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IN THE LIGHT OF PRACTICAL NEEDS**

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Preface

Research in management and business is an essential existential and strategic route to reaching high academic standards of faculties and universities of economic and managerial orientation.

We view the transfer of one's own research results into the practice of organizations as one of the significant dimensions and justifications for the current and future existence of faculties and universities. It is one of the basic driving elements of development of universities and their faculties as well as organizations in practice. It is also the source of innovations and one of the conditions for the dynamic development of organisations as well as for societies and whole integration groups.

New knowledge gained by research appears to be a key factor in overcoming consequences of global crisis as well as in overcoming important existing problems of enterprises and in performing theoretical, mainly current macroeconomic tasks especially at the stage of subsequent development.

Finally, the success of a company in a strenuous effort to gain a leading position in the market is one of the main tools how to measure the quality of management. Marketing and financial health of companies along with high competitiveness in the area of human resources and technology, satisfaction of markets by quality and desired production based on high technology – all this is the added value provided by transferring research results into practice.

The structure of this publication has been devised to present significant areas of current management and its important segments and remarkable connections:

Economics, business & economy, financing and regional development is dealt with in the first part of the publication. The following part focuses on modern management area and its one of the most important parts – human resource management. A significant part of the next section is traditionally dedicated to the issues of marketing and innovations. Management of tourism, hotel and spa industry plays an important role in the development of our territory and it is one of the study and research areas of our faculty and its departments, which has translated into a number of articles published in this section. Legal, ethical, cultural, environmental and psychological aspects of management are gaining a significant importance not only in the period of crisis but also in the ensuing development. Crisis of moral values and all the mentioned socio-scientific attributes, which are analysed in the fifth section of this publication, is also one of the significant factors of the current economic and managerial problems of enterprises. The section focusing on econometrics, quantitative methods and informatics in management which could be regarded as highly significant areas of current economy and management concludes the publication.

The ambition of this publication is not to remain a published collection of theoretical studies and recommendations based on research results, but to help our organisations at the time of development of entrepreneurial sphere after the global economic crisis as well as to contribute to the increase of competitiveness of companies in international markets in the coming period leading to economic growth and social welfare.

October 2012

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**1. Economics, Business & Economy, Financing
and Regional Development**

Applying the Theory of Risk Management in Practice (on the Example of a Spa Enterprise)

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Abstract

This paper examines the issue of training future managers in the field of spa tourism. The paper attempts to document the relationship between theoretical education at higher education institutions and the reality in the field of spa industry based on the analysis of spa services and the theory of risk management. The final part of the paper gives practical recommendations for higher education institutions (on the example of the Faculty of Management, University of Prešov in Prešov).

Key words

Training managers for spa tourism. Spa enterprises services. Classification of risks. Responsibility for risk solutions. Recommendations for higher education institutions.

Introduction

“The majority of the population says that health is the most important thing they have. That’s why health, spa and medical tourism have developed. Global health care has been well spread all over the world and the increasing number of health tourism establishments and their participants show big interest in and popularity of ‘travelling for better health’ (Matušíková, 2012, p.102). “Although usable natural resources have existed at numerous places, spa industry in terms of our perception has been a European matter” (Talarovičová, 2010, p.8).

Despite being a little country, Slovakia has favourable conditions for tourism, especially spa tourism development. This type of tourism can be specified as a kind of economic activities that primarily use natural resources. Another condition for spa industry development is a suitable natural environment and appropriately developed forms of social and cultural life. According to Eliašová (2003, p.129), on the basis of three fundamental functions of spa tourism (a curative, regenerative and recreational function), it can be divided into other relatively independent segments:

- spa and health tourism
- spa and revitalisation tourism
- spa and relaxation tourism
- spa and recreation tourism

Nowadays, the Slovak spa industry takes pride in a high level of professionalism in the field of health care, highly professional level of healthcare and rehabilitation staff as well as a good system of spa management.

This is supported by legislation that is Act No. 538/2005 Coll. on Natural Mineral and Healing Waters, Healing Spas and Spas.

If we want to maintain and develop this favourable starting position of the Slovak spa industry further, we have to pay attention to appropriate marketing activities, improvement of spa environment as well as training of future spa managers. In the contribution we examine training of experts in the field of spa management. Our examination stems from the fact that appropriate knowledge of processes forming a complex product is an inevitable condition for managing complicated control processes. Needless to say, all spa processes carry potential elements of new risk occurrence. Inappropriate risk management might lead to problematic situations or even to spa liquidation. Thus, we pay the greatest attention to applying the theory of risk management to the management of spa establishments. We also describe responsibilities of senior management members for handling specific risks.

A spa company employs staff and managers of various professions. Doctors and medical staff are educated and trained at faculties of medicine, and health care and at similar higher education institutions. Technical staff is trained at higher education institutions of a technical character. In this context we focus on managing staff (managers, economists, and operations staff providing accommodation and catering services). Our recommendations for preparing and training future experts given at the end of the paper

should be taken into consideration especially at faculties of a managerial and economic character training future managers and economists who might serve spa companies.

Management of risks in spa establishments

To manage a spa business, the manager must have personal predispositions and demonstrate good knowledge of managerial techniques as well as she or he has to familiarise themselves with the nature of operations in spas. They must also know the 'surroundings' of the spa business and be aware of trends in this sector. In this context, we might mention some basic trends in spa tourism development, which are influenced by general movements as well as demographic and social changes. In the future, the number of older population with good health and higher income will increase. And on the basis of increasing average level of education there will be an increased interest in culture, art and history in relation to planning and organising spa stays. Transport and accessibility are other significant factors that will determine development trends in spa tourism (Hudáková, 2011, pp. 115-116).

The spa product is the result of functioning of this organism; we can say that it is the result of specific processes taking place in a spa business. The analysis of services provided by the spa is an appropriate methodological condition for managing those processes. Several authors classify services according to Knop (*et.al.*, 1999, pp.30-34).

Spa services are classified as follows:

- Health (treatment and prevention) services
- Accommodation services
- Catering series
- Additional services (cultural, social, sports, and entertainment)

The given spa service classification determines managing activities and an appropriate organisational structure of spa businesses. We will not pay attention to the description of specific services as these are examined by professional literature in great detail. We assume that every manager (a generalist) or the manager focused on the management of specific services must familiarise themselves with internal service mechanism, otherwise they would not be able to manage effectively and successfully. An essential characteristic of spa services is that they are provided in really turbulent and constantly changing environment and the risks associated with them are their integral characteristics. It is in the area of avoiding and eliminating risks where the quality of managers' training is shown, and their knowledge and experience gained in the process of tertiary education are fully applied. Particular risks are closely associated, they mutually influence one another and sometimes they appear to be really complicated and unmanageable at first glance. An effective and suitable tool for addressing the issue of risks is their appropriate classification according to various criteria. In our paper, we use pragmatic classification (on the basis of risk's external characteristics) in relation to spa services. The classification is as follows:

- **Production risks** which are classed as:

- Technical risks
- Technological risks
- Organisational risks

These are the risks mainly associated with providing accommodation, catering and additional services and partially also health services.

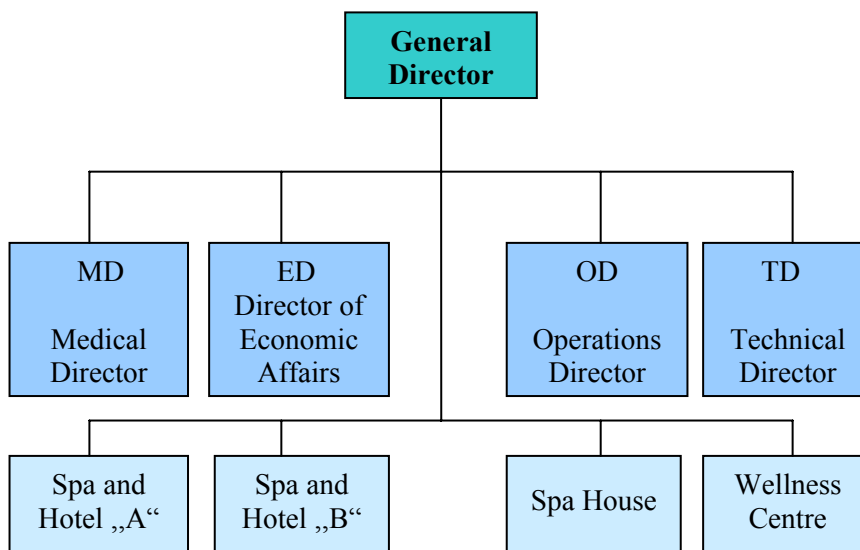
- **Commercial risks** –related to procuring (purchasing) necessary inputs and producing (selling) outputs, i.e. complex services provided by spa businesses. Price risks, the influence of seasonality and others belong here.
- **Economic risks** - risks associated with deteriorating economic (financial) situation; frequently they are consequences of commercial risks. A classic example is increased costs per a unit of production, decreased productivity, reduced profitability etc.
- **Social risks** – are risks associated with employing, and training employees and individual employee performance. They are related to motivation, remuneration, and employees' satisfaction. Failure to address these risks might take extreme forms, for example a form of a strike.

- **Risks related to information technology** – we can distinguish between technical (hardware), technological (software) and organisational levels (people)
- **Legislative risks** – risks related to sudden, unexpected change of significant legislation
- **Risks with regard to health and safety at work**
- **Force majeure risks** – fire, natural disaster, explosion, ecological catastrophe etc.

This risk classification can be applied to running and developing spa businesses and their services. Justification for using it stems from long pedagogical experience in tertiary education and teaching mainly subjects: Management of Risks and Changes and Spa Establishment Management. Moreover, knowledge gained by author's observation (personal participation/terrain survey) and that obtained by personal communication with managers of several spa businesses contribute to the paper. A specific category is formed by graduates working in spas who consider this classification to be practical.

In the following part of the paper we focus on risks in primary services provided by spa businesses with the exception of additional services. A starting point for our examination is an organisational structure and accountability of individual managers. Roles of boards of directors, general assembly and supervisory boards have been deliberately omitted. In the context of Slovak spa industry, spas mainly take the legal form of a joint stock company. We will analyse responsibilities of professional directors. The below presented organisational structure belongs to structures commonly used in tourism enterprises. We have made some changes to it in order to apply it in spa industry.

Figure 1 A possible organisational structure of a spa business



Source: own processing

To understand the processes of a spa business better we add more details to the organisational structure chart.

GD - General Director of a spa business

MD - Medical Director of a spa business responsible for:

- entry diagnostic examinations,
- preventive and curative treatment,
- continuous treatment,
- post-treatment examinations.

ED - Economic Affairs and Sales Director in charge of:

- economic affairs,
- sales (marketing sector).

OD - Operations Director in charge of:

- catering,
- accommodation.

TD - Technical Director responsible for:

- operation and maintenance of spa business facilities,
- energy, water and waste management,
- maintenance of outdoor and indoor environment,
- planning and realising investments.

Spa hotel provides: - basic curative-preventive services

- accommodation services,
- catering services,
- additional services.

Spa house offers: complex curative and preventive services for spa guests.

Wellness centre provides wellness services including beauty treatments and/or some therapeutic and preventive services.

Table 1 Breakdown of production risk and responsibilities of spa directors

Types of services	Types of risks		
	Technical	Technological	Organisational
Basic curative- preventive services	MD, TD	MD	MD
Accommodation services	TD	OD	OD
Catering services	TD, OD	OD	OD

Source: own processing

Legend: MD - Medical Director
TD - Technical Director
OD - Operations Director

As Table 1 shows, risk related to health treatment breaks down into particular types of risks (that is technical, technological and organisational). Medical and technical director share the responsibility for technical risks dividing it on the basis of agreement. Technical risks are often handled by external company – external service. Technological risks, in the context of spa business the ‘technology’ of treatment and preventive activities as well as organisational risks are managed by medical directors.

Accommodation services form an important part of spa services. Their importance is increased by the fact that the average duration of accommodation within treatment stays is more than 14 days. The operations director is fully responsible for organisational and technological component (in some spas it is an operations manager). Concerning technical risks related to this area (room temperature, sanitation etc.) responsibility for them is shared by a technical director.

Catering services are an integral part of spa services in terms of the length of spa stays. The level of their quality is a very sensitive issue for spa guests. Analysing gastronomic processes within catering services it is their technical support that plays a crucial role there. The operations director or the head of the operations sector is responsible for technologies (the way of food preparation and serving).

Given those facts we can state that technical directors play a significant role as they bear risks in the area of health and treatment, accommodation and catering services. Apart from that they are responsible for their own areas described above. Their role in analysing and solving problems, and taking practical measures against risks is highly significant but frequently undervalued by top management.

Summary

Given these facts we can draw some important conclusions. It is necessary to ensure appropriate theoretical and practical training for future spa tourism managers, or more precisely spa business managers during their tertiary education. Based on 16 years of experience in training managers for the area of travel and tourism (as well as spa business management) it is possible to give a few suggestions and recommendations which might be topical for the Faculty of Management, UP:

- To pay more attention to the harmony between theoretical education in the 8.1. 1 Tourism, Hotel and Spa Industry study programme and spa business practice
- To make full use of previous experience in this area
- To provide some theoretical lectures and practical seminars in spas (use our previous valuable experience with Bardejov Spa (a joint stock company))
- To recruit external teachers who are spa business experts
- To specify topics of final thesis (bachelor's, master's and dissertation thesis) in cooperation with spa business management
- To include spa business management into committees of final state exams at the first, second and third degree level of higher education
- To continue with organising practical work placements of foreign partner school students
- To focus scientific-research activities of academic staff (Department of Tourism and Hotel Management) on solving topical issues related to spa tourism.

We believe that rich theoretical knowledge and professional experience since 1996 will be used in favour of both parties, that is spa businesses as well as further professional development of the Faculty of Management staff.

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Investment Attractiveness of the Enterprise as an Economic Category

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Abstract

Companies of any industry for achievement of leadership and maintenance of positions have constantly to develop, master new technologies, enter modern equipment and extend the spheres of activity. In such terms periodically comes a moment when further development becomes impossible without attraction of investments. Attraction of investments gives to the enterprise additional competitive advantages and often is the most popular means for growth. Therefore, definition of the term "investment attractiveness" is important for activation of the investment process, and its better understanding will speed up the process of attracting of investments. The nature of the investment attractiveness of an enterprise is investigated in the research. The main approaches to its definition are analyzed. The economic content of the concept "investment attractiveness" is refined.

Key words

Investment attractiveness, Enterprise, Economy.

Investment attractiveness of the enterprise as a category of economy

Investment attractiveness can be considered at the national, industry, region, enterprise level. The company is the foundation of any market economy system. In modern economic literature, there are a large number of definitions of the enterprise which reflect different aspects of this entity. They generally lead to its definition as a self-managed, integrated, property separate socio-economic system for the production of consumer goods and (or) services in any sector of the economy [1, 2, 3, etc.].

The company is the end point of placement of material and intellectual property, where specific projects are implemented. The development and functioning of the enterprise is carried out by means of investment. Investment attractiveness of the company is determined to investors primarily by the level of income which they can get on their investments. The level of income, in its turn, is due to the level of risk of no capital return. Investors define the requirements to companies according to these criteria. Therefore, the investment attractiveness of the organization should be at a high level, to motivate the investor to make a positive decision about future investing. The high level of investment attractiveness can mitigate the risk of political and economic instability in the country for the investor, but the most important for the enterprise is to be better than competitors. Companies need quickly to adapt to changing environmental conditions, offering the market modern, high-quality, satisfying consumer goods and maintain their competitiveness. Constant development requires regular investment in fixed assets, scientific and technical development, and other objects aimed at obtaining of a positive effect. Thus, the key factor to the success for any enterprise is the increasing of the investment attractiveness.

The economic literature has not yet developed the unified approach to the definition of the term "investment attractiveness", so its interpretations for today are very ambiguous. L. Chechevitsina and I. Chuev determine the investment attractiveness as "attractive conditions for capital investment created by the state and companies" [4, p. 61]. A. Vorontsov thinks that the category of "investment attraction" should be defined as "the likelihood of achieving of put forward objectives of investment, expressed in individual investor's expectations" [5, p. 49]. He explains this by saying that investment is a process with unguaranteed results, since any investment decisions involve risk and it is impossible to be completely sure in getting a certain amount of profit. Although the presence of security or mortgage can reduce these risks. Therefore, the ratio of risk-return-time is fundamental in the category of investment attractiveness. A. Ponin believes that "the investment attractiveness is a system or a combination of various objective features, facilities which determine a total potential solvent demand for investments in a particular country, region, industry, etc. [6, p. 31]. The concept is very well described by scientists N. Rusnak and V. Rusnak. Under the investment attractiveness of (country, region, industry, businesses) they understand the feasibility of the investment of free funds [7, p. 65]. We can say that it's a pretty good general definition of investment attractiveness. In our opinion, the investment attractiveness is a set of characteristics which allow potential investors to assess in what extent a particular object (enterprise, industry, region, country) is more attractive than others to invest.

In the professional literature, there are a sufficient number of scientific works which are devoted to the problems of definition and understanding of the "investment attractiveness of the enterprise". Opinions on this theme are different, but at the same time they substantially complement each other. On the one hand the investment attractiveness is considered as a *cause of investment*. I. Napadovskaya in her work "The theoretical and methodological aspects of researching of the investment attractiveness" under the investment attractiveness understands the system totality of potential investment opportunities in order to obtain benefits in future as a consequence of the results of previous economic activity of the potential investment object, subjectively evaluated by investor [8]. I. Roizman said that the investment attractiveness is a set of various objective features, properties, facilities, capabilities which cause a potential solvent demand for investment [9]. A. Mozgoev in his work: "Some terms used in the investment process" determines the investment attractiveness as "a set of properties of external and internal environment of the investment object, which determine the possibility of investment" [10]. E. Patrusheva determines the investment attractiveness of the company as "... guaranteed, safe and timely achievement of objectives of the investor through the production and market results of performance of the enterprise" [11, p. 139]. This definition is difficult to accept, because it is incorrect to treat the investment attractiveness as achievement of goals, moreover, adjectives "guaranteed", "safe" are not suited to the process of investment, because the risk always exist. But with the definition of A. Gaydutskego is simply impossible not to agree, he believes that the investment attractiveness of the enterprise allows potential investor to assess in what extent this or that object is more attractive the others to invest available resources [26]. V. Mashkin shows that for him investment attractiveness means the presence of conditions which have an influence on the preferences of the investor in choosing a particular object for investment [12]. As we can see all definitions treat the investment attractiveness from the side of possibility of attraction of recourses and investors benefits.

On the other hand investment attractiveness is seen as a *condition of development* of the enterprise. V. Tolmachev has the opinion that the investment attractiveness is a dynamic category that represents a vector (or a system of vectors) of investment development of the enterprise [13].

T. Guskova in her work determines the investment attractiveness of the company as a state of its economic development, when with a high degree of probability in acceptable to the investor terms, investments may give a satisfactory level of profitability or other positive effect can be achieved [14]. O. Tolkachenko notes that the investment attractiveness in the existent terms is one of the most important characteristics of the performance of an economic entity, as it directly affects its prospects of development, competitiveness, financial strength, solvency, etc. [15]. V. Savchuk in his book "Analysis and design of investment projects" determines the investment attractiveness as an integral characteristic of individual companies - objects of future investment from the position of development, scope and perspectives of marketing, effective use of assets and their liquidity, solvency and financial stability [16]. T. Kolmykova in her work define investment attractiveness as an economic category, characterized by efficient use of assets, solvency, stability of the financial state, ability to develop on the basis of increasing of capital profitability, technical and economic level of production, quality and competitiveness of products [17, p. 159]. All of the definitions above describe investment attractiveness from the position of enterprise development and improving its economic activity.

Also, some scientists think that the investment attractiveness is the *indicator of effectiveness of investments*. I. Sergeev, I. Veretennikova and V. Yanovsky offer a definition of investment attractiveness of the business entities to conduct in conjunction with the assessment of the effectiveness of investments and investment activity: "the efficiency of investments determines the investment attractiveness and investment attractiveness - investment activity. The higher the efficiency of investment is, the higher the level of investment attractiveness and the larger scale of investment activity, and vice versa" [18, p. 37]. Sharing the position of researchers about the existing correlation between investment effectiveness and investment attractiveness, we can say that these categories have much in common.

Very common is the definition of investment attractiveness as a *set of indicators*. This can include determination of A. Ivanova, who writes in his work: "Investment attractiveness of the enterprise is a set of economic and financial indicators of company's performance which determine the possibility of obtaining maximum income as a result of investing with minimal risk of investing" [19]. N. Tryastsina writes in the same vein, she believes that the investment attractiveness of the enterprise is a set of indicators of its activity, which determine for investor the most desirable investment behavior [20]. S. Dontsov understands under this concept a set of characteristics of financial stability and economic efficiency of the enterprise [21]. M. Kreynina, also examines investment attractiveness as a set of

indicators, she believes that an objective assessment of investment attractiveness depends on all parameters that characterize the financial position. But if narrow down the problem, in her opinion, investors are interested in indicators that have influence on profitability of capital, stock price and dividend level [22, p. 47]. Continuing to develop this approach, E. Krylov, V. Vlasov and M. Egorova in their training manual note that investment attractiveness is characterized not only by stability of the financial state, it also formed by competitiveness of products and client orientation, resulting in the most complete satisfaction of consumers [23, p. 5]. Professor D. Endovytsky shares the position set out above, under the investment attractiveness, he understands the interrelated characteristics of the economic potential, profitability of the operations with asset and investment risk of an economic entity that has a certain capacity for sustainable development in a competitive environment and corresponds to the assumption of continuity of activity [24]. V. Sheremet, V. Pavlyuchenko, V. Shapiro under the investment attractiveness understand the financial analysis of the company in terms of financial stability, profitability, liquidity of assets, assets turnover, etc., from the viewpoint of potential investment in the form of capital and financial investments [25, p. 59].

Summary

It should be noted that in each case of definition only one of the signs of investment attractiveness is shown. Although in some definitions the features of two groups are combined, mainly second and fourth [15, 16, 24 and others]. As seen from these interpretations, there is no consensus about the definition of this concept. But generally economists share approach to the interpretation "investment attractiveness" from the position of the reliability of the financial conditions of the analyzed object of investment, set of indicators which determine the investment attractiveness. But this approach does not fully reflect the nature of investment attractiveness. Thus, summarizing the classification proposed above, we offer a definition which in our opinion, most accurately reflects the essence of the concept. Investment attractiveness of the company - is an economic category which determines the state of economic development, the degree of its competitiveness and efficiency of investment, characterized by a set of indicators which demonstrate various aspects of the performance on the enterprise, identifying the possibility to the investor of obtaining maximum profit with minimal risk (compared with other objects of possible investment). Investment attractiveness becomes an important economic category. It's planning and rising of the level should be considered as separate tasks of the performance on the enterprise. Every company should look for ways of improving the investment attractiveness in order to attract investments.

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Analysis of Impact of Global Risks of Economic Environment on Economy and Business in EU

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Abstract

Current global economic environment remains under the effects of global crisis, slow economic development, and financial market uncertainty and number of increasing risks. The global environment is changing current business practice resulting in an increased focus on risk and risk management. The aim of this article is to analyze the determinants of midterm and long term global risks and risk factors in business with specific focus on business and financial risks in EU in order to prevent and mitigate risks in global business competition. In the end of article are outline risk profiles of European region through risk reports and methodology of risk indexes for risk prevention.

Key words

Global risks, Empirical analysis, Determinants, Risks indexes, Business

Introduction

Current economic environment, at home as well as abroad, has been disrupted due to the financial crisis. Poor loan risk management in the United States produced rapid declines in asset prices across international stock markets in 2007, worsening the financial situation for households and reducing their consumption across the world leading ultimately to the global recession. While the global GDP rose by 5% in 2007 according to the International Monetary Fund (IMF), the rise was only 2,4% in 2008, and 2009 experienced a worldwide contraction of 1,6%. Luckily, the trend reversed back to growth as soon as 2010 (Monthly bulletin, March 2012). The volume of world trade declined in the second quarter of 2011 by as much as 0,6%. This was the first decline since the recovery of global trade since the second half of 2009. These changes in economic environment prompted the increasing global business risk and the need for the mitigation of this risks.

Methodology, aims and methods

Multiple managerial and business focused areas of research study the detection and mitigation of global risks and their determinants. All of these areas of research contribute to the analysis through their own lens constructed on prior understanding, procedures, tools and methodologies continuously tailored to the needs of real-world business (McNeil, Frey, Embrechts, 2005). As an example, consider the sheer number and variety of risk types, their definitions, and the number of areas of research that seek to study them (Merna, Al-Thani, 2011).

Main Aim of this article is:

- to analyze the determinants of midterm and long term global risks and risk factors in business with specific focus on business and financial risks in EU in order to prevent and mitigate risks in global business competition

Partial Aims:

- evaluate the current studies of global risks directly affecting business through financial management practices in Slovak Republic, European Union (EU), and the world
- identify main determinants of long term financial risks threatening the current business environment using a Global Risk Index – Lloyd's Risk Index, and risks for Slovakia published by Intrum Justitia – Slovakia Risk Index, analyzed using recently developed financial management and business practice in order to solve and prevent risks.

Methodology and methods:

- empirical analysis using selected indicators describing the economic environment aimed at identifying current risks in business in global environment, the EU and inside Slovakia
- analysis and comparison indicators of global financial stability, financial risks and default risk from the point of view of businesses attempting to mitigate the risks during 2009 -2011
- synthesis the determinants of global risks from the point of view of business.

Empirical analysis of current trends

Current global business risks can be summarized using the Risk Index published by Lloyd's, a global insurance company. The Risk Index can detect and capture the main risks perceived by managers around the world, and how the managers intend to deal with future risks. Compared to 2009, the risk index rose in all categories during 2011, but while in 2009 the main concerns were economic, regulatory and market risks, managers were more concerned about business and strategic risks (table 1). Lloyd's ranked the following top five risks for 2011: loss of customers, lack of talent, reputation loss risk (for business risks), and currency fluctuations and legal changes (for strategic risks). The managers felt ill prepared for the any potential changes in the legal environment. In the EU region, the economic and business risks were lower or comparable to worldwide average. The EU region managers ranked the following risks as most important: loss of customers (order cancellations), lack of talent, currency fluctuations, capital costs, and legal environment changes (table 2).

Table 1 Overall global risks in 2011 versus 2009

2011 Priority Rank	Overall risks	2011 Priority score	2011 Preparedness score	2009 Priority score	2009 Preparedness score
1	Business and strategic risks	7,3	7,1	6,5	6,0
2	Economic, regulatory and market risks	7,2	6,5	6,8	5,8
3	Political, crime and security risks	5,4	6,5	4,9	5,1
4	Environmental and health risks	5,0	6,1	4,0	5,1
5	Natural hazard risks	4,2	5,5	3,9	5,4

Score – out of 10, high 7,3 -7,2

Source:

http://www.lloyds.com/~media/Files/News%20and%20Insight/360%20Risk%20Insight/Lloyds_Risk_Index_2011.pdf

Table 2 Top five risks in 2011

Rank	Risks	2011 Priority score Europe/Global
1	Loss of customers/cancelled orders	6,0/6,2
2	Talent and skills shortages (including succession risk)	5,66/6,2
3	Reputational risk	5,53/5,8
4	Currency fluctuation	5,34/5,6
5	Changing legislation	5,33/5,6

Score – out of 10, high 6,3 -6,2

Source:

http://www.lloyds.com/~media/Files/News%20and%20Insight/360%20Risk%20Insight/Lloyds_Risk_Index_2011.pdf

Within EU, the financial and economic crisis and concomitant recession initiated a worrying increase in the indebtedness, especially in Greece, Ireland, Portugal, Spain and Italy. ECB suggest the Eurozone debt to GDP ratio increased from 19% to almost 86% between 2008 and 2011 (Statistical Data Warehouse, 2011). The situation required changes in the management of debt for many Eurozone countries. The new agency – The European Financial and Stability Facility was created by the Eurozone nations, the IMF and the ECB in May 2010. Immediately after launch, the agency provided Euro 110 billion to Greece and Euro 85 billion to Ireland.

The changes in the fiscal and macroeconomic outlook of Eurozone countries fueled unprecedented currency swings during 2011, identified by Lloyd's. The main indicator of current economic environment used in the Eurozone, the EURIBOR or the interbank short-term loan reference rate, rose to 1,22% in 2009, fell to 0,81% during 2010, but quickly rebounded up to 1,42% in the second quarter of 2011 (ECB Monthly Bulletin, September 2011). ECB indicated a potential rate hike since April 2011 (Hoschek, 2011).

Financial crisis began affecting Slovak Republic in 2009 and manifesting as a decline in most macroeconomic indicators of growth (Závorská, 2011a). Similarly to the developments in the rest of the

world, the GDP rose in 2007 and 2008 by 10,5% and 5,8%, slowed down to 4,8% in 2009, and further to 4,0% in 2010. The ratio of government debt to GDP rose from 29,56% to 40,96% between 2007 and 2009 (Selected indicators of economic and monetary development in Slovakia, 2011).

To assess the risks posed by a business, or to classify the ability to repay loans, we can use ratings. According to the rating agency Moody's the technical definition of rating is an opinion on future ability of the borrower to repay in full and on time any outstanding financial obligations to the lender. Rating agency Standard and Poor gave the Slovak Republic a rating of A+ since 2008, and in 2011 indicated a positive outlook. However in 2012 the rating was reduced to A with a stable outlook. Moody's followed by reducing SR rating to A1 with stable outlook since March 2009, but reduced the rating to A2 with a negative outlook in March 2012. (History of rating assessment of Slovak Republic, 2012). The developments in August 2011 supported the notion that ratings can exert a meaningful influence over financial markets, and change the outlook of investors potentially leading to outright panic.

Another closely followed measure of risk by the National Bank of Slovakia (NBS) in the bank sector is liquidity. In the first half of 2011, liquidity was positively affected by stable loans to households and business entities relative to an increase in deposits by the bank clients (Analysis of Slovak financial sector, 2011). The liquidity risk in the business sector is mostly affected by the decreased ability to provide timely payments on orders made by other businesses. According to Slovakia Risk Index published by Intrum Justitia, 47% of business reported worsening liquidity as a result of a delay of repayment of accounts receivable. As a second most important growth limiting factor, over 50% of business reported a decline in revenue. 88% of businesses suffering from delayed payments on account receivable suggested the delays are largely due to a poor financial situation of their business clients. 42% of business suggested that the delay in repayment will remain stable, and 30% of business suggested it will increase over time. The uncertain situation is further underscored by European payment index, which documented an increase in write-offs to 2,7% in 2011 from 2,6% in 2010, and 2,4% in 2009. Slovakia Risk Index remained within 160-169 and suggested an intervention to reduce the risk profile (Slovakia Risk Index, 2011, figure 1).

Figure 1 Slovakia Risk Index – value in year 2005-2011

Value of index 100-200	2005	2006	2007	2008	2009	2010	2011
170-179							
160-169							x
150-159				x	x	X	
140-149		x	x				
130-139	x						
120-129							
110-119							

Value of index 100 – null risk, 200 – high risk (payment and liquidity risk)

150-159 – intervention is necessary, restrictive practices of decreasing of risk profile

160-169- intervention is necessary, explicit restrictive practices of decreasing of risk profile

Source:

Intrum Justitia: Slovakia Risk Index 2011. [online]. [cit. 2012-01-21]. Accessible by: www.intrumsk.sk/sk/doc/Slovakia_Risk_Index_2011_V5.pdf.

Analysis of the main determinants of global risks

The medium-run risks in the business sector stem from their financial position affected by a weaker domestic economic demand¹ due to numerous fiscal measures aimed decreasing the debt-GDP ratio, largely aimed at retirement payments to households. Even though in 2010 the export sector grew, this growth was outweighed by the decrease in domestic demand (Report on financial stability, 2011). If the household income does not grow in the future, the lower domestic demand may persist and continue to hamper revenue generation in domestic industries. While the export sector grew in 2011, it is necessary to point out the significant dependence of Slovak exports on the Eurozone, EU and the international markets, deterioration of which may cause the export business to lose its footing (Filip, Grzebyk, Kaliszcak, 2010).

¹ More about the trend of the domestic demand in the Slovak republic may be found in Závorská (2011b).

NBS identified the following global risks that could affect domestic financial stability in their Report on financial stability (2011):

- escalation of financial instability to the Eurozone periphery affecting otherwise stable Eurozone core
- sluggish recovery in the banking sector of developed countries
- sudden slow down in large developing economies such as China
- further increase in oil prices, and prices of other commodities leading to an inflationary spiral causing a domestic price increase further decreasing household disposable income
- delay in planning for midterm financial consolidation in developed countries (USA and Japan).

This economic situation and the related risks affected business environment, the business, and financial processes (Filip, 2010, Grzebyk, 2010). Financial management of most business required significant changes to adapt to the new environment and required the utilization of some new methods and models (Kráľovič, Vlachynský, 2011).

Based on actual economic situation we can identify the key determinants and risks, which directly affected the domestic and international business environment in recent years:

- increasing global risk associated with uncertainty surrounding the future economic growth, debt to GDP ratios, and financial market volatility – the global fiscal deficit risk
- increasingly cautious loan approval by many banks lead to a decrease in new loans generated – global financial market risk
- increasing number of loan delinquencies and write-offs – global solvency risk
- decline in the economic activity and global trade largely due to declining global demand, decrease in investments, and lower valuations assigned to business and financial instruments – global economic risk.

Ignoring the large effect of global risk on your enterprise can have significant consequences. A possible solution may come from the consideration of statistical characteristics, such as range, standard deviation, coefficient of variance when quantifying the risks themselves:

- it is possible to increase the accuracy of liquidity indicators, by considering a coefficient of risk of non-payment by your trading partner, potentially utilizing existing methodologies (model of D. Durand, Bondareva, 2010)
- to assess the business, it is possible to determine a risk premium that can be incorporated into the cost of capital (Fotr, Souček, 2011)
- in financial valuation, consider the duration of bond repayment, which will greatly affect the propensity of its price to move with small changes in interest rates (Markovič, 2011)
- in capital efficiency investment is possible using of model real option as flexible approach in strategy with real economic risk (Markovič, 2011)
- when global risks cannot be absorbed, consider diversification by cross-border mergers and acquisitions, or business listing on exchange rates.

Summary

The purpose of the study was to identify the main determinants of global risks affecting current business environment and financing using the Global Risk Index published by Lloyd's as well as Slovakia Risk Index published by Intrum Justitia as a model. We observed an increase in all types of global risk measures. Ignoring the developments in the external business environment may cause a business to overestimate its performance, underestimate its risks, payment ability of trading partners, return on investment project etc. As a result, the business may find itself poorly prepared to respond to changes in business environment, potentially threatening its existence.

Some examples of modern managerial methods and models focused on financial management and risk mitigation is Balanced Scorecard (BSC) and Benchmarking. Using benchmarking a comparison to the best performing business in the industry can be made, especially considering the financial situation and methods used by the industry leader. Benchmarking can prompt not only the switch to superior financial management methods, but also help reformulate the assessment and mitigation of risks in the global business environment.

In order to maintain a successful business presence a business should consider a timely identification of opportunities as well as threats presented by global business risk, with focus on utilizing modern methods and models in the business practice to monitor, mitigate, diversify or eliminate risks.

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Concept of the Common Agricultural Policy and its Impact on the Budget of the European Union

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Abstract

Throughout the existing Common Agricultural Policy of the EU present European agriculture has changed its character beyond recognition. European population over time has lost conception about the way that present modern agro-food complex, which has increased its work during the last 50 years following the unsophisticated subsidy policy oriented on the production, works.

An effort of the returning the competitive character to this branch has lead Common Agricultural Policy of the EU to the different reforms which consistent application should lead to the decrease of the disproportions between supply and demand on the agricultural production market.

Key words

CAP EU (Common Agricultural Policy of the European Union). CAP EU Financing.

Introduction

Agricultural policy is the oldest and the most developed one. It is followed by the social, regional and environmental policy. Its biggest problems are: formation of the large production surpluses, protectionism, damage of the environment, competitiveness. In the original version, agricultural policy was conceived to solve the problems of the founding states in the period after the World War II when there was a lack of the foodstuff.

Throughout the existence of the Common Agricultural Policy of the EU, present European agriculture has changed its character unrecognizable. Idea of the yeoman (small farmer) living the nearest way to the nature is very idyllic and it borders with the naive view of the present people of the 21st century.

Material and methods

The aim of the Scientific Paper is to evaluate trends in the process of the reformatory changes of the Common Agricultural Policy of the EU (CAP EU) and trends in the agricultural funding from the point of view wider context connected with the reformatory periods CAP EU.

Scientific Paper contributes to the solution of the partial aims of the projects VEGA 1/0541/11 and KEGA 013PU-4/2011.

Base data were gained from the official data of the European Commission, scientific papers, publications and from the internet. From the content aspect Scientific Paper analyses development of the reformatory tendencies of the Common Agricultural Policy EU during the period of its existence and the ways of the CAP EU funding in the last time.

By the aim realization, different standard scientific research methods were used, e.g. comparative method, analyse and a synthesis. By the evaluation process, standard mathematic-statistical relations and numerical calculations were used.

Results and discussion

Basics of the CAP EU were formed in the 50s years of the last century, regarding to its establishment in the EEC Treaty in the articles 32-33 part II. The Treaty of Rome establishing the CAP in 1957 defined the tendency of the governments to provide by grants adequate standard of living, especially by the rise of the individual incomes of the persons working in the agriculture, to stabilise the markets and to provide food supply properly. System of the grants, duties and intervention buying was established by conviction of the individual governments that without their intervention the market with the agricultural commodities would collapse and people would starve.

Cap reforms has continued till nowadays and present state of the main goals and principles totally differs from the original policy direction. First reformatory steps were started in the half of the 80s of the 20th century. In that period two main tools were set up: production quotas and guarantee thresholds. Quota was defined as a tool limiting the production to get the better coincidence of the supply and demand. Term

maximum guaranteed quantity was first time used with the specification of the guarantee threshold. The tendency was to regulate farmers to the required production and to prevent its crossing.

First complete CAP reform took time in the first half of the 90s and it was known as a MacSharry reforms (1992). Attempts to reverse unfavorable state in the production in the 80s did not lead to overproduction removal and were considered as insufficient. These reform was characterised by two main facts. The determination of the low prices of the strategical agricultural commodities and subsequent compensation of the impacts of the decrease of the prices on the farmer incomes by the mechanism of the direct payments. Reform, among other things, started to deal with the ecological aspects and with a tendency to avoid the displacement of the rural areas.

Another extensive reform called „Agenda 2000“ (1999) directed policy to the establishment of the sustainable agriculture focused on the economic development of the countryside. Within the productin regulation and the prevention of its re-accumulation, it has continued with the reform of the segregation of the support from production. It is called „Decoupling“ – gradual segregation from the production. Reform has considered as a necessary to create a free place for farmers so they can produce as much production as the market actually wants.

In the 2003 „Agenda 2000“ was evaluated and its other revision was proposed. New reform elaborates more in detail basics of the Macsharry reforms and it use to be marked as Fischler reform according to then european commissioner Hanz Fischler (Baldwin - Wyplosz, 2008). This reform contents in contrast with previous reforms some significant modifications. Reactions of the member states about this reform were contradictory, countries counted with continuation of the reform from 1999. Significant mark of the reform was the separation of the payments from production (Decoupling) what has meant implementation of the single payments for the farm (Single Payment Scheme), that has involved payments for the crop and livestock production. System of payments has partly abolished dependence of the grants on the amount of production. But the complete separation was not considered. The aim is to keep production and to not finish the foodstuff production. Introduction of the single payments was counted on firstly from 2005. In the countries which has entered in 2004 transition period was applied (Fojtíková – Lebieczik, 2008).

The main aim of the proposed revision of the CAP was: to cancel the bond between the retirement of the single payments to farmers for the production, to condition direct payments by observing the legislation about the environment, food safety, animal welfare and safety at work, to increase the support of the development of the rural areas by „modulation“ of the direct payments from all farmers with the exception of small ones, to implement new audit system on farms and new measures for the development of the rural areas focused on the improvement of the production quality, food safety and animal welfare.

Control of the CAP EU that would lead to the revision of the European Union budget directed to the CAP, called „Health Check“ has been running from 2008.

Key items of the CAP „Health Check“ are:

- ✎ separation support from production,
- ✎ help for the sectors with specific problems (arrangement according the Article 68),
- ✎ gradual cancellation of the milk quotas,
- ✎ prolongation of the mode of single payments on the area,
- ✎ additional financial resources for farmers of the EU-12 countries so they can easier exercise arrangement of the Article 68,
- ✎ transfer of the financial resources from the direct supprt on the development of the rural areas,
- ✎ investment support for young farmers,
- ✎ cancellation of the requirement that producers on the arable land should left 10 % of the land without any production,
- ✎ cross fulfillments, intervention mechanism and the other arrangements.

Common Agricultural Policy EU was during 1970-2006 funded by European Agricultural Guidance and Guarantee Fund (EAGGF). Income part of this fund was created from the european budget sources, from the contributions of the farmers for the shared responsibilty, from the taxes from the sugar and glucose and from the various variable fees.

Expenditure part of the fund was from the 1964 created by two sections. Regulative section was set for financing of the rural areas within structural changes and warranty section served for covering expenditures of the CAP, especially concerning expenditures on intervention measures (intervention prices, export support, etc.) and on the direct payments. Warranty section covered mainly 90 % of the all CAP expenditures.

CAP financing is realized by two funds from 2007. First one is European Agricultural Guarantee Fund (EAGF) which has taken over functions of the warranty section of EAGGF. Second one is European

Agricultural Fund for Rural Development (EAFRD) which has taken over functions of the regulative section of the EAGGF.

System of the receiving sources from funds is based on the advance payments of the members states with the annual account. Financial resources for the final recipients are paid by accredited paying agencies (in Slovak Republic APA, Agricultural Paying Agency). After the financial year member state presents European Commission all documents about the expenditures. These are after the approval paid and European Commission elaborates Final report that is submitted to the Council and Parliament.

From the point of view of the expenditures, Common Agricultural Policy is the most difficult policy about the financial resources within the European Union.

Expenditure costs of the CAP created in the past financially most difficult chapter of the EU Budget. Table nr.1 elucidates financial difficulty of the CAP by the expenditures of the warrantysection of the EAGGF that was at that time linked mainly with the expenditures on the support and the stabilization of the production. Increasing tendency of the expenditures influenced whole rank of factors, the most important is total economic growth of the EU member states as well as the growth of the number of the single member states.

Table 1 Financial view of the European Union liabilities in the years 2000-2006 (mil. EUR, in current prices)

Liability items / years	2000	2001	2002	2003	2004	2005	2006	Total 2000 2006
Agriculture	41 738	44 530	46 587	47 378	49 305	51 439	52 618	333 595
from that: agriculture (without the development of the countryside)	37 352	40 035	41 992	42 680	42 769	44 598	44 847	294 273
development of the countryside and accompanying measures	4 386	4 495	4 595	4 698	6 536	6 841	7 771	39 322
Structural operations	32 678	32 720	33 638	33 968	41 035	42 441	44 617	261 097
Internal policies	6 031	6 272	6 558	6 796	8 722	9 012	9 385	52 776
External policies	4 627	4 735	4 873	4 972	5 082	5 119	5 269	34 677
Administration	4 638	4 776	5 012	5 211	5 983	6 185	6 528	38 333
Reserves	906	916	676	434	442	446	458	4 278
Pre-accession assistance	3 174	3 240	3 328	3 386	3 455	3 472	3 566	23 621
from that: agriculture	529	540	555	564				2 188
Compensatory payments					1 410	1 305	1 074	3 789
Total Liability items	93 792	97 189	100 672	102 145	115 434	119 419	123 515	752 166
Agriculture as a percentage of the total liabilities	40,39%	41,75%	42,26%	42,34%	38,27%	38,44%	37,18%	39,92%

Source: European Commission, own processing

Table 2 Financial view of the European Union liabilities in the years 2007 - 2013 (mil. EUR, in current prices)

Liability items/years	2007	2008	2009	2010	2011	2012	2013	Total 2007 - 2013
Sustainable development	53 979	57 653	59 700	61 782	63 638	66 628	69 621	433 001
from that: competitiveness for the growth and employment	8 918	10 386	11 272	12 388	12 987	14 203	15 433	85 587
coherence for the growth and employment	45 061	47 267	48 428	49 394	50 651	52 425	54 188	347 414
Natural sources	55 143	59 193	59 639	60 113	60 338	60 810	61 289	416 525
from that: expenditures related with the market and direct payments	45 759	46 217	46 679	47 146	47 617	48 093	48 574	330 085
Citizenship, freedom, safety and justice	1 273	1 362	1 523	1 693	1 889	2 105	2 376	12 221
European Union as a global partner	6 578	7 002	7 440	7 893	8 430	8 997	9 595	55 935
Administration	7 039	7 380	7 699	8 008	8 334	8 670	9 095	56 225
Compensatory payments	445	207	210					862
Total Liability items	124 457	132 797	136 211	139 489	142 629	147 210	151 976	974 769
Agriculture as a percentage of the total liabilities	37,12%	34,96%	34,42%	33,80%	33,39%	32,67%	31,96%	33,95%

Source: European Commission, own processing

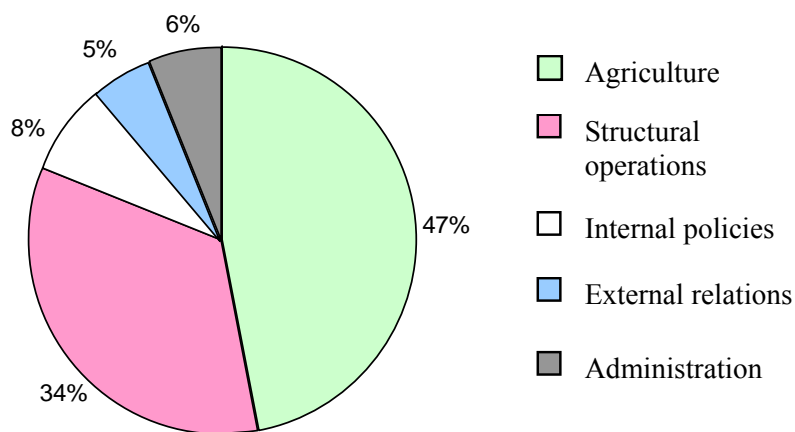
We can see decreasing tendency from the point of view of expenditures on the agriculture to the total EU budget (more Table nr.1,2). This decreasing tendency can be justified that by running time other policies were gradually transfered on the EU (in the 70s of the 20th century from the point of view of the financial provision CAP was the only fully transfered policy on the Union).

Within the period 2007-2013 single budget chapters of the EU were renamed so that single titles of the chapters were in accordance with revised Lisbon strategy which priority item is increasing EU competitiveness and regions convergence (chapter „Sustainable development“).

Originally separate chapter „Agriculture“ that consumed most financial resources is included in the period 2007-2013 in the second chapter called „Natural sources“ in which more than 75 % of expenditures are linked with agriculture market and direct payments. These modified budget chapters present an effort of the EU in decreasing of the total expenditures on the CAP and reorientation on the knowledge-based economy, development, research of the new technologies and environment protection. On the base of the historical facts objectively decrease of the resources for the farmers and increased support for the chapter „Sustainable development“ (with two important subchapters called „Competitiveness for the growth and employment“ and „Coherence for the growth and employment“) is being happened.

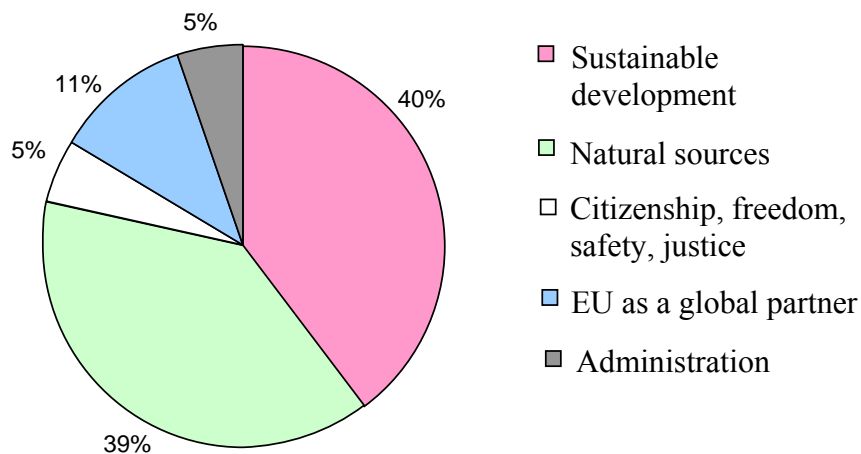
As the convergence is the main aim of the programming period 2007-2013, financial resources from the EU structural funds and Cohesion Fund are directed to the projects focused mainly on the support of the employment growth, to the development of the society based on the knowledge and on the environment protection.

Graph 1 Gross comparison of the expenditures for the main chapters of the EU budget in the period 2000-2006



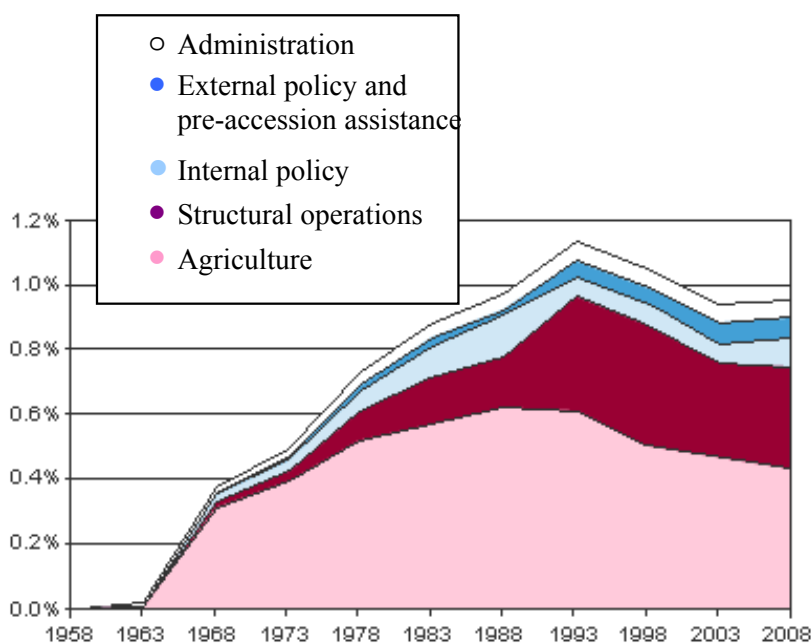
Source: European Commission, own processing

Graph 2 Gross comparison of the expected expenditures for the main chapters EU budget in the period 2007-2013



Source: European Commission, own processing

Graph 3 Development of the EU budget and its single expenditure components in the years 1958_2008 (% of the Gross national product of the EU)



Source: Reforming the Budget, Changing Europe, History of the budget, on http://ec.europa.eu/budget/reform/history/history1957_en.htm

MacSharry reforms have started new tendency in the development of the expenditures on the Common Agricultural Policy. These have started to decrease in proportion to the Gross National Product (GNP) from the 1992 (see Graph nr. 3). Real expenditures on the CAP have henceforth increased. The primary reason of the expenditures growth is further EU spreading, in the 1986 by Spain and Portugal, in the 1995 by Austria, Finland and Sweden. In the medium-time horizon, it is not possible to suppose the change in the tendency as in the last time 12 countries have joined the EU and all of them are authorized to get direct payments according to the determined schemes.

Summary

CAP EU reform is an important step to the market mechanism as it put the prices of the main commodities on the level of the world prices. The main aim of the reform should be by a support of the competitive, market oriented and sustainable agriculture.

Effective and competitive agriculture would support viability of the rural economy and would stay an important part of the rural activities. Production support decreasing would have an effect in a lower workforce in agriculture. The result of this process would be reduction of the European agricultural production and used resources.

By mentioned it is possible to state that problems of the agrarian market would in the higher and lower rate repeat, therefore also process of the present CAP EU reform has not been finished and it will need gradual implementation of the other measures focused on the removal of the animosities towards the market mechanism formed by former exaggerated subsidy policy focused on the intensive production.

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Prediction of Purchase Prices of Milk in the EU

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Abstract

The Common Agriculture Policy (the CAP) is a set of policies regulating agricultural production that was set up primarily to attain food self-sufficiency and sustainability for Europe by making farming profitable for farmers. One of the problematic issues farmers experienced lately is related to milk production with relation to its price. A forecast of purchase prices of milk in ten selected EU countries is proposed. The bases for modeling were 27 known values – monthly time series from January 2010 to March 2012. The goal was to find, for every country, the simplest appropriate solution in terms of numbers of parameters and possible linearity in parameters. The task was solved by means of ARIMA modeling and exponential smoothing method.

Key words

Time series analysis, ARIMA, Exponential smoothing, Test of seasonality

Importance of the CAP

The CAP has been a cornerstone of the EU integration and one of its most spectacular successes. A policy to stimulate European food production after World War II was desperately needed, and the CAP succeeded in making Europe self-sustaining within a few decades following the end of the war. The CAP eventually became burdened by its own success, creating problems with overproduction and large food surpluses.

Prices are the main instrument of regulation within the CAP. According to Kučerová (2006, p. 151) prices can be split into two groups: those for agriculture products produced within the single market, and then there are prices for agriculture products imported from the third-party countries. The first group is regulated by two types of price support measure: the target price and the intervention price. The target price is set by the Council for the entire year. Every producer has a right to this guaranteed price; its size is based on minimal cost, which is the reason why mass producers are favored and should bring in ordinary profit. The intervention price is a guaranteed minimum price, officially set for agricultural products according to prices on the world market. If prices fall below this minimum, the market organizations are obliged to buy the products at this price. The intervention price is usually a percentage of the target price. The threshold price comes into play with respect to the second group. It is the price for which importers from third-party countries must sell their products on the EU market. This price is usually higher than the intervention price and its purpose is clear – to stabilize income for European farmers, to protect against any competition from outside the common market and to cover the higher cost of expenses to transport products to the place where they will be consumed.

Milk prices for farmers in the EU are determined by several factors (Milk and milk products in the EU, p. 14): supply and demand on the internal EU market, world dairy product prices, currency exchange rate fluctuations, quality requirements and demand for specific products, the competition situation in the food chain and support for the dairy market, and to farmers, from the CAP. Since the creation of the support system for milk and dairy products in the late 1960s, the CAP has been a major element in determining price. However, a series of reforms to the CAP, mean that market forces are now the main determinant.

Analysis of the purchase price of milk in selected countries of the European Union

The primary aim of the analysis was to forecast the development of purchase prices of milk in the selected EU countries in the period within five months. There was 27 monthly data of the purchase price from January 2010 till March 2012. The missing value for December 2010 was replaced with the aid of a linear interpolation of neighboring values. (Data source: Roľnícke noviny, 2012). Purchase prices of milk are in euros per 100 kg without value added tax.

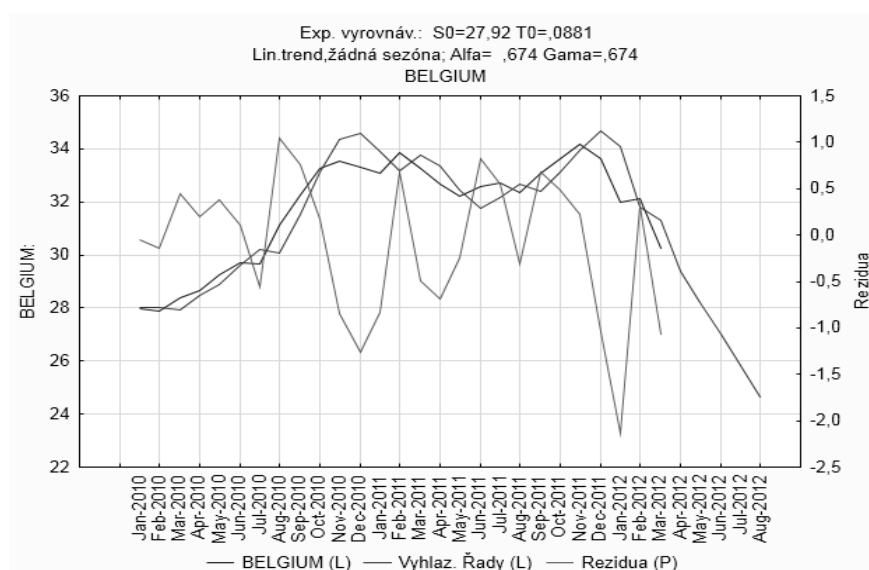
In order to estimate the nearest purchase prices of milk we used Box-Jenkins methodology named Autoregressive-Integrated Moving Average (ARIMA) model (Box, Jenkins, 1970) or Brown's linear trend exponential smoothing of time series analysis in selected countries. In ARIMA modeling the forecast can be made on the basis of past values. Basic assumption is stationarity of time series which often can be achieved by a suitable transformation, or/and by differencing. Our goal was to find the simplest solution in

terms of numbers of parameters and possible linearity in parameters. On the other hand, the quality of the found model had to be checked. The resulting residuals are assumed to be random in time and normally distributed. In every accepted model white noise conditions have been met. Estimated parameters have to be significant and uncorrelated. Residual sum of squares have to be minimal. Among the couple of compared models was always chosen model with better features.

A visual view on considered time series convinced us about their non seasonal behavior. More exact method of seasonality testing is to regress the series on dummies for each season and ask if they are significantly different. Using this method led to the confirmation of non seasonality. Another exact method is for example a general-to-simple test procedure (Frances, 1992), or nonparametric method NPST (Rau, 2006).

In next part we proposed individual solution for every considered time series.

Figure 1 Belgium – observed, expected, forecast and residual values



Source: own calculation

Belgium. The best found model for Belgium data was Brown's model with parameter $\alpha=\gamma=0,674$ applied to the non transformed data. Brown's model is here described according to help SPSS:

Let us Y_t denote the value of purchase price of milk in time $t, t = 1, 2, \dots, n$. Initial values for Brown's model are $T_0 = \frac{Y_1 + Y_2}{n-1}$, $S_0 = Y_1 - \frac{1}{2}T_0$.

Then initial estimate is $\hat{P}_1 = S_0 + T_0$ and first error term is $e_1 = Y_1 - \hat{P}_1$. Other values for time $t, t = 1, 2, \dots, n$ are

$$e_t = Y_t - \hat{P}_t,$$

$$S_t = S_{t-1} + T_{t-1} + \alpha e_t,$$

$$T_t = T_{t-1} + \gamma e_t,$$

$$\hat{P}_{t+1} = S_t + T_t.$$

Hence we obtain the forecast for $t > n$ since there $e_t = 0$. In the Table 1 is result of program STATISTICA for Belgium. Own calculation in MS Excel led to the same results. For better visual view all observations, estimations, forecast and residual values are shown in Figure 1.

Table 1 Belgium – observed, expected and residual values

t	Y _t	est. Y _t	e _t
január 2010			
1	27,96000	28,00404	-0,04404
2	27,90000	28,04245	-0,14245
3	28,40000	27,94990	0,45010
4	28,66000	28,46089	0,19911
5	29,27000	28,89316	0,37684
6	29,72000	29,61623	0,10377
7	29,64000	30,20243	-0,56243
8	31,13000	30,08448	1,04552
9	32,28000	31,52447	0,75553
10	33,28000	33,11204	0,16796
11	33,53000	34,37998	-0,84998
12	33,31000	34,57626	-1,26626
Január 2011			
13	33,09000	33,91728	-0,82728
14	33,86000	33,17853	0,68147
15	33,27000	33,76563	-0,49563
16	32,65000	33,33469	-0,68469
17	32,22000	32,46557	-0,24557
18	32,60000	31,78083	0,81917
19	32,74000	32,18530	0,55470
20	32,35000	32,66338	-0,31338
21	33,09000	32,41434	0,67566
22	33,62000	33,13837	0,48163
23	34,17000	33,95029	0,21971
24	33,65000	34,68548	-1,03548
január 2012			
25	31,97000	34,10496	-2,13496
26	32,13000	31,81455	0,31545
27	30,25000	31,31828	-1,06828

Source: own calculation

Next countries, for which was the best Brown's model are **Austria, Germany and Slovakia**. Table 2 consists of forecast ex ante for Belgium and these three countries, in the Table 3 are characteristics of model quality assessment.

Table 2 Five month forecast

Forecast - model Brown, no transformation				
Month	AUSTRIA	BELGIUM	GERMANY	SLOVAKIA
Apr-2012	35,97506	29,40481	32,00002	30,31747
May-2012	35,45314	28,21108	31,30005	29,71194
Jun-2012	34,93121	27,01735	30,60007	29,10640
Jul-2012	34,40929	25,82362	29,90009	28,50086
Aug-2012	33,88736	24,62990	29,20011	27,89532

Source: own calculation

As we can see, we can expect about the same slow decrease in purchase prices of milk in three countries, Austria, Germany and Slovakia. More rapid decrease in prices we expect in Belgium.

Comparing prices, countries are in the following order: Belgium < Slovakia < Germany < Austria. From Table 3 we can conclude, that model for Belgium slightly underestimates the purchase prices.

Table 3 Quality of models

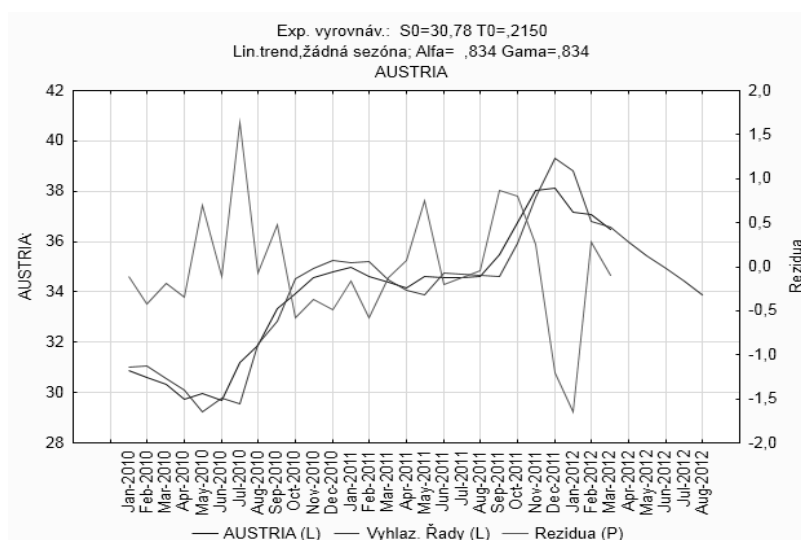
Model quality*					
Country	ME	MAE	MSE	MPE	MAPE
AUSTRIA	-0,03926	0,47209	0,41634	0,08771	1,38042
BELGIUM	-0,10459	0,61174	0,56888	-0,31732	1,90539
GERMANY	-0,03205	0,52650	0,45059	-0,06553	1,58377
SLOVAKIA	-0,04202	0,29212	0,12025	-0,12101	0,97618

*Parameters of all models are significant on $\alpha = 0,01$.

Source: own calculation

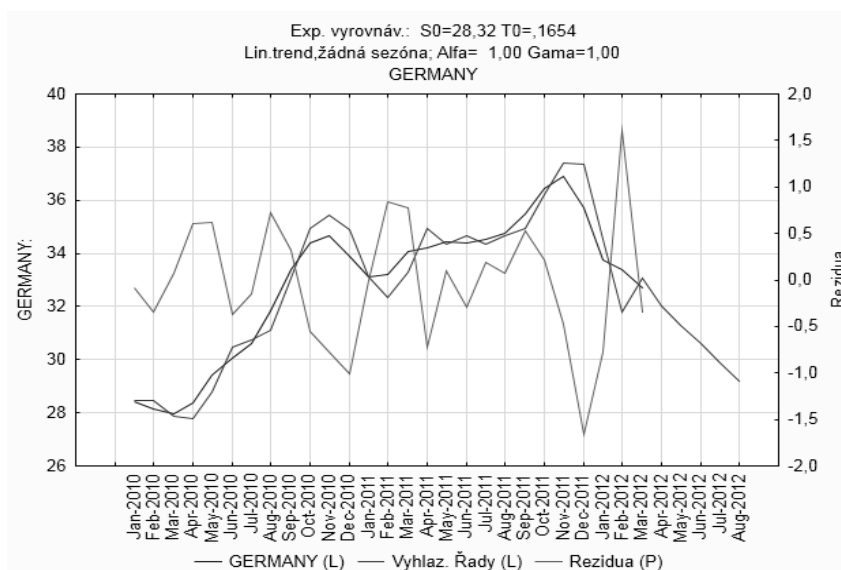
Observed, estimated, forecasted and residual values are shown in Figure 2 for Austria, Figure 3 for Germany and Figure 4 for Slovakia.

Figure 2 Austria – observed, expected, forecast and residual values



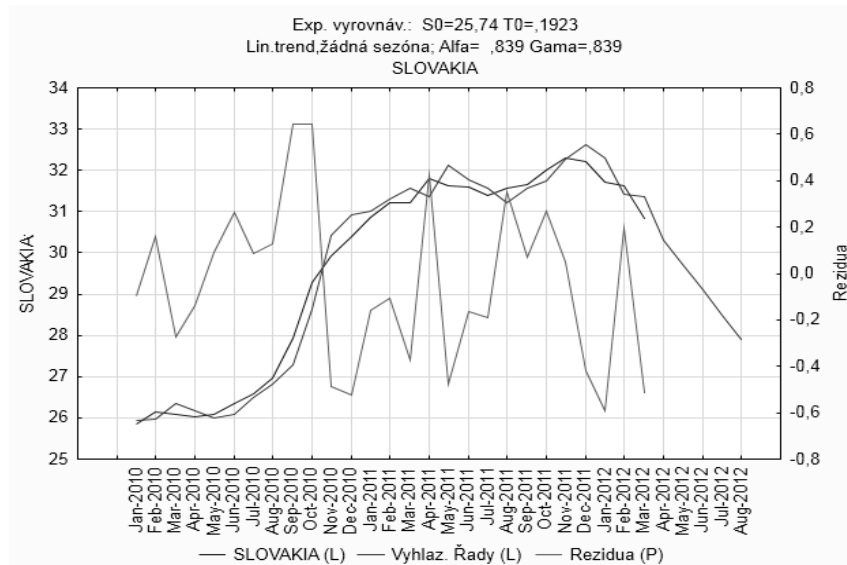
Source: own calculation

Figure 3 Germany – observed, expected, forecast and residual values



Source: own calculation

Figure 4 Slovakia – observed, expected, forecast and residual values



Source: own calculation

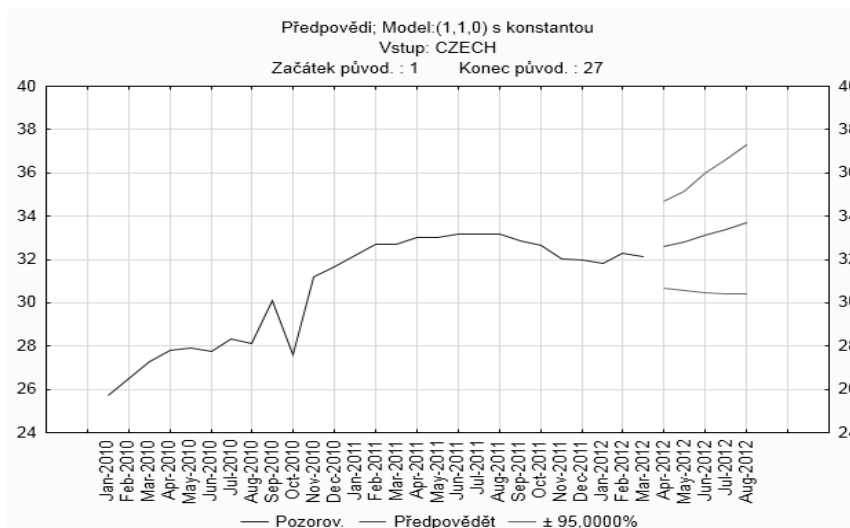
In case of **Netherlands** and **Czech** there is the best of simpler models differenced first order autoregressive model ARIMA(1,1,0) applied to the natural log transformed data. In this model estimated values are expressed by formula $\hat{Y}_{t+1} = c + \phi(Y_t - Y_{t-1}) + Y_t$ (c is constant used when C is significant and ϕ is AR(1) parameter, where C and ϕ are found by minimization Melard algorithm using statistical software), where in case of ex ante forecasts are missing values of previous measurements replaced with the previous estimates. In Table 4 there are the forecast values for Czech and Netherlands for the nearest 5 months and in Figures 5 and 6 are observed and forecasted values with confidence intervals. Found models are expressed in the formulas:

Czech: $\hat{Y}_{t+1} = 0,0127 + (-0,5020)(Y_t - Y_{t-1}) + Y_t$, where $AR(1) = -0,5020$ ($t = -2,864$, $p = 0,009$) and $C = 0,0085$ ($t = 2,088$, $p = 0,048$).

Netherlands: $\hat{Y}_{t+1} = 0,4698(Y_t - Y_{t-1}) + Y_t$, where $AR(1) = 0,4698$ ($t = 2,552$, $p = 0,017$).

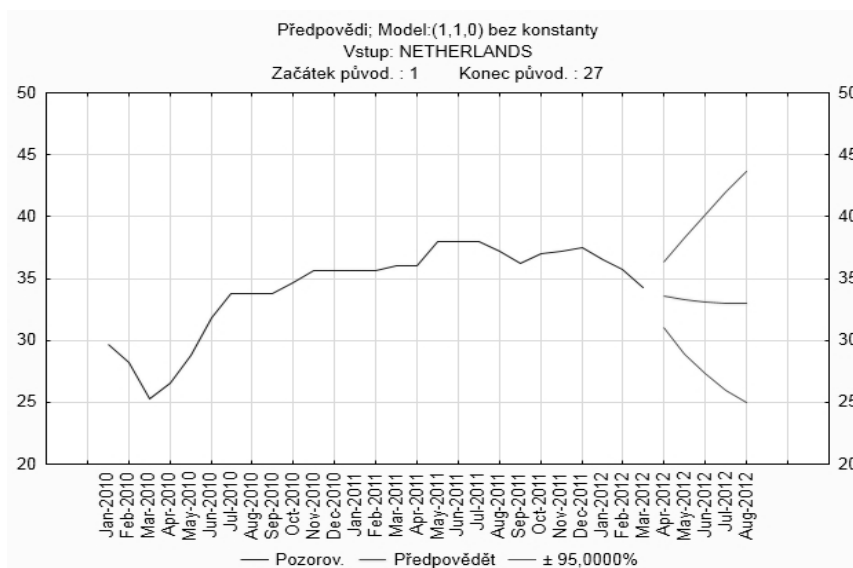
In Netherlands, we exact very slight fall and in Czech, very slight increase in purchase prices of milk. Comparing prices, countries are now in the following order: Belgium < Slovakia < Germany < Czech = Netherlands < Austria.

Figure 5 Czech – observed values, forecast and 95% CI of forecast



Source: own calculation

Figure 6 Netherlands – observed val., forecast and 95% CI of forecast



Source: own calculation

Table 4 Five month forecast

Forecast - model Arima(1,1,0), Natural Log transformation		
Month	NETHERLANDS	CZECH
Apr-2012	33,56719	32,61685
May-2012	33,25111	32,79042
Jun-2012	33,10365	33,12119
Jul-2012	33,03460	33,37595
Aug-2012	33,00220	33,67278

Source: own calculation using STATISTICA

In case of **Hungary**, **Italy** and **Poland** no AR and MA parameters have to be added to the ARIMA model. Resulting model is ARIMA(0,1,0), e.g. random walk, model I(1) where the constant term c is the average difference in Y . The formula of this model is $\hat{Y}_{t+1} = c + Y_t$. The last country is **France** with exponential smoothing without trend - simple model. The following table shows the resulting predictions for these countries using SPSS.

Table 5 Four month forecast

	Apr-2012	May-2012	Jun-2012	Jul-2012
HUNGARY	31,59416	31,90129	32,21139	32,52451
ITALY	40,00923	40,39209	40,77862	41,16884
POLAND	30,41269	30,57539	30,73808	30,90077
FRANCE	32,59002	32,59002	32,59002	32,59002

Source: Own calculation using SPSS

We expect minimal increase in purchase prices of milk in countries Hungary, Italy, and Poland. In France, we expect a constant level.

Comparing all milk prices, countries can be put in the following order: Belgium < Slovakia < Poland < Germany < Hungary < France < Czech = Netherlands < Austria << Italy.

Summary

In point of forecast in purchase prices of milk we expect minimal increase in purchase prices of milk in countries Hungary, Italy, and Poland. In France, we expect a constant level. In Netherlands, we expect very slight fall and in Czech, very slight increase in prices. Slow decrease we expect in Austria, Germany and Slovakia. More rapid decrease in prices we expect in Belgium. Prices are different in the considered

countries, see above in previous chapter. Note that not all results and figures are given here. We have omitted graphs of auto correlation and partial autocorrelation functions, tests of normality of residuals, AIC and BIC criteria and many other considered tests and results. However, these results were always taken into account. Our main goal was to show the estimates of purchase prices of milk in selected countries and briefly indicate how the estimates were made. For calculations we used programs STATISTICA, SPSS and MS Excel.

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Selected Benchmarking Indicators of Cluster Initiatives in Slovakia Tourism Clusters

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Abstract

Currently, there are many measuring models for the cluster initiatives performance, but there is still no standard model in use. Therefore, a certain creativity in the management and use of various methods of investigations beyond purely statistical findings and defining ratios is an important aspect for success. One of the additional tools for measuring the performance of clusters is the benchmarking of cluster initiatives. The aim of this paper is to map and evaluate the parameters of this method in existing clusters of tourism in Slovakia.

Key words

Benchmarking, Cluster initiatives, Tourism clusters

Introduction

Benchmarking is an advanced management tool, which means measuring performance and processes of the organization and their systematic comparison with other performances looking for the best deal. Robert C. Camp (Pavelková, s.180) defines benchmarking as "search for best practices in business, leading to excellent results." The operation of clusters and comparing their performance can focus on benchmarking companies in the cluster, or cluster as a whole compared to other clusters. Most proposed methods for evaluation of cluster focuses on the evaluation of economic efficiency with economic indicators. The benefits of clustering are not always easy to measure eg. development of local resources, knowledge and social capital variables are intangible and therefore difficult to quantify (Jumper, 2004). To analyze the performance we can serve official statistics, interviews with the steering group of the cluster but also purposefully designed questionnaire. In this paper we use data from the questionnaires, which we prepared for the purpose of comparing operating clusters of tourism in Slovakia in Žilina region. The exploratory sample consisted Liptov, Turiec and Orava Cluster.

Benchmarking of cluster initiatives

Initiative Cluster Linked over Europe (CLOE, 2006) proposes the Cluster Benchmarking Initiative (Pavelková, 2009) evaluation through indicators such as:

- number of members, which brings together the cluster initiative,
- aggregate turnover of cluster members,
- total number of the cluster staff members,
- number of organized events (workshops, seminars, workshops) in the cluster initiative,
- number of joint projects and the number of firms involved in projects,
- financial strength of cluster initiative (compared to the invested cost subsidies, the share of public funding of cluster initiatives),
- share of SMEs in the cluster, the number of visits to businesses in the cluster initiative,
- number transferred analyzes focusing on customer satisfaction in the cluster.

For this paper processing, we used selected benchmarking indicators of cluster initiatives, applied on received answers in a questionnaire survey of tourism clusters in the region of Žilina.

Results of cluster benchmarking initiatives in Slovakia

In practice there are different forms and methods of formation and development of clusters, either naturally or conscious support of cluster initiatives. Support for regional clusters has become an important and successful tool for economic development in the region.

Table 1 Basic data of tourism clusters

	Liptov Cluster	Orava Cluster	Turieč Cluster
Year of cluster establishment the	2008	2009	2009
Legal form	The Association	Regional tourism organization	The Association
Vision	Build from region Liptov the European recognizable destination until 2013	Orava as attractive year-round tourism destination	Turieč as attractive travel tourism destination
Cluster management	A professional manager	Representatives of municipalities and companies	Representatives of companies
The establishment of a of a cluster	VUC, city, business	VUC, city, business	city, business

Source: own processing of questionnaire responses

In summary, we see that VUC, various cities in the region and companies dealing with tourism in the region of Žilina, participated on the establishment of clusters. On the question of cooperation with schools and universities cluster Orava replied in the negative way, and clusters Liptov and Turieč confirmed cooperation with schools, but as we see the schools and universities did not participated on the establishment of clusters.

To fulfill the vision of each cluster, should be noted that the steering group of managers are the most important issue for stable long term clusters. Cluster Liptov is coached by professional manager which resulted in a higher number of organized events and projects (Table 2). Clusters managed by representatives of municipalities and companies can run into the problem of conflicts and tendencies to follow their own particular interests.

Table 2 Selected comparison indicators up to 31.12.2011

	Liptov Cluster	Orava Cluster	Turieč Cluster
Number of members in a cluster	29	25	23
Aggregate turnover of cluster members in Eur	700 000	550 000	250 000
Total number of staff members of the cluster	100	220	180
Number of organized events	13	5	3
Number of projects	5	0	0

Source: own processing of questionnaire responses

The functioning of our comparison of clusters takes a short period, clusters in Slovakia do not have enough experience and each cluster is specifically designed for specific conditions. We can therefore speak of clusters at an early stage, in which the cluster policy should be focused on development and stability of clusters in order to encourage dialogue between members of the cluster. The survey showed that the clusters are small regional businesses engaged in tourism with a staff of 50 representing 90% and the other 10% are firms with more than 250 employees.

Cluster Liptov has been instrumental in the implementation of joint projects in the field of marketing activities, development of human resources, information and communication platform. Organized events are mostly staff training, seminars, cooperation with educational institutions, preparation of promotional materials and presentations of the clusters.

Table 3 Sources of cluster funding in 2011 in percentage

	Liptov Cluster	Orava Cluster	Turieč Cluster
Membership fees	70	85	100
Projects	30	0	0
Subsidies	0	0	0
Private sources	0	15	0

Source: own processing of questionnaire responses

To be able to fulfill the vision of the cluster management must have sufficient financial resources. In summary, we see that the cluster funding is from membership fees from 500 to 10,000 Euros. The absence of projects and a few joint activities in the Orava and Turiec Clusters forces management to increase the membership fees. Private equity comes from entities in the cluster or outside the cluster in the form of bank loans, sponsorship or other funding sources.

Table 4 The most significant benefits for companies from joining the cluster

Liptov Cluster	Orava Cluster	Turiec Cluster
✓ Joined marketing	✓ Joined marketing	✓ Joined marketing
✓ Innovations	✓ Innovations	Information Services
Lobbying for better infrastructure and legislation	Lobbying for better infrastructure and legislation	Lobbying for better infrastructure and legislation
✓ Cooperation between members of the cluster	✓ Cooperation between members of the cluster	✓ International cooperation
✓ The expansion in terms of new markets and customers	✓ Information Services and Training	✓ The expansion in terms of new markets and customers
✓ Access to funding	✓ Increase of specialization	✓ Increase of specialization

Source: own processing of questionnaire responses

Entities that joined the cluster in the first place want to know if their participation in a cluster can deliver the expected results. Among the many benefits for firms in a cluster design from questionnaires, we selected those who were assigned the highest marks from the managements. Beneficial for firms in the cluster is shared marketing strategy in regular PR events and presentations in various media. The good thing is reducing the cost of advertising, web presence, internet security, legal and consulting services. The Cluster management close cooperation with the regional institutions create a space for activities in favor of the development of clusters. Therefore, the requirements and needs of small firms in clusters in the improvement of services, infrastructure or regional legislative regulations are often accepted. A large number of specialized suppliers and service providers who are involved in clusters, bring local firms competitive prices, fast delivery, discounts which are linked with lower costs and better bargaining position in service selling. Information services and better opportunities to promote clusters, affordable prices of services will attract new customers. Membership in a cluster allows the acquisition of major contracts, access to international markets, foreign contacts and finding partners for joint projects, as said by representatives of the clusters.

Summary

Benchmarking is a systematic process aimed at comparing the effectiveness of their own with top companies. The aim is to learn from better and more successful approaches and methods that are key to greater efficiency expressed by the general success.

The consequences of benchmarking can be reflected in better quality decisions based on information in setting challenging service quality objectives in comparison with competitors which ensures customer satisfaction. The result of the process should be an answer on how to become better than I am.

The article highlighted some of the characteristics and compare them with competitors in a sector in the region. Formation and functioning of clusters in Slovakia is at the beginning, there is no template for successfully constructed cluster, we can only learn from the clusters operating abroad. Research has identified the key factors for successful cluster development such as networking collaboration, professional management, mutual trust and communication of cluster members, training and collaborative research, access to finance and support from the Government and the Regions.

From the conducted survey, we can conclude that the clusters are able to create different effects and benefits for participating organizations. Compared clusters have still large reserves in the early stage of development, but their definitely have the courage and volition to be better. The basic functioning of the economic effect of clusters is their impact on business competitiveness and growth of the region itself.

South Carolina County supports the development of clusters of tourism although it is not a panacea for achieving prosperity and well-being of the region's population, but certainly one of the options for solving the problems of the regional economy.

From the survey conducted, we can conclude that the clusters are able to create different effects and benefits for participating organizations. Compared clusters have still large reserves are found in the early stage of development, but their definitely have the courage and determination to be better. The basic functioning of the economic effect of clusters is their impact on business competitiveness and growth of the region itself. South Carolina County supports the development of clusters of tourism although it is not a panacea for achieving prosperity and well-being of the region's population, but certainly one of the options for solving the problems of the regional economy.

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Analysis of Assumptions and Conditions for EU Harmonization of Direct Taxes

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Abstract

Growth of interdependence of economies in the European Union is connected with the growing interest in international aspects of public finances. Creation of a common market in Europe, the growing interaction of multinational corporations and the funding of joint activities in the integration groupings highlighted need for tax coordination or harmonization. The paper presents advantages and disadvantages of tax competition and tax harmonization as well as focuses on legislation of direct taxation in the EU. This paper also analyzes structure of direct taxes in particular EU countries and presents significant differences in tax rates in the EU-27.

Key words

Direct tax, Tax harmonization, Tax Competition, Tax Rate, European Union

Introduction

Appropriate harmonization of taxes and the coordination of tax policies of EU member countries presents serious economical and political issue, which has to be taken seriously to maintain economic progress and economic stability. Consequently, the harmonization is rather complicated, difficult and highly controversial process. Currently, the European Union has 27 Member States, which means it is more about 21 new countries and 21 tax systems. These are naturally more or less distinct. If the idea of harmonization of tax systems and direct taxes of the six countries in the 1960s was difficult and complicated, is to place the question, would be the coordination and harmonization in the current conditions of twenty-seven members realistic?

The beginnings of tax harmonization contain already the Treaty from 1957 of establishing of the European Economic Community (EEC) in paragraphs 90-93.

Coordination and harmonization in the EU are executed through the implementation of Community law into the legislation of member countries. The fundamental instruments of the EU in the process of coordination and harmonization of taxes are the regulations and directives¹. These are the instruments of secondary law. In the literature, we can meet with the concepts of positive and negative harmonization.

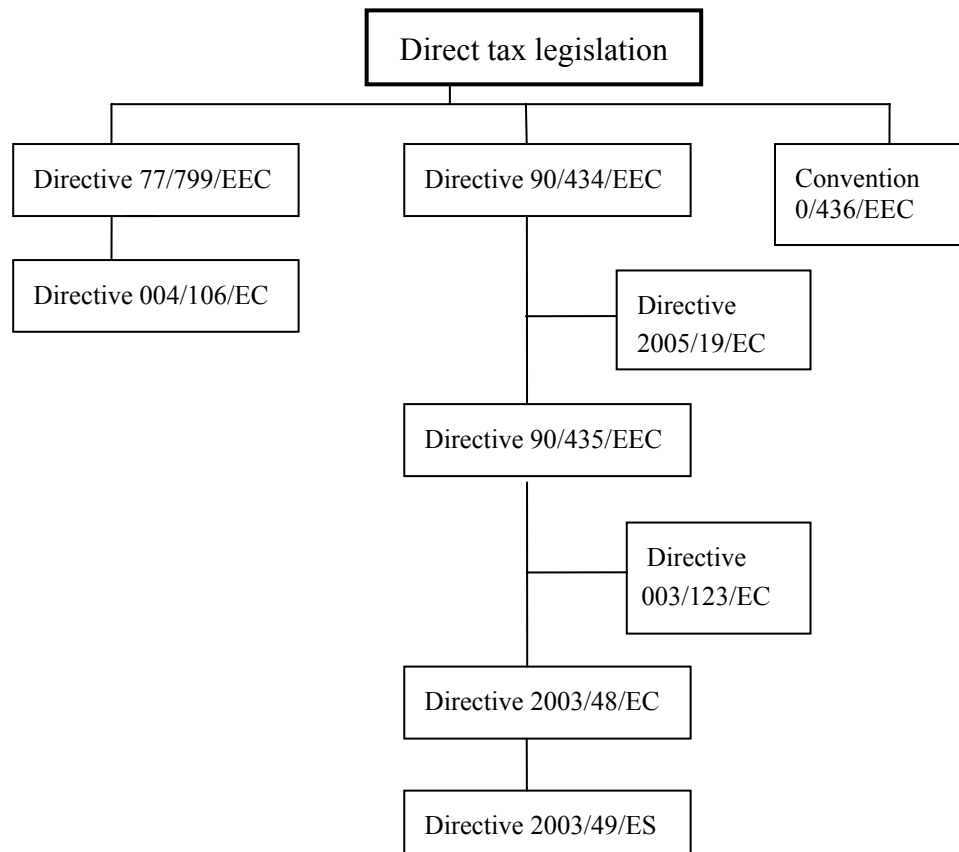
- *Positive harmonization* is a process of convergence of tax systems through the implementation of the directives, regulations and other legislative instruments used by promoting of harmonization. The same rules apply in all Member countries.
- *Negative harmonization* does not create the same rules for all Member States. It is the result of the activities of the European Court of Justice (ECJ). In the national tax systems are executed measures on the basis of the ECJ law, not on the basis of directives or regulations.

Existing legislation in the area of direct taxes shows the Figure 1. Crucially, the following four directives:

- 90/434/EEC - The Merge Directive, amended by Directive no. 2005/19/EC
- 90/435/EEC - Parent-Subsidiary Directive, amended by Directive no. 2003/123/EC
- 2003/48/EC - The Savings Directive
- 2003/49/EC - The Interest and Royalties Directive

¹A "regulation" is a binding legislative act. It must be applied in its entirety across the EU. A "directive" is a legislative act that sets out a goal that all EU countries must achieve. However, it is up to the individual countries to decide how. (<http://europa.eu>)

Figure 1 The principal legislation in the field of direct taxation



Source: Široký (2009)

There are individual boundaries implemented in EU (Medved', Nemec at al., 2011, p. 524):

- Personal income taxes remain the responsibility of national Governments.
- Indirect taxes which immediate effect the functioning of the single market stand in the centre of the attention and efforts of harmonization.
- Corporate taxes should facilitate free movement of capital and does not cause harmful competition between countries.
- Social systems should eliminate discrimination of residents of the individual States, and should not be a barrier of freedom of establishment and investment in any of the Member countries.

Tax harmonization versus tax competition

Past few years there is constantly discussed the question, whether it is better to leave to Member States the possibility to decide individually of their tax systems or to harmonize taxes. One of the basic arguments for harmonization is the fact that the common tax system would greatly improve the functioning of the single market.

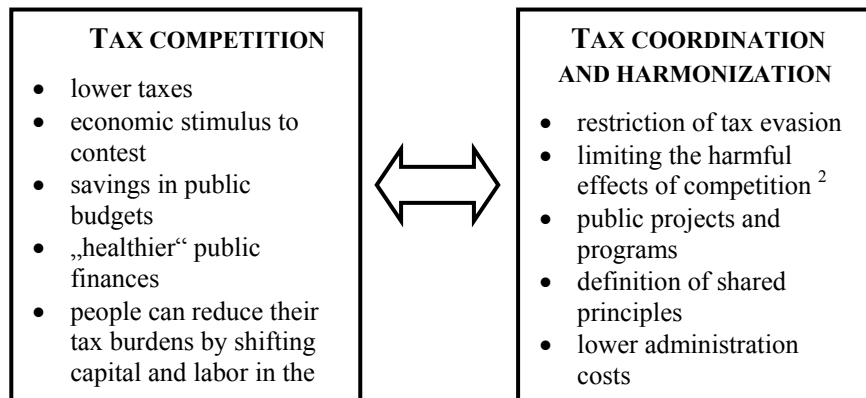
Tax harmonization means:

- The creation of greater uniformity in the tax systems of the Member countries
- The harmonization of indirect taxes
- Harmonization of direct taxes
- Result into a "European tax system"

Practice not clearly confirmed nor refuted the advantages or disadvantages of harmonization as well as competition. The convergence of direct taxation within the EU proceeds very slowly, and so direct taxes yet remain within the competence of the Member States. But there is still some emerging effort to harmonization in the field of direct taxes. However these efforts are hampered by resistance from several of the Member countries, including Slovakia. Therefore there is EC trying to harmonize taxes aiming to

limit excessive tax competition between Member States of the Union. On the other hand stand many Member States, which are not too inclined to give up idea of competitive advantage.

Figure 2 Tax competition versus tax coordination and harmonization



Source: processed according *Mitchell (2005)*

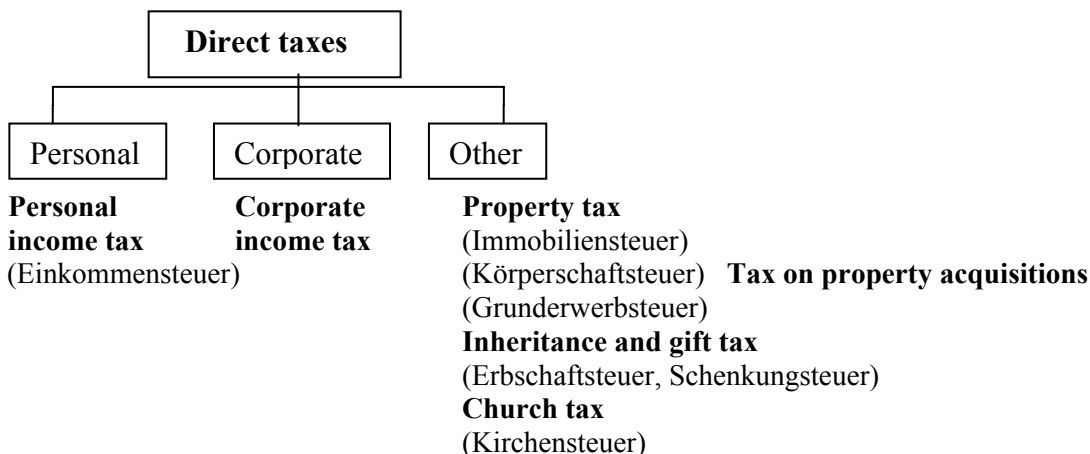
Direct tax harmonization, unlike the indirect, is yet clearly stagnating. However value added tax and excise taxes are already included in the phase of substantial unification of legislation and in tax rates.

Tax systems in selected EU countries

Tax systems of Member countries currently exhibit significant differences, although the structure of current recognized tax systems is similar. This section analyses the structure of direct taxes in selected EU countries. We have divided the countries into two groups – first group consists of the three developed countries of EU - Austria, France, Germany, the second group of transitive economies — Czech Republic, Poland and Slovakia.

Currently valid structure of direct taxes in Austria represents Figure 3.

Figure 3 Direct taxes in Austria

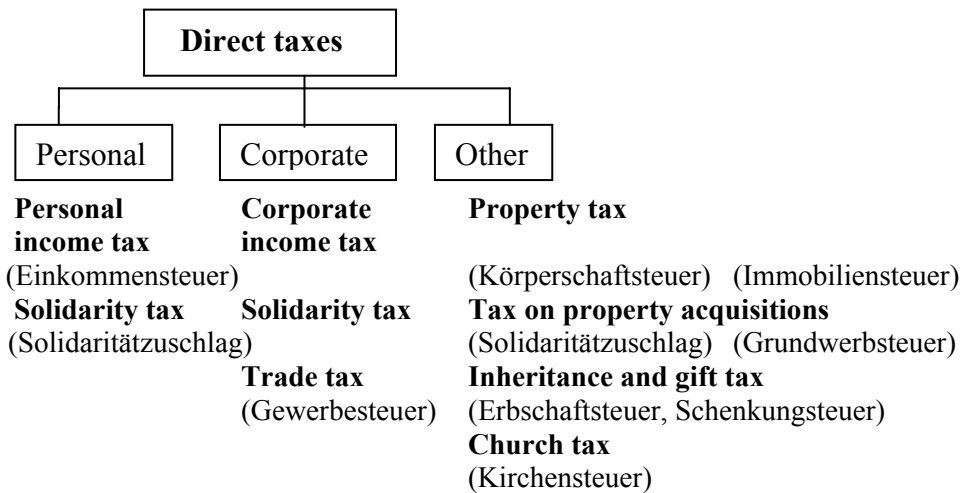


Source: processed according <http://www.bmf.gv.at>

² „Race to the Bottom“ theory suggests that tax competition (and the related issue of regulatory competition) will catalyze a downwards spiral of tax cuts and other incentives as a result of the intense rivalry between countries to attract investments and location of enterprises and rich individuals. The advantage gained by one country from lowering its taxes is often short term because it is quickly offset by similar moves in neighboring countries. (*Gurtner, Christensen, 2008*)

At the same time valid structure of direct taxes in Germany is shown in Figure 4.

Figure 4 Direct taxes in Germany(Kirchensteuer)



Source: processed according http://www.worldwidetax.com/germany/germany_tax.asp

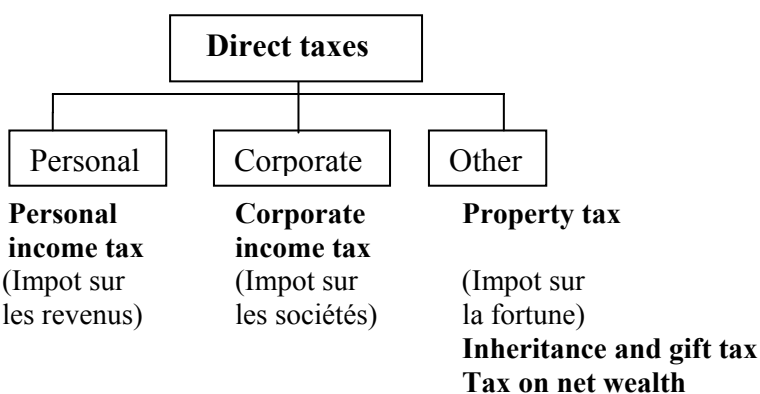
Tax system of Germany is considerably complicated. Taxes are levied at the level:

- Federal
- Republican
- Towns and Municipalities

German tax system includes 118 laws, 418 exceptions and 185 of the various forms. Two and a half percent (about 3,7 billion. EUR) of total received taxes are the administrative costs.

Further, the structure of direct taxes in France is in Figure 5.

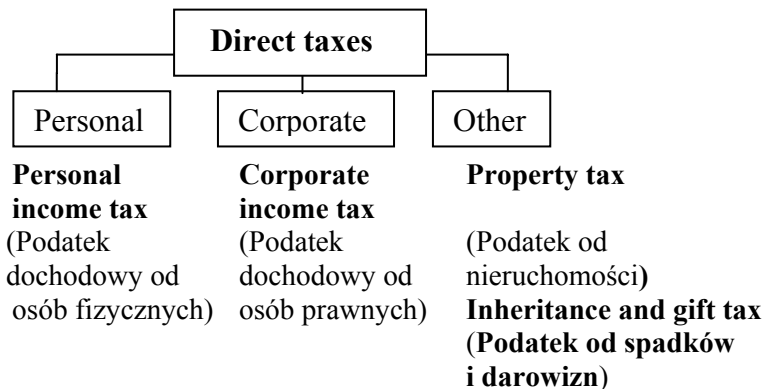
Figure 5 Direct taxes in France



Source: processed according http://www.grenzgaenger-forum.de/wiki/index.php/Steuern_in_Frankreich

The structure of direct taxes in Poland is in Figure 6.

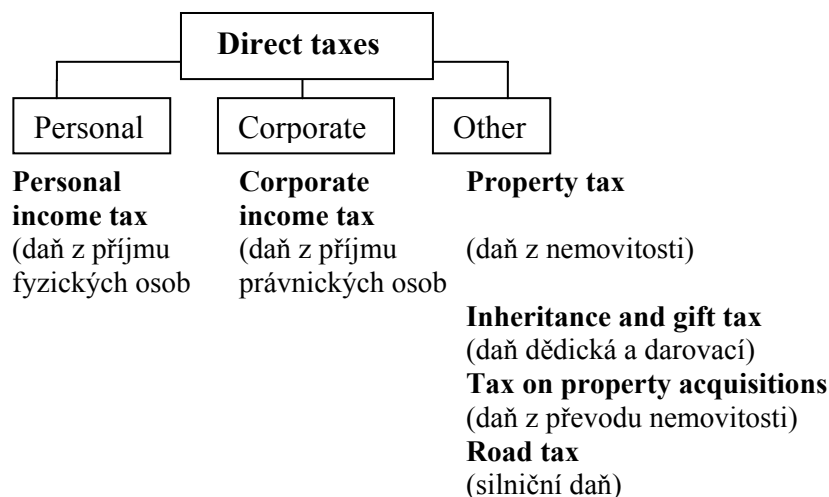
Figure 6 Direct taxes in Poland



Source: processed according http://www.paiz.gov.pl/polish_law/taxation

Direct taxes structure in Czech Republic (Figure 7).

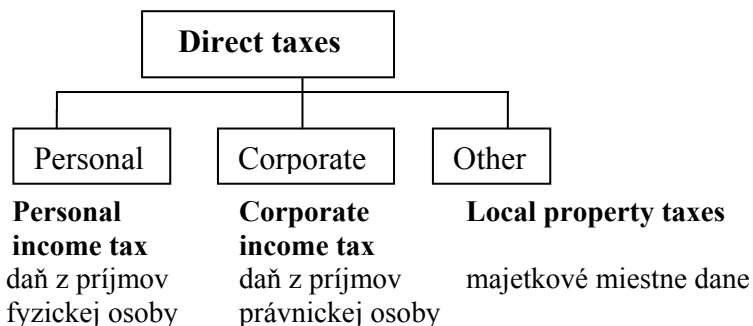
Figure 7 Direct taxes in Czech Republic



Source: processed according <http://www.berne.cz/druhy-dani/>

Currently valid structure of direct taxes in Slovakia represents Figure 8.

Figure 8: Direct taxes in Slovakia



Source: processed according Bánociová (2009)

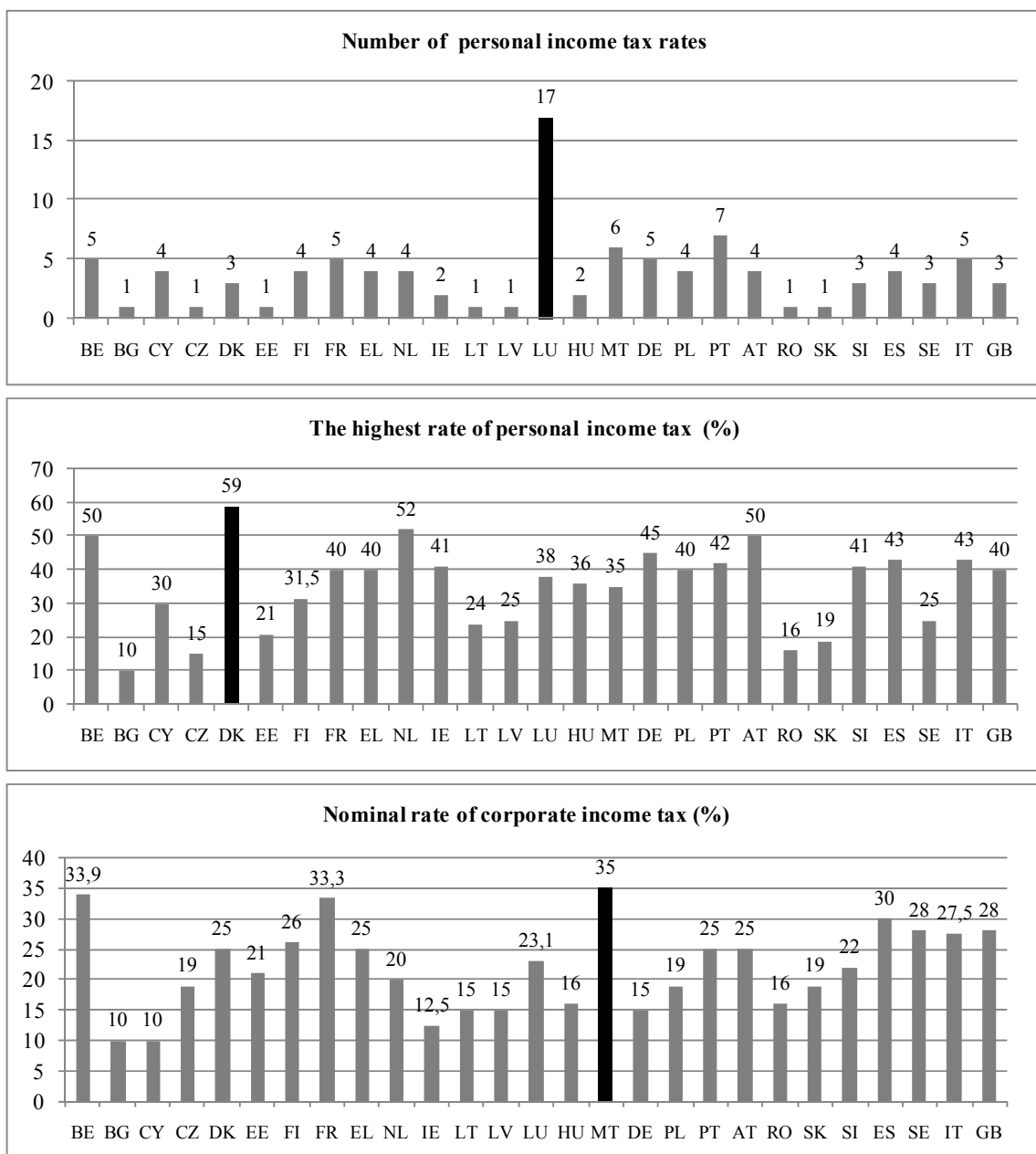
Analysis of the structure of the direct taxes in selected countries shows that the personal and corporate income taxes are a crucial part of them. In all six countries, the tax rate, the tax base as well as tax relief belong to the Central Authority's competence.

Significant differences in the studied countries can be observed:

- the recipients of corporate income tax
- in the number of tax rates
- in the amount of tax rates,
- in the calculation of the tax base,
- in the type of applicable taxes.

It can be stated that a certain uniformity can we see in the area of distribution of income tax competence between the individual government entities, but in the crucial issues of harmonization of direct taxes (tax rate and tax base) is no uniformity there yet.

Figure 9 Basic characteristics of direct taxes in EU



Source: processed according Šíroký (2010)

Summary

Different economic, political and social development of the taxes is noticeable in different parts of Europe. Naturally it also well reflected on separate tax systems and the specific characteristics of the tax. There are significant differences remained between the tax rates of countries of Western and Northern Europe (Belgium, Denmark, France, Netherlands, Germany) and the rates in countries of the Eastern and Central Europe (Bulgaria, Romania, Czech Republic or Slovakia). These are significant differences in the rates of income taxes in these countries. We can assume that the citizens of transition economies were not accustomed to high tax burden by income taxes (70-80 %) developed countries. Such a burden in our countries would be difficult to meet with comprehension.

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Influence of Crisis in Slovak Agriculture

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Abstract

This article deals with agriculture and their characteristics in Slovak Republic before and during the crisis. Firstly, we define the position of agriculture in Slovak economy and then we analyze it through chosen indicators.

Key words

Agriculture. Crisis.

Introduction

Agriculture fulfills a vital role in every economy in the world. Agriculture has had an important share in the national economy, but in recent years, its share has been decreasing. (Bujňáková, 2011) This is due to many changes in the economy, but also in agriculture itself.

Aims and methodology

The aim of this paper is to characterize the level of agriculture in Slovakia through selected indicators and to highlight the impact of the crisis on the sector.

In this paper we have used data published by the Statistical Office of SR and specialized publications dealing with issues of national economy and its subdivisions.

We used the method of analysis to characterize the Agriculture of SR. We analysed the agriculture of SR via selected indicators, namely:

- gross agricultural production in the crop and livestock productions,
- gross agricultural output per employee in the crop and livestock productions,
- number of employees
- average monthly wage,
- gross turnover.

We have analyzed the period 2008 - 2010. Outputs are shown in the next part.

Discussion

National economy and its structure

The economy presents an area of such human activities which purpose is to meet their needs via produced goods and services. The national economy is considered as a system of economic units operating in the territory of a state, which current form is set by the historical development. Thus, the complex consists of areas of economic activities in the country, which are joined together by means of labour division. The national economy is thus a whole, composed of the entities that satisfy the material and immaterial needs. (Hečková a kol., 2009)

The structure of the national economy can generally be seen as its composition, form or arrangement of its elements. The elements interact with each other and their interaction shapes the functioning of the national economy as a whole. The national economy can be divided in many ways, most often it is broken down into:

- branch structure - that is a division of the country's economy due to nature of the final results of the activities of individual entities. In this division we distinguish two main groups of industries the manufacturing and non-production.
- sectoral structure - a sectoral division is a tool to capture changes in the economy influenced by the economic development. This structure of the national economy can be divided into primary, secondary, tertiary, quaternary and quintuple sector.
- functional structure – this means division of economy on functional components, such as human capital and material capital.

- organizational structure - as the national economy is made up of various organizations thus we can assess relations between them according to the established organizational structure of the national economy.
- regional, territorial, spatial structure - elements of the national economy in terms of regional and territorial divisions create individual administrative areas and regions. The set division of the national economy is in accordance with the country's territorial structure. (Hečková a kol., 2009)

The sector division of the national economy is the best known and the most widely used is so called three sectors division. This sector division can be characterized through the following activities.

The primary sector is the principal sector of national economy and is made up of primary production, which includes mining, agriculture, forestry and fishing, which according to the classification of SK Nace Rev. 2 (2008) to sections A and B. The primary sector provides essential resources from nature and provides products that have not undergone any processing stage.

The secondary sector is closely related to the primary sector, as the products of primary sector are processed in the secondary sector. It is referred to as the sector of manufacturing industry and construction and in classification of SK Nace Rev. 2 (2008) divided into sections C, D, E and F.

The tertiary sector includes all types of services, trade, transport and communications. The sectors covered in this sector are characterized by rapid pace of scientific - technical progress. Due to the classification of SK Nace Rev. 2 (2008), this sector is made up of sections G and U. A detailed description of the economic activities covered by the various sectors is given below.

Tab 1 Division of sectors according to SK Nace Rev.2 (2008) classification

Name	Sector
SECTION A - AGRICULTURE, FORESTRY AND FISHING	Primary sector
SECTION B - MINING AND QUARRYING	
SECTION C - MANUFACTURING	Secondary sector
SECTION D - ELECTRICITY, GAS, STEAM AND AIR	
SECTION E - WATER SUPPLY, SEWERAGE TREATMENT PLANTS, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	
SECTION F - CONSTRUCTION	
SECTION G - WHOLESALE AND RETAIL TRADE, REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	Tertiary sector
SECTION H - TRANSPORTATION AND STORAGE	
SECTION I - ACCOMMODATION AND FOOD SERVICES	
SECTION J - INFORMATION AND COMMUNICATION	
SECTION K - FINANCIAL AND INSURANCE ACTIVITIES	
SECTION L - REAL ESTATE ACTIVITIES	
SECTION M - PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	
SECTION N - ADMINISTRATIVE AND SUPPORT SERVICES	
SECTION O - PUBLIC ADMINISTRATION AND DEFENSE, COMPULSORY SOCIAL SECURITY	
SECTION P - EDUCATION	
SECTION Q - HEALTH AND SOCIAL WORK	
SECTION R - ARTS, ENTERTAINMENT AND RECREATION	
SECTION S - OTHER ACTIVITIES	
SECTION T - ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; NON-PRODUCING ACTIVITIES OF HOUSEHOLDS OFFERING GOODS AND SERVICES FOR OWN USE	
SECTION U - ACTIVITIES EXTRATERRITORIAL ORGANIZATIONS AND BODIES	

Source: own elaboration based on data from Statistical Office of SR

The first indicator analysed was gross agricultural production. We measured its level in the sector of crop production, livestock production and total agricultural production. The results for the period 2008 - 2010 are listed in Table 2.

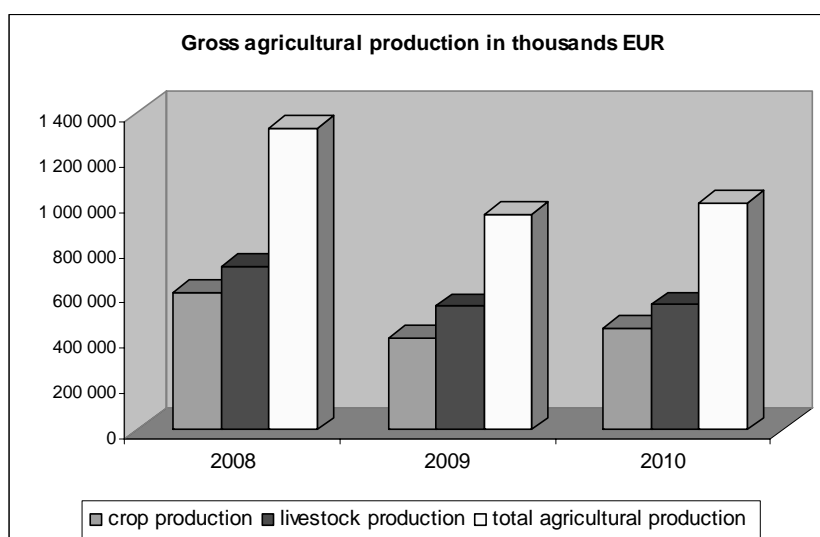
Tab 2 Gross agricultural production

v thousands EUR	2008	2009	2010
Crop production	607 835	407 384	449 801
Livestock production	722 516	544 710	552 202
Total agricultural production	1 330 351	952 094	1 002 003

Source: own elaboration based on data from Statistical Office of SR

During the examined period the livestock production dominated over the crop production. A common feature of both productions was the sharp reduction in volume in 2009, when the crisis began. In the production volume slightly increased, but it does not reach the level of 2008. The changes are displayed in the Figure 1.

Fig 1 Gross agricultural production



Source: own elaboration based on data from Statistical Office of SR

The second indicator analysed was the gross agricultural production per employee. This indicator has a higher predictive value than the first. Besides absolute data from production we can see data counted to an employee and so we can better assess the state of agriculture in each year.

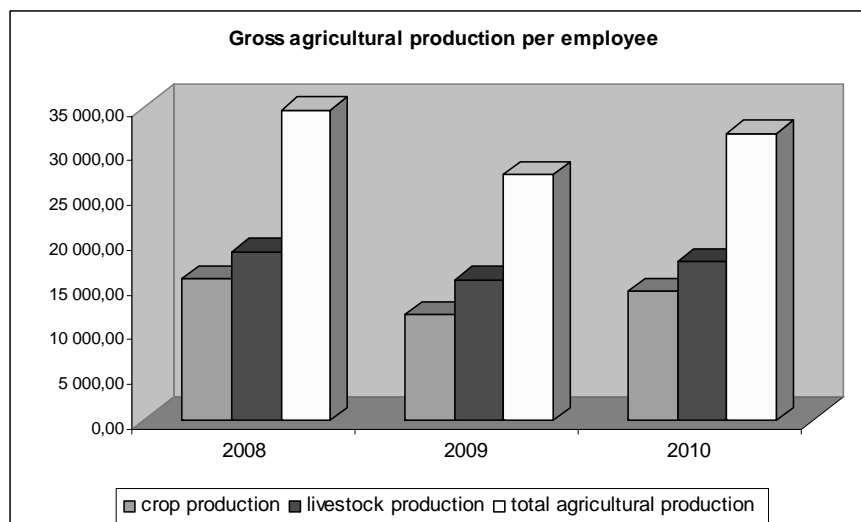
Tab 3 Gross agricultural production per employee

v EUR	2008	2009	2010
Crop production	15 806.40	11 720.30	14 371.70
Livestock production	18 788.60	15 671.20	17 643.50
Total agricultural production	34 595.00	27 391.50	32 015.20

Source: own elaboration based on data from Statistical Office of SR

Here we can also see a significant decrease in 2009 compared to 2008. But there is higher growth level in 2010. This was caused both by reducing the number of employees in 2010 and at the same time increasing the volume of agricultural production, although the values still do not reach the level of 2008.

Fig 2 Gross agricultural production per employee



Source: own elaboration based on data from Statistical Office of SR

As we have mentioned before, there was a decline in the number of employees in agriculture from the original 37 404 employees in 2008 to 30 801 in 2010.

Tab 4 Number of employees

	2008	2009	2010
Number of employees by 31.12.	37 404	33 163	30 801

Source: own elaboration based on data from Statistical Office of SR

Table 5 shows the average monthly salary in agriculture. Though, there was a crisis in 2009 the average monthly wage rose. However, if we compare its volume with an average wage of an employee in economy as a whole, we see the difference. The average monthly wage in agriculture in 2010 was 25% lower than the average monthly wage in economy. When comparing the pay in agriculture to wages in industry, the wages in agriculture were lower by 28% compared to the average wage in the industry in 2010.

Tab 5 Average monthly wage (in EUR)

	2008	2009	2010
average monthly wage in agriculture	548.96	562.68	581
average monthly wage in economy as a whole	723.03	744.5	769
average monthly wage in industry	733.35	754.07	795

Source: own elaboration based on data from Statistical Office of SR

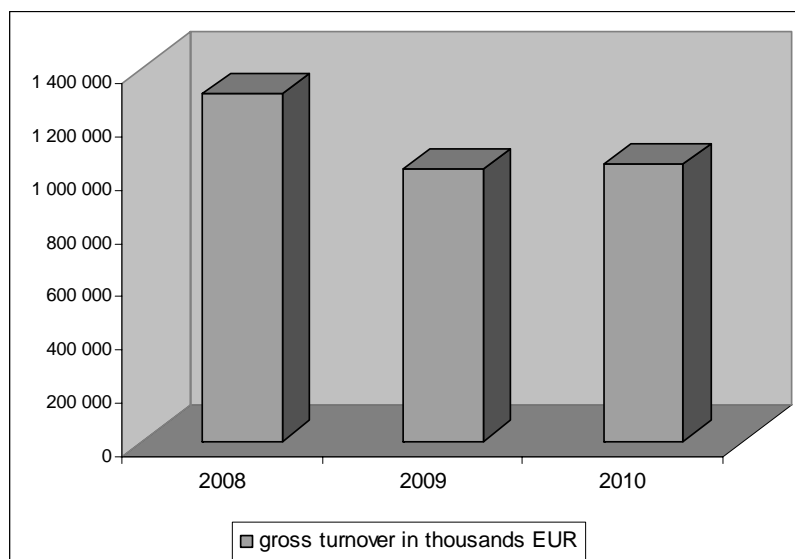
The last indicator analyzed was the gross turnover. This indicator is also influenced by the impact of changes in the economy in the world due to crisis when its height in 2009 was decreased significantly compared with values from 2008. In 2010, turnover was higher than in 2009, but it still did not reach the level of 2008.

Tab 6 Gross turnover

	2008	2009	2010
Gross turnover in thousands EUR	1 305 005	1 018 980	1 038 423

Source: own elaboration based on data from Statistical Office of SR

Fig 3 Gross turnover



Source: own elaboration based on data from Statistical Office of SR

Conclusion

A significant impact of the crisis in agriculture was marked in all variables except the average monthly wage in examined period. The values of all analyzed parameters except for average monthly wage significantly decreased in 2009 compared to 2008. Thus in 2009 there was the most visible impact of the crisis in this key sector of the Economy. Although the parameter values in 2010 increased, they still did not reach pre-crisis levels and is therefore questionable when this happens.

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Theoretical Background for Discounts and Premiums in the Course of Business Valuation for Purpose of Acquisitions

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Abstract

In the developed market economy, increasing globalization and integration of the Slovak Republic into the EU the meaning of the market for businesses is becoming more eminent. It's goal is the reorganization of the ownership structure of businesses. Along with this comes the redistribution of markets towards the "big players". Acquisitions become one of the elemental tools for gaining a greater market share. The goal of this article is to outline the theoretical background for discounts and premiums and their application in determining the business' value during acquisitions especially in connection with the Integrated business valuation theory of Z. Christopher Mercer.

Key words

Acquisition, Discount for Lack of Marketability, Minority Shareholder, The Integrated Theory of Business Valuation

Introduction

The protection of minority shareholders in the acquisitions plays the significant role in the determination of minority shareholder's value. The determination of fair amount of a consideration for minority shareholders at the acquisition process means an ascertainment of the specific share's value in an enterprise equity capital (other than determination of the company - level equity capital value). We believe that there is a specific valuation problem, at which it is not enough to ascertain a resulting general company-level value and subsequently to ascertain an aliquot share, by any of valuation methods, but it is needed also to apply additional valuation instruments, such as discounts and premiums. The reason is simple. At the moment of a division of the ownership among several subjects, the company is not the marketed asset any longer and the stock or business shares are going into the market as the marketable assets. The investors, who making their investments into minority and majority shares, do not create a homogenous group. By this reason, there is no common market for all equity or business shares. Usually, their price is lower on the market of minority shareholder's stock compared to the price of stock included in a block held by a majority shareholder. The value of a share of the company may vary by shareholders (members) or groups of shareholders (groups of members), i.e. the value of a share is not aliquot to the company-level equity share. The goal of this article is to outline the theoretical background for discounts and premiums and their application in determining the business' value during acquisitions especially in connection with the Integrated business valuation theory of Z. Christopher Mercer.

Levels of value, discount and premium at the valuation of enterprises

According to Petřík (2009, p. 412), the discounts and premiums mean amounts (absolute and relative) set subjectively on the basis of a precise and special analysis, taking into account a risk, contributions and benefits of a shareholder, member or investor or other user of valuation, which have been raised by the facts, which were not or were only partially taken into account in the calculation of final aimed value of the company or other investment valued, which the discount or premium relates to.

Mařík et al. (2007, pp. 429-430) defines the discounts and premiums on general level as absolute or relative values, which present a change of expected risk or benefit of an investor due to factors, which were not included into the calculation of basic value, to which the discount is applied. Their relative formulation prevails in the business and managerial practice.

The discounts and premiums apply to the basis, which presents the result of application of basic valuation methods. According as premiums and discounts have influence on the company-level value (i.e. without considering an individual view of a shareholder or a group of shareholders) or contrarywise, their purpose is to consider the particularities of a shareholder, they can be classified as it follows:

- **company - level discounts** – influence the value for all shareholders (members),¹
- **shareholder - level discounts** – have unequal impact, i.e. only at a shareholder (member) level,² they include a **Discount for Lack of Marketability** and a **Discount for Minority** (or a control premium).

According to International Glossary of Business Valuation Terms (2001), **Discount for Lack of Marketability**, means „an amount or percentage deducted from the value of an ownership interest to reflect the relative absence of marketability“. **Marketability** means, according to abovementioned glossary „the ability to quickly convert property to cash at minimal cost“. According to Stockdale Sr. (2011) combining the two definitions allows us to arrive at a more detailed definition of discount for lack of marketability as an amount or percentage deducted from the value of an ownership interest to reflect the relative absence of the ability to quickly convert property to cash at a minimal cost. Thus, by definition, the discount for lack of marketability is a reduction in value resulting from an inability to sell the property quickly at a minimal cost. This definition incorporates the key points that have developed in the legal framework in the United States.

Liquidity, according to Stockdale Sr. (2011) is a concept that is integrally related to marketability. The International Glossary of Business Valuation Terms also has a definition for liquidity as „the ability to quickly convert property to cash or pay a liability“. A comparison of this important term, according to Stockdale Sr. (2011) shows that liquidity is included under the umbrella term of marketability. Both imply the ability to quickly convert property to cash, but marketability also includes the concept of „at a minimal cost.“ A security could have a discount for lack of marketability resulting from the fact that it is illiquid. It could have an increase in a discount for lack of marketability because it cannot be sold at low cost. Both parts of this definition are important because they are elements likely to be considered by buyers and sellers.

Some analysts use different definitions for both marketability and liquidity. They would define marketability as the right to sell (a security) and liquidity as the ability to sell (a security). The International Glossary does not recognize this distinction and never uses the term „right.“ It is assumed that the term ability as used in the above definitions incorporates the right to sell. One would not have the ability to sell unless the right to sell were incorporated within it.

Stockdale notes that International Glossary of Business Valuation Terms does not distinguish this difference and it does not use the term „right“. It supposes that the term „ability“, as it is used in the abovementioned definitions and also includes the right to sell and this sale option could not exist without the right to sell. Conceptually, the idea of a discount for a lack of marketability is identically applicable for controlling as well as minority ownership interests. If the owner of a majority ownership interest cannot obtain a cash value for his/her interest within appropriately short period of time, it seems that it is possible to apply discount for a lack of marketability. The logics of this statement can be explained by following question: „Which would you rather have, cash in hand or a business for which you expect to obtain a cash value at a future time?“ The argument is sometimes advanced that because a controlling ownership can make the decision to sell and the decision to distribute from the business, no discount for lack of control should be applied. However, the decision to attempt to sell does not automatically result in the achievement of a cash price in a reasonably short period of time.

Minority interest discounts (strategic control premium), similarly like discounts for a lack of marketability, cause an imbalance between stock value in various equity shares. The necessity of their application at valuation comes from practical experiences, when a state really occurs that blocks of shares which enable to obtain certain degree of a control over the company are marketed for relatively higher price compared with minority blocks. The formation of controlling premium was enabled by the existence of two separate markets of equity shares. The controlling and minority equity shares can be, in this relation, considered as different commodities.

The controlling premium and minority interest discount present two views on the same reality. The following relation between minority interest discount and controlling premium applies:

$$Discount = 1 - \left(\frac{1}{1 + premium} \right)$$

¹ Most frequent ones include a key person discount, which represent a potential or real decrease in company value due to a potential loss of the company management's key person, off-balance sheet liabilities discount (e.g. in the case of a legal dispute for unclear result and time schedule of its closing, environment pollution damage, etc.), monosupplier discount and key customer discount.

² The value of a company share may vary by shareholders (members) or groups of shareholders (groups of members), i.e. the value of a share is not aliquot to the company-level equity share.

In the present, there are two main streams of opinion in the area of controlling premium:

- *main stream* – prefers the practical side of the problem and the idea that a shareholder is willing to pay for a control over a company,
- *alternative stream* – prefers the theoretical explanation of sources of controlling premium and the idea that a majority shareholder has certain „private advantages of control“ available, i.e. a certain amount of financial means, which is not available for the minority shareholders, what probably means the occurrence of certain uneven reallocation of the value (cash flows) at the level of shareholders (Mařík et al., 2007, p. 445)

Basic sources of control premium include the different expectations of the amount of future cash flow among minority and majority shareholders, imperfect competitive structure of capital markets, irrationality of investors, etc.

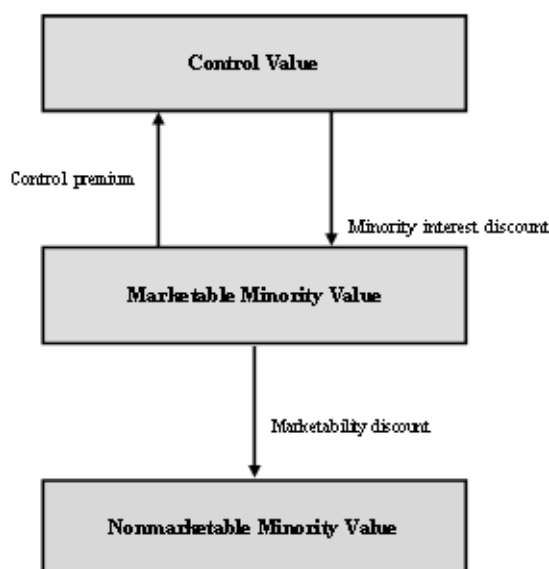
The problems of discounts for a lack of minority and control premiums contends with a complexity, heterogeneity of opinions among professional public and especially with application demandingness at valuation, which is the same as for discounts for a lack of marketability.

Basic condition of a correct application of the discount is, according to Mařík et al. (2007, pp. 432 – 433), the identification of the basis to which the discount is applied. The ground for the application of discount for marketability is, by main stream of American literature, the value of *majority (control) interest* and the value of *minority interest*.

Z. Christopher Mercer's Integrated Theory of Business Valuation

The topic of **value levels (bases)** is the subject of intensive discussions of professional public since the 90th of the 20th century. The first conceptual model of the value levels was a three-stage model of Z. Christopher Mercer published in 1955, which included Control Value, Marketable Minority Interest Value and Nonmarketable Minority Interest Value. The advance of the application of discounts and premiums is obvious from Scheme 1. In case that the company-level cash flows are the basis, the result of valuation is a control value. To calculate a minority equity share marketed at a secondary market, the minority interest discount is to be applied. To calculate minority interest value with a lack of marketability, it is needed to apply subsequently the discount for a lack of marketability. To calculate a control value, a premium for control is needed to be applied.

Scheme 1 A diagram of value levels of Z. Christopher Mercer – 1995



Source: Mercer, Harms, 2008, p. 83

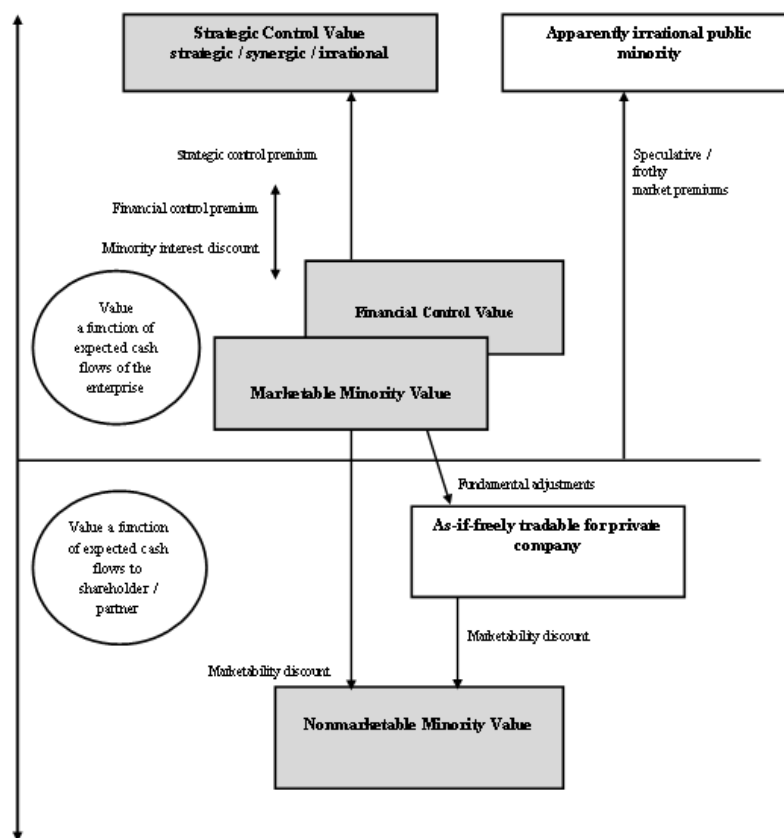
The diagram of Z. Christopher Mercer from 1995 according to Mařík et al. (2011, pp. 486 – 487), considers the value of marketable minority as „normal“ valuation, i.e. the value of minority shares marketed publicly at capital market. To calculate the control (financial) value, it is needed to apply the financial control premium. It is obvious that this model describes a state, when the shares are marketed on public market for lower price

compared with the shares in control stock on the mergers and acquisitions (M&A) market. However, a different situation has been observed on developed capital markets since the '90s. The prices of minority shares marketed on these markets are approximately the same or even higher compared with the prices of shares marketed within controlling interests. This fact is also confirmed by empirical studies of private advantages and controls made recently in the United States of America and on other developed capital markets. It means that minority shares are marketed on developed capital markets for control prices, i.e. the value of marketable minority is identical with the control value.

As a result of this fact, if the purchaser of controlling interest is investor, who cannot carry out any synergic effects (irrespective of irrational investor) any control premium can occur. It implies, in addition, that if the result of basic valuation is the value of marketable minority at this developed market, no control (financial) premium will be applied to the calculation of value of controlling interest.

The given situation is described by modified diagram of Z. Christopher Mercer from 2001 (Scheme 2),³ which already shows that the value of marketable minority is the same as the control (financial) value. It results from this diagram, that synergic effects, strategic advantages or irrational non-economic elements of price represent the source of control premium on developed capital markets. However, it is needed to emphasize that, according to Mařík et al. (2011, p. 487), this modified diagram appropriately describes the application of discounts and premiums for joint-stock companies only, the stock of which is marketed on the capital market (and on developed capital market), and potentially for valuation of their non-marketable stocks (e.g. restricted stocks). It is not suitable for the joint-stock company, the stock of which is not quoted on the capital market. For valuation of the stock of the companies which are not marketed at all or marketed on not very developed capital market, there are additional sources of control premium, namely „reallocation“ among majority and minority shareholders and private benefits of control. Valuating minority stock of nontradable company, it is needed to apply minority discount, which, however, does not occur in the modified diagram, in addition to the discount for a lack of marketability.

Scheme 1 Diagram of value levels of Z. Christopher Mercer - 2001



Source: Mercer, Harms, 2008, p. 83

³ The diagram was modified from the original three-stage one to four-stage one. The fourth stage is the value of the controlling interest. To calculate it, it is needed to add a synergic/strategic premium to control (financial) value. The resulting premium is thus consisting of financial control premium and strategic (synergic) control premium.

The Mercer's model of value levels became the basis for many authors (e.g. Michael Bolotski, Shannon P. Pratt, Eric W. Nath), who additionally modify it and add new value levels, or classify non-marketable restricted stocks and stocks of non-marketed companies.

Subsequently, in 2002, Z. Christopher Mercer gave the initial diagram a shape of the quantitative expression of relations between values within **the Integrated Theory of Business Valuation**. To explicate the levels of values and relations between them (i.e. discounts and premiums), he applied a well-arranged Gordon's model and the original diagram of value levels got a tangible quantitative nature. The integrated theory of Z. Christopher Mercer became innovative also in another way. In the context of Gordon's model, it deduced the value levels depending on the nature of all input quantities (i.e. not only from the type of cash flow and a rate of growth, but also from discount rate nature). Mercer distinguished not only differentiated cash flows for shareholders, but also the differentiated expected rate of growth and requested return of these investors according to the fact, whether there is a category of minority-, controlling financial or controlling strategic investors. (Mařík et al., 2011, p. 489, Mercer, 2002).

In accordance with the value levels scheme, the Integrated theory of business valuation describes all the value levels – the one of marketable minority, controlling financial, strategic controlling and the level of non-marketable minority.

The basic value level represents, according to Z. Christopher Mercer's Integrated theory, **the marketable minority interest level of value**, which is deduced in the context of Gordon's model as it follows:

$$V_{mm} = \frac{CF_{e(mm)}}{(R_{mm} - G_{mm})},$$

where:

V_{mm} - is the equity value of a public security at the marketable minority level of value (mm), and the value of a privately owned security at the same level, i.e., as-if-freely-traded,

$CF_{e(mm)}$ - is equal to the cash flow (earning power) of the (public or as-if-public) enterprise at the marketable minority level for the next period,

R_{mm} - is a public company's discount rate, or the discount rate at the marketable minority level of value. While it is not directly observable, it can be inferred from public pricing or estimated using the Capital Asset Pricing Model or other models. For private companies, R_{mm} is most often estimated using the Adjusted Capital Asset Pricing Model,

G_{mm} - is the expected growth rate of earnings for the public security under the assumption that all earnings are distributed to shareholders. (Mercer, 2002, p. 4)

The financial control level of value is deduced in the context of Gordon's model as it follows:

$$V_{e(c,f)} = \frac{CF_{e(c,f)}}{[R_f - (G_{mm} + G_f)]},$$

where:

$V_{e(c,f)}$ - is the value of the equity of an enterprise from the viewpoint of typical purchasers of the entire enterprise (control) who do not have the expected benefit of synergies or strategic intent that could further increase value relative to the marketable minority value,

$CF_{e(c,f)}$ - is equal to the cash flow of the enterprise from the viewpoint of the financial control buyer,

R_f - is the discount rate of the universe of financial buyers,

$(G_{mm} + G_f)$ - is the expected growth rate of earnings for the financial control buyer.

The latter value can be greater than the former if one or more of the following conditions holds:

- $CF_{e(c,f)}$ is greater than $CF_{e(mm)}$. This would be true if the typical buyer of the enterprise could be expected to improve the operations of the enterprise and would share that expected benefit with the hypothetical seller. Note that $CF_{e(c,f)}$ will not exceed $CF_{e(mm)}$ because of above-market salaries paid to owners of a business. Adjustments of that nature were required to arrive at $CF_{e(mm)}$,
- G_f is greater than zero. If the typical financial control buyer expects to be able to augment the future growth of cash flows (and will share that benefit with the hypothetical seller), then $V_{e(c,f)}$ can exceed V_{mm} , other things being equal. (Mercer, 2002, p. 8 - 9)

Subsequently, Z. Christopher Mercer deduced the financial control premium from the given formulas for the value on the level of financial control investor and investor into marketable minority as a ratio of a difference between financial control value and value of marketable minority interest value:

$$CP_f = \frac{V_{e(c,f)} - V_{e(mm)}}{V_{e(mm)}},$$

$$CP_f = \frac{\frac{CF_{e(c,f)}}{R_f - (G_{mm} + G_f)} - \frac{CF_{e(mm)}}{R_{mm} - G_{mm}}}{\frac{CF_{e(mm)}}{R_{mm} - G_{mm}}},$$

where:

CP_f - financial control premium,

$V_{e(c,f)}$ - is the value of the equity of an enterprise from the viewpoint of typical purchasers of the entire enterprise (control) who do not have the expected benefit of synergies or strategic intent that could further increase value relative to the marketable minority value,

$V_{e(mm)}$ - is the equity value of a public security at the marketable minority level of value (mm), and the value of a privately owned security at the same level, i.e., as-if-freely-traded,

$CF_{e(mm)}$ - is equal to the cash flow (earning power) of the (public or as-if-public) enterprise at the marketable minority level for the next period,

R_{mm} - is a public company's discount rate, or the discount rate at the marketable minority level of value,

$CF_{e(c,f)}$ - is equal to the cash flow of the enterprise from the viewpoint of the financial control buyer,

R_f - is the discount rate of the universe of financial buyers,

$(G_{mm} + G_f)$ - is the expected growth rate of earnings for the financial control buyer,

G_{mm} - is the expected growth rate of earnings for the public security under the assumption that all earnings are distributed to shareholders.

It results from this formula that the presumptions of the existence of the control financial premium include:

- financial control investor must expect higher cash flow or its higher rate of growth,
- financial control investor must be willing or forced to share his advantage with seller, or he must have lower requested rate of return as it would correspond with market level.

Thus, it results from the known relation between minority interest discount and control premium that minority interest discount can be applied only if financial control investor is able to increase cash flow compared with the level of „normalized“ cash flow (i.e. adjusted by extraordinary and non-recurring receipts and expenditures). This relation is described by following equation:

$$MID_f = 1 - \frac{1}{1 + CP_f},$$

$$MID_f = \left[1 - \frac{1}{1 + \left[\frac{V_{e(c,f)} - V_{e(mm)}}{V_{e(mm)}} \right]} \right],$$

where:

MID_f – minority interest discount from the financial control value,

CP_f - financial control premium,

$V_{e(c,f)}$ - is the value of the equity of an enterprise from the viewpoint of typical purchasers of the entire enterprise (control) who do not have the expected benefit of synergies or strategic intent that could further increase value relative to the marketable minority value,

$V_{e(mm)}$ - is the equity value of a public security at the marketable minority level of value (mm), and the value of a privately owned security at the same level, i.e., as-if-freely-traded.

Mercer identifies himself with a concept that financial control value and the value of marketable minority interest is approximately the same or identical at publicly marketable stock at a liquid market.

As the third level of value in the Z. Christopher Mercer's Integrated theory is **the strategic control level of value:**

$$V_{e(c,s)} = \frac{CF_{e(c,s)}}{[R_s - (G_{mm} + G_s)]},$$

where:

$V_{e(c,s)}$ - the value of the equity of an enterprise from the viewpoint of buyers of the entire enterprise (control) who may have the expected benefit of synergies or strategic intent that could increase value relative to the financial control value,

$CF_{e(c,s)}$ - is equal to the cash flow of the enterprise from the viewpoint of a strategic control buyer,

R_s - is the discount rate of potencial strategic buyers,

$(G_{mm} + G_s)$ - is the expected growth rate of earnings for the strategic control buyer.

The expected rate of growth of flow cashes of strategic investor depends on expected rate of growth on the level of marketable minority, or from the increment of the rate of growth from strategic activities of the company.

It implies that the value of strategic investor will be higher than value of financial control investor if:

- as a result of synergies or strategic effects, strategic investor's cash flow increases compared with financial control investor, or
 - the strategic investor will expect higher growth of cash flow,
- or
- the strategic investor will have lower required rate of return (also a concurrence of several factors at the same time can occur).

The strategic control premium can be deduced from the model as it follows:

$$CP_s = \frac{V_{e(c,s)} - V_{e(mm)}}{V_{e(mm)}},$$

$$CP_s = \frac{\frac{CF_{e(c,s)}}{R_s - (G_{mm} + G_s)} - \frac{CF_{e(mm)}}{R_{mm} - G_{mm}}}{\frac{CF_{e(mm)}}{R_{mm} - G_{mm}}},$$

where:

CP_s - strategic control premium,

$V_{e(c,s)}$ - the value of the equity of an enterprise from the viewpoint of buyers of the entire enterprise (control) who may have the expected benefit of synergies or strategic intent that could increase value relative to the financial control value,

$V_{e(mm)}$ - is the equity value of a public security at the marketable minority level of value (mm), and the value of a privately owned security at the same level, i.e., as-if-freely-traded,

$CF_{e(mm)}$ - is equal to the cash flow (earning power) of the (public or as-if-public) enterprise at the marketable minority level for the next period,

$CF_{e(c,s)}$ - is equal to the cash flow of the enterprise from the viewpoint of a strategic control buyer,

R_{mm} - is a public company's discount rate, or the discount rate at the marketable minority level of value,

G_{mm} - is the expected growth rate of earnings for the public security under the assumption that all earnings are distributed to shareholders,

R_s - is the discount rate of potencial strategic buyers,

$(G_{mm} + G_s)$ - is the expected growth rate of earnings for the strategic control buyer.

The nonmarketable minority level of value is the last level of value in the model. Mercer distinguishes the level of marketable and nonmarketable minority in model in such a manner that, at marketable minority, he proceeds from an aliquot interest in cash flow generated by a company discounted by expenses of capital showing the risk of business-making, while, at non-marketable minority, he proceeds from cash flow expected by the given specific shareholder. In the case of non-marketable minority, the model is based on the expected dividends and exit value after a certain period of a share holding. The value of non-marketable equity share is calculated from the following relation:

$$V_{sh} = \frac{CF_{sh}}{(R_{hp} - G_v)},$$

where:

V_{sh} - is the value of an equity interest in an enterprise that lacks an active market for its shares from the viewpoint of the shareholder of that interest,

CF_{sh} - is equal to the portion of the cash flow to equity of an enterprise expected to be received by the shareholders of the enterprise,

R_{hp} - is the discount rate of the minority investor in a nonmarketable equity security for the expected duration of the holding period, or the required holding period return,

G_v - is the expected growth rate in value of the equity of the enterprise, which will yield the terminal value of the enterprise at the end of the expected holding period for the investment. (Mercer, 2002, p. 22-23)

The discount for a lack of marketability is within the theory deduced as it follows:

$$MD = 1 - \frac{V_{sh}}{V_{e(mm)}},$$

$$MD = 1 - \frac{\frac{CF_{sh}}{R_{hp} - G_v}}{\frac{CF_{mm}}{R_{mm} - G_{mm}}},$$

where:

MD – marketability discount,

V_{sh} - is the value of an equity interest in an enterprise that lacks an active market for its shares from the viewpoint of the shareholder of that interest,

$V_{e(mm)}$ - is the equity value of a public security at the marketable minority level of value (mm), and the value of a privately owned security at the same level, i.e., as-if-freely-traded,

R_{mm} - is a public company's discount rate, or the discount rate at the marketable minority level of value,

G_{mm} - is the expected growth rate of earnings for the public security under the assumption that all earnings are distributed to shareholders,

CF_{sh} - is equal to the portion of the cash flow to equity of an enterprise expected to be received by the shareholders of the enterprise,

R_{hp} - is the discount rate of the minority investor in a nonmarketable equity security for the expected duration of the holding period, or the required holding period return,

G_v - is the expected growth rate in value of the equity of the enterprise, which will yield the terminal value of the enterprise at the end of the expected holding period for the investment.

The nonmarketable minority value (value to the shareholder) will be less than V_{mm} if one or more of the following conditions holds:

- CF_{sh} is less than $CF_{e(mm)}$. The expected cash flow of a shareholder will be less than the expected cash flows of the enterprise in cases where less than all of its cash flows are distributed to shareholders. The cash flows may be reinvested in the business or paid out to controlling shareholders. Lower cash flow to shareholders yield lower value relative to the capitalized benefit of all cash flows in the public markets,

- G_v is less than R_{mm} . The expected growth rate in value reflects the combined effect of the expected growth rate of earnings, or the G of the Gordon Model, and the reinvestment of those cash flows into the enterprise. If the reinvestment rate is equal to the discount rate, G_v will be equal to the discount rate, or R_{mm} . To the extent that cash flows are not reinvested in the enterprise or that they are reinvested suboptimally (at rates less than the discount rate), then G_v will be less than R_{mm} . A lower G_v than R_{mm} implies a lower terminal value at the end of any holding period, and therefore, lower value.
- R_{hp} is greater than R_{mm} . Few observers question that the owner of an illiquid asset bears greater risk than that borne by a shareholder of an otherwise identical asset with an active, public market. We have given a name to this incremental risk – the holding period premium, or HPP. HPP is comprised of numerous factors, including the potential for a long and indeterminate holding period and many other risks that flow from this holding period or from the factual situation in any appraisal. Greater risk implies lower value. (Mercer, 2002, p. 24)

Figure 1 incorporates all four levels into a single chart to present the conceptual math of the levels of value, and summarizes an integrated theory of business valuation.

Figure 1 Levels of values of Z. Christopher Mercer's Integrated Theory

	CONCEPTUAL MATH	RELATIONSHIPS	VALUE IMPLICATIONS
<i>Control Strategic / Synergistic Value</i>	$\frac{CF_{e(c,s)}}{[R_s - (G_{mm} + G_s)]}$	$CF_{e(c,s)} \geq CF_{e(c,f)}$ $G_s \geq 0$ $R_s \leq R_{mm}$	$V_{e(c,s)} \geq V_{e(c,f)}$
<i>Control (Financial) Value</i>	$\frac{CF_{e(c,f)}}{[R_f - (G_{mm} + G_f)]}$	$CF_{e(c,f)} \geq CF_{e(mm)}$ $G_f \geq 0$ $R_f \geq R_{mm}$	$V_{e(c,f)} \geq V_{mm}$
<i>Marketable Minority</i>	$\frac{CF_{e(mm)}}{(R_{mm} - G_{mm})}$	$CF_{e(mm)} = CF_{mm}$	V_{mm}
<i>Nonmarketable Minority</i>	$\frac{CF_{sh}}{(R_{hp} - G_v)}$	$CF_{sh} \leq CF_{mm}$ $G_v \leq R_{mm}$ $R_{hp} \geq R_{mm}$	$V_{sh} \leq V_{mm}$

Source: Mercer, Z. Ch., 2002, p. 26

According to Mařík et al. (2011, p. 498), the main benefits of Z. Christopher Mercer's Integrated theory can especially include an attempt of the theory to connect the levels of value with categories of value, mathematizing of the content of control premiums and discounts for minority and inclusion of a presumption that various shareholders of the same company may suffer from different rate of risk and request different rate of return of their investments.

Conclusion

In the developed market economy, increasing globalization and integration of the Slovak Republic into the EU the meaning of the market for businesses is becoming more eminent. It's goal is the reorganization of the ownership structure of businesses. Acquisitions become one of the elemental tools for gaining a greater market share.

The problems of determination of levels of values as well as the estimation of size and application of discounts and premiums at the level of a shareholder, become to discussed and controversial areas in the valuation of companies for a long time and they are the subject of intensive discussion especially in the United States of America from early 90s of the 20th century, which are continue to be elaborated from the point of view of theory and application from various points of view. It is supported by disunity of theoretical opinions and results of empirical studies in this area, their significant scatter, a limitation of input data of models, their time and regional uniqueness, subjective, although, of course, professional and sufficiently analytical, financially and economically justified view of analyst, etc. The minority shareholders may be considered (in the position of small investors) as necessary and contributing constituent of every capital

market. They are not only a source of capital for enterprises by public stock markets, but, to a certain extent, the opposition against the majority shareholders. On the other side, it is needed to mention a disproportion between rights and responsibility of minority and majority shareholders.

The successfulness of entire process of the acquisition process and satisfaction of minority and majority shareholders is significantly influenced by the value of a consideration. In principle, minority shareholders do not resist the sale of their shares, the price is most crucial for them. The fact is, since there is a collision of fundamental rights and freedoms and a change in an arrangement of property conditions that the price would correspond with so called complete indemnification, i.e. to such a value of the shares, so that the expelled shareholder could acquire the alternative investment with the same yield and risk for the consideration obtained. One of the ways how to calculate the value of consideration in present time is utilization of Z. Christopher Mercer's Integrated theory of valuation.

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The Analysis of the Unemployment Rate and the Inflation Rate as the Antipoles of the Macroeconomic Policy

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Abstract

The economy of a country is a system of interaction between four sectors – the households, the firms, the government and the outland. The quality and quantity of these interactions affect the trend of all economic indicators which determine the performance of the whole domestic economy. Some of these indicators are the employment and the inflation. In connection with the negative aspects of global crisis may discuss about the rapidly drop of the employment in our economy. But how is the unemployment rate connected with the inflation rate? The main goal of this contribution is to analyze the coherence between the unemployment rate and, the inflation rate in the Slovak economy in the period during the economic crisis and just prior the crisis.

Key words

Unemployment, Inflation, Correlation, Phillips curve

Introduction

The unemployment is a very serious economic and social problem. Its long-term increase focuses on the decline of the performance of the whole economy. And the same way, the rapid increase of the price level can lead to the decrease of the effective demand, to the decrease of the investment and, in the consequence to the recession of the national economy.

This contribution is elaborated as a part of the project GAMA/11/7 „The performance analysis of agrarian enterprises in the accord with the Value Based theory in the context of the global crisis”. One of the partial goals of this project is to identify the main factors influencing the performance of agrarian enterprises. And, the outside environment is one of these factors. Considering the high topicality of the solving theme, this contribution is focused on the correlation analysis of two variables – the rate of the disposed unemployment (U) and the inflation rate measured via the Harmonized index of consumer prices (HICP).

According to the economic theory there is the indirect proportion between the unemployment and the inflation. And there are several explanations for this phenomenon. The decline of the unemployment leads to the increase of the effective demand of the households, what is the reason why the prices of final goods rise. The other reason may be seen during the time of the economic expansion, when the economic subjects (households and firms) start to invest, what flow into the further price increase. On the other side, the growing number of unemployed individuals leads to the decline of the price level, in consequence of pessimistic expectations. And of course, the loose monetary policy is able to drop the unemployment via the increase of the currency followed by growth of firm's investment.

In the context of the economic policy, several macroeconomic aims are monitored (further Kiseľáková, 2011a). Some of them are independent, some may depend on other, and some are in the negative dependence. The decline of the unemployment rate and the decline of the inflation rate in an economy are the examples of the antagonistic goals. The improvement of one indicator leads to the deterioration of the other indicator. Both of these indicators (the unemployment and the inflation) have a significant impact on the macroeconomic development (Kiseľáková, 2011b).

The main goal of this contribution springs from the goal of the project GAMA/11/7 and from the proposition of the macroeconomic theory about the indirect proportion between the unemployment rate and the inflation rate, which the New Zealand economist William Housego Phillips (18. 11. 1914 – 4. 3. 1975) living in the United Kingdom described in the year 1958 (Sojka, 2010). The main goal of the research is to analyze the correlation between the unemployment and the inflation rate in the Slovak economy in the period during the economic crisis and just prior the crisis.

Material and methods

There are several institutions concerned with the macroeconomic analysis and prediction – the Institute for Financial Policy of Ministry of Finance of the Slovak Republic (IFP), the Statistical Office of the Slovak Republic (STAT), the Statistical Office of the European Communities (EUROSTAT) or the National Bank of the Slovak Republic (NBS). These institutions gain the relevant data from the official sources, as for instance tax statements, statements of finances or reports from other economic subjects. To fulfill the set goal of this contribution, the secondary data from above mentioned institutions were used and the followed macroeconomic indicators were chosen:

- the rate of disposable (filed) unemployment (U) numerated in the percentage (the rate is calculated as the percentage fraction of disposable unemployed persons to the whole number of labour force¹) and,
- the Harmonized Index of Consumer Prices (HICP).

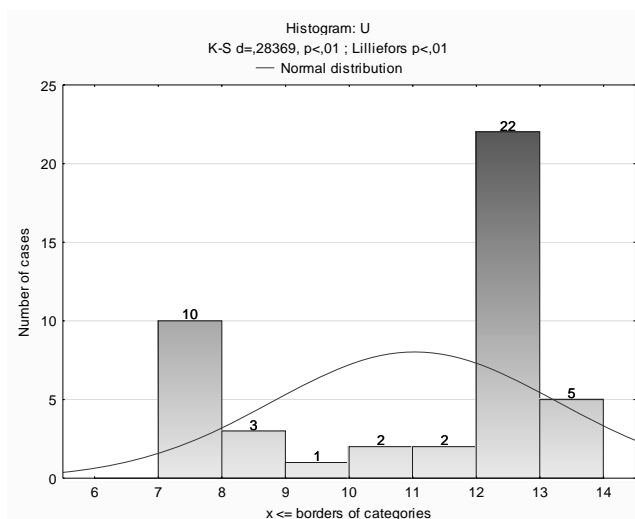
There may be seen visible coherence between the unemployment rate and the HICP (appendix 1). The negative tendency between the unemployment rate and the HICP may be seen especially during the period of the economic crisis in the Slovak economy – from the fourth quarter 2008 till the end of 2009. The chart pointed out three time periods – (1) the period before the economic crisis, (2) the period during the crisis and, (3) the period just after the economic recovery.

In the following step the Kolmogorov-Smirnov test have been done (chart 1 and 2). The results of this test confirm that both variables (U and HICP) have not normal distribution and therefore the nonparametric test should be used in further research. In the correlation analysis the nonparametric correlation coefficients were used – the Kendall's tau-b and the Spearman's rho for all of three time periods. The coefficients were computed in the statistical environment of the software STATISTICA.

Discussion

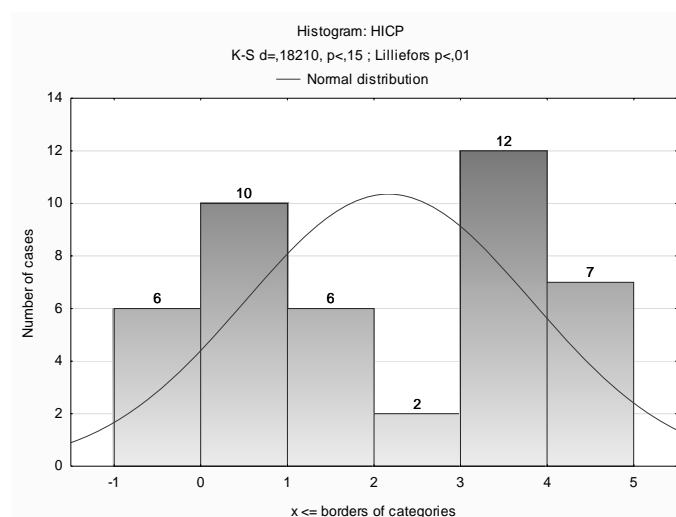
As the first step of the research the Kolmogorov-Smirnov test has been used. The results of this test are on the charts below (chart 1 and 2). In the Kolmogorov-Smirnov test the statistic software STATISTICA gives the value of the test statistic (d) and two p-value. If the “p-n.s.” (non significant) is presented on the chart, the hypothesis about normal distribution is not refused on the level of significance 5 %. In the case of the both variables – the variable U and the variable HICP, the hypothesis about the normal distribution of the variable is refused on the level of significance 5 %. That means both of these variables probably have not the normal distribution. The mistake of this conclusion is only 5 %.

Chart 1 The histogram of the rate of disposable unemployment (U)



¹ This rate is calculated according to the methodology of Central Office of Labour, Social Affairs and Family (UPSVAR). It takes into account all disposable unemployed persons.

Chart 2 The histogram of the Harmonized index of consumer prices (HICP)



The correlation analysis was done in three time periods – (1) from January 2008 till August 2008 (the period before the crisis), (2) from September 2008 till February 2010 (the period during the crisis), and (3) from March 2010 till July 2011 (the period after the economic recovery). The last presented data about the HICP is from July 2011. The last presented data about U is from September 2011. By setting these three time period the following fact was taken into account – the first relevant symptoms of economic crisis in the Slovak economy were noticed in September 2008 (the beginning of the second time period) and vanished in February 2008 (the end of the second time period). The trend of the rate of the disposable unemployment (U) to the end of each month and the rate of inflation measured via HICP to the end of each month shows the following table, appendix 2 and 3. The descriptive statistics of both variables gives the appendix 4.

Table 1 The unemployment rate and the inflation rate

Month/Year	U	HICP	Month/Year	U	HICP
I/2008	8,1	3,2	I/2010	12,9	-0,2
II/2008	7,8	3,4	II/2010	13,0	-0,2
III/2008	7,6	3,6	III/2010	12,9	0,3
IV/2008	7,4	3,7	IV/2010	12,5	0,7
V/2008	7,4	4,0	V/2010	12,2	0,7
VI/2008	7,4	4,3	VI/2010	12,3	0,7
VII/2008	7,5	4,4	VII/2010	12,3	1,0
VIII/2008	7,4	4,4	VIII/2010	12,2	1,1
IX/2008	7,5	4,5	IX/2010	12,4	1,1
X/2008	7,5	4,2	X/2010	12,3	1,0
XI/2008	7,8	3,9	XI/2010	12,2	1,0
XII/2008	8,4	3,5	XII/2010	12,5	1,3
I/2009	9,0	2,7	I/2011	13,0	3,2
II/2009	9,7	2,4	II/2011	13,2	3,5
III/2009	10,3	1,8	III/2011	13,1	3,8
IV/2009	10,9	1,4	IV/2011	12,9	3,9
V/2009	11,4	1,1	V/2011	12,8	4,2
VI/2009	11,8	0,7	VI/2011	13,0	4,1
VII/2009	12,1	0,6	VII/2011	13,1	3,8
VIII/2009	12,1	0,5	VIII/2011	13,1	
IX/2009	12,5	0	IX/2011	13,4	
X/2009	12,4	-0,1			
XI/2009	12,4	0			
XII/2009	12,7	0			

Source: composed according to IFP (2010), IFP (2011a), IFP (2011b), IFP (2011c)

In the appendix 1 there is visual interpreted the coherence between the rate of disposable unemployment and the Harmonized index of consumer prices to the end of each month in the period from January 2008 till July 2011. From this chart may be seen that during the crisis period from September 2008 till February 2010 the unemployment rate had been increasing and the inflation rate (HICP) had been declining. There is certainly some coherence between the rate of unemployment and the inflation rate, what verify the proposition of macroeconomic theory about the negative correlation between these two macroeconomic indicators.

In the first time period (from January 2008 till August 2008) there was a decline of the unemployment rate and, in parallel there was an increase of the inflation rate till April 2008. Then there were some disturbances recorded – the first symptoms of the economic crisis. From May till August 2008 the unemployment rate was approximately on the same level. The inflation rate had been increasing. The rise of price level was caused by non-effective allocation of producing factors. The economic recession had led to consumption decline. The production had slowed down. Therefore the production capacities were not used effective. The price level had been pushed up in consequence of increasing production costs. When the firms started to reduce staff, the pressure on the price level slackened. In consequence of pessimistic expectances of the economic subjects (the firms and the households) the price level started to decline. In the period of the economic crisis there was recorded the negative coherence between the unemployment and the inflation rate again.

In March 2010 the Slovak economy started to recover. The unemployment rate started to decline and the inflation rate started to grow. There was the negative coherence between these two indicators again. In December 2010 this negative coherence started to fail. The unemployment rate started to grow as the consequence of the reduction of seasonal employees and the reduction of employees in the civil service.

In the period from January till August 2008 there was confirmed the negative correlation between the unemployment rate and the inflation rate on the significance level 5 % ($\tau\text{-}b = -0,615$; $\rho = -0,721$). In the period from September 2008 till February 2010, there was confirmed the negative correlation between the unemployment rate and the inflation rate on the significance level 1 % ($\tau\text{-}b = -0,950$; $\rho = -0,987$). In the further period from March 2010 till May 2010 the trend was reverse, but the coherence between these two indicators was negative too. The turbulences started in June 2010 and lasted till March 2011. Then the negative coherence was renewed ($\tau\text{-}b = -0,778$; $\rho = -0,895$ on the significance level 5 %).

Summary

The main goal of this contribution was to analyze the coherence between the rate of the disposed unemployment and the rate of the inflation measured via the Harmonized index of consumer prices. According to the visual interpretation of the ordered pair of both variables [unemployment rate; inflation rate] the following conclusion may be set.

From January 2008 the unemployment rate had been declining, and in parallel, the inflation rate had been rising up. There had been the negative coherence between these two variables. Afterwards there were some turbulences in the economy – from May 2008 the price level had started to rise, what was one of the symptoms of the incoming economic crisis. The increase of the price level was due to the decline in production. The production capacities were not used effectively what was compensated with the higher prices of the production. From May till August 2008 there was “the inflation pushed up by the production costs” in the Slovak economy.

In September 2008 the negative sequels of the economic crisis sprang out in their fullness. The number of unemployed persons started to rise up, what had released the pressure on the rise of price level. The performance of the whole economy began to fall down.

At the end of the first quarter 2010 the economy started to recover. The trend turned over – the unemployment rate started to decrease and the inflation rate started to grow². This trend lasted only few months. At the end of the year 2010 the price level rose further (as the consequence of the recovery of the economy in the European area) but the unemployment started to grow again. It was caused not only by the rising number of unemployed seasonal workers, but by the rising number of the unemployed from civil service too. A paradox had risen up – the both economic indicators, the inflation rate and the unemployment rate had been growing.

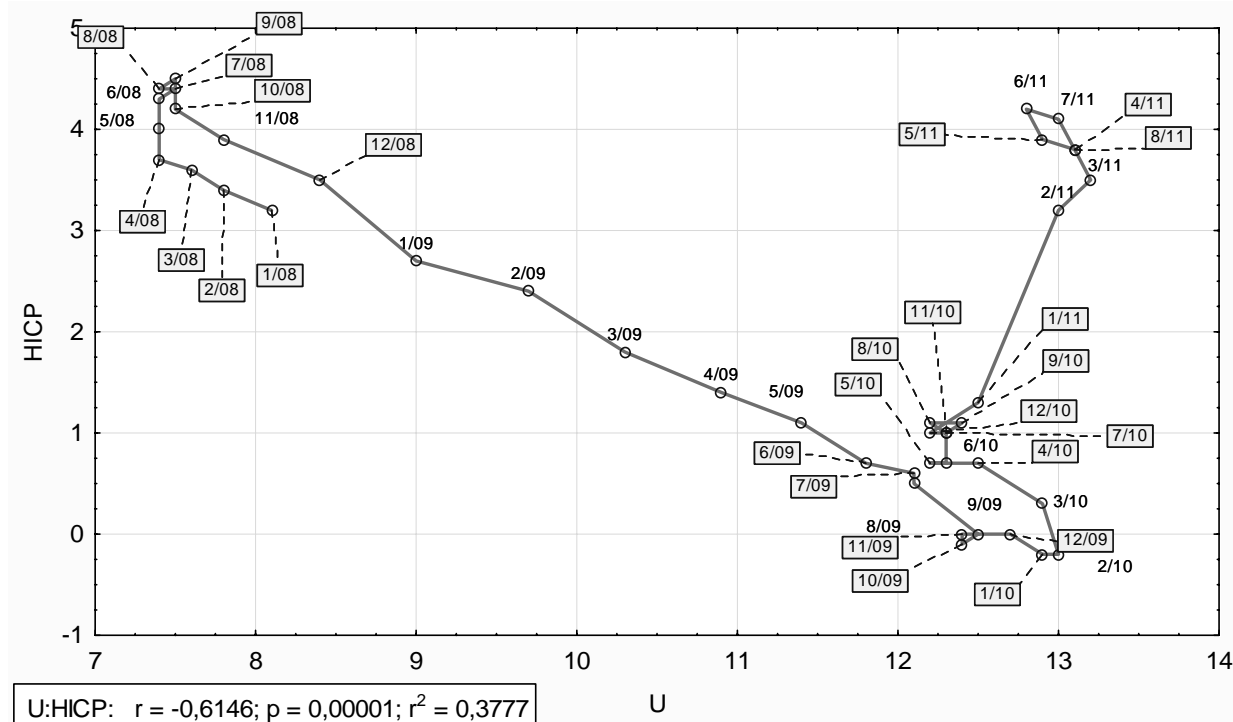
According to the results of this research the conclusion about the negative correlation in the short-term may be set. If either of macroeconomic factors causes disturbances in the economic life this negative correlation is disturbed. To these factors belong, for instance changes in the politic situation, fuel shocks, changes in the flexibility and in the structure of the workforce, or aimed treats of the government in the area of the macroeconomic policy.

² The growth of the price level was supported by the increase of the Value Added Tax in 1 % and some indirect taxes.

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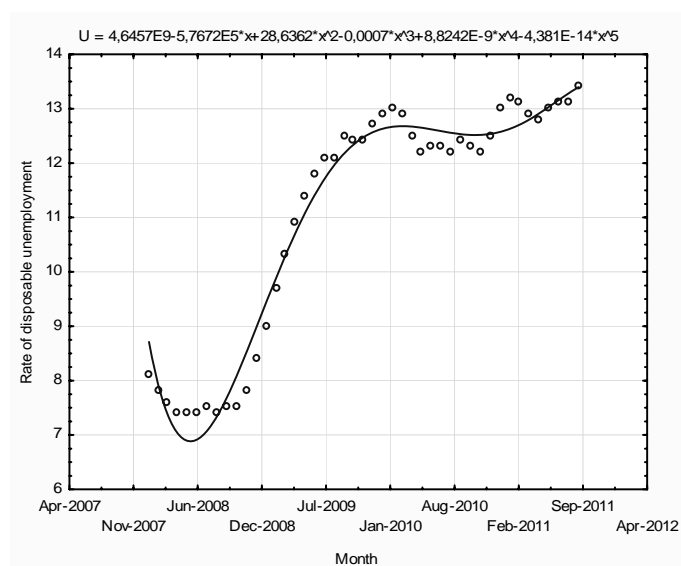
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Appendix 1 Coherence between unemployment rate and inflation rate



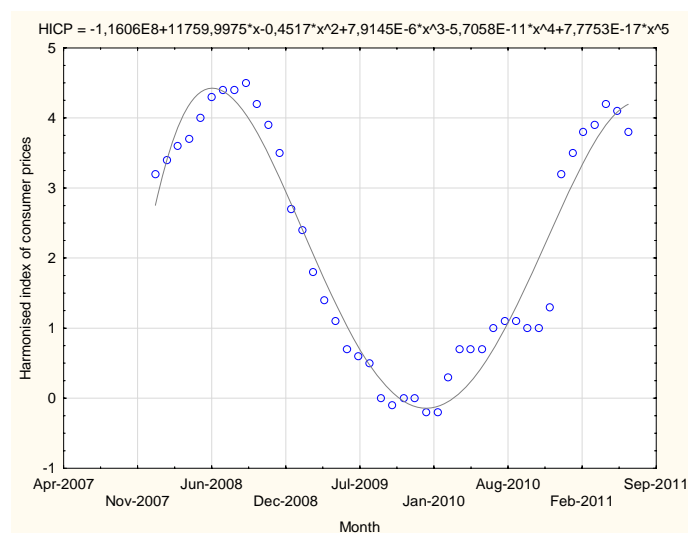
Source: composed according to IFP (2010), IFP (2011a), IFP (2011b), IFP (2011c)

Appendix 1 The trend of the unemployment rate



Source: composed according to IFP (2010), IFP (2011a), IFP (2011b), IFP (2011c)

Appendix 2 The trend of the inflation rate



Source: composed according to IFP (2010), IFP (2011a), IFP (2011b), IFP (2011c)

Appendix 3 The descriptive statistics

	Average	Median	Modus	Min.	Max.	25 %	75 %	Std. Dev.	Disp.
U	11,0	12,2	7,4	7,4	13,4	8,4	12,8	2,24	5,00
HICP	2,2	1,8	0,7	- 0,2	4,5	0,7	3,8	1,66	2,74

Source: composed according to IFP (2010), IFP (2011a), IFP (2011b), IFP (2011c)

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Fundamental Analysis – Gold Investment versus Silver Investment

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Abstract

This paper deals with the gold investment versus silver investment. Precious metals are very safe harbours during the period of instability and various crises. The paper compares gold investment vs. silver investment, because this topic is widely discussed among experts, investors and industrialists. This is the fact that both silver as well as gold has their own advantages and disadvantages. The demand for gold is based on the amount of uncertainty in the market and gold has some prestige value.

Key words

Precious metals, Gold Investment, Silver Investment

Introduction

Gold investment and silver investment can be a very interesting investment opportunity, not only for large institutional investors, but also for little investors and households. During the global financial and economical crisis plenty of large institutional and little individual investors were preferring investments in precious metals, especially gold and silver.

The history of gold is very interesting and famous, one of the oldest civilizations, the Sumerians, first used gold as sacred, ornamental, and decorative instruments in the 5-th millennium B.C. In the same period, Egyptians began the art of gold refining. Like the Sumerians, the Egyptians and other old nations used gold primarily for personal decoration, rather than for monetary and investment purposes. King Croesus was the first king, which began to issue gold coins (560-546 B.C.). King Croesus was ruler of Lydia's kingdom, today part of Turkey. Stamped with his royal emblem of the facing heads of lion and a bull, these first known coins eventually became the standard of exchange for worldwide trade and commerce.

The gold producing countries had their first gold fever there over one century, for example 1838 in Siberia (Russia), 1848 in California (USA), 1851 New South Wales (Australia) 1886 the Witwatersrand (South Africa), 1896 the Klondike (Canada). The famous time for gold nuggets of several tens of kilograms, of alluvial gold glitter is gone.

Today, it's time period, when we get from tons of rock only a few grams of gold. The largest gold producing countries are China, Australia, the Republic of South Africa, the United States, Russia, Peru and Canada.

The history of silver is very interesting, too. This metal has attracted man's fascination for many thousands of years. Old civilizations found silver deposits plentiful on or near the earth's surface. Silver took on near mystical qualities in marking important historical milestones throughout the ages, and served as a medium of exchange. The Mesopotamian merchants were doing just that as early as 700 BC. In 1792, silver assumed a key role in the USA monetary system when Congress based the currency on the silver dollar, and its fixed relationship to gold. Silver was used for the nation's coinage until its use was discontinued in 1965. The dawn of the 20th century marked an important economic function for silver, that of an industrial raw material.

Although silver is relatively scarce, it is the most plentiful and least expensive of the precious metals. The largest silver producing countries are Mexico, Peru, the United States, Australia and Chile. Sources of silver include; silver mined directly, silver mined as a by-product of gold, copper, lead and zinc mining, and silver extracted from recycled materials, primarily used photographic materials. Today, silver bullion stocks make up a significant component of silver supply.

Gold and silver investment instruments

Gold and Silver bullions are valuable precious metal, namely gold or silver. Gold or silver bullion has two main forms bullion bars and bullion coins. What makes it bullion is simply that its value derives entirely from its precious metal content. Gold or silver bullion bars can weigh anything from a few grams upwards. 1kg and 100 oz (~3kg) bars are sometimes accepted by participants in professional bullion markets in Zurich and New York though under strict controls to ensure bullion integrity. There is usually a premium on those locations, because London is the world's main physical bullion marketplace.

Gold and Silver bullion coins usually come in 1 oz, 1/2 oz, 1/4 oz, 1/10 and 1/20 oz. sizes. Most countries have one design that remains constant each year; others (such as the Chinese Panda coins) have variations each year, and in most cases each coin is dated. The most popular gold and silver coins are one oz bullion coins such as the American Eagle, the Canadian Maple Leaf, the South African Krugerrand, and the Austrian Vienna Philharmonic. They are easy to keep and transport and closely match the price of gold with a small premium. The European Commission publishes annually a list of gold and silver coins which must be treated as investment coins in all EU.

Gold and Silver certificates are certificates, which represent ownership of gold bullion held by a financial institution for convenient and safe storage. There is a fee for storage and insurance.

Numismatic coins usually are older coins, which fit the description of collectibles have a premium to the value of gold or silver included in the coin. For example, in July 2002, a very rare 20 1933 USD Double Eagle gold coin sold for a record 7 590020 USD at Sotheby's, making it by far the most valuable coin ever sold to date. In early 1933, more than 445 000 Double Eagle coins were struck by the U.S. Mint, but most of these were surrendered and melted down following Executive Order 6102. Result is fact that only a few coins survived.

Gold futures and options and Silver futures and options: futures contract traded on one of the futures exchanges, such as the COMEX in New York. This method is generally leveraged and options provide price movement much more than that of gold itself. It can be used to sell short and can be used to benefit from a drop in the price of gold. Calls option – investor would buy a call option if you believe the underlying futures price will move higher. For example, if investor expects gold futures to move higher, he will want to buy a gold call option. Puts option – investor would buy a put option if he believes the underlying futures price will move lower.

Gold or Silver Mutual Funds are relatively safe method of buying and owning gold stocks allows the owner to diversify among many stocks and allows the investing decisions to be made by a professional. Investment methods vary among funds and provide many different styles of portfolio management for an investor to choose from. Prices move faster and further in both directions than the price of gold. When selecting a fund, an investor should be aware of significant differences between funds:

- Some funds invest in South African mining stocks.
- Some funds allow hedging, shorting and option writing.
- Some funds are closed to new investments.

Gold Investment versus Silver Investment

Gold is more valued than silver, because it's rare and is not easily counterfeited. Gold is substitutable and exchangeable because every bit of 0.999 fine gold is similar enough to be like another. Gold is not rust and it isn't imperishable. These properties make gold a good store of value, a medium of exchange, and a unit of account. Therefore, gold is easily tradable with a narrow spread, meaning it has a small price between the bids and ask-the prices to buy and sell. Gold is therefore the ultimate liquid asset.

Estimates say that more than 75% of gold has been mined. According to the World Gold Council, the world has mined 170 000 metric tonnes by the end of 2010. (That includes gold jewellery.) There is a large gap between the gold production in the world and the demand for gold (gold bullion, gold coins, gold jewellery, electronics, and dental gold) of over 1000 tons of gold per year since over 20 years. This deficit is met by recycling and sales of central banks. In this situation of chronic deficit, we easily imagine the consequences of the inevitable decline in production of mines on the price of gold. For 8 years, gold production decline. World production of gold needs high gold prices to keep a minimum level of production, because the costs of production are rising. A decline in the price of gold would cause a sudden drop in gold production. The inevitable consequence would be a very violent increase in the price of gold. For this reason, the gold price should continue to increase at the same pace. A diminished production of gold is then maintained. However, since 2001 the world production of gold seems to have peaked.

The mankind has about 250 million ounces up to 650 million ounces of silver. (Those numbers do not include silver jewellery.) There is about seven times as much gold in the world as silver. (Another way to say it is that mankind holds less than one year's mine supply of silver.) Silver, above ground, is more rare than gold. There is seven times higher gold price above ground as compared to silver. Silver is used in electronics, photographs, and jewellery. The largest use is in electronics, and that is growing all the time, perhaps 40% of annual demand is from electronics. Silver is the greatest electrical conductor, better even than gold! Silver is used in switches, because it does not spark, and makes a great contact. Silver is used in bearings and some batteries. When used by modern industry, silver is used in tiny quantities. In fact, that

most silver used is not economically recoverable. It ends up in the dumps, in smaller quantities than can be mined or refined. Not only is the silver unrecoverable, but the demand cannot be stopped by higher prices. Silver is used in such tiny quantities, and in most cases, there is no substitute.

Silver is so much cheaper than gold, it is much less economical to mine and sell silver. Today, the world mines about 2,500 metric tonnes of gold per year and mines about 23,000 metric tonnes of silver. The world mines about nine times more silver each year than gold. An impartial observer might view those numbers, and conclude that a minimum price for silver should be 1/9th of the gold price, not 1/60th of the gold price. Then, taking into account current refined supplies, that there is seven times as much gold in the world as silver, silver should be worth much more than that.

Table 1 Average silver price and gold price USD/oz. from 1850 to 2011

Year	Silver price USD/oz.	Gold price USD/oz.	Gold price/Silver price
1850	1.29	18,93	14.7
1900	0.64	18,96	29.6
1920	0.65	20,68	31.8
1940	0.34	33, 85	99.6
1960	0.91	35,27	38.8
1970	1.63	36,00	22.0
1980	16.39	615,00	37.5
1990	4.06	383,51	94.5
2000	4.95	279,11	56.4
2005	7.31	444,74	60.8
2009	14.67	972,35	66.3
2010	20.19	1224,53	60.7
2011	35.12	1571,52	44.7

Source: own table based on information from

<http://www.silverinstitute.org/site/> and http://www.nma.org/pdf/gold/his_gold_prices.pdf

The main reason that gold and silver are both relatively cheap is that gold and silver are no longer being used as money in daily transactions by the general population or anywhere in the world. Before the world went "off the gold standard", many economists wrongly predicted that the price of gold would immediately drop, since it would no longer be used as money. The reduced monetary demand, they assumed, meant that the price would drop. They were proved wrong almost immediately, as gold moved up from \$35/oz., in 1971 to over \$850/oz. by 1979. The economists were proven wrong because people back then recognized the real situation, that dollars were defaulted contracts and fraudulent pieces of paper. But ultimately, the economists were proved correct as seen in the prices today. Today, few people own gold and silver and most people have forgotten the essential reasons why gold and silver are money.

Then there is increased demand for gold, and reduced demand for the nearest real alternative, silver. The problem is that a lot of the world's gold has ended up in rather large hoards, owned by the central banks. Banks prefer gold over silver, because a large supply of silver is rather heavy and bulky and more costly to store, by comparison.

When the world was using gold as money, banks really disliked silver, and have tried to prevent the use of silver as money. Their reason is that if silver is prevented from being used as money, it reduces the money supply, and thus, makes their gold more valuable by comparison. And also, the banks don't like to have to process and store the heavier silver.

The high price of gold compared to silver makes more sense if you simply do not know about the supply and demand fundamentals, or if you have high storage costs that you wish to avoid, or if you are a central banker. It makes sense if you are doing what everyone else is doing, and if you think you have the power to force the entire world to follow your actions. It makes sense if you are a trend investor. The trend investor thinks the prior unsustainable trend will continue, and that gold will become increasingly more valuable, while silver will become increasingly less valuable.

The high price of gold compared to silver does not make sense if you are a value investor. The value investor realizes that something is wrong, that conventional wisdom is wrong, that central bankers are wrong, that the world's leaders are wrong, that the world's most wealthy people are wrong, and that silver

is seriously undervalued as compared to gold. The value investor realizes that the central bankers and politicians are not in control, because gold moved from \$20/oz to \$35/oz back in 1933, and because gold moved from \$35/oz. to over \$850/oz. in 1979, and silver hit \$50/oz in 1980.

Here are a few basic reviews:

- **Gold silver ratio** – That is, the spot price of gold vs. the price of silver per oz. The price per oz is historically 16 to 1. That means the price of gold is 16 times the price of silver. The ratio is a natural value argument for investing. Silver is mined seven times more than gold. If you are trying to make sense out of this golden mean, don't. Better spend your time with quantitative valuations of stocks.
- **Silver appreciates more than gold in times of uncertainty** – Historically when there has been times of inflation or uncertainty actually silver and not gold appreciates more in value. So if you're buying it on the rational that these are the times that try men's souls, silver is your answer.
- **Silver is lower priced and more volatile** – Although an asset that is low-priced does not necessarily have greater volatility, it seems to be the case with silver. Greater risk, but also return.

The value investor rightfully asks himself, "How can silver become less valuable than today's prices, when it is in short supply above ground in refined form, and when more silver is consumed each year than mined, and when there is already less than zero monetary demand due to irrational investor selling?" This trend cannot continue. It must reverse course. True value must assert itself. And when true value is restored, which is partly determined by the fundamental factor of scarcity, and people recognizing that scarcity, which is what made gold more valuable than silver in the first place, then perhaps silver will be more valuable than gold.

The value investor will also benefit as the trend investors realize the truth, but a bit later. As silver outperforms gold, and moves up in value faster than gold, the trend investors will tend to jump on board the new trend, and buy silver in preference to gold. Later, the trend investors will be preaching the same things that the value investors know today: that in above ground refined form, silver is rarer than gold and more silver is consumed by industry than is mined each year.

Summary

Generally investors all across the world is advised to maintain at least 5% silver in their portfolio; imaging the ecstasy of those investors who has managed to accumulate silver and gold in their portfolio, truly fantastic. For many years the demand for silver is always surpassed its supply. Silver miners were never able to compensate the demand deficit. There is also a big forecast by geologists of the world that silver is the first element of the periodic table which is going to get extinct. This is going to happen very soon, may be in next 15 years by 2025. Little for guessing that silver mining will get costlier day by day and its price is sure to surge if demand is stable. It will be best for investors to start accumulating silver as the price is going to go up dramatically.

Even though investing in precious metals is a great way to diversify any assets and which for its own proves profitable over the long term, there are several risks involved. These risks of investment hinge partly on the type of investment vehicle: buying physical metals, purchasing shares of precious metals mines, or investing with mutual funds, futures or options. The first risks centre on physical risks, followed by political risks, market risks, exchange rate risks and technological risks.

Physical Risks: Investing directly in precious metals, by purchasing bullions (American Eagle, Krugerrand, Canadian Maple Leaf etc.) or numismatic coins opens the door to a number of risks. Physical gold can be stolen, second you might lose it, and third it's simply a forgery. Not a risk, but a burden, is the storage fees, if the gold coins should lay in a bank's safe.

Silver is not only a precious metal for investors its application has found several utilities in industry like glass, electric conductors, normal lead acid batteries, solar panels, mobile hand-sets, computers etc. Till today we do not have an alternative of silver in our industry. Moreover silver is also used in several life saving medicines. Starting from investors to industries to medicine everybody desperately needs silver. This is one good reason for investors to accumulate silver than anything else.

Silver is considered as a poor man's gold, because as compared to gold which is currently traded at about 1250 EUR per ounce, silver trades at just about 25 EUR per ounce. Gold is purchased by investors or nations for the sake of accumulating alone but silver has several other applications. This makes silver a better utility metal than gold. Each and every ounce of gold ever mined has either been stored in the

central banks of the world or in our personal lockers. Gold finds no use in industry and even negligible in medicine.

The price of gold has always been trading at exorbitant prices due to huge imbalance of demand and supply. Even the global trend and its brand name have contributed to its exorbitant pricing. But silver is still traded at very economical price and even small investors can go ahead and start accumulating one.

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Ex-post Analysis of Costs of Agriculture Businesses in Districts of the Prešov Region

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Abstract

Costs are one of the major driving factors that influence management of businesses. This is especially true about agriculture businesses. Comparison between amount of costs and amount of revenues gives us a gross income, which to a certain point, represents an efficiency and strength of business in the region. Aim of this work is to give an overview of total costs of all agricultural entities in the Prešov region and compare them between districts. Result of our analysis is an overview of the amount of costs in years 1998 – 2009. Contribution of our work is the analysis of state and development of observed economic ratios in the research sample.

Key words

Agriculture, costs, Prešov region

Introduction of issue

According to Kajanová (2005) basic aim of every enterprise is maximalization of profit. Prosperity depends of returns and costs. Enterprise can affect only costs, which is achievement of management improving and cost decreasing. Costs belong to the most important enterprise attributes, therefore present object of focus for any managers.

Accounting law (2003) defines costs as „ economics profit decreasing of accounting entity in accounting period that can reliably to evaluate. “

Costs presents financial valuation of consumption inputs which were applied on their output, eventually other reasonable costs. Costs make also base of creation selling transfer price. Cost presents the most reliable instrument of change expression labour productivity. Increasing of it makes itself felt as cost decreasing.

Costs fill same task in any economic sector, and agriculture is no exception. The Research Institute of Agricultural and Food Economics (2012) regard as main task of agriculture the population food security. Main activities include land cultivation, culture crops growing and farm animals rearing.

Difference between industrial production and agriculture is in agriculture dependence on soil (e.g. climatic conditions). Process of production is also biologic process. These factors influence costs of agriculture enterprises. Seasonality of agricultural production influence income, which has seasonal character as well.

Methodology

The aim of this contribution is present review about costs in Prešov region in agriculture years 1998 – 2009.

Research sample represent enterprises in Prešov region: Bardejov (BJ), Humenné (HE), Kežmarok (KK), Levoča (LE), Medzilaborce (ME), Poprad (PD), Prešov (PO), Sabinova (SB), Snina (SN), Stará Ľubovňa (SL), Stropkov (SP), Svidník (SS) and district Vranov nad Topľov (VT). Enterprises with the most frequency quality of estate were object of analysis:

1. grange,
2. limited liability companies,
3. incorporated companies,
4. private famers.

We assume that market indicator - average high salary - exercise an influence in costs variance. Higher salaries affect higher operative costs that affect total costs.

A first step analysis was normality test of research sample. In another step we provided sample with correlation analysis.

We selected among several tests (Kolmogorov-Smirnov test, Cramér von Mises test, Anderson-Darling test, etc.). In respect of software options of procedures generation and research sample size we selected Shapiro-Wilkov test.

$$W = \frac{(\sum_{i=1}^n a_i x_{(i)})^2}{\sum_{i=1}^n (x_i - \bar{x})^2},$$

where

$x_{(i)}$ - is the i th order statistic, i.e., the i th-smallest number in the sample;

\bar{x} - is the sample mean;

a_i - the constants Shapiro Wilkov test are given by

$$(a_1, a_2, \dots, a_n) = \frac{m^T V^{-1}}{(m^T V^{-1} V^{-1} m)^{1/2}}$$

where

$m = (m_1, m_2, \dots, m_n)^T$,

m_i - are the expected values of the order statistics of an sample from the standard normal distribution, and V is the covariance matrix of those order statistics.

When the data are roughly elliptically distributed and there are no prominent outliers, the Spearman correlation give similar values:

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}.$$

Testing significance of coefficients is based on the calculation of p-values, the significance factor is accepted if the calculated p-value less than 0, 5.

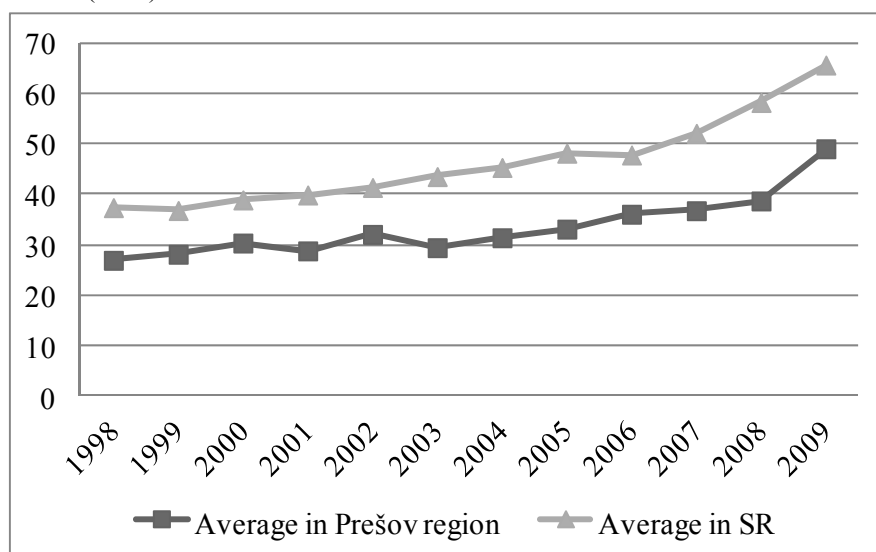
Official sources for analysis presented Ministry of Agriculture and Rural Development and Statistical Office of the Slovak Republic. Year 2009 present basic year of cost financial expression.

Data processing was analysed with exploitation statistics software Statistica and Systat.

Results and discussion

Results of this contribution consist of two parts. In the first part progress of tracking market indicators in Prešov region during years 1998 to 2009 is analyzed. In this part average operative costs and average soil costs (per hectare) are described. Difference between these two market indicators is object of this part as well. Second part of this contribution presents closer look on tracking indicators in Prešov region districts. Special attention is paid to difference between individual districts in first and last tracking year, e.g. 1998 and 2009.

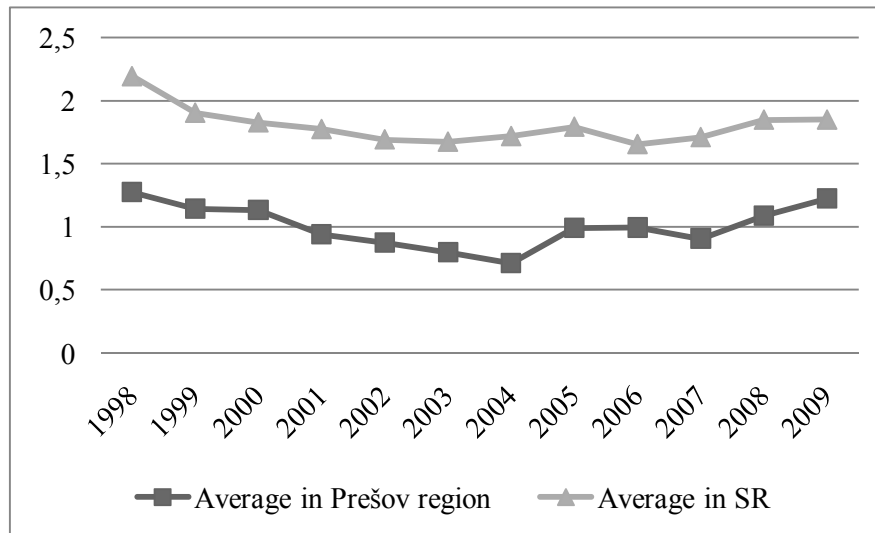
Graph 1 Operative costs (EUR)



Source: own calculations

During tracking period average costs in Prešov region as well as in Slovak Republic (next only „SR“) has increasing tendency. In year 1998 operative costs in SR comprised 57 % of operative costs in end of tracking period (2009). Compared to operative costs in SR, operative costs in Prešov region were higher by 7 €. In last four year's we can watch the most remarkable operative costs increase. During this term it increased in about 18 € which meant growth in more than 37 %. Operative costs in Prešov region increased in almost 10€ in first ten years. The most important growth took place last year, when absolute difference was 12, 26€ between years 2007 and 2009.

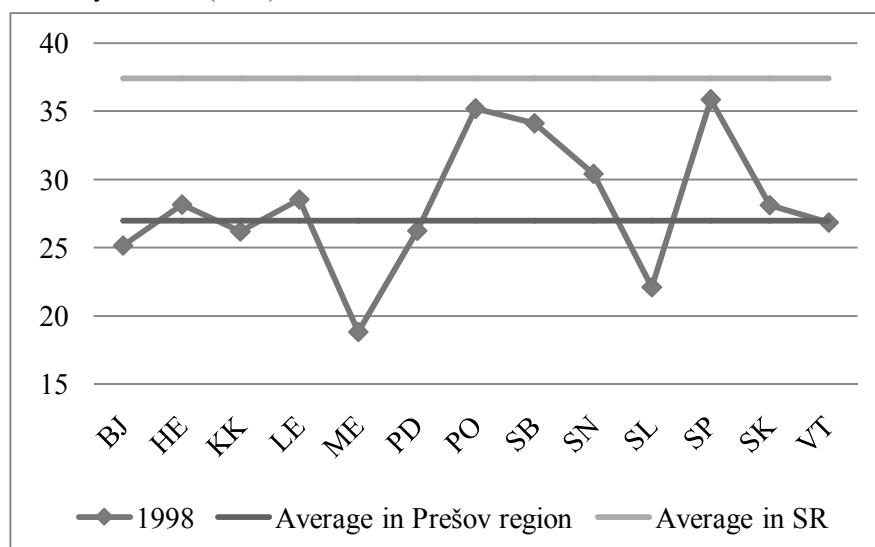
Graph 2 Soil costs (EUR)



Source: own calculations

Average soil costs did not present expressive difference during tracking term. Difference of average operative costs between years 1998 and 2009 was 0, 34€. In the beginning of tracking term the most important decreasing took place, when decrease was 0, 29€ between two years. Average costs in Prešov region decreased as well. Between first and last year of tracking term, difference was 0, 05 €. The lowest soil costs in Prešov region were in year 2004, when it was only 71 % of average value during whole tracking term. In between 1998 and 2009, reduce difference between average values in SR and Prešov region could be seen. Decrease presented 32 %. The most significant difference was in 2004 (1, 01€).

Graph 3 Operative costs in year 1998 (EUR)



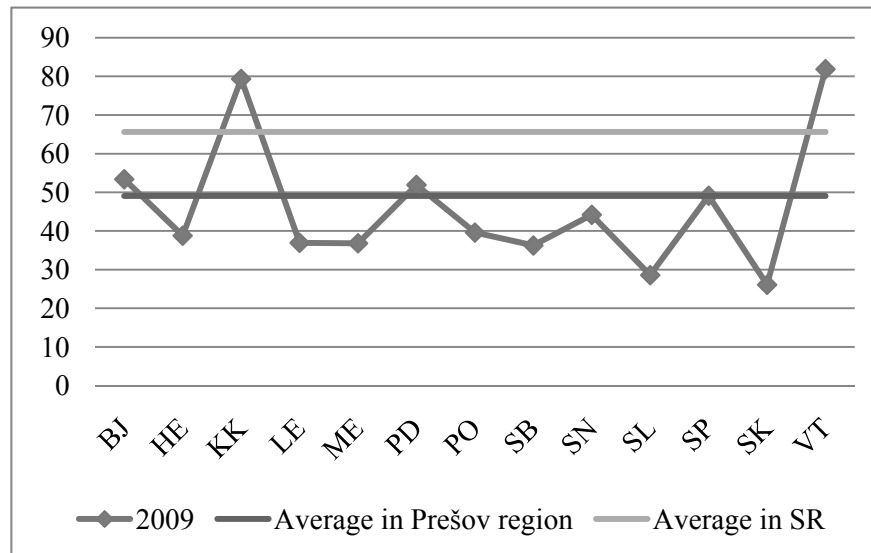
Source: own calculations

Graph no. 3 present operative costs in SR (37, 41 EUR) and in Prešov (26, 99 EUR) in year 1998. Districts of Prešov region did not reach value of average costs in SR during whole tracking term. The

most successful districts were Prešov, Sabinov, Snina and Stropkov. District Medzilaborce, Stará Ľubovňa belong among districts with the lowest operative costs in year 1998.

The most influential factors shaping these results were total costs in given district and manpower. The biggest cost in Prešov region reached district Prešov in year 1998 (16,6 % of region costs). District Prešov has the most employees (2103) as well. Region with the worst results was Medzilaborce district in both market indicators.

Graph 4 Operative costs in year 2009 (EUR)

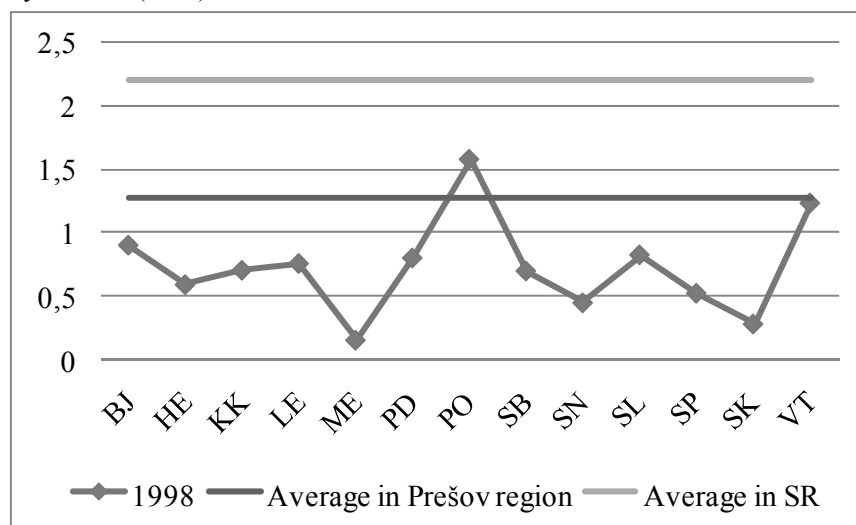


Source: own calculations

Comparison between year 2009 and 1998 in operative costs presents differential scores. The most successful districts were Humenné and Vranov nad Topľou. Those showed better than average values in Prešov region and SR. The most significant difference can be seen between Vranov nad Topľou and Svidník districts.

With the exception of above mentioned districts, other districts present values under average of SR. In comparison with year 1998 we can watch higher operative costs differences among single districts. The district with the lowest operative costs was Stará Ľubovňa during both years, i.e. 1998 and 2009.

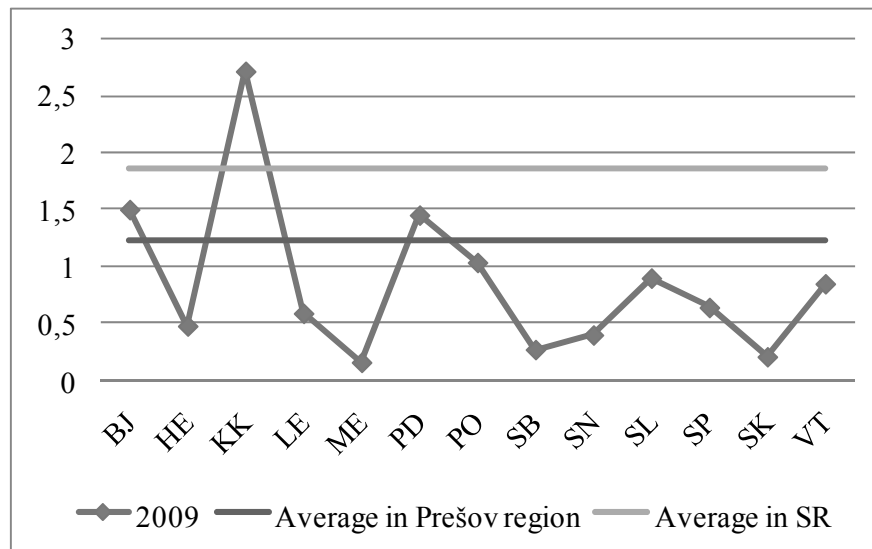
Graph 5 Soil costs in year 1998 (EUR)



Source: own calculations

Soil costs present similar progress as operative costs in year 1998. The average value in Prešov region was 58 % abreast of SR. Prešov district had the highest soil costs, the lowest were found in Medzilaborce district. Difference between these districts were 1,4€ in year 1998.

Graph 6 Soil costs in year 2009 (EUR)



Source: own calculations

There are significant differences in marked indicators between single districts in year 2009. Kežmarok district had the highest soil costs. On the other hand, districts Medzilaborce and Svidník were the feeblest.

High inter district heterogeneity (operative costs and soil costs) required single analysis. We are focusing on relation between determined costs and average districts salary in year 2009. Normality tests employed by Kolmogorov-Smirnov test refuse normality in total operative costs ($W=0,855^+$, $p=0,033$). Normality was not refused in average districts salary ($W=0,95^+$, $p=0,597$).

Table 1 Correlation analysis results

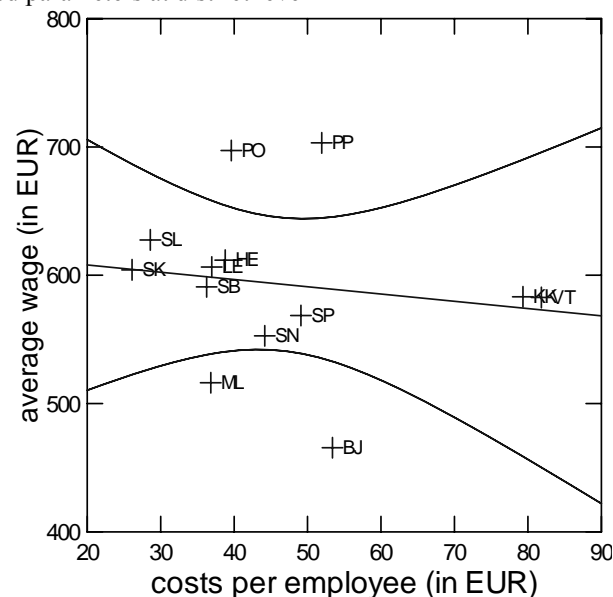
N	Spearman R	t(N-2)	p-value
13	-0,280	-0,968	0,354

Source: own calculations

Correlation analysis results, especially output significance does not allow us accept the assumption that among the parameters - the total cost of agriculture per worker in the districts of Prešov and the average monthly salary in the same districts - is connected.

Ambiguity over the relationship between these parameters at the district level (without visual assessment of significance) is also evident from the picture.

Picture 1 Scatter plot of analyzed parameters at district level



Source: own calculations

Above-average level of labor costs in some districts (PO, PP) had no significant effect on total costs of agricultural entities converted to a single worker.

Summary

Costs present significant determinate of successful entities. Operative costs or soil costs indicate which propose objective view on financial exploitation in single districts. Operative costs presented increasing tendency during whole tracking term. Growth of 75, 4 % make provision for worker amount in this area. Soil costs presented mild decreasing tendency during whole tracking term, or stagnation.

We did not confirm assumption about different rank of average salaries' influence on variability of total costs at districts level. High costs variability is not coupled with variability of operative costs. For a detailed understanding of the causes, additional analysis aimed at identifying relevant costs determinants will be necessary. Based on those, we will be able to management total costs and optimize them. Such analyses exceeded the scope of this contribution though.

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Alternative and Modern Forms of Financing for Small and Medium Enterprises

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Abstract

Rapid development of an enterprise is not possible without external sources of financing. In Poland, as a free market-based country with a stable economic situation, there are many institutions capable of co-financing undertakings. Modern forms of financing and institutional support cause that they are starting to play a significant role in financing small and medium enterprises.

Key words

enterprises, sources of financing, external capital, modern forms

Introduction

Last years and the crisis - made it difficult to access various sources of financing, however, on the other hand, they forced the sector of small and medium enterprises to take a risk and use less known forms of gaining capital. Unquestionably, the European Union makes it easier, not only by pecuniary means but also by specialist consultancy, and entrepreneurs in many cases base on experiences of other member states. This article focuses on presenting possibilities of using alternative forms of gaining capital. The main aim is to identify and analyse available modern forms of financing investment activities of small and medium enterprises as well as depicting the existing trends. The research part is based on the studies performed by the Polish Agency for Enterprise Development, the Main Statistical Office as well as other organisations and companies connected with small and medium enterprises, i.e. dealing with its financing.

Theory of selecting funding sources

The selection of funding sources by small and medium enterprises is much dependent on the hierarchy of the financing methods used by the enterprises and certain criteria defining the attractiveness of particular sources. The theory of hierarchy of financing sources assumes that enterprises select their funding sources pursuant to a given order, not trying to maximise their goodwill. The theory indicates that enterprises prefer internal sources of financing. Later, in case of lack of sufficient internal sources, they use external ones. Choosing external sources, the entrepreneurs are aimed at the lowest dependence of an entity which is entitled to allocate them (Zadora, 2009, 56). The following criteria of attractiveness of particular sources of financing may be differentiated: availability, cost, flexibility. (Nędzi, Cegłowski, 2005, 23).

The most significant criterion is availability of particular sources of financing. It depends on the requirements introduced by the capital provider but SME have to fulfil certain conditions. Assuming that access to funding sources has a great significance while applying for them, SME shall use mainly the sources which are easier to obtain. A very important criterion is the cost of gaining funds from a given source (Grzebyk, 2010, 149). The enterprises aim at minimising costs of their activity and they regard this parameter while considering various sources of financing. Another criterion is also flexibility of a given source of financing. It means the pace of gaining the funds, amount of available resources, repayment time, ability of increasing and decreasing the value of debt, possibility of renegotiating the repayment terms and conditions. There are criteria which are mainly beyond the control of enterprises.

Table 1 Access to sources of financing for the enterprises of the SME sector

Easily available source	Semi available source	Hardly available source
Own funds Trade credit Credit guarantees European Union funds Non-banking loans Support public funds Loans from family	Short-term bank credits Leasing Customer loans Factoring Emissions on the market outside the stock exchange	Bonds Emissions on the stock exchange Financial market Long-term bank credits Venture capital funds Franchising

Source: Report on the state of small and medium enterprises in Poland in the years 2007-2008, A. Żołnierski, PARP, Warsaw 2009.

Small and medium enterprises have a specific position with reference to big enterprises. On the one hand, they have difficult or even impossible access to some forms of financing, but, on the other hand, there are sources addressed mainly for them. Proper use of financing forms assigned mainly for SME is a chance for greater improvement of their own market position, development of the company and providing competitive advantage on the market (Borowiecki, Siuta – Tokarska, 2008, 45).

Foreign capital has an external character in comparison to an enterprise. Its characteristic feature is time-basis of using resources, necessity of their return within a definite period of time and certain fees. Foreign capital flows into an enterprise by linking an enterprise with the pecuniary and capital market. The main feature is the lack of influence of the creditor on the decisions of a company as a whole (Gąsowska, Moczydłowska, 2011, 12). Table 2 presents the main financial institutions providing foreign capital.

Table 2 The institutions financing small and medium enterprises - countries of the European Union comparative analysis (% of answers)

Financial institutions	Traditional members of European Union	New members of European Union	Poland
Commercial banks	79	66	56
Leasing companies	24	35	32
Public institutions	11	11	10
Private investors	7	8	2
Non-banking financial institutions	9	3	6
Venture Capital Funds	2	1	1
Other	2	7	7

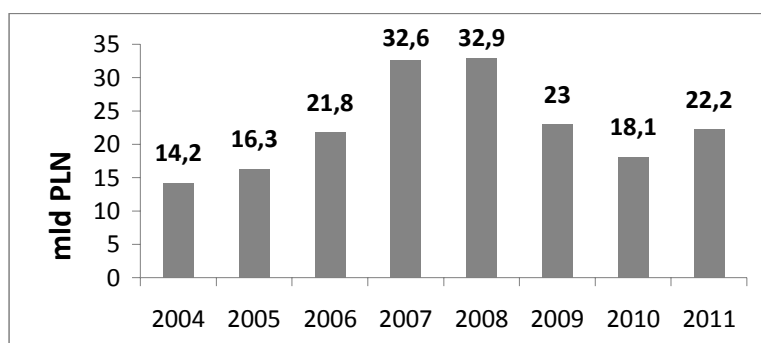
Source: European Commission, SME Access to finance in The New Member States, Raport o stanie sektora małych i średnich przedsiębiorstw w Polsce 2009-2010, Red. A. Brussa, A. Tarnawa, PARP, Warszawa 2011.

Available sources of financing are, to certain extent, used by small and medium enterprises. About 56% of the entrepreneurs in Poland indicate a bank credit and 32% of them indicate leasing. Each tenth enterprise uses EU funds and only some of the entrepreneurs indicate such sources as factoring, loans from loan funds, issuance of shares. The most important external source of financing the activity of an enterprise is a bank credit (Grzebyk, 2004, 345). The greatest problems with access to external financing have persons starting their own economic activity and micro companies. They do not have any credit history nor property sufficient to secure the credit along with proper creditworthiness (Grzebyk, 2006, 157). Insufficiency of funding sources makes it impossible to carry out investments. It constitutes one of the reasons of a high level of companies which go bankrupt in the first year of their activity - in Poland it amounts to ca. 14%. Despite a great reluctance of the SME sector to the modern forms of financing, in some unconventional methods of gaining capital, we notice their greater and greater share.

Assessment of using unconventional forms of financing by the SME sector

One of the most available and popular unconventional forms of financing is leasing. Leasing is particularly beneficial for newly established enterprises having limited possibilities of access to the capital market. An enterprise, using leasing, gains the possibility of extending the production capacity, adjusted to the market needs while maintaining the previous structure of own capitals. The value of the leasing market within the framework of the companies associated with the Polish Leasing Association, has been presented in the drawing no 1.

Graph 1 The value of the leasing market in Poland



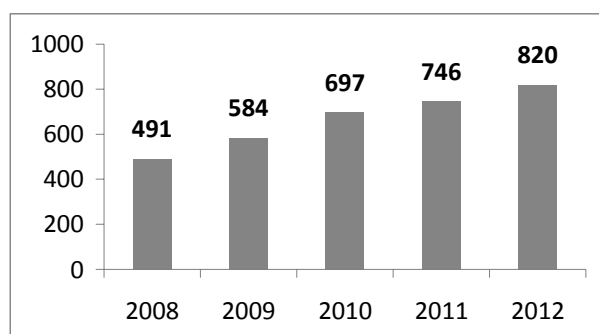
Source: Polish Leasing Association, Wyniki branży leasingowej w 2011 r. Warsaw 2011, www.leasing.org.pl

As the conditions of a leasing contract are mostly stable, it is a security against any unfavourable decisions of the government, inflation as well as it is the means thanks to which enterprises may exactly plan their budgets. The leasing market in Poland is rather broad, the pace of its development within the last several years shows that it develops very fast. Demand for leasing services is the consequence of a dynamic increase of investments in Poland, which is translated into the need for proper financial products. The situation in these branches is a true reflection of the current condition of our economy. Advantages of leasing rely on simplified operating procedures, short time of issuing a decision on providing funds as well as lower collateral than in case of a credit. In the years 2004-2007, we noticed a greater significance of the leasing market, its average annual increase was 32%. The economic slump caused a decrease in turnover in 2008, which translated into the increase of 1% in comparison to the previous year. The year 2009-2011 was a return to the level of financing from 2006, mainly due to the financial crisis and anxieties of entrepreneurs regarding the future. Despite the significant inhibition of the growth dynamics, the branch provided financing in 2011 in the amount of PLN 22.2 m - this is the value higher by 22.5% in comparison to 2010.

Another unconventional method of financing small and medium enterprise is franchising. Also, at the time of the economic crisis, franchising may provide support for entrepreneurs. It is a business for everybody. The main franchising market players are franchising systems which act by their subsidiaries. The Polish franchising market is constantly growing. As a consequence, at the end of 2011, there were 746 franchising networks, which acted with the use of 42.5 K subsidiaries. The resignation of enterprises from development by franchising has an incidental character in Poland and an annual growth of a new system is so high that the development of the entire market may be defined as dynamic. The changes in the scope of the number of franchising systems are associated with branch transformations and geographical networks. It shall be emphasised that the directions of such changes are mainly convergent with long term tendencies observed on franchising markets of other countries (Antonowicz, 2011, 93). According to the report of the consulting company PROFIT in 2012, the number of subsidiaries, conducted by franchisees may increase by even 50 K.

The most numerous franchising systems were conducted by grocery keepers. Last year, such licences were used by more than 21 K of such entities. The leader in this segment is the chain of "abc" belonging to the Eurocash Group, which has 4.6 K shops. The great dynamics of the growth in franchising entities may also include legal consultancy offices (42%) and property estate agencies (35%). The greatest selections of franchising brands has the clothes and gastronomic branch. Last year, there were 163 fashion brands in the Polish market.

Graph 2 Number of franchise systems in Poland



Source: PROFIT system, (2012 – forecast)

Cooperation on the basis of franchising allows using the power of a brand and reaching new groups of recipients. Franchising environments agree that the franchising market in Poland will be still developing. There is no doubt about the fact how big will be the growth. In Poland, there is also a gap in the area of franchising, both in the side of demand and - in the scope of systems as well as in the side of demand - in the scope of subsidiaries. We may assume that in order to achieve full maturity, the Polish need more than several years.

The specific kind of modern financing from the group of private equity investors are Business Angels. The phenomenon of investments performed by natural persons has existed in our country for not so long. The structural change in the market of business angels was introduced after entering Poland into EU and it

has been playing a significant role in improving the conditions of finance within Polish enterprises due to significant importance of business angels resulting from supporting investment activity especially in the scope of seed and start-up investments. The EU commission grants financial aid to business angel networks at the stage of their establishment.

A business angel is a private investor - an entrepreneur or a wealthy person - who supports selected business ideas, especially at the beginning of their activity. They grant support not only in form of money, but also by their knowledge, experience and contact. The most popular organisational form of business angels is a network. It is an organisation acting in Poland on the non-profit basis. It functions as an agent between the environments of individual investors and entrepreneurs. Within its framework, there is a platform, on which idea creators seeking capital for start or development of their company have a chance to find an investor and partner. The network offers investors anonymity, access to unique knowledge, training and the best projects. Moreover, they offer entrepreneurs an objective analysis of ideas, support in developing concepts, consulting, aid in negotiations as well as forming contracts between the parties. The other interesting structure is the club of Business Angels, which mainly functions as an association (Błoński, 2011, 34). Most and most popular form of organisation are groups of business angels. These are institutions forming stable investors' groups whose capitals create investment pools of equal sizes. The decisions on entering a given project are taken on a democratic basis. The groups are formed for long-term periods. The aim is to create a diversified investment portfolio. Pursuant to the results of the European Business Angels Network, business angels invest mainly in: ICT (68%), energy and environment protection (56%), software and multimedia (41%), production (35%), biotechnology (35%). These areas are characterised by potentially high profits in comparison to encumbered investment expenditures. However, lower interest is connected with the retail branch (16%) and health protection (22%). The following business angels networks function in Poland: Lewiatan Business Angel, Polish Association of Business Angels PolBAN, Silesian Association of Business Silban, Business Angels Network Amber, Business Angels Network of Lublin Angels, Eastern Business Angels Network WSAB, Regional Capital Investors Network RESIK. Since 2005 business angels have provided capital support to many enterprises from various branches and the year 2010 was record-breaking as far as investment offers are concerned. Only 20% out of 100 incoming offers turn out to be interesting, that is why it is important that the projects presented by entrepreneurs regard not only innovative undertakings but also the fact that newly established enterprises were able to analyse their ventures in detail and would take a risk along with the angels. Analysing the investments undertaken by business angels in Poland, we may include two basic elements of this market, defining supply and demand - at first, a reduced number of individual investors possessing certain financial means and competences, secondly a certain number of investment projects which are aimed at business angels as investment partners. As the great number of business angels belong to former or active entrepreneurs, the number of such investors in the Polish market is relatively low. Basing on the data developed by Dun & Bradstreet one registered company is for 11 Poles, whilst EU average amounted to 8.1 dwellers per one enterprise. This state of things result from: a relatively short time period of free market economy in Poland, in comparison to highly developed countries, constant lack of capital and legislative and taxation difficulties connected with establishing and running businesses in Poland.

A great chance for external financing have innovative SMEs. They are supported by the Polish Agency for Enterprise Development engaged in implementation of i.a. programme for the benefit of competitiveness and innovativeness (Świdorska, 2008, 24). Up to 2013, the programme shall include ca. 400 K of small enterprises, by supporting them in the amount of 30 bn. Euros and within the framework of the Regional Development Fund, the sector may obtain 23 bn. Euros. The boost of ASO turnover is also significant, private investors are interested in companies from the NewConnect market, or EU funds. The venture capital branch also sees the future in bright colours and the National Capital Fund acting in the market, may finance up to 300 projects in early stages of development. Small and medium enterprises seek various solutions to developing their activity. The range of such possibilities and their availability are becoming greater and greater.

Conclusion

Availability of funding sources, the manner of financing the current and investment activity as well as proper relations with external financing providers influence the decision making process of enterprises as well as it conditions their strategic plans and intentions. Regarding foreign capital, the most popular form is a traditional bank credit which is very expensive and difficult to obtain. That is why, the financial market provides more modern forms of external financing. Such sources include leasing, venture capital,

business angels or even franchising. Using the aforementioned forms of capital within an enterprise provides possibilities of development and an opportunity for improving the results of management. While choosing a given form, an enterprise shall pay attention to both benefits as well as threats resulting from a given form of financing. The opportunities of financing the development of Polish entrepreneurship by external institutions are increasing and are becoming an alternative and attractive form in comparison to financing offered by banks.

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Financial Management of Companies and Management Analysis at Time of Lingering Economic Crisis

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Abstract

Keeping your earned position in the market these days is quite difficult for companies, since even hundreds remains consequences of global economic and financial crisis. For these reasons, it is necessary that companies pay their financial management, improved care but we, knowing that early detection of risks that threaten their existence. To streamline financial management businesses should benefit not only financial analysis but also a management analysis.

Key words

Financial management, Crisis, Business, Management analysis

Introduction to financial management

Financial management presents process company, which provides for important tasks, through which passes the competitive environment. Financial management performs four basic tasks which are:

1. acquisition of capital appropriate structure (both process of obtaining business capital external and internal resources),
2. deciding on allocation of the capital (both process of effective capital allocation to various projects and then the components of business assets),
3. deciding on profit sharing (both decision-making process of allocation of profits between owners and for further development of the enterprise),
4. analyzing and control of the business (process control and then determine the sequence of steps and axles when they fail) (Suhányiová, Vravec, 2011).

Financial management in time of crisis for the financial manager is much more difficult because they must pay attention to what the only the slightest hint of external and internal environment, unless they wish to remain unprepared. Real strength of the global economic and businesses are feeling the financial crisis, even today, after almost 4 years when broke. As the Kislingerová (2010) global economic crisis has had its size, depth and novelty. It can also define the characteristics of a computer virus - is extremely resourceful, adaptable and highly innovative. It is perhaps ironic to be noted that the lingering crisis in the way it has all the features and characters should have a modern and dynamically developing company in new global economy.

Financial decisions

Financial management process is always accompanied by the financial decisions that financial managers must perform. There are two known types of financial decisions.

1. Tactical financial decisions do not change the current business activity and require a smaller amount. For example, buying a machine, the increase in inventory, and so on.
2. Strategic financial decisions bring major changes in business activity and usually also require large amounts of money. The expected result is a big change in income associated with greater risk.

Financial decisions can be defined as the process of selecting the optimal alternative of raising money and adopting effective investment decisions to an acceptable level of risk and help achieve their goals. The financial manager is important to know the general rules that are associated with work with risk. Such general rules that apply to financial decisions, including:

- always prefer more yield from smaller,
- always prefers less risk to larger,
- prefers rather to raise money to equal the value obtained later,
- percentage yield must be higher than the other alternative decisions
- investment is either larger business assets, cash flow or earnings (Beňová, 2007).

Crisis and company

The global economic and financial crisis did not lead to establishments only as of the day. The symptoms that something is going on, has long signaled that something was order. It can be stated that if a given symptom is given a higher profile, it could lead to the fact that a business analysis of financial management can mitigate the impact of the crisis.

The most common symptoms of impending financial crisis:

- substantial decline in sales, which induces the growth of stocks of finished products and work in progress, causing an increase in funds commitment enterprise,
- liabilities (both long and short term) are paid with considerable delays,
- increase in prices of inputs, wages and causes a decrease in interest revenue and profitability capital,
- substantial decline in production and production of the turning point, which marks the beginning of absorption of equity (share declines in the total equity capital),
- lack of all liquid resources is forcing a company to indebtedness, which is an increase in interest rates.

The best known symptom and then the result of the crisis can be considered insolvent company. Insolvency is the company's inability to pay its debts and commitments due dates. There are two types of insolvency, which can be defined as follows:

1. primary insolvency - reflects the lower status of prompt payment of funds in compared with the outstanding obligations,
2. secondary insolvency - reflects a significant elevation of the debt liabilities of the company, which is due to the fact that purchasers of goods and services by an enterprise failed to meet deadlines due date (Král'ovič, Vlachynský, 2006).

Financial analysis, which is part of the financial management, is an appropriate tool for early identification of potential problems. It offers a number of ways in which it is possible to identify early symptoms of the above and streamline the financial management of the company. Calculating indicators businesses should pay more attention and any identified adverse deviations deeper analysis and look for causes of the negative aspects of the indicators.

Kisef'áková (2008) devoted major attention to the comparison of evaluation approaches, the financial situation of enterprises, which are:

1. methods of economic and financial analyzes that are based on accounting earnings and book value of the company (financial indicators)
2. value method of management focusing on EVA indicator, which is based on the principle of economic profit and market value of the company (selected economic and market indicators)

It should be noted that in the first case of static parameters character, as are analyzed in terms of accounting, which does not take into account the current market situation. In contrast, however, economic and financial indicators reflect the current status of market economy and the state in which business operates. Although both types of indicators that are of interest, it is necessary, keeping in mind the fact that in modern times, even when damp out consequences of the global financial and economic crisis is almost essential that in the financial management of undertakings to analyze both types of indicators, because connected with each other and to their mutual analysis provides relevant information on the current situation in the company.

Managerial analysis

Varcholová (2001) defines managerial action analysis, which is aimed to evaluate the economic and financial situation. These steps to analyze the management of economic and financial efficiency of the company based on accounting data and accounting profit can be used to calculation of key indicators reflecting the level of achievement of the objectives of the enterprise and also the main factors affecting its continued prosperity. If the company wants to make high-quality managerial analysis, must have a suitable methodology and model apparatus, which must include:

- all aspects of economic management company,

- respect of individual aspects of the economic situation of the company (in this context is reflected by an explicit and transparent links between aspects of business operations),
- information not only on the state, but must be well-defined cause a condition that occurred and suggest another direction the company wants to go.

The evaluation of managerial analysis using comparative methods, and it is necessary that their relationship was determined on a basis. However, determination of optimal values of selected parameters (eg, the ratio) is marked by a considerable degree of maturity of the personality of the economy in each country, also the other sectors in which it is located and other other factors.

Complex manager requires constant comparison analysis of parametric values achieved in time, which is accompanied by inter-comparison, which reflects the current state of the industry - reflects the current external environment of the establishment, but also competitors.

As well as the financial analysis, the fundamental basis of managerial analysis is defined by calculating ratios and their interpretation. Ratios are grouped together, which is a sign of a specific aspect of economic and financial situation of the company (Kiselařková, 2008). In general, using five groups ratios (financial analysis "ex post"), which are:

1. *Liquidity ratios* - measure the company's ability to pay its liabilities, and liquidity is defined as a measure of the ability and readiness of business to pay its current liabilities in time and in full to their maturity date.
2. *Activity ratios* - advise on how to effectively use its property business and analyze how rational business treats its property.
3. *Leverage ratios* - analyze the structure of the financial resources of business and finding the optimal relationship (structure and height) between self and foreign capital enterprise.
4. *Profitability ratios* - also known as indicators of profitability, return is made as the ratio of the final effect, which the company achieved (output) to a comparative base (input) . Show positive or negative impact on asset management, financing and liquidity for the company profitability.
5. *Market value ratios* - represent a combination of accounting and market values, as analyzed by real appreciation for the enterprise market as a whole. It made real information about how to look at future business owners and potential investors. It is important to remember that even though the company is evaluated based on previous reported results, taking into account the riskiness of the sector in which business operates and to predict future developments (Kislingerová, 2004).

Summary

Although the effects of global economic and financial crisis, even today continues to resonate, it is possible that this negative business situation eased, possibly as much as possible to eliminate this negative impact. Constant financial and management analysis can be more effective financial management and the right to achieve optimal business results. Enterprises nowadays high awareness and constant monitoring of the situation of competition in the industry can achieve effective financial management of not only increase profit, but mainly seek to maximize the market value of the company.

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Tourism Product And Its Role In A Regional Development

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Abstract

National regional development policy is strongly centered on financial instruments, EU funds. Accent of this contribution is given to a networking (and necessary cooperation) of local suppliers in conjunction to barriers reflecting administrative spatial diving.

The paper focuses on a description of a importance and position of a tourism product (as a set of services provided by a subjects to consumers) in a local level of administration.

Key words

Regional policy, tourism product, networking

Introduction

Aim of the regional development is to reduce disparities between the levels of development of regions and countries. In the European Union were established authorities and instruments (legal, financial etc.) who are involved in strengthen economic, social and territorial cohesion. EU covering activities complement operations of the regional and local subjects in the field defined by the state level borders. Following the principle of subsidiarity¹ local and regional authorities are responsible for taking decisions as closely as possible to the citizens.

Position of a regional (selfadminstrated) bodies is maintained in a strategic and coordinating field. It's up to individual local players (subjects) mainly private nature to bring ideas and specific projects to life. Czech Republic is dividend into 14 cohesion regions but there is uncountable number of local initiatives running businesses in tourism field.

Regional development

The Czech Republic is participating already on the second budgetary period (2004-2006 and 2007-2013) and as a net receiver² is used to get high budget for the whole period. In the period of 2007-2013, the Czech Republic has been using finances from the European Funds via 26 operational programmes splitted into:

- 8 Thematic Operational Programs,
- 7 Regional Operational Programs,
- 2 Operational Programs Prague and
- 9 European Territorial Cooperation.

Non of them is dedicated specially to tourism, but tourism project can be supported from some of them. Because of small number of projects and big amount available money in the beginning of the second period money from the Operational Programmes were quite easy reachable under the condition that the project applications meet the setted formal terms. Recipients got the feeling of plain money gifts. They often forgot to think about the future costs, rate of return or real sustainability. The unpleasant effect is nowadays growing problem with number of projects without correct audit but with stopped financing and close comming cut-downs.

Support going toward regional (spatial) development is in a administrative field connected with the administrative boundaries, it means no matter of net connections of a local subjects, financial subsidies respekt the Nomenclature of territorial units for statistics (NUTS) regardless the tourists don't recognise them and expect the highest service and product not ending on the region border.

Tourism has potential to play significant role in a rural and post-industrial areas in a region. With regard to a situation of a Czech economy in last few years (rising unemployment, down falling real wages) in many

¹ in Article 5 of the Treaty on European Union

² Net reception 2007 - 15,2 billions CZK (15 200 000 000,-)

2008 - 23,8 billions CZK

2009 - 42,3 billions CZK

2010 - 47,3 billions CZK

2011 - 30,7 billions CZK

regions there is more than time to look after local stimulation shift. Tourism is a part of economy with such a potencial namely on a local level.

Tourism product

Tourism product definition can be made from different points of view. An economist would prefer definition as a total of incomes made from the part of national economy – tourism, destination manager would describe the definition as a product (untouchable) offered to tourists on market („something“ what supply offer and demand ask for). Here is no space to make serious discussion on a tourism product definition, so we follow the idea of a combination (set) of services provided by a subjects to consumers (tourist) enjoying the activities in a area (destination).

As Smith (1994) says, product development is prerequisite for satisfying tourists' changing demands and insuring the long-term profitability of the industry.

Czech Republic and its regions have advantage in a cultural (over 100 castles under the state administration throught National Heritage Institute) and natural heritage as well as in industrial leftovers (buildings, equipment etc.). For example in comparison with USA there is wide variety of attractions connected with deep history that can be connected with a real stories.

We can show an example of the Washington D.C. and his tourism product focused on a monuments and memorials devoted to history younger than 200 years and constructed not before the 20th century. It means no matter of a lack of the historical occurrences and wealth, they know very well how „to sell“ what they have.

On the other hand Czech Republic is full of the historical proofs, we could call it - because of the numer of castles, churches, chateaus etc. - „cultural mess“ as well as density of the nature objects and admirables, but there is a depth in utilization. The question stays: Why?

There are many reasons, lets focuse on one group.

Administration, management or local providers

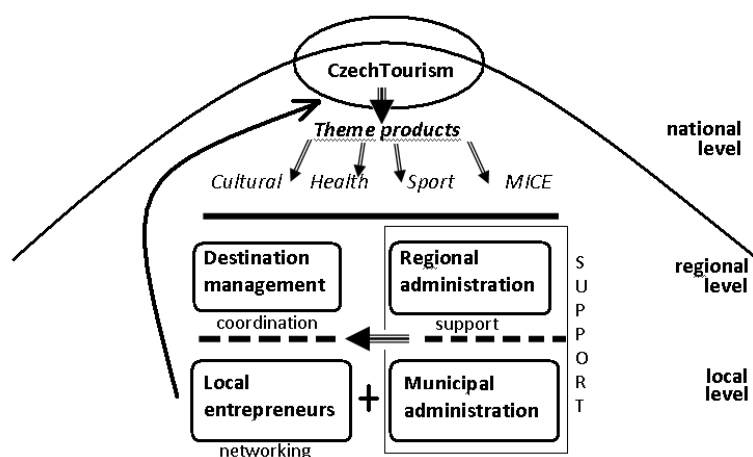
One problem brings disharmony between the owner versus administrator. Each of them has various goals (at least on the first sight).

Another difference lies among municipality (as a basic self-administrated unit in a state) and destination management what should be founded on a higher (regional) level. Municipality follow mainly local development sometimes in cooperation with the closest surrounding, destination management should support and ensure successful development of the wider area, area seeked by tourists (hardly ever respects the administrative structure).

New tourism product system

There is finally a new tourism product system in the Czech Republic (from 2012), to understand see Picture 1. The CzechTourism the Czech Tourist Authority, published in Tourism marketing conception 2013 – 2020 system of a tourism product on a national level. (See picture 1).

Picture 1 Top – down tourism product authorities



Source: Self made

CzechTourism cover the national theme products with the marketing mix instruments. Authority defined 4 topics (themes called: cultural product, product health, product sport, MICE product) as a main assets of the Czech Republic in tourism products. These theme products are dividend into specified „chapters“ (for example the cultural theme product contains: Cultural paths, Prague, Cities story, Czech spiritual, Cultural landscape). These „chapters“ represents a suggestions for regional levels of administration and management. They should coordinate specific activities from the local level in a tourism product establishment on a larger area to cross the local administrative borders and merge services to get higher profits together.

Now it's time to go back to regional development financial assistance and remind that operational programmes respect administration diversification. It can be provided to local service providers (to concrete projects) or to municipal administration to have financial injection for preparing appropriate conditions for local service providers and their networks. Networking of particular services brings tourism product to life as well as motivate tourists to stay longer in the area and consume more. Local network of cooperative subjects brings better outputs. As the system is new in the Czech Republic, public administration should take responsibility for the first initiative to address the local service providers and start basic systematic cooperation. This first step is mostly based on a informal relations and mine from the personal contacts of a municipality representants. It's up to them to demonstrate the opportunities and introduce the municipality assistance. Why should municipality be the impulse?

Where is tourist it means income. Where is satisfied tourist there is income for a local economy, income which means more taxes for the country and higher income to the municipal and regional budget. Budget as a source for local player support.

There is possibility to earn money through service. To make more money it's necessary to hold tourist for a longer time. No tourist will stay longer without entertainment and satisfaction. Not to become tourist bored it's necessary to cooperate and group varied (but complementary) services.

Local suppliers network linkage has to become fundamentally mutually beneficial. There is a new system, still in the beginning of its life, so now it's time to push the local subjects into cooperation and creating community based tourism product closest to the market.

Conclusion

Reducing disparities requires stimulation help and improvements in competitiveness between destinations. Accelerating transfer of know-how within the area and supporting cooperation, that is way how to use the tourism potencial.

With a good working net of local subjects covered by destination management and pushed by local authorities to better effects for a residents positively affects local duality of life and brings more opportunities for other services, incomes, taxes etc. Local administration hope to start a chain reaction with better and better profits. It is a way how to attract investors. This is a explanation on why support creativity on tourism products in a area by encourage local partnerships.

Tourism is one of the fastest-growing industry without extra expenditures above services provided for the residents. Conversely investment in higher infrastructure will bring profit for tourists too. There is risk of negative affectin local quality of life, e.g. crime may increase by locals or visitors.

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Entrant as Predator – a New Approach Towards Predatory Pricing

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Abstract

Let's examine the situation where a market which has hitherto been under the absolute dominance of an incumbent is now totally taken over by a newcomer. This happens because the entrant is able to respond to the incumbent's lowering of prices with his own predatory pricing strategy, which he is able to implement more successfully than the incumbent.

Introduction

In previous game theory models it was the incumbent who had the first move: he signalled his costs and then the entrant could decide whether to enter or not. And only the entrant was vulnerable to bankruptcy. The incumbent could win (to save his position) or he might just lose a part of his market (and some profits). Bankruptcy was the exclusive 'privilege' of the entrant.

In this model it is the entrant who is the main player in the game and his costs are the crucial factor in the end result. Here the incumbent could be the victim of a predatory pricing strategy and completely lose his market.

Assumptions

There are two players in the game: an incumbent and an entrant, who are producing 'substitutes' (products which are identical or which can be used as substitutes for each other). The only difference between the players is that the entrant has to bear an "entry cost", which is known to both players. This 'fixed' cost can be defined as $FC = q * AFC$, where q is the level of production and AFC is the average fixed cost of entering the market and producing one unit. This cost is only borne by the entrant, since the incumbent by definition already possesses the appropriate means of production. The total cost for the incumbent is

$CI = qI MC$ and for the entrant is $CE = qE(MC + AFC)$, where MC is marginal cost.

Given this knowledge, the incumbent believes that a sufficient barrier to entry will be a price equal to $MC + AFC$, which will allow him to continue to make a profit, while denying the entrant the possibility of anything better than breaking even.

The entrant, however, may view the situation differently, and treat the entry cost as sunk, not fixed (although he hopes to recoup it if his strategy is successful). Thus AFC can be called a 'false' sunk cost, and, in game theory terms, the incumbent does not have full information about the intentions of the entrant.

The 'Entrant as Predator' model

The incumbent chooses between two options: 'cooperate' and 'fight', and the entrant between 'enter' and 'not enter'. The incumbent has the first move. The game takes place in two stages $t1$ and $t2$.

Assume:

P-price Q-quantity

$P = 100 - Q$ $MC = 20$ $AFC = 10$ $Q = qR + qW$

qR – incumbent's level of production

qW – entrant's level of production

If the incumbent chooses 'cooperate' (i.e. doesn't change his level of production) and the entrant chooses 'not enter', the incumbent retains the whole market and maintains his profit level.

The incumbent's profit:

$$MR = 100 - 2Q$$

$$MR = MC$$

$$100 - 2Q = 20 \rightarrow Q = 40 \quad P = 60$$

$$\Pi = 1600$$

The incumbent's pay off is 1600, and the entrant doesn't enter.

The entrant could invest the amount AFC elsewhere, but in the game we are considering he neither loses nor gains, and therefore his pay-off is 267 (this is the cost that would be sunk if the entrant entered

the market and were to produce the amount necessary for there to be a Cournot equilibrium - because he would hope to share the market with the incumbent in this equilibrium).

The pay - offs of the game

If the cost AFC is regarded as sunk, the entrant's pay-off is equal to 267, because the sunk cost is not connected with the production, but with the information – the role of the cost is to signal commitment.

If the cost AFC is treated as fixed, the pay-off is 0, because if there is no production there is no profit or loss.

- if the incumbent cooperates and the entrant enters and both firms share the market as a duopoly in a Cournot equilibrium, $Q = q_I + q_E$

In a Cournot equilibrium, the maximum profit for the incumbent (Π_R) and for the entrant (Π_W) are given by:

$$\begin{aligned}\Pi_R &= \max_{q_R} [(a - bQ) q_R - c_R q_R] \\ \Pi_W &= \max_{q_W} [(a - bQ) q_W - c_W q_W]\end{aligned}$$

where q_R is the incumbent's level of production and q_W is the entrant's level of production.

It follows that:

$$\begin{aligned}\text{EMBED Microsoft Equation 3.0} \\ \text{EMBED Microsoft Equation 3.0}\end{aligned}$$

If we treat the cost AFC as sunk, the result will be as follows:

$$\text{EMBED Microsoft Equation 3.0}$$

$$\text{EMBED Microsoft Equation 3.0}$$

$$\text{EMBED Microsoft Equation 3.0}$$

The profits of both firms will be equal: $\Pi_R = \Pi_W = 1420.44 \approx 1420$

But the real entrant's profit will be lower $1153.44 \approx 1153$.

If the firms share the market in a Cournot equilibrium and the cost AFC is treated as fixed, the price will be higher and the level of production lower than in the cases that will be considered later.

$$\text{EMBED Microsoft Equation 3.0}$$

$$\Pi_R = 900$$

$$\text{EMBED Microsoft Equation 3.0}$$

$$\Pi_W = 400$$

$$q_R + q_W = 50 \quad P = 50$$

if the incumbent fights (i.e. he increases production to a level which allows him to make a positive profit, and at the same time to prevent entrance to the market) his profit is $AFC \cdot q_{RMC} + F$ (where $q_{RMC} + F$ is the level of the incumbent's production according to the level of price that equals $MC + AFC$)
price $P = 30$, production $Q = 70$, profit $\Pi_R = 700$

The incumbent thinks that this is enough to stop the entrant from attacking the market, because he is sure that the entrant's pay-off is 0. The incumbent treats the cost AFC as fixed, so he presumes that in this case the entrant is not able to acquire a profit higher than 0, so entry is not profitable for him. But he doesn't have the full information.

If the incumbent sets the price at the level $P=30$, but the entrant treats the cost AFC as sunk (not fixed) so he doesn't take it into account any more, the marginal cost for both rivals is the same $MC=20$. Therefore the price $P=30$ is higher than the marginal cost MC . If it was a sequential game and the incumbent set the price in the first period at the level $P=30$, and in the second period the entrant decided to enter or not, the entrant would make his decision in accordance with the Stackelberg equilibrium. But we are not considering that possibility. In our case the entry and the setting of price are simultaneous, so that we are considering the Bertrand equilibrium. In the Bertrand equilibrium the profit is 0, because the price is set at the level of MC . This is why the entrant doesn't want to follow the incumbent's rules. If the price is set according to the Bertrand equilibrium rules, the entrant loses, because he is not able to retrieve the entrance cost AFC , and a possible price war has no sense because it would not lead to the recovery of the

losses either. From the entrant's point of view there is a better solution that will be presented below.

The incumbent's pay-offs will be different: if AFC is treated as a sunk cost, the incumbent's pay-off will also be 0, according to the Bertrand equilibrium.

If the incumbent fights, but in spite of that the entrant enters, both of them will go bankrupt. The entrant sets his production at the level of the Cournot equilibrium and the incumbent increases his production to the level $MC+AFC$. In this way both are incurring significant losses, though the incumbent loses more because he produces more than the Cournot level $Q_{MC+AFC} > Q_C$.

However, both competitors are operating in the area of very low elasticity of demand, therefore the probable price of selling such an amount of produced goods could be even lower.

$$\text{Production } Q = q_R + q_W = 70 + 26,7 = 96,7 \quad P = 3,3$$

$$\text{The incumbent's losses } \Pi_R = 70 \times 3,3 - 70 \times 20 = -1169$$

The entrant's losses:

$$\text{for AFC treated as sunk } \Pi_W = 26,7 \times 3,3 - 26,7 \times 20 = -445,89 \approx -446$$

$$\text{for AFC treated as fixed } \Pi_W = 26,7 \times 3,3 - 26,7 \times 30 = -712,89 \approx -713$$

The table below shows the pay-offs when F is treated as fixed, according to the incumbent's assumptions.

incumbent cooperates fights	entrant	
	enters	doesn't enter
900,400	1600,0	
-1169,-713	700,0	

The table below shows the pay-offs when AFC is treated as sunk, according to the entrant's assumptions.

incumbent cooperates fights	entrant	
	enters	doesn't enter
1420,1153	1600,267	
-1169,-446	0,0	

According to the incumbent's assumptions there is a significant difference in cost between the incumbent and the entrant. But in this particular game the result depends not on the level of costs but on the level of information.

In the game presented in the table where AFC is treated as fixed, the incumbent's dominant strategy is to cooperate. Then it pays the potential entrant to enter because he will count on the 400 pay-off. Then the total pay-off in both periods t1 and t2 will be 1800.

If the incumbent decides to fight in the period t1, the entrant will not enter the market because his pay-off is - 712. But in the period t2 the incumbent will still be able to choose the 'cooperative' level of production because having scared the entrant, he can now be sure that the entrant will not take the risk of entering the market. Therefore the incumbent's total pay-off for the two periods is 2300. The incumbent knows that the entrant knows about the cost difference in favour of the incumbent. Under such circumstances it is beneficial for the incumbent to fight in the period t1 and cooperate in the period t2. If he chose to cooperate in the period t1, the entrant would be sure to enter in the period t2. Because the entrant and the incumbent have the same information the equilibrium point in the period t1 is fight/ doesn't enter, and in the period t2 cooperate/ doesn't enter. That is the incumbent's way of thinking, because it seems to him that he is taking part in a game with perfect information.

However this is a game with informational asymmetries. The incumbent knows that the entrant has to bear the cost AFC and it is obvious for the incumbent that this is a fixed cost. But the entrant treats this cost as sunk. Therefore he is better off choosing 'enter' in the period t1 no matter what his opponent does.

Even if, against the previous reasoning, the incumbent chooses to cooperate instead of fight in the period t1, the entrant will benefit. The entrant's real pay-off will be 1153 (not 400, as the incumbent thinks). But if the incumbent fights, both players will lose, as the entrant assumes.

If the entrant appears on the market with production at the Cournot equilibrium level, then, treating the cost AFC as sunk, he will benefit. It follows that if, in the period t1, the incumbent lowers the price to the $MC+ACF$ level and the entrant enters in a Cournot equilibrium (not a Stackelberg or a Bertrand

equilibrium) the entrant will gain in every situation. After such an entrance the price will fall to 3.3. But at this point the demand curve is so inelastic that we can assume that the price will be nearly zero. Then the incumbent's loss that was previously calculated as -1169 will really equal -1400. If the entrant has entered and he doesn't intend to exit the market, the only possible point of equilibrium in the period t2 is cooperate/enter. At this point the incumbent's pay-off in the first table is 900 and in the second 1420. Both pay-offs are too small to cover the first period's loss. Therefore the incumbent has no choice but to let the potential entrant enter the market.

Under these circumstances the entrant's situation is totally different from the incumbent's. Because he enters the market with a relatively small amount of production, his loss is also relatively small. He also doesn't risk much. If the incumbent cooperates in the period t1, the entrant's pay-off is 1153. If the incumbent is still present on the market in the period t2, the entrant's pay-off will be 1153 minus the losses from the period t1. And because 1153 is much more than the losses estimated at the price 3.3, as well as 0, the entrant will earn well in any case.

If the incumbent exits the market, the entrant will have an opportunity to buy him out and become a monopolist. In that situation he will also be able to cover his possible losses, as the monopolistic pay-off is 1600.

The model shows how to avoid a possible punishment from the anti-trust office. If incumbent drops his price to the level of 3.3, he would expose himself to anti-trust office criminal proceedings. Meanwhile the entrant is able to dramatically lower the price and consequently take over the market with impunity. It is not possible to prove that entering the market with production at the Cournot equilibrium level was a deliberate use of a predatory pricing strategy. Also incurring sunk costs is not forbidden. So these aspects should be taken into account in any possible legal investigation.

Conclusion

In such a model the incumbent is not without responsibility for the results of his lowering the price in order to block the entry. He is a victim of his own strategy. If he had chosen to cooperate in the period t1 he would not have lost the whole market. He would have been able to do this if he had known the entrant's strategy. So let's check if it is beneficial for the entrant to inform the incumbent about his plans.

The decisive thing is the course of events after the incumbent exits the market. Then the entrant becomes a monopolist with a profit of 1600 in the second period t2 minus the loss from the first period - 446. So in the period t2 his pay-off as a monopolist is 1154. It is nearly the same, as what he can gain in the Cournot equilibrium. And if we deduct the cost F, which in spite of being treated as sunk is willingly recovered, we will have 887. This is definitely more than 400, which could be gained in the Cournot equilibrium in the first table. But it might not be the end of the monopolistic spending. The crucial question is the necessity of buying the means of production belonging to the bankrupted incumbent. If it helps the entrant to maintain his present monopoly in the subsequent periods t3, t4 ...tn, where tn is the period in which a new competitor appears - it could be a third firm or a previous incumbent wishing to come back to his previous market - then under these circumstances, buying the incumbent out would be beneficial but only from the period t3. Assuming that the cost F is a unit cost equal to 10 and knowing that the incumbent went bankrupt with the level of production at 70, the cost of buying his means of production is 700. So after buying the incumbent out, the entrant's profit in the period t2 is 187. Still it is a profit, not a loss. But it proves that for the entrant it is more beneficial not to buy out the incumbent and wait for another entrant to do it. In that case the 'original' entrant would be able to gain more in the Cournot equilibrium with the new competitor. But this is not the issue of this model.

In this model it was proved that, under specific circumstances, the implementation of a predatory pricing strategy may lead to the incumbent losing the whole market. Using this strategy would be beneficial for the entrant without exposing him to the possibility of prosecution by the anti-trust authority.

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Ratio Analysis of the Financial Situation of Urban Municipalities in the Province of Podkarpackie in the Years 2008-2010

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Abstract

The article is an attempt of assessing the financial situation of urban municipalities in the province of podkarpackie in the years 2008-2010. In order to achieve this aim the financial ratios developed by the Ministry of Finance have been selected. The ratio analysis allows familiarising with the financial situation of urban municipalities in detail. It may help municipalities to manage their finance better and exercise rational management of the budget signalling earlier potential threats and irregularities which may influence their financial condition.

Key words

Management, Financial situation, Urban municipality, Ratio analysis

Introduction

A self government is an element of the public sector and territorial self government units, whereas municipalities are included in the sector of public finance. Self government finance encompasses the activities connected with effective collection of budgetary resources coming from own and compensation incomes and revenues as well as their spending on public actions so as to satisfy the needs of the self government's community.

Municipalities has a kind of freedom in deciding on its activity, common property and satisfying local social needs. Financial independence of a municipality is a significant factor of its autonomy and self-governance.

Implementing self-governmental actions, municipalities shall assume the principle of minimising misspending of public financial resources which are assigned for the implementation of actions (Jastrzębska, 2002, 30). As a result, it is significant to study financial phenomena, processes and problems which are connected with managing financial resources as well as their assessment and proper interpretation of obtained results (Filip, 2005, 86).

The tool which allows controlling the financial situation of a territorial self government unit is an ratio analysis. The results of this analysis allows assessing the appropriateness of previous decisions as well as settling effectively current and future actions (Kozuch, 2010, 182).

The ratios reveal, in a synthetic manner, the state of finance of a self government unit. Thanks to these ratios, it is possible to control its debts and what is more important due to statutory obligations, maintain debts at a safe level.

The aim of this article is the analysis of the financial situation of self government units by means of selected ratios. In order to fulfil this aim, the example of all 12 urban municipalities located in the province of podkarpackie has been used.

Methodology of the studies

The analysis of the financial situation deals with researching the state and development of broadly understood finance of a self-government unit as well as the analysis of diagnosis of financial effects of undertaken actions as well as implemented tasks by a self government unit (Dylewski, Filipiak, Gorzałczyńska – Koczkodaj, 2006, 138).

The scope of a financial analysis within territorial self government units is a result of the criteria regarding the assessment of financial economy. Consequently, it includes the effectiveness of managing public pecuniary resources, ability of timely repayment of debts along with a debt level, effectiveness of using assets and liabilities, financial independence, financial liquidity and attractiveness of territorial self government units (Dylewski, Filipiak, Gorzałczyńska – Koczkodaj, 2010, 35).

Each municipality shall know how to assess its financial situation. A proper analysis allows defining the credit worthiness and identifying these areas of management, which require improvement. Financial ratios are helpful in this capacity (Nesterowicz, 2006, 46).

The financial situation of the municipality may be analysed i.a. on the basis of the set of ratios developed and published by the Ministry of Finance.³ The set of these ratios may be useful while assessing the financial situation of certain territorial self government units and taking debts or decisions of a developmental character. On the basis of this prepared set of ratios, certain territorial self government units within the framework of defined types and categories, may compare their financial situation to other units (Filip, 2007, 30).

Three groups of ratios have been defined:

- 1) Budgetary ratios (in %)
- 2) Per capita ratios (in PLN)
- 3) Debt ratios (in %)

The ratio analysis, even the most detailed one, is not able to provide unambiguous answers to the questions regarding the financial situation. The financial analysis depicts certain determinants and signals potential threats. This information in combination with the knowledge of local economy provides measurable effects in form of more precise decisions (Rudowicz, 2009, 208).

In the article, the data from the Main Statistics Office and from reports on budget implementation within particular municipalities have been used. The ratios presented in table 1 have been used for assessing the financial situation.

Table 1 Types of ratios applied in the financial analysis of municipalities

Ratio	Formula
Percentage of own incomes in total incomes (in %)	Own incomes/ total incomes x 100% (The greater value of this ratio, the greater investment opportunities for a municipality. The values greater than 50 confirm a good financial condition)
Percentage of current incomes in total incomes (in %)	Current incomes/ total incomes x 100% (The lower value of this ratio, the greater development and investment opportunities for a municipality)
Percentage of total liabilities in total incomes (in %)	Liabilities according to debt titles/total incomes x 100% (Amount of debt of a territorial self government unit at the end of the budgetary year cannot exceed 60% of total incomes of this unit)
Total liabilities per capita (in PLN)	Liabilities according to debt titles/number of dwellers (The lower the level of the ratio, the lower debt of the municipality)
Encumbrance of total incomes with debt handling (in %)	Interest on credits and loans + repayment of capital instalments of credits and loans/total incomes x 100% (The greater value of this relation the greater risk of insolvency of a territorial self government unit. Under the act, it cannot exceed 15% of the incomes planned for a given year)
Operating surplus per capita (in PLN)	Operating surplus/number of dwellers (The greater value of this ratio is identified with the beneficial assessment of a unit. It shows its attractiveness)
Self-financing ratio (in %)	(Operating surplus + property incomes)/property expenditures x 100% (The greater relation is the lower risk of losing cash flow. If the value of this ratio assumes the level equal to 100, it means that a municipality may finance its investments with own resources. Values exceeding 100 depict the level of other investment opportunities to be used within a municipality. If the value of the ratio is lower than 100, it means that investments were financed with external resources.)
Current transfers per capita (in PLN)	Current transfers/number of dwellers (This ratio shows current transfers coming from general subsidies and grants into current aims calculated per one dweller of a municipality. The ratio reflects the level of dependence of finance within a given municipality on current transfers calculated per one dweller of the municipality)

Source: own study on the basis of www.mf.gov.pl

Financial situation of urban municipalities in the province of podkarpackie in the years 2008-2010

The data regarding the financial situation of studied municipalities are included in tables 2 and 3.

Analysing the ratio of a current income percentage in total incomes, it may be observed that all municipalities dispose a great percentage of current incomes in total incomes. The municipalities of

³The ratios for assessing the financial situation of territorial self government units in the years 2008-2010, Ministry Finance, Warsaw 2011.

Przeworsk and Lubaczów have the greatest ratio. It is confirmed by the fact that these municipalities use property incomes insufficiently. Moreover, the percentage of own incomes exceeding 50% confirms a good financial condition of municipalities. The worst situation has the municipality of Dynów (the value of the ratio did not exceed 20% in 2010).

In order to define the extent to which a unit may assume new liabilities in comparison to gained incomes, the ratio of operating surplus percentage in total incomes may be used. The greater value of this ratio, the greater investment opportunities or greater opportunities for increasing current expenditures. The best situation is in Mielec, the worst in Przeworsk. In the latter municipality, this ratio did not exceed 1% in the years 2007 - 2009 and in 2010 was even negative. It means that investments within municipalities were financed with external resources.

Analysing the ratio of self financing it may be observed that it has been ranging in all municipalities. In the years 2007 - 2010, the ratio of self financing assumed the value above 100, which meant the level of other investment opportunities to be used by municipalities (the best situation characterises the municipality of Sanok). However, the ratio lower than 100 means that in these years, investments were financed from external resources. Przeworsk had the worst situation.

Analysing the ratio of current transfers per capita, it may be claimed that their level increases year by year. At the end of the analysed period, the greater current transfer in the analysed municipalities was achieved by Jasło (PLN 1704.00) and the lowest by Dynów (PLN 704.00).

The ratio of operating surplus per capita is another ratio which informs how much financial resources remains after covering the most important expenditures connected with current functioning of a municipality. The greatest value per capita was assumed by Sanok (PLN 625.00) and Mielec (PLN 563.00) in 2008. It confirms the beneficial financial situation of the municipalities in a given year. A municipality disposes resources which shall be allocated for repayment of previous debts or other investments improving life of local societies. The greatest operating deficit was observed in 2010 in municipalities of Przeworsk (PLN 119.00) and Jarosław (PLN 150.00).

The next ratio relies on encumbrance of total incomes along with debt handling. It defines, which part of incomes is assigned for handling the debt of a municipality (repayment of capital instalments, buyout of bonds, interest and granted guarantees) within a given year. The ratio cannot exceed 15% of the incomes of a territorial self government unit, planned for a given year. Analysing, it may be noticed that in all municipalities (except for Mielec) the level of this ratio underwent annual fluctuations. In Mielec it amounted to zero in all analysed years, which confirms that the municipality does not have debts. Moreover, the worst situation was in Dębica. The ratio exceeded 16% in the years 2007-2008.

Furthermore, the ratio of the percentage of total debts in total incomes displays the level of debt i.e. the percentage of total debts of a territorial self government unit in total incomes. The ratios regard all debts of territorial self government units. Analysing this ratio, it may be noticed that its level ranges in the analysed years in all municipalities (except for Mielec, where it amounted to zero). The worst situation was in Dębica, the ratio amounted to 50.5% in 2010 and 47.7% in Jarosław. However, total amount of debt in each of the analysed municipalities does not exceed 60% of the incomes, which means that statutory boundry of debt ratio has not been exceeded.

The ratio of total debts per capita depicts the amount of debts per capita within the analysed municipalities. In the analysed period, there are visible significant fluctuations of this ratio, though, the highest ratio was in the municipality of Dębica in 2010 (PLN 1280.00) and Jarosław (1087.00), however, lack of such debts is characteristic for Mielec.

Conclusion

The analysis of the financial situation of a municipality provides much information of former and current property and financial situation as well as effectiveness of certain activities. It also allow defining its developmental opportunities. A properly applied analysis shall signal potential threats and irregularities which influences the financial condition of a territorial self government unit. It allows effective performance of planned incomes and expenditures as well as efficient and rational allocation of obtained and possessed resources by a municipality. By means of the financial analysis, the municipalities may implement their basic aims - undertake actions aimed at satisfying collective needs of a given community in comparison to financial possibilities of their budgets.

On the basis of the ratios within a given period, i.e. in the years 2008 - 2010, there were indispensable data obtained on incomes, expenditures, self-financing, current transfers or total debts within municipalities in the province of podkarpackie.

The conducted studies conclude that the municipalities are characterised by a good financial condition. The best ratios belong to Sanok and Mielec, the worst situation is in Dębica, Przeworsk and Jarosław.

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Table 2 Ratio analysis of the urban municipalities in the years 2008-2010

Ratio	Lata	Mielec	Przeworsk	Dynów	Lubaczów	Radymno	Stalowa Wola
Percentage of current incomes in total incomes (in %)	2008	93,2	95,0	91,9	96,1	86,7	94,1
	2009	89,3	96,7	99,8	97,1	89,4	89,0
	2010	86,7	99,2	83,9	97,7	87,4	81,2
Percentage of own incomes in total incomes (in %)	2008	66,3	58,4	37,5	51,1	46,4	67,2
	2009	68,6	56,9	26,2	49,9	47,8	64,6
	2010	60,8	55,9	19,2	46,9	49,8	55,5
Percentage of operating surplus in total incomes (in %)	2008	25,3	0,4	9,7	3,3	4,8	14,5
	2009	17,8	0,7	7,6	7,7	3,1	10,9
	2010	12,4	-4,9	5,9	7,3	0,6	6,8
Self-financing ratio (in %)	2008	103,9	58,8	119,3	48,7	106,5	131,0
	2009	99,2	69,9	147,5	59,7	64,1	77,0
	2010	119,9	31,3	83,0	82,2	68,2	92,7
Current transfers per capita (in PLN)	2008	723,0	744,0	687,6	664,1	1228,6	778,7
	2009	734,5	747,2	697,2	702,7	1278,0	824,1
	2010	806,6	816,3	704,4	757,0	1322,3	914,4
Operating surplus per capita (in PLN)	2008	562,9	7,2	161,7	62,2	115,5	354,5
	2009	419,4	14,3	207,5	149,5	76,6	276,0
	2010	327,0	-119,0	199,3	157,1	16,0	205,8
Encumbrance of total incomes with debt handling (in %)	2008	0,0	5,9	10,8	3,8	8,9	6,8
	2009	0,0	6,3	6,0	9,8	3,6	2,5
	2010	0,0	4,9	6,3	10,6	4,6	2,5
Percentage of total liabilities in total incomes (in %)	2008	0,0	14,3	2,5	2,4	4,4	4,8
	2009	0,0	4,7	3,3	3,5	14,8	11,1
	2010	0,0	36,5	4,7	20,7	14,6	13,1
Total liabilities per capita (in PLN)	2008	0,04	292,7	66,3	45,8	106,6	116,1
	2009	0,01	101,7	89,1	67,6	362,7	281,4
	2010	0,0	885,3	156,5	445,1	388,0	398,6

Source: own study on the basis of Regional Statistical Office in Rzeszów

Table 3 Ratio analysis of the urban municipalities in the years 2008-2010

Ratio	Years	Dębica	Leżajsk	Sanok	Jarosław	Jasło	Łańcut
Percentage of current incomes in total incomes (in %)	2008	91,6	98,9	90,3	95,1	95,1	88,7
	2009	90,5	90,6	95,1	91,7	91,1	96,5
	2010	85,8	86,4	88,9	92,9	90,4	95,1
Percentage of own incomes in total incomes (in %)	2008	63,1	64,2	64,6	60,2	62,2	66,0
	2009	56,7	66,6	60,4	56,0	59,6	64,5
	2010	60,8	61,0	64,2	54,5	51,1	65,3
Percentage of operating surplus in total incomes (in %)	2008	8,8	9,5	27,9	28,2	11,2	9,8
	2009	-3,1	8,4	21,9	21,9	3,5	8,8
	2010	0,8	-1,0	15,3	-6,6	2,5	3,2
Self-financing ratio (in %)	2008	114,6	124,4	276,9	231,9	162,4	143,2
	2009	22,2	134,5	296,2	185,0	62,1	131,7
	2010	59,7	58,0	331,3	7,0	77,0	69,9
Current transfers per capita (in PLN)	2008	845,2	764,1	762,3	875,9	959,5	742,0
	2009	862,6	802,7	795,2	961,0	1039,4	787,5
	2010	965,9	857,0	822,1	980,4	1704,5	821,3
Operating surplus per capita (in PLN)	2008	208,5	204,0	625,0	620,3	287,8	232,8
	2009	-71,5	203,2	455,5	499,6	93,3	200,0
	2010	20,36	-22,91	351,0	-150,8	85,4	75,6
Encumbrance of total incomes with debt handling (in %)	2008	8,9	9,0	7,4	6,4	5,9	7,3
	2009	16,5	11,4	8,1	5,7	5,5	7,0
	2010	16,8	5,4	8,7	8,2	6,8	6,7
Percentage of total liabilities in total incomes (in %)	2008	27,2	23,9	22,8	22,9	24,7	31,0
	2009	45,8	17,8	30,6	35,1	28,8	26,6
	2010	50,5	24,9	32,4	47,7	23,7	29,8
Total liabilities per capita (in PLN)	2008	642,9	510,4	511,0	504,3	636,6	733,9
	2009	1073,9	431,2	636,9	780,0	689,3	605,4
	2010	1277,9	598,6	743,6	1087,3	827,2	709,2

Source: own study on the basis of Regional Statistical Office in Rzeszów

Development of the State Budget Deficit and the State Debt in the Slovak Republic

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Abstract

Government debt as the result of the budget deficit is closely related to budget revenues and expenditures. Although, debt level in Slovakia is not critical in comparison to other countries, in terms of the significant increase in the last two years, government is forced to implement the measures to reduce it. The aim of this paper is to analyse the fiscal development and evolution of government debt in Slovakia between 2005 - 2011 and assess the foreign debt compared with the V4 countries.

Key words

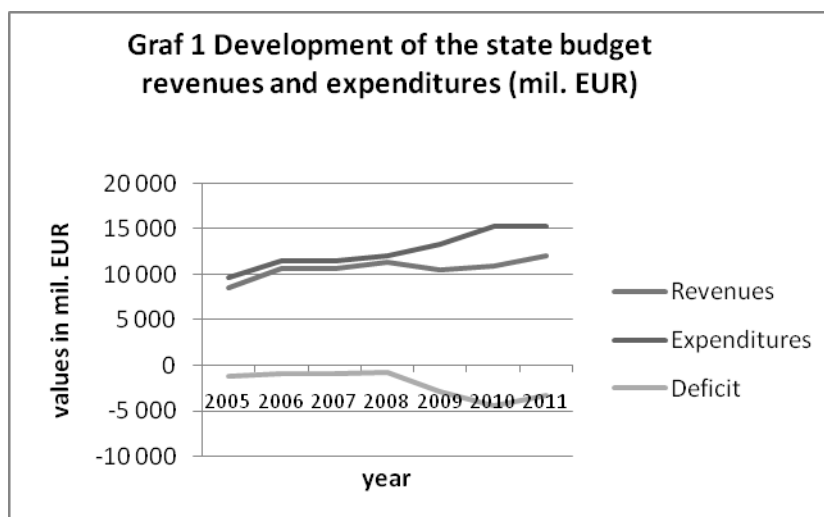
State budget revenues. State budget expenditures. State budget deficit. Stability and Growth Pact.

Introduction

The state debt is a global problem that many countries are concerned with. A need to deal with the fiscal balance arose from the rapid growth of public debt caused by the financial and economic crises. The debt of Slovakia has increased by more than 62% in the last three years due to growing state budget deficit, and the public debt is currently on the level of EUR 30.2 mld. The Slovak Republic Government, together with the economic experts, tries to change such adverse development and looks for solutions to stop, or slow down this negative process. The first step in the process of looking for the right solution requires identifying the reasons for such state and then proposing measures with positive impact on the state budget deficit decrease and public debt reduction.

1. Analyses of the state budget revenues and expenditures

From the accounting point of view, the state budget is the main instrument of fiscal policy which reviews revenues and expenditures in the balance sheet [2, p. 509]. The revenues and expenditures draft is approved by the government as a State Budget Act. The real balance between revenues and expenditures is shown in a state closing account. If the state budget expenditures are higher than revenues, the budget deficit then arises. State budget deficit counts into the public administration debt.

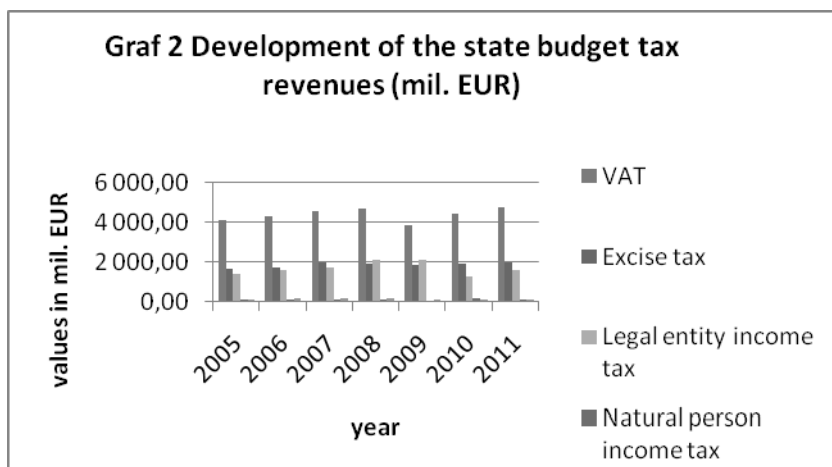


Source: own processing based on the SR Statistical Bureau data

State budget revenues include, in particular, tax revenues that are formed by four main taxes:

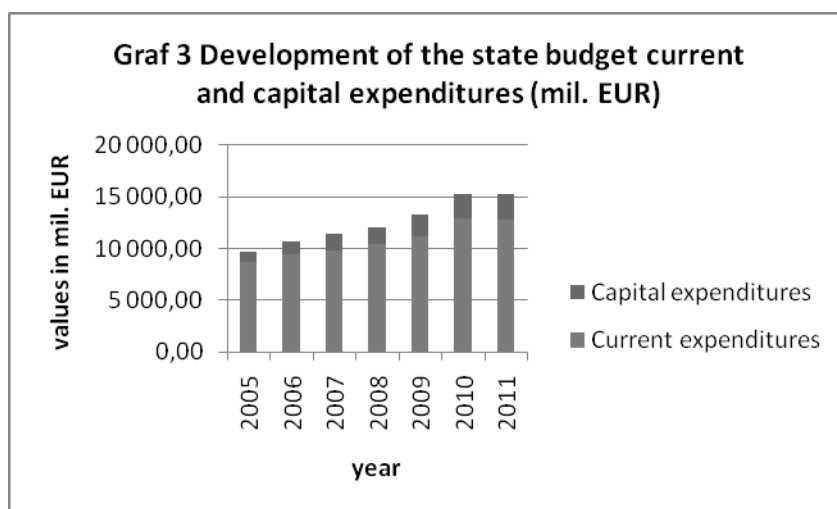
- value added tax
- excise tax
- legal entity income tax and
- natural person income tax.

The ratio of individual taxes in the state budget revenues has been gradually changing throughout the years analysed. The main reason for this was the change of value added tax rates, an increase of the excise tax caused mostly by the consolidation of excise tax rates for tobacco with the rates of EU and an increase of the oil price on world markets.



Source: own processing based on the SR Statistical Bureau data

In 2011 the loss of tax revenues was EUR 207.8 mil. in total (0.3% VAT), which had a negative impact on the state deficit budget. In comparison to the budget, the excise tax dropped in total amount of EUR 108.8 mil. (0.2 % GNP) and the natural person income tax dropped in the amount of EUR 97.1 mil. Such loss was influenced largely by macroeconomic development [5].



Source: own processing based on the SR Statistical Bureau data

State budget expenditures are divided into current and capital expenditures. Current expenditures are predominant expenditures for both the state budget and public administration. In comparison to 2005 when the expenditures increased by EUR 5.566,1 mil., in 2011 the overall expenditures were EUR 15.278 mil.; this means an increase by 57.3%. Since the revenues for the same period increased only by 39.8 %, the state deficit deepened from EUR 1.125 mil. (in 2005) to EUR 3.276 mil. (in 2011) [7].

Tab 1 Development of state budget deficit

	2005	2006	2007	2008	2009	2010	2011
% from GNP	2,8	3,5	1,9	2,2	6,8	7,9	4,6

Source: SR Ministry of Finance

The state budget deficit in 2010 was 7.9% GNP, in 2011 there was a slight drop (to 4.6 % GNP). The reason for the deficit was the potential product drop due to economic crises and changes implemented by economic policies of various governments taking place. The deficit drop of the public administration from

7.9 % GNP to 4.6 % GNP is positive and the aim of fiscal government policy is to bring this deficit below 3 % GNP by 2013.

2. Development of the state debt in Slovakia and V4 countries

The state debt is created by accumulation of the state budget deficits. The state debt is a part of a public debt which includes state debt, regional self-governments debt and state funds. "Public debt is a total of receivables from any economic entity against the state, notwithstanding whether they arose in the budget way or any other way" [2, p. 512]. In order to analyse the public debt it is important to define not only who the debtor is but also what payables this debt creates [1, p. 81].

Tab 2 Development of the gross public debt

	2005	2006	2007	2008	2009	2010	2011
Gross public Debt (mld. EUR)	- 16,8	- 16,8	- 18,1	- 18,6	- 23,6	- 27,0	- 30,2
Gross public debt/GNP (%)	- 34,2	- 30,4	- 29,4	- 27,7	- 35,4	- 41,0	- 43,3

Source: National Bank of Slovakia, SR Statistical Bureau, SR Ministry of Finance

The public debt has been growing in Slovakia since 2009 as a reason of budget deficit growth. The main factor for the state budget deficit is mostly the loss of tax and delivery revenues, countercyclical expansive fiscal policy and the drop of sources to cover state debt within the fiscal system [6]. Despite its growth in the last years, the Slovak public debt is the lowest within the European Union. The debt in relation to GNP in 2011 amounted to 43.3 %, which is EUR 5.503 per person. In comparison to 2010, it is an increase by more than EUR 500 [4].

Tab 3 Development of the public debt in the V4 countries (% GNP)

	2005	2006	2007	2008	2009	2010	2011
Hungary	61,8	65,9	67,1	73,0	79,8	81,4	80,6
Poland	47,1	47,7	45,0	47,1	50,9	54,8	56,3
Slovakia	34,2	30,5	29,6	27,9	35,6	41,1	43,3
Czech Republic	29,7	28,3	27,9	28,7	34,4	38,1	41,2

Source: own processing based on Eurostat

The public debt development for a period of 2005 – 2011 is not optimistic at all even though the three V4 countries, except Hungary, meet the Maastricht criteria. Slovakia with its 43.3 per cent debt is below the European average and has the eighth lowest government debt in relation to GNP in the European Union. According to Eurostat, the debt of the Eurozone towards the end of 2011 was 87.5 % GNP and in the European countries it was 83.5 %. A country with the deepest debt is Greece where the public debt in 2011 in relation to GNP was 165.3 % [8].

The member states are obliged to prepare stability plans as a part of the Stability and Growth Pact and these plans are submitted to the European Commission and European Union Council. The Stability Pact is a protective system to control maintaining criteria by individual countries [3]. The subject of such plans is to present fiscal position development, anticipated economy development and description of measures in the budget and economy area from a medium-term horizon. Slovakia has submitted the fourth Stability Plan, which is the Stability Plan update from 2011 [5].

3. Strategy of state debt management

The public debt serves as an indicator when comparing the international economies. The Maastricht criteria, according to which the government debt in relation to GNP may not be higher than 60 % or may not be increasing, is used to evaluate quality of the public finance in the EU countries. At the same time, the public administration deficit is recommended to be below 3 % GNP. It means that the state debt management should work in such way as to reach these values, or at least become closer to the set values. The SR Government anticipates the public administration deficit amounting to 2.9 % in 2013. For the period of 2014 and 2015, the set budget targets in the form of public administration deficit are amounting to 2.3 % GNP and 1.7 % GNP. Assuming that the budget targets will be met, the public administration gross debt shall increase from 43.3 % GNP at the end of 2011 to 50.2 % GNP at the end of 2012 and 53.0 % GNP at the end of 2014 [5].

According to Dvořák [1, p. 139] there are two possible ways how to lower the public debt:

- passive way, when the situation in the public finance improves as a consequence of exogenous factor without active government influence,
- active way, by means of the government economic and political measures.

According to Dvořák, one of the external factors with positive influence on the public debt amount is the rate of economic growth that should be higher than the effective real interest rate from the public debt. Another exogenous factor according to Dvořák is the inflation that may lower the real public debt value under certain condition; however, it fails to influence its proportion in relation to the GNP. The last exogenous factor Dvořák mentions is the reduction of the foreign public debt by agents themselves, the situation when the debt is excused or the interest due is lowered. [1, p. 140]. Active solutions of the debt issue include: budget solutions, extra capital contribution, and the use of the privatization income, public debt monetisation and the administration solution of the debt issue.

The SR Government has decided to use the active way in order to lower the public debt and that is by means of proposing measures within the state budget revenues and expenditures. The Government pays attention mainly to the effective increase of the tax collection (VAT area and excise tax in particular) and tax evasion detection. Another priority is the public administration modernisation. The state budget decrease of expenditures shall be concerned in particular with the personal, operational and capital expenditures. The expenditures of municipalities are to be lowered, too. All such measures are supposed to help in achieving the set targets.

Conclusion

The key question in relation to the debt crises is currently the question of making the public finance deficit lower. Slovakia has adopted the Budget Responsibility Act, which under the threat of penalties prevents the government and self-governments continue in increasing the state debt. In relation to this, the target of the SR Government is to achieve such fiscal position improvement as to create long term stability of the public finance. This is to be achieved by means of measures on the side of public administration revenues and by means of decreasing the state budget expenditures.

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Comparison of Tax Systems, Tax Evolution Analysis and the Future of the Value-added Tax as the Most Important Tax is the Tax System

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Abstract

The paper is devoted to the tax issues and it is divided into three parts. The first part analyzes the status of the tax system of the Slovak Republic in comparison with the tax systems of 182 countries worldwide, especially with the tax systems of the EU countries. The second part focuses on the current situation and the evolution of harmonization of value added tax, which has been introduced since 1993 as a compulsory tax in all countries of the European Community. It forms the largest share of total tax income of the state, and very significantly affects the EU's single market. The third part of this paper analyzes the development of value added tax in the Slovak Republic for 19 years of its existence in the Slovak tax system.

Key words

Paying Taxes Study, The overall tax rate, Value added tax, VAT harmonization, The development of VAT

Comparison of the tax system in Slovakia with the tax systems of other countries in the world, with emphasis on the tax systems of EU Member States

The World Bank in collaboration with the PriceWaterhouseCooper worked out a study entitled Paying Taxes 2012, which compares the Slovak tax system with the systems in 182 countries. This study is prepared and published on an annual basis. The study was compiled on the basis of a model company that is engaged in the manufacture and sale of goods. Tax characteristics of this company are measured for each country separately. Then is compared the total tax cost, the time needed to meet legal requirements and the number of payments that companies must make in each country per year.

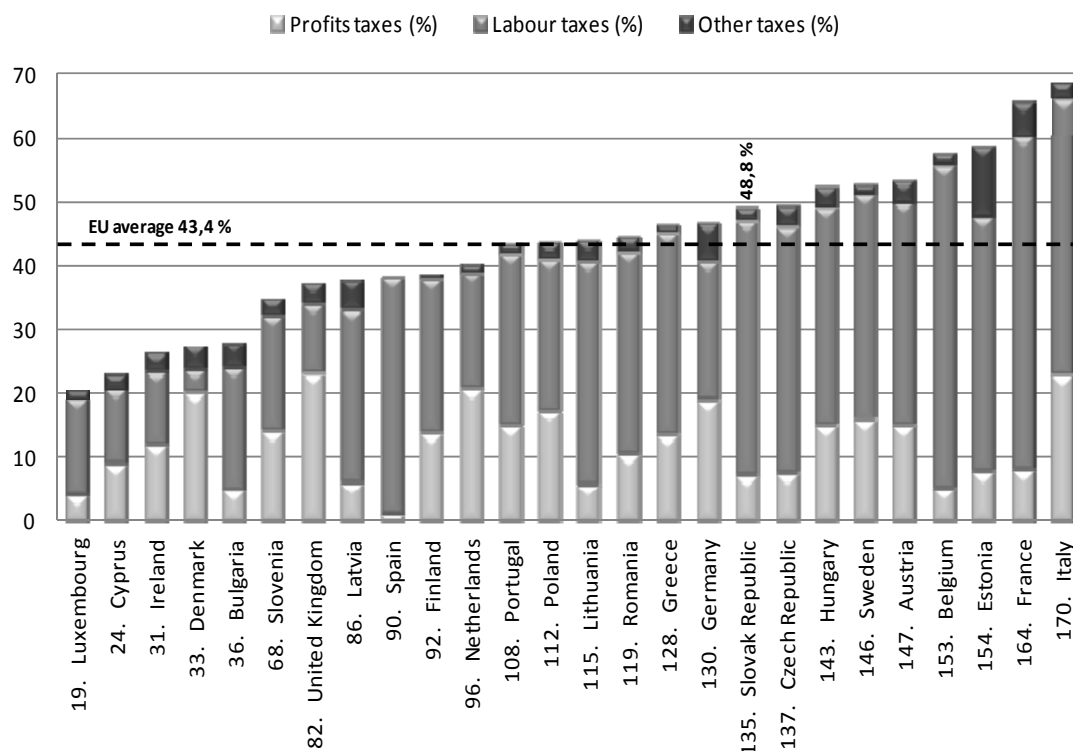
Within the study is defined the tax as the payment obligation to the Exchequer, which is a part of the public finance and which has no direct return to the taxpayer. The study measures all taxes and levies, that must be paid by a medium enterprise in a given year. It is a gain tax, respectively corporate income tax, social security tax, property taxes, tax on conveyance of property, dividend tax, capital gains tax, tax on financial transactions, tax on waste disposal, vehicle tax and road tax and other minor taxes and charges.

As the report informs, the governments continue to reform their tax systems. Since 2006 in 123 countries (from the 183 followed by research) have been introduced significant regulatory changes to reduce the tax burden and to mitigate the impacts of the global economic crisis.

On a global scale, the average total tax rate for small and medium enterprises is 44,8% of their business profits. The enterprises devoted to the activities related to the compliance with tax laws 277 hours in average and they made an average of 28,5 payments per year.

The EU has reached lower results than the rest of the world in all three conditioning variables. The average overall rate was 43,4%, the average time needed to comply with statutory tax obligations is 207 hours and the average number of payments is 17,0.

Fig 1 Comparison of the Total Tax Rate in the European Union



Source: Self elaboration based on Paying Taxes 2012

The results of the study have shown that the total tax rate applied in a hypothetical Slovakian company was 48,8%. It's much more than the average in EU countries, which was 43,4%.

Regarding the overall tax rate, Slovakia is ranked 135th place of the 183 surveyed countries around the world. In comparison: Poland was ranked 112th, Czech Republic 137th and Hungary 143rd place on the ranking (see Fig. 1).

Tab 1 The overall tax rate in the Slovak Republic based on the study Paying Taxes 2010, 2011, 2012

Paying - Taxes	Total Tax rate %				Position by the total tax rate
	Profits taxes	Labour taxes	Other taxes	Total Tax rate	
2012	7,20	39,6	2,0	48,8	135
2011	7,00	39,6	2,1	48,7	131
2010	7,10	39,6	1,9	48,6	130

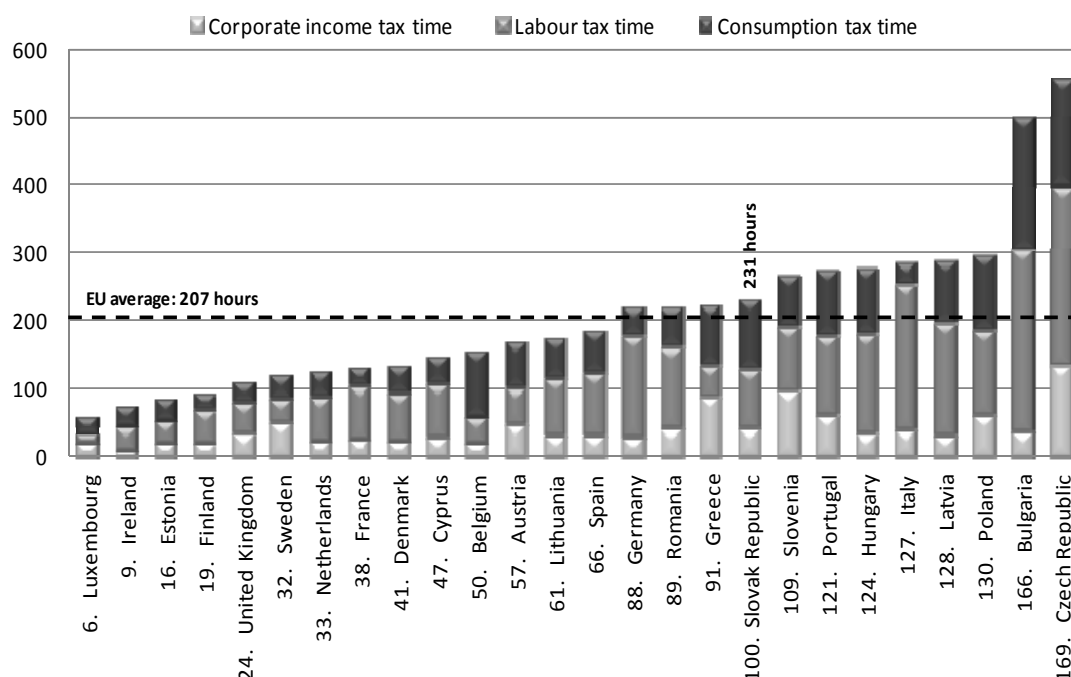
Source: Self elaboration based on Paying Taxes

Slovakia has fallen in the ranking of the study, because the other countries have done more in reforming their tax systems than we do. This means that more than 73% of the countries ranked in the study had a lower overall tax rate than Slovakia, mainly because we have high tax rates on work, i.e. social security contributions.

Another area which the study investigates is the time necessary to the taxpayer to meet its statutory tax obligations, thus the time needed to prepare tax declarations and reports, to file a tax return and to pay the taxes and contributions. In this context, Slovakia was ranked 100th place from the 183 countries mentioned (see Fig. 2).

It is not inevitable that by raising taxes must increase also the revenues to the state budget. In many countries were successfully increased the total tax revenues by reducing tax rates, this contributed to the promotion of investments and to the fulfilment of statutory tax obligations. An example of this is the tax reform in Slovakia in 2004. Likewise Russia, they significantly reduced the tax in 2001 and the next three years increased their tax revenues to the state budget by 14% in average per year (Bradshaw, 2010, p.73).

Fig 2 Time to comply in the European Union



Source: Self elaboration based on Paying Taxes 2012

The current status and the trends in harmonization development of the value added tax in the European Union

Tax policy has always been a symbol of national sovereignty. This autonomy is still maintained also in the European Union. However, for the appropriate functioning of the single market, the development of European integration requires relatively close cooperation in the field of taxation, whether in the form of information exchange, harmonization, or at least coordination of tax systems (Šíroký, 2012, p.21).

The impact of tax harmonization in the EU on each of us is in the area of indirect taxes, where the member states must incorporate laws of the EU into the national law.

The harmonization of indirect taxes is necessary to ensure the functioning of the common market, which is based on the free movement of goods, of persons, of services and of capital. From 1.1.1987 the Value Added Tax is the only general indirect tax in all EU Member States. Since then the importance of value added tax is continuously growing, this is mainly based on fiscal reason "hidden" tax burden and on the relatively ease tax collection, tax audit and administration of taxes. The importance of value added tax rose even after the tax yield became one of the EU budget receipts.

Tab 2 VAT rates applied in the EU Member States

Member state	Code	Super reduced rate ¹	Reduced rate	Basic rate	Special rate
Belgium	BE	-	6; 12	21	12
Bulgaria	BG	-	9	20	-
Czech Republic	CZ	-	14	20	-
Denmark	DK	-	-	25	-
Germany	DE	-	7	19	-
Estonia	EE	-	9	20	-
Greece	EL	-	6,5; 13	23	-
Spain	ES	4	8	18	-
France	FR	2,1	5, 5; 7	19,6	-
Ireland	IE	4,8	9; 13,5	23	13,5
Italy	IT	4	10	21	-

¹ The super reduced rate is indicated in the table as the rate below 5%. Some states have also a zero rate (which is tax exemption).

Cyprus	CY	-	5; 8	17	-
Latvia	LV	-	12	22	-
Lithuania	LT	-	5; 9	21	-
Luxemburg	LU	3	6; 12	15	12
Hungary	HU	-	5; 18	27	-
Malta	MT	-	5; 7	18	-
Netherlands	NL	-	6	19	-
Austria	AT	-	10	20	12
Poland	PL	-	5; 8	23	-
Portugal	PT	-	6; 13	23	13
Romania	RO	-	5; 9	24	-
Slovenia	SI	-	8,5	20	-
Slovak Republic	SK	-	10	20	-
Finland	FI	-	9; 13	23	-
Sweden	SE	-	6; 12	25	-
United Kingdom	UK	-	5	20	-

Source: Report on the VAT rates applicable in the EU Member States – the data updated on 1st March 2012

In the first phase of harmonization was primarily about the introduction of value added tax as a unified system of indirect taxation in all member states, then the second phase was represented by a legislative harmonization of value added tax, including tax rates approximation. Both steps were carried out in close collaboration with the primary objective, i.e. establishing a common market.

European Commission issued in February 2012 the "Report on the VAT rates applicable in the EU Member States" that describes the situation to date 1st January 2012. In addition to the basic information on VAT rates (see Tab. 2), this report contains a detailed breakdown of goods and services, which are a subject of individual tax rates in EU member states. It also includes the evolution of VAT rates in the member states since its introduction.

The future of the VAT in the European Union

"... Value Added Tax (VAT) is paid for by citizens, collected by businesses and accounts for over 20% of national revenues. It therefore has a significant impact on every single EU citizen. However, it is now 40 years since the EU VAT system was first set up, and the regime no longer fits with our service-driven, technology-based economy. The time has come for an ambitious VAT reform ..." said Algirdas Šemeta in 2010, Commissioner for Taxation, Customs, Anti-fraud and Audit (Škvarková, 2012, p. 16).

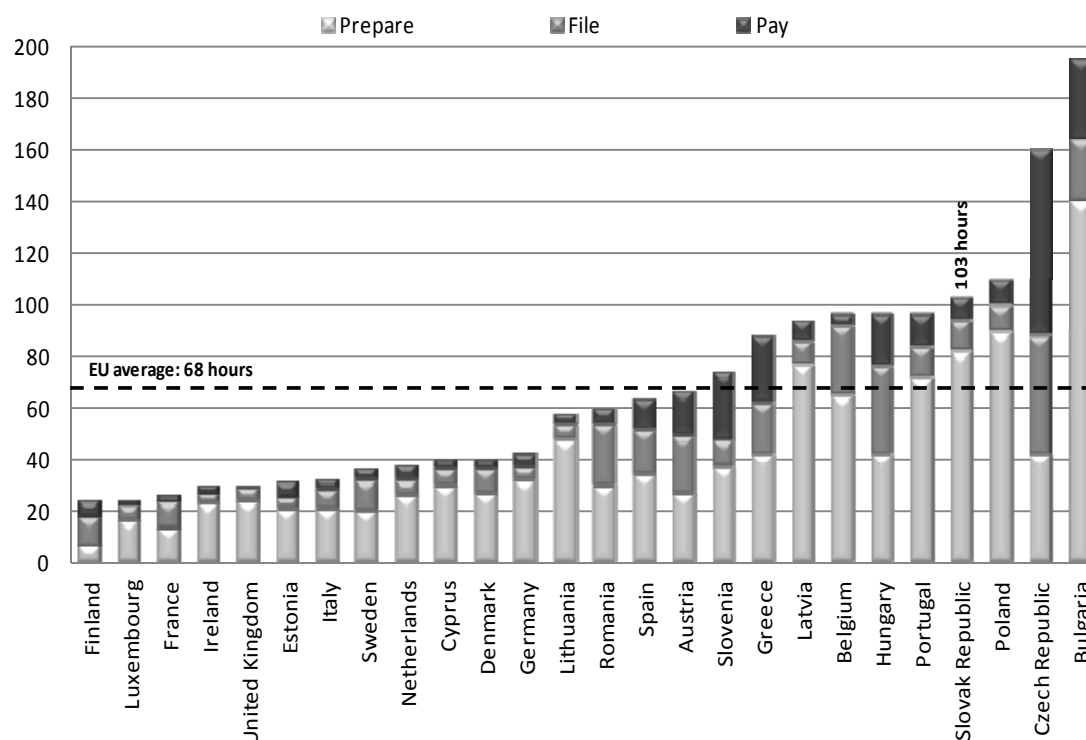
Therefore, the European Commission in December 2010 issued a "Green Paper on the future of VAT – a simpler, stronger and more efficient tax system", which outlined some areas to improve the system of VAT in the EU and called for public discussion. During the 6-month public consultation the European Commission received 1 700 contributions from businesses, academics, citizens and tax administrations of Member States.

After evaluating these contributions, the European Commission in December 2011 issued a statement called "White Paper on the future of VAT", which summarizes the comments and suggestions. It outlined the basic features of the new VAT regime, and the priority actions needed to create a simpler, more efficient and reliable system of VAT in the EU.

The shape of the new VAT system is determined by three main objectives:

- VAT should be made easier for businesses. A simpler, more transparent tax system would burden off businesses from a large administrative burden (see Fig. 3) and would support the expansion of cross-border trade, which would have a positive impact on growth. Among the planned measures, which aim to establish a more favourable VAT system for businesses, is an extension of the concept of single contact point for cross-border transactions, the standardization of the VAT return and provision of clear and easily accessible information on all national VAT systems, through a central web portal.

Fig 3 Comparison of the time to comply with the VAT in the European Union



Source: Self elaboration based on Paying Taxes 2012

- The VAT system should be streamlined to support national efforts to consolidate the fiscal and economic growth. Extending the tax base and limiting the application of reduced rates could lead to new revenues for member states without the need to raise the tax rates. The basic rate of VAT might be even lower in some member states – without any impact on revenues – should be abolished exemptions and reduced rates. The report sets out the principles which should be followed in reviewing exemptions and reduced rates. The European Commission in the review of fiscal policy of the member states shall also analyze the way of the use of reduced rates and exemptions.
- It is necessary to stop the huge losses that currently arise because of large arrears on VAT and tax fraud. It is estimated that it is not collected approximately 12% of the total VAT due (the so-called failures of VAT). In 2012 the Commission proposed a rapid response mechanism to ensure that member states can better react in the situation of suspected fraud. In addition, will be considered whether it is necessary to strengthen existing mechanisms, such as EUROFISC², to compete against fraud, and will be examined the possibility to create a team capable to carry out cross-border audits, which would facilitate multilateral controls.

As a last but not least, the European Commission concludes that the issue of transition to a VAT system based on the taxation at the origin country is no longer relevant. Therefore, the tax will continue to be collected in the destination country, i.e. the country where the customer is located. The European Commission will work to compile a modern VAT system based on this principle (Škvarková, 2012, p.16).

² Eurofisc - a decentralized network with no legal personality, the network targeted for rapid exchange of information between member states to promote and facilitate multilateral cooperation in the fight against VAT fraud. More on www.eurofisc.eu.

Analysis of the development of value added tax in the Slovak Republic

Since 2004 the Slovak tax reform included a tax system based on flat tax rate (19%) of income tax and also of value added tax.

The crucial part of the revenue of the state budget is the value added tax. Within the public finances it represents a bigger part than all direct taxes and therefore it is of high importance from a fiscal perspective.

Value added tax is also dominant in terms of households for two reasons. If the VAT is the main source of public revenues, then it means that it mostly contributes to the tax burden of households reducing their disposable income. The second reason is its versatility, which lies in the fact that unlike the other taxes, it affects all the households without exception, because it affects the final consumption.

Tab 3 An overview of the total state budget revenues in SR – tax revenues and the VAT receipts in time series 1993 – 2011

Year	Revenues of the state budget	Tax revenues	VAT	Share of VAT on the tax revenues in %	Annual VAT growth rate
in millions of SKK					
1993	150 342	85 317	27 467	32,2	x
1994	139 148	109 842	37 132	33,8	35,2
1995	163 138	136 524	52 314	38,3	40,9
1996	162 865	140 098	48 679	34,8	-6,9
1997	175 798	145 524	54 935	37,8	12,9
1998	177 835	152 974	55 249	36,1	0,6
1999	216 720	160 433	58 944	36,7	6,7
2000	213 477	173 822	70 587	40,6	19,8
2001	205 353	165 013	73 567	44,6	4,2
2002	220 362	188 944	82 241	43,5	11,8
2003	233 071	200 147	83 799	41,9	1,9
2004	242 444	209 498	99 576	47,5	18,8
2005	258 694	222 605	122 429	55,0	23,0
2006	291 977	236 272	128 467	54,4	4,9
2007	322 220	258 239	135 978	52,7	5,9
2008	342 003	271 825	139 557	51,3	2,6
in thousands of Euro					
2009	10 540 796	8 024 307	3 846 396	47,93	-16,96
2010	10 900 863	7 962 242	4 431 539	55,65	15,21
2011	13 147 834	8 700 510	4 753 095	54,63	7,2

Source: Self elaboration based on the data from the Tax Directorate of the Slovak Republic and from the Ministry of Finance

A reason of slight decrease in 2009 can be a weaker performance of business due to the economic crisis and the introduction of new monetary currency. The table shows that since 2010 the tax revenue from VAT increases, as the economy gradually recovers.

The state budget counted for the year 2011 with tax revenues in an amount of 8 786 725 thousands of Euro. The real tax revenues on a cash basis for the year 2011 reached 8 700 510 thousands of Euro, compared to the budgeted level it is 86 215 thousands of Euro less. The real tax revenues represent the fulfilment of the national budget to 99,02%. The budget has been exceeded mainly by the value added tax (better yield of 85 089 thousands of Euro).

Tab 4 Evolution of VAT rates in the Slovak Republic

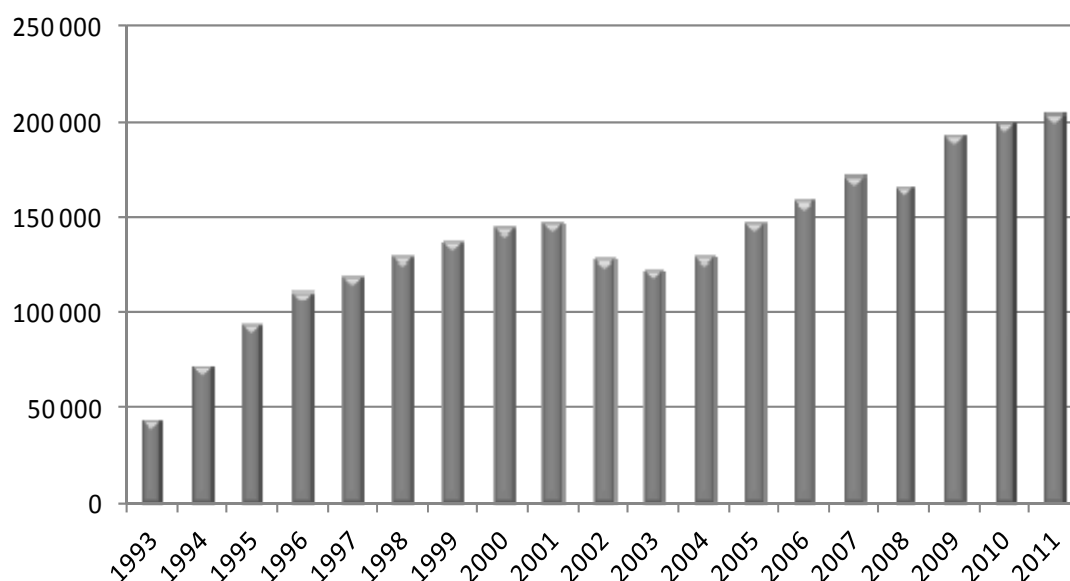
Tax rate	Reduced rate	Basic rate
from 1.1.1993	5	23
from 1.8.1993	6	25
from 1.1.1996	6	23
from 1.7.1999	10	23
from 1.1.2003	14	20
from 1.1.2004	neither	19
from 1.1.2007	10	19
from 1.5.2010	6; 10	19
from 1.1.2011	10	20

Source: Self elaboration based on the VAT legislation

Since 2011 were reduced the number of VAT rates in Slovakia from three (6%, 10%, 19%) in 2010 to two in 2011. In addition to the reduction of the number of rates also changed the basic tax rate, which increased from 19% to 20%. This temporary VAT rate increase is a part of the measure to reduce the government deficit. The increase of the basic rate was planned temporarily, until the government deficit falls below 3% of GDP. The reduced VAT rate of 10% on selected medical products and books remain unchanged.

Since 1993 had to be registered as a VAT payers those persons whose turnover for the previous three consecutive calendar months exceeded 1,5 million Slovak Crowns (6 million per year). The amount of turnover, which required the person to register as a VAT payer, decreased since 1994 from 6 million Slovak Crowns to 3 million Slovak Crowns per year (it means 750 thousands of SKK for the previous three consecutive calendar months). By the date of accession to the EU from 1.5.2004 the registration level was changed to 1,5 million SKK for 12 consecutive months. Since 2009 was changed the registration level in the Slovak Republic to 35 thousands of Euros (calculated by a conversion rate it was 1 054 410 SKK). Such a registration level proceeds from the Council Directive 2006/112/EC. The reduced registration threshold touched especially small businesses and entrepreneurs who operate in the services. Since 2010, the taxpayer becomes a person who, for 12 consecutive calendar months has a turnover of 49 790 Euros. The amendment of the VAT legislation in 2010 extends the duty on the VAT on a larger number of subjects. These changes mean that almost every company who provides or receives services within the EU will be affected with the VAT. And while, it may not be a subject of VAT.

Fig 4 The number of the subjects of charge, registered for VAT in the years 1993 – 2011



Source: Self elaboration based on the data from the Tax Directorate of the Slovak Republic

Summary

Many people think that the tax reform in 2004 was to reduce taxes. This reform was not intended to reduce the overall tax burden. The reform only shifted the weight of the direct taxes – income taxes – to indirect taxes – VAT and excise tax. It is shown also in the study of the World Bank in collaboration with the PWC, entitled Paying Taxes. The results show that from the 183 evaluated countries Slovakia has reached the 135th place in the ranking of the overall tax rate.

The largest share on the tax revenues is represented by the value added tax. The introduction of VAT into our taxation system was a necessary step to ensure the convergence of indirect taxes with the tax mechanisms applicable mainly in EU countries. The VAT in Slovakia was a subject of a number of legislative changes that influenced the value added tax revenue. Over the past 10 years increased the share of the VAT revenue on total tax revenues by more than 10 percentage points and it represents more than a half of all tax revenues.

The economic crisis has created new challenges to the Slovak Government, e.g. how to ensure sufficient income to the state budget, necessary to provide public services and meet their social objectives, and at the same time promote investments, ensure economic growth and create job opportunities.

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Coping with Obstacles to Exporting the Case of Greece

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Abstract

In this paper we investigate the various factors leading to obstacles to exporting. We point out the weaknesses existing in the Greek economy that lead to very low exports. We investigate the problems faced by the Greek exporters of toys, by examining a random sample of companies members of the Association of Exporters of Northern Greece. Part of the paper focuses on the case of olive oil, which is a characteristic example of a product which has a lot of outstanding advantages but the income derived from its exports is considerably lower than its potentialities.

Key words

Obstacles to exporting, Greece.

Introduction

The exports of Greece remain at very low levels for many years now. This negative development is connected with a series of factors preventing the gradual increase of exports up to levels that at least approach the average figures of the European countries.

Under the current conditions within the Greek economy, the turning of companies towards exports, constitutes an imperative need. Fighting recession can be achieved through attracting investments and developing exports. In both cases the role of the government must be constructive and helpful by creating favorable conditions. Unfortunately all the Greek governments of the last decades did not contribute to the solution of the problems of the Greek economy, either by their acts or by their omissions.

In the frame of this paper, we first examine the obstacles faced by exporting companies worldwide. Then we examine the difficulties experienced by the Greek exporters a) as they are pointed out by International organizations (ie World Bank) b) according to the answers we received to a questionnaire sent to exporters of toys, members of the Association of Exporters of Northern Greece.

The second part of this paper deals with the case of olive oil. We focus on olive oil because it is a product of paramount importance for the Greek economy and it is representative of most of the problems faced in the Greek exports. Despite the high potentialities, the exports of olive oil are not commensurate with them.

Obstacles to exporting worldwide

In most of the countries of the world there are obstacles to exporting, either real or perceived by exporters. Shoham and Albaun in a study of the Danish exporters, classify the obstacles to exporting in controllable and non-controllable. In the controllable barriers, they included communication with the foreign unit, lack of export training (experience and language skills) lack of market information, controlling international activities, documentation requirements, arranging transportation etc, providing services, higher than domestic risk.

In the non-controllable barriers, they included foreign government attitudes, foreign public attitudes, trade barriers (tariffs, quotas), financing sales, no assistance from the home government.

A. Barrett suggests small companies, among other things to overcome the obstacles through: increased commitment, seeking advice, using trade shows, choosing partners and markets carefully, not being overwhelmed by big orders, using letters of credit and being patient.

Difficulties experienced by Greek exporters

In the following table 1, we can see the very bad performance of Greece in exports, expressed as a percentage of GDP.

Table 1 Exports/GDP

Country	September 2010	September 2011
Belgium	86,6%	93,4%
Slovakia	71,1%	81,1%
Hungary	71,7%	78,0%
Netherlands	71,9%	78,0%
Bulgaria	41,9%	51,2%
Germany	37,7%	41,1%
Poland	33,9%	35,8%
Portugal	20,9%	24,3%
France	20,2%	21,3%
Spain	17,7%	19,5%

Source: Eurostat / IEES-SEVE

According to World Bank (Doing Business 2012), Greece is placed in the 84th position among 180 countries, concerning trading across borders, compared with the 12th position of Germany and the 95th of Slovakia.

In the table 2 we can see the number of documents required to export, the time needed and the cost to export.

Table 2

	Greece	Germany	Slovakia
Documents to export(number)	5	4	6
Time to export(days)	20	7	17
Cost to export(USD per container)	1153	872	1560

Source :Doing Business 2012

In table 3 we can see an analysis of the time needed to export.

Table 3

EXPORT PROCEDURES	Duration(days)		
	Greece	Germany	Slovakia
Documents preparation	14	3	7
Customs clearance and technical control	2	1	2
Ports and terminal handling	2	2	2
Inland transportation and handling	2	1	6
TOTAL	20	7	17

Source: Doing Business 2012

Table 4 shows an analysis of the cost to export, expressed in USD per container.

Table 4

EXPORT PROCEDURES	Cost in USD/container		
	Greece	Germany	Slovakia
Documents preparation	235	142	235
Customs clearance and technical control	230	30	55
Ports and terminal handling	228	250	285
Inland transportation and handling	460	450	985
TOTAL	1153	872	1560

Source : Doing Business 2012

Concerning the documents needed to export, Greece has 5: Bill of lading, certificate of origin, commercial invoice, customs export declaration and technical standard/health certificate. Germany has 4 : Bill of lading, commercial invoice, customs export declaration, packing list. Slovakia has 6 Bill of lading, certificate of origin, commercial invoice, customs export declaration, inspection report, packing list. From

the above mentioned analysis we see that the ranking of countries by the World Bank regarding the trading across borders does not necessarily mean that the export performance of each country is exclusively connected with this ranking. For example, although Slovakia is ranked 95th, namely “worse” than Germany and Greece, its export performance is much better.

According to a study by P. Athanasoglou, C. Backinezos and E. Georgiou on export performance, the Greek exports remain concentrated in low and medium technology sectors, while product variety and quality have declined. The geographic structure of destinations has changed for the Greek exports with an increasing share for Southeastern European and Mediterranean-Middle east countries. The explanation for these developments, has to do with the presence of Greek companies and banks in this area leading to better knowledge of these markets, the proximity with them leading to easier access and also the fast growth of these countries. Of course the EU-15 markets remain the major destination of Greek exports, despite their decrease due to the fierce competition from third countries.

The views of exporters about the problem

In order to find out what are the views of exporters regarding the obstacles to exporting we chose a specific group of exporters (toy exporters). Our choice was based on the fact that toy exporters is a rather small group and therefore it would be easier to draw some conclusions that might be useful at least for this particular group of firms. In total there are 20 exporting companies members of the Association of Exporters of Northern Greece (AENG). Our questionnaire was addressed to 10 of those companies, selected from the respective list of AENG in a random way. All the 10 companies answered. Our findings can be summarized in the following. 8 out of the 10 exporters believe that due to the bureaucracy, the delays and the lack of flexibility in the customs procedures, there is a negative impact on the competitiveness of the Greek products. The Greek products become more expensive and the exporting companies less reliable due to the long time required. 6 out of the 10 exporters believe that there is lack of national strategic planning for exports. (The National Council of Exporters didn't work efficiently and it should belong to the National Council of Growth and Competitiveness earlier in order to secure a closer coordination of the authorities involved). 3 out of the 10 exporters believe that more trade shows should be organized abroad with more participants. 5 out of the 10 exporters believe that they don't benefit enough from the EU programs. More specifically they reported long delays in the implementation of the National Strategic Reference Framework and wrong priorities set by the government. 2 out of the 10 exporters complain that foreign partners very often in the last year have not accepted letters of guarantee issued by Greek Banks, being afraid that the Greek economy will collapse and consequently the overall problem will affect the Greek Banks. 3 out of the 10 exporters are treated in an unfavorable way in international trade shows, as the reliability of the Greek companies is doubted because of the negative overall financial image of the country. 8 out of the 10 exporters express their worries about the consequences of the recent decision of International Insurance Organizations to avoid signing contracts of credit Insurance due to the economic and political uncertainty in Greece. Although this development affects mainly the importing companies, exporters are also affected in a negative way as they have to import raw materials, machinery, equipment etc. So the companies have to prepay for their orders and therefore given the problem of lack of liquidity, they face extra difficulties. All the exporters (10 out of 10) complain that the fiscal problem faced by the Greek government results in long delay in refunding the value added tax to exporting companies. 9 out of the 10 exporters believe that the existing procedures of exemption from VAT are too complicated. 8 out of the 10 exporters complained that access to financing from banks has become too difficult in the last year.

The case of olive oil

Olive oil is a very important product for the Greek economy, as its production constitutes 11% of the total agricultural production and 0,3% of the GDP of Greece. (Eurostat). The spectacular increase in the consumption of olive oil worldwide, creates positive perspectives for the respective exports. Greece is the third producer of olive oil in the world with 13% of the global production in the decade of 2000. Spain comes first with 40% and Italy comes second with 22%. The quality of the Greek olive oil is higher as 75% of its production is extra virgin, compared with 45% of the Italian and 30% of the Spanish respectively.

Despite the comparative advantages and the increasing demand at global level, the course of the Greek olive oil was rather negative in the previous years, with the market share of Greece in the global market of

standardized olive oil going down to 3%. Only 20% of the Greek production comes to standardization compared with 50% in Spain and 75% in Italy.

The main reasons of the above mentioned negative developments have to do with:

- The higher cost of growing olives, connected with the smaller fields and the lower productivity of labor.
- most of the olive-press factories are small and use old technology.
- the split of cooperatives makes quality control and promotion of premium products difficult.
- the small size of standardization companies does not allow the effective promotion of recognized brands (Milonas P.).

The Greek exports of olive oil are diminishing as the increasing demand is almost exclusively for standardized olive oil. In the following table 5 we can compare the ratio of exports/production for Greece, Italy and Spain.

Table 5 Exports/production

	1990-1999	2000-2008
Greece	41%	31%
Italy	35%	56%
Spain	39%	51%

Source: Faostat, NBG

In tables 6 and 7 we can see the excellent performance of Italy against the poor results of the Greek exports. Italians import from Greece (they absorb 68% of the Greek exports of olive oil) non-standardized olive oil. Then they process, pack and export it, taking full advantage of the high quality of the Greek olive oil (having as main customers big countries with high income per capita).

Table 6 Destination of Greek olive oil exports 2010

Italy	68%
Germany	7%
Spain	4%
USA	3%
Canada	3%
China	1%
Russia	1%
UK	1%
Others	12%
TOTAL	100%

Source: Eurostat

Table 7 Destination of Italian olive oil exports 2010

USA	32%
Germany	11%
France	8%
Canada	7%
Japan	6%
UK	6%
China	3%
Netherlands	2%
Switzerland	2%
Others	23%
TOTAL	100%

Source: Eurostat

Concluding remarks

From the above mentioned analysis we can draw some conclusions about the obstacles to exporting and formulate some suggestions to overcome the difficulties.

It has been evident that Greek exports remain at very low levels compared with the other European countries.

According to the annual reports of World Bank the obstacles to exporting are connected with the bureaucracy involved in the export procedures resulting in longer periods for documents preparation and customs procedures. The problem of bureaucracy was confirmed by the vast majority of our sample. The vast majority of the exporters of our sample, complain for the delays in refunding the VAT, the extremely difficult access to Bank Financing and their unfair treatment from Insurance companies and other foreign partners, due to the country's bad financial position. Many Greek exporters believe that they do not receive enough benefits from the European funding programs compared with other sectors of the economy. The majority of our exporters believe that there must be a more active involvement of the Greek government as they point out the lack of national strategic planning.

In general we believe that there is an imperative need for very deep reforms in the Greek economy that will make Greece more attractive for investment. For many years now Greece remains around the 100th position (among 180 countries of the world) in the ranking made annually by the World Bank concerning the investment friendly business environment of each country. This unfavorable ranking is the outcome of a series of low rankings in fields like starting a business, dealing with construction permits, registering property, getting credit, protecting investors, paying taxes, trading across borders, closing a business, employing workers etc.

We strongly believe that the Greek exports, especially under the current conditions of International uncertainty, deserve a higher priority in the government's choices for growth. The role of the Export Credit Insurance Organization should be upgraded to make the Greek economy more extrovert by providing the exporters more protection against commercial and political risks of non-payment.

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The Economic Role of Transnational Corporations

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Abstract

This study examines the role of transnational companies through foreign direct investment (FDI). Transnational corporations (TNCs) play a dominant role in the present world economy since their sharing in the global foreign direct investment, production, services, trade and employment is also predominant. In 2010 there were 103,786 parent companies and 892,114 foreign affiliates in the world. In spite of the 2008 situation, for the first time most of them emerged in developing countries. Half of the top-20 receiving economies for FDI were developing or transition economies and six developing and transition economies were among the top-20 investors. The present global economic and financial crisis hit the most the financial TNCs that were active players on the international futures markets. FDIs largely declined and the majority of non-financial TNCs elaborated strategic alternatives to manage the negative effects of the crisis. The year 2010 brought growth to many TNCs.

Introduction

Giant corporations gained terrain in global economy in the late 1970s, which was called the age of transnationalization. The term “transnational” first emerged in the name of a Commission by Economic and Social Council of the United Nations (ECOSOC) in 1974: “Commission and Center on Transnational Corporations”. Under transnational corporations (TNCs) I mean the organizations defined by the United Nations Conference on Trade and Development (UNCTAD).

TNCs evolve and gain power as a consequence of and caused by the advancement of globalization. The joint operation of parent companies and their foreign affiliates is now a common place, they mutually depend on national economies but are in asymmetric positions. For power-related reasons, the relations between the TNCs and the state where they have their operations affect other actors as well. Development, competitiveness and position in the global economy for a particular country is very much influenced by their integration into the network of transnational corporations.

But dependencies are mutual since international companies can and are willing to operate only in a predictable and favourable social-economic environment that is to be established by national governments and civil organizations. Not only physical, economic and intellectual infrastructural conditions play an important role, but factors such as stable law and order, culture, security, morals and trust are important as well.

TNCs seek to optimize their global competitive advantages and reach maximum profit with all of their operations. The biggest and most adaptable corporations with their international mobility, flexible business policies and competition strategies are able to manage the economic challenges of crisis and suffer only restricted losses.

TNCs and their operations

The number of TNCs (parent corporations) and their foreign affiliates is continuously growing, especially in the developing and transition economies. While there were 69,727 parent corporations and 690,391 affiliates in 180 countries of the world in 2004, there were 82,057 corporations and 807,363 affiliates in 2008 and 103,786 corporations and 892,114 affiliates in 195 countries of the world in 2010, respectively. The number of parent corporations increased by 50% and that of subsidiaries by 30% between 2004 and 2010. It is a major trend that the proportion of parent corporations based in developed countries is decreasing, it was 92% in 1992 and 70.5% in 2010. Although their number increased by 24.4% compared to 2008, TNCs in developing countries grew by 31.7%.

The majority of affiliates is based in developing and transition economies, representing 54.6% in 2008 and 58.1% in 2010. The reason for this is the fact that parent corporations have more subsidiaries in these countries, compared to developed countries. In 2010 a parental company had an average of 5 affiliates in developed countries while it had 17 affiliates in developing and transition economies.

The USA has the most affiliates among the developed countries: they had 9,692 corporations and 27,251 subsidiaries in 2010. There were 47,455 corporations and 310,047 affiliates in the European Union in 2010. Regarding the developing and transition economies, China is the leader with 12,000 corporations and 434,248 affiliates. This means that US-corporations have an average of 3 affiliates while Chinese corporations have an average of 36 foreign affiliates.

Most TNCs are privately owned but state-owned companies play an important role especially in developing countries. They help to ensure stability to international businesses, affect the branch structure of capital inflows and outflows, support companies in trouble and manage economic risks. There were 653 state-owned TNCs in the world in 2010, 285 of which in developed countries, 345 in developing countries and 21 in transition economies. FDI outflows reached \$146 billion, more than 60% of this, that is \$90 billion originated from developing or transition economies, which underpins the regulating role of state-owned TNCs.

FDI at TNCs

Due to the dominating neoliberal economic policies, obstacles of international capital flows were abolished at the end of the 20th century. As a consequence, the dominance of trade of goods and services turned into the dominance of capital flows and foreign direct investment (FDI).

UNCTAD (just like OECD and IMF) defines that FDI is an investment that ensures a share of 10% or more of a foreign company to the investor for the long run.

FDI is performed through the operations of TNCs. The global credit crunch in the 1980s gave a big boost to the FDIs since countries with an open economy were compelled to compete for capital resources. The international flow of services is supported by international direct investments nowadays.

An FDI can be done by equity modes or non-equity modes (NEMs).

Equity modes include a) indirect acquisition of shares, foundation of subsidiaries and mergers & acquisitions; b) reinvested capital and c) other capitals (mainly inter-company loans).

NEMs include contract manufacturing, services outsourcing, contract farming, franchising, licensing, management contracts and other types of contractual relationships. Investors use these channels to influence the operation of the company by appointing the management or determining the profile of the company. A key advantage of NEMs is that they are flexible arrangements with local firms, with a built-in motive for TNCs to invest in the viability of their partners through dissemination of knowledge, technology and skills. NEMs of international production generated over \$2 trillion in sales in 2010, much of it in developing countries.

The global FDI inflows, parallel with the growing number of TNCs, show an increasing trend from 1990 although they suffered a decline temporarily. The total value of FDI inflows was \$1,244 billion in 2010, that is six times as high as the value was in 1990. There was a decline year by year between 2000 and 2003 while it continuously grew from 2004 to 2007. It fell again between 2007 and 2009 due to the global economic crisis, but there was a slight growth of 5% from 2009 to 2010.

FDI inflows had their highest value in developed countries in 2007: \$1,307 billion. Due to the recession from 2008, it decreased by more than a half until 2010 and it did not reach the level of value in 2005.

In the developing and transition economies the FDI inflows had their highest value in 2008, it was \$658 billion and \$121 billion, respectively.

In 2010, the United States and China maintained their top position (table 1.) and two European countries (UK and Luxembourg) moved down in the ranking.

Table 1 Global FDI inflows and outflows, top 20 host and home economies, 2009 and 2010 (Billions of dollars)

Host economies	R* 2009	Inflows 2009	Inflows 2010	Home Economies	R* 2009	Outflows 2009	Outflows 2010
United States	(1)	153	228	United States	(1)	283	329
China	(2)	95	106	Germany	(3)	78	105
Hong Kong, China	(4)	52	69	France	(2)	103	84
Belgium	(17)	24	62	Hong Kong, China	(5)	64	76
Brazil	(15)	26	48	China	(6)	57	68
Germany	(6)	38	46	Switzerland	(10)	33	58
United Kingdom	(3)	71	46	Japan	(4)	75	56
Russian Federation	(7)	36	41	Russian Federation	(8)	44	52
Singapore	(22)	15	39	Canada	(9)	42	39
France	(10)	34	34	Belgium	(156)	- 22	38
Australia	(16)	26	32	Netherlands	(12)	27	32
Saudi Arabia	(11)	32	28	Sweden	(14)	26	30
Ireland	(14)	26	26	Australia	(20)	16	26
India	(8)	36	25	Spain	(23)	10	22
Spain	(30)	9	25	Italy	(16)	21	21
Canada	(18)	21	23	Singapore	(18)	18	20
Luxembourg	(12)	30	20	Korea, Republic of	(19)	17	19
Mexico	(21)	15	19	Luxembourg	(17)	19	18
Chile	(26)	13	15	Ireland	(13)	27	18
Indonesia	(43)	5	13	India	(21)	16	15

Source: World Investment Report 2011, p. 4, p. 9.

R* = The number in bracket after the name of the country refers to the ranking in 2009.

FDI investments into the developing countries are characterised by the fact that there are only 9 developed countries along the USA in the top 20 countries receiving investments, all the other countries are developing economies.

Due to the good performance of TNCs in East and South-East Asia and Latin America there was a decline of 22.4% in FDI in the developed countries only between 2008 and 2009, they grew by 12.3% already from 2009 to 2010 and they still have a growing trend.

The greatest receiver of FDI in the developing world is China, where FDI grew by 11% to \$106 billion from 2009 to 2010. Investments flow into sophisticated industries and services. In 2010, Brazil, Singapore, Mexico, Chile and Indonesia moved up in the ranking and Indonesia entered the top 20 for the first time.

Singapore, Indonesia, Malaysia, Vietnam and Thailand in South-East Asia and Bangladesh in South Asia became the main target areas of investing into low-cost production.

The poorest regions of the world, like Africa and South Asia, is receiving less and less investments at the same time. The “Arab Spring” of 2011 and the consecutive political uncertainties in North Africa involve high risks for investments. The decline of investments in South Asia is due to the fall by 31% in India and that of 14% in Pakistan.

The outward global FDI reached \$1,323 billion in 2010. This means a 13% growth from 2009, but it is still 39% less than it was in 2007. In 2010 investment by developed countries (\$935 billion) was 49% less than it was in 2007. The outward FDI originating from developing and transition economies grew rapidly. It reached the top value (between 1990 and 2008) with \$309 billion in 2008. In 2010, six developing and transition economies were among the top 20 investors.

FDI by region and industry

The outward FDI primarily depends on the economic and political situation in the receiving country as investing TNCs intend to keep or expand their foreign markets and secure their profits in various economic sectors.

Table 2 Sectoral distribution of FDI projects, 2009-2010 (Billions of dollars and per cent)

Years	Primary	Manufacturing	Services
2009			
Billions of \$s	361	449	392
Per cent	30.0	37.0	33.0
2010			
Billions of \$s	254	554	338
Per cent	22.0	46.0	30.0

Source: World Investment Report 2011, p. 9.

Since the developing countries appear to have a boom period, outward capital flows ensure the opportunity of consumption growth and the favourable economic perspectives attract most of the investments both from the developed and the developing and transition economies. In 2010 almost half of the total FDI (cross-boarder M&A and greenfield FDI projects) flew into developing countries while this proportion was only 32% in 2007.

Both the value and the proportion of foreign investment into the industry grew in 2010, but there was some decline for mining industries and services. The financial crisis severely hit the manufacturing industry and for this reason, a lot of companies restructured their operations to favour profitable activities. There was an excess of capacities and perspectives were not promising, especially in the developed countries. The chemical and pharmaceutical industries could flexibly adapt to the new situations in the crisis, the textile, food and automobile industries could recover in 2010. FDI projects of the primary sector fell despite the fact that demands and prices were growing. The crisis led to a decline in all the operations of the service sector, though there were some differences between the branches.

TNCs in the current global economic crisis

TNCs through their global operations have largely contributed to the outbreak of the present crisis. Reasons are partly that non-financial TNCs had financial activities too and partly that financial TNCs did not recognize the risks and negative effects involved in credit offering in due time or they were slow in reacting to the negative events. The crisis was caused by the following factors (Farkas, 2010):

- There emerged the biggest-ever financial bubble by the direct intertwining of money capitals and productive capitals and financial investments – first time in the history of capitalism – had more returns than productive capitals did.
- Through mergers and acquisitions large productive-financial conglomerates were founded, which are competitors and partners of each other at the same time. By the WIR 2011 overview (p. xii) the value of cross-border M&A deals increased by 36 per cent in 2010, but was still only around one third of the previous peak in 2007. The value of cross-border M&A into developing economies doubled. Greenfield investments declined in 2010, but registered a significant rise in both value and number during the first five months of 2011.
- Liberalization of the economic relations resulted in outsourcing of the labour-intensive industries into countries with favourable capacities, like China.
- Production capacities became more excessive than ever but they could be maintained with the support of the giant TNCs and their extra profits on the financial markets.
- Outsourcing brought along an extensive global competition of workers beside that of the countries, which led to wage cuts. Capital gains' share of the GDP is continuously growing compared to the share of salaries and wages.
- Private individuals' decreasing demand and savings were supported with a surge of bank loans that boosted consumption and led to severe debts.
- International trade and payments became severely imbalanced in some countries.
- Income inequalities grew within countries and between countries resulting in very severe social tensions.

The special corporate interests of TNCs and the financial liberalization of the last decades played an important role in the process mentioned above. The strategic decisions of the "most international" corporations' managements are independent of the interest of the countries where they are based and

global corporate interest outweigh the importance of any operations in the various national economies (Simai-Gál, 2000).

Big non-financial TNCs invested more money in 2010 again and they represented a large share in total investments. During the economic and financial crisis many companies dismissed employees and restructured their operations to stay in the black. TNCs in developed countries, – which make up about three quarters of the total number of TNCs and offer 70% of global FDI outflows –, often downsized their operations in their base countries and sought foreign opportunities to capitalise on comparative advantages. The investments of the biggest non-financial TNCs grew in 2010 and they kept their share in investments. Financial TNCs, however, did not expand their foreign operations because they encountered a lot of difficulty in 2010. Some of them were helped out with substantive state subventions and some of them sold a large part of their foreign assets. Japanese financial TNCs, in contrast, increased their internationalization, making strategic international acquisitions during the crisis.

It is important to see that the majority of TNCs only slightly reduced their expenditure in R&D despite of the unfavourable conditions of the crisis. The USA and Japan increased, the EU decreased their expenditure in this field. There is a large expansion in China and India. This is partly because R&D programs that were started earlier cannot be cancelled and partly because of the consideration that such programs could contribute to the improvement of competitiveness and efficiency.

Generally speaking, the international role of non-financial TNCs did not diminish due to the economic and financial crisis. Their international operations expand, they have more and more business and the number of their employees and the assets of their foreign subsidiaries are increasing. All the domestic and foreign operations of all TNCs in the world produced \$16 trillion of added value in 2010, which represented more than one quarter of the global GDP. Foreign subsidiaries accounted for more than one tenth of global GDP and one third of global exports (estimated by UNCTAD, WIR 2011).

Table 3 Selected indicators of TNCs' activity, 1990-2010 Value at current prices (Billions of dollars)

Item	1990	2005-2007 average	2008	2009	2010
FDI inflows	207	1 472	1 744	1 185	1 244
FDI outflows	241	1 487	1 911	1 171	1 323
FDI inward stock	2 081	14 407	15 295	17 950	19 141
FDI outward stock	2 094	15 705	15 988	19 197	20 408
Income on inward FDI	75	990	1 066	945	1 137
<i>Rate of return on inward FDI %</i>	<i>6.6</i>	<i>5.9</i>	<i>7.3</i>	<i>7.0</i>	<i>7.3</i>
Income on outward FDI	122	1 083	1 113	1 037	1 251
<i>Rate of return on outward FDI %</i>	<i>7.3</i>	<i>6.2</i>	<i>7.0</i>	<i>6.9</i>	<i>7.2</i>
Cross-border M&A	99	703	707	250	339
Sales of foreign affiliates	5 105	21 293	33 300	30 213	32 960
Value-added of foreign affiliates	1 019	3 570	6 216	6 129	6 636
Total assets of foreign affiliates	4 602	43 324	64 423	53 601	56 998
Exports of foreign affiliates	1 498	5 003	6 599	5 262	6 239
Employment by foreign aff. (000)	21 470	55 001	64 484	66 688	68 218

Source: World Investment Report 2011, p. 24.

The chart shows that indicators pointed to a decline between 2008 and 2009, but they slightly improved in 2010. Both the rate of return on inward FDI and that on outward FDI increased and surpassed the mean score of the period between 2005 and 2007. Sales, added value, assets and exports of foreign affiliates grew and they hired more employees. It is questionable, however, if they can keep up with the favourable trends.

Summary

TNCs play a very important role in national economies and the global economy. Ten thousands of small and medium-size enterprises operate as parent companies and affiliates or suppliers in various fields. Following a new trend, the number of TNCs and the expansion of their FDI operations in developing and transition economies are continuously growing, compared to the ones based in developed countries.

Non-financial TNCs largely invested in the financial sector to increase their profits and this way, they contributed to the bubble formed by financial TNCs. The global economic and financial crisis that started in 2007 led to the bankruptcy of many companies. Most companies that survived the crisis so far try to

remain competitive by restructuring their operations, doing layoffs, hiring better workforce, finding new markets and increasing R&D expenditures.

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Differences of Interest Between the Management and the Owner of a Company

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Abstract

Managers play a very important role in influencing the financial processes. This poses the question what kind of contact there is between the capital owners and the management of a company. Various groups of people may represent different interests within the operation of a shareholders company. While managers make the economic and financial decisions connected to the functioning of companies and their expectations are usually short-term, the owners of capital count on significant proceeds from their long-term investments. Operation in offshore markets are of vital importance in the case of globalised corporations (multinational companies) but ethical investment opportunities is another important issue in the decision-making process of the management.

Global economic environment

“A business absolutely devoted to service will have only one worry about profits. They will be embarrassingly large.” (Henry Ford)

The most explicit set of conditions of the international division of labour comprises of geographical location, quality of the natural environment and specific experience of production. These circumstances have led to different solutions to problems and different levels of development. Nations have adopted a different path of development in the course of their history but they act as a part of the global world. Global economy can be interpreted as the most comprehensive union of humanity that can work best in a construct that reflects the different levels of development. This construct of today's global economy is best defined by the world system theory based on centre-periphery by Wallerstein. He maintains that a centre is an autonomic unity of development that changes in an innovative way, develops on the basis of the given system and the internal motivations of economic actors and acts as an engine for global economy. A Periphery tries to follow the innovative results of a centre and by adopting their knowledge but necessarily lags behind in development. Global economy is not merely a union of nations but a developing system based on cooperation in a special set of conditions. This system includes integrations, transnational and multinational companies, even virtual companies harnessing technical progress that have cost-effective unities established for temporary periods.

Globalization¹, which has fundamentally changed the conditions of economy and cooperation for all the actors, is meant to refer to the features of different effects described above. The highly developed level of cooperation requires various skills from the actors that can be called the system of adaptable actors. This refers not only to the organizations but also to the labour force that must be highly educated and trained, creative and able to cooperate.

As a special feature of the 20th century, huge companies were formed by the mergers of firms in production, banking, insurance, etc., some of these giant firms are multinational companies (that are linked to a particular country)”and others are transnational companies (that are clearly subject to global economy) and they are all characterised by being controlled from a single centre, effectively organized and possessing a network of subsidiaries. In the permanent pursuit of effectiveness they strive to find and take advantage of the best conditions of taxing as well (tax-havens, tax avoidance, tax shields).

Irrespective of their past and levels of development in global economy, companies have one single aim: to make profit. Every business is required to produce a profit and accumulate fortune supported by both internal and external actors.

This study aims to examine the internal actors. They belong to the following categories:

- owners, who provide capital for the business and expect returns of their investment but do not participate in the operation of the company unlike in the age of early capitalism,
- managers, who identify with the requirements of the owners but have their own requirements, and

- employees, who are hired workers in production, commerce and distribution and who are striving to increase the profit as well, but fighting for a more favourable division of goods within the company that reflects the conflict of interests of all the actors.

Enforcement of interests, business and ethical issues

It is a common problem that the cooperation of owners, managers and employees is overshadowed by the conflicts of interests appearing in their relations of every day. The emergence of a conflict must be examined since this is an ethical issue as well and any solution can be found in the ethical issues. Business ethics plays a very important role in these issues. Ethical norms shall be considered when making a decision and such norms carry a high level of responsibility in relation to consumers, business partners, competitors, environment and the society as a whole.

For employees, trade unions and social cooperation are pre-determined, this area does not belong to our scope.

Making decisions is, however, an important area which holds various consequences. If the owner makes a decision, they have to bear the financial and ethical responsibility since not only their, but the fellow owners' money was also invested in the business. These circumstances could act as a special drive for the investor as they can manage to establish harmony between the interests of the owners. They all have interests for the long run, that means that they would prefer the company keep its effectiveness and its ability to make profit in the long term. This is the interest of the investors as well as they long for the returns of their investment. There was, however a significant change in the constructs of decision-makers since owners are separated from decision-makers due to the change in structure after mergers.

Managers are actually employers themselves, therefore their interests – due to the techniques of evaluation – are for the short term. They do not own the company so they only have ethical responsibilities. Consequences of their decisions are present for a long time and they have objective, social and personal implications as well (such as change in production – modernization as activities of innovation and their consequences, e.g. down-sizing or environmental pollution). Considering all these issues, it is obvious that a high level of ethical awareness is essential for decision-making, which is not present in every case. The reason for this is that whole generations were socialized in an economic environment which was organized in a less ethical way, so people tend to avoid responsibility.

Responsibility plays a key role nowadays since companies operate in a global economy and affect a global environment with their activities. Offshore market constellations enable companies to avoid taking full responsibility since part of the losses and damage takes place in regions different from those of physical operation. Actors may lack financial resources to implement necessary changes. Addressing these problems is a very important ethical issue as environmental problems do not emerge in a spectacular way in the long run and when they are perceived, it might be too late or it would be too expensive to restore the environmental conditions². Consequences are damage to the flora and fauna and an unfavourable change in the environmental conditions in a serious case. Ethical investment involves the situation in which investors have a high level of responsibility in accepting worse than optimal financial returns that, however, protect and preserve the environment and support the accumulation of profit in the long run. Ethical banks can join to participate in ethical investment.

Individuals shall also assume responsibility for their work including ethical responsibility. Related issues are the following: if they contributed to the occurrence of a harmful event, if they had a level of freedom in the activities, if they were familiar with the process, if they had an insight into the potential consequences, if they took advantage of their skills and finally, what purpose they were pursuing, if they were considering their own interests, the community interests or both?

If they do not make the right decision, a conflict might emerge that has to be handled to prevent open confrontation between people, groups of people or society. Managers have ethical responsibilities toward every (whether internal or external) partner as they need to keep written or oral norms and contribute to the interests of employees, users, business partners, society and the state. Their decisions and the evaluation of the market are reflected in the value of the activities of the management which can be measured in a financial way. That means that consequences of the decisions of managers and owners should be analyzed.

Owners

Every capital owner makes a decision for the long run, that is they invest part of their resources to gain future returns. Though, we have to distinguish investors and savers. Investors adopt a conduct in which

they continuously move their money and monitor the effective investment opportunities to attain optimal returns. Good investment means that money inflow exceeds money outflow. A continuous alternation in investment opportunities involves, however, a certain level of risk since the investor's psychological conditions, market skills and other market effects must be calculated (there are many ways to quantify these effects). Investors who are not so active are deemed to be savers.

Requirements of the savers, who are also important actors of economic processes may be the following:

- certain financial mobility (that is they can access their savings if needed, even if they restrict their investment opportunities),
- minimal risk as they have a low propensity to take (economic, political, environmental, etc.) risks,
- maximal returns for a secure investment,
- requirements toward the management to be loyal and provide maximal results for both the short and the long run.

Owners have various types of requirements and since any change in their portfolio can involve risks, they strive to reach a secure profit under the constructs of their expectations.

Management

Managers have their duties in the control of the company. They consider the company to be a workplace, so they expect favourable financial opportunities for the future, but they can easily drop their loyalty if they find better opportunities. They are well-trained experts, who make their decisions on the base of professional skills, perform daily operations using their well-established network (of external partners) and their information basis (related to banks, market, stock exchange, logistical relations, etc.). Every manager has the aim to receive proper professional and financial acknowledgement during their career.

Managers have to perform responsibly their work, and their results can be evaluated by probability calculus, chaos theory, value analysis and other economic calculations. They have to get to know the actors, observe the underlying situation and pay intuitively attention to conditions that can help to make the right decision. As employees, they work between the owners and workers as both groups of people have financial expectations toward the company. The manager shall adopt their decisions to produce the most beneficial conditions (fellow worker relations).

Evaluation of the owner – manager cooperation

Business and investment is always a kind of competition, the success of which is featured in the heads of market players. For this reason, it is very important that all companies should manage the knowledge base as their basic duty. This means that they have to gather the skills necessary for innovation as this is to enable the operation of the business in the long run, the expansion of the market segment or the intervention of market demands. There has been a demand for innovation at all the stages of human history as this helps to secure advantages in the long term since better knowledge might lead to a more favourable market position. Development can be analyzed by the following examples: economic opportunities were carried by the use of land and animal breeding in the beginning, by manufacturing technologies and the knowledge of the operators later and by know how in the current age. The right application must be performed by a SWOT analysis of the owner — manager relations where cooperation has the main point:

Strengths	Weaknesses
<ul style="list-style-type: none"> - increasing profit, - successful operation in the long run, - secure market relations, - reliable partners, - right handling of owners' and entrepreneurs' capital, - liquidity in the long run, - flexible adaptation, - presence at the Stock Exchange, - employment of researchers, - entrepreneurship of researchers, - innovative thinking, 	<ul style="list-style-type: none"> - managers' loyalty, - remuneration, - resolving conflicts of interests (between managers – owners – employees), - opportunities of capital raising, - risks of capital using, - structural hierarchy, issues of competency, - the role of time periods in the approach, - the role of time periods in the representation of interests, - improper treasury activities, - improper handling of risks,

Opportunities	Threats
<ul style="list-style-type: none"> - new solutions (e-Economy, e-Commerce), - opportunities of capital raising, - getting to know the competitors, - opportunities of professional training, - consultancy (PR, logistics, transportation, marketing), - financial security, - re-investment of profit (tax allowances, capital gain), - financial training, - active use of treasury, - policy of dividends, - considering personal traits, - ethical investments, 	<ul style="list-style-type: none"> - a rapid amortization in real assets and skills, - not the right composition of assets, - unfavourable capital structure, - not right preparation for decision-making, - failure of due risk mitigation, - cooperation with offshore markets, - not right (insecure) policy of dividends, - frequent changes of tax policies, - conflicts of interests between owners, - not right level of activities and improvement

The analysis indicates that innovative thinking has a key role because this can lead to successful market activities in the future. The most crucial enemy of the company is the general satisfaction as it might easily result in lagging behind in or being excluded of the market.

Conclusion

Innovative thinking and responsible behaviour of the managers can ensure that a company would be able to cooperate continuously in the market or adapt to the changing economic conditions. It is favourable only if decisions are made responsibly from the financial aspects but with the consideration of moral and ethical issues as well. This is to ensure that yesterday's facts could be tomorrow's life opportunities so that our offspring could enjoy the harmony with nature. It is very important that managers should get proper training to handle ethical issues and adopt responsibly their decisions.

Notes

1 – Its definition can be found for economic issues in Farkas Péter: A globalizáció fenyegetései (Aula, 2002) and Csath Magdolna: Globalizációs végjáték (Kairosz, 2008)

2 – As Nikkolo Machiavelli (1469 – 1527) said: The wish to acquire more is admittedly a very natural and common thing; and when men succeed in this they are always praised rather than condemned. But when they lack the ability to do so and yet want to acquire more at all costs, they deserve condemnation for their mistakes.

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Invest in Ethical Capital

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Abstract

Business ethics has played a very important role in most areas of life in recent years. Decision-makers have to consider issues, handle conflicts and invest in ethical capital not regulated under the law. The profit-oriented approach has a harmful influence not only on the actors of the economy but on the environment as well. The main importance of ethical behaviour in the economy is that it reduces the social costs, the disadvantages and losses the society has to cope with. Ethical codes and investment in ethics as a new approach and supporting ethical banks emerged as new elements in the companies' toolbox. Today it is an indispensable element of the companies' financial strategy to handle the issues of environmental pollution and ethical problems concerning the employees and the business partners.

Introduction

“Numberless are the world’s wonders, but none more wonderful than man.” (Sophocles: Antigone)

People forgot to pay attention to the natural laws in the 20th century, as a consequence of this the natural environment suffered, in other words the balance of nature was damaged. Ecology did not play a role in human history for a long time. Today, however, it is questionable whether we can link the demand for increased production and consumption without severe external consequences. Man's confidence without a carefully designed set of economic activities inflicted serious damage to nature. The approach focusing on money has a bad influence both on the “silent” nature and the actors of economy.

Research into the links of economy and nature can take place in the domains of evolution and system theory. Whenever scientists examine environmental issues, they primarily focus on the artificial environment, the material world, but the natural environment basically restricts the opportunities of any change which means that the symbiosis of nature and economy should be examined. Responsible environmental management has become a major issue, it has a varied set of tools and it implies that the relationship of man and nature should be examined from the economic and financial perspective. (We must not forget about it that responsible environmental management has been a major issue in the EU since the conference in Stockholm in 1972. The action program that is effective today does not determine tasks set to special dates and deadlines but it is designed to be implemented in the long run and it aims to modify the behavioural habits and those of consumption so that the future generation could enjoy a physical environment that could support public health, social and economic welfare.) In this field, ecological economics and environmental management conducts examinations partly from natural, partly from financial – economic perspectives.

Relations between nature and economy are determined by man through their activities, organizations and division of labour, which is getting more and more complicated. The aim of the division of labour at a particular level of development is to provide the maximum profit. Since both economic and natural environment is continuously changing, there are severe restrictions for a mathematic modelling. As it is well-known, living systems such as nature and economy could be described with the curve “S”. If there are no restrictions to the expansion of the system, the curve is exponential, if there are certain restrictions, the curve will be logistical. The curve “S” is the most characteristic feature of the current global economy as society and economy holds restricted resources.

Man as a participant in the global world adopts decisions under the given lawful, social and cultural environment, but our way of thinking is still independent from these issues, which is an important source of risks. In modern world, risks should be categorized into two groups, that is the risks of decision theory which refers to the likelihood of a bad decision and the consequences and the risks emerging during the phase of implementation that could be interpreted as financial risks and can be described by the standard deviation of the expected yield.

Basically, there are two options for receiving returns after an investment: that of real investment and financial investment. With either of the two options, we have to calculate with significant risks. Some of the major questions for our decisions are when we want to invest our money and in what field we want to invest it as markets can be influenced by substantial and rapid changes resulting in a significant rise in or

loss of our investment value. This is especially true for financial investments but affects investment into real assets in the long run as well. Investment into real assets implies that the newly-founded object (as a source of risks) inflicts environmental changes beyond the economic effects.

To summarize all this, the most important characteristics of an investment are:

- they are time- and money-consuming processes,
- they affect the environment in every case that could refer to the geographical environment (roads, bridges, channels, etc.), the change of the composition of population (total number, age, qualifications, etc.) and the variation of their networks (purchase, sales, human relations and settlement relations, etc.),
- the time of operation (long- or short-term operation) affects the balance of economy, the balance of payment and that of the public budget,
- unfinished investments or slow implementations can have serious financial consequences (money investments without returns, costs of maintenance, the obsolescence of the chosen technology, breaking of the networks, appearance of natural damage, etc.)

Characteristics of changes are linked to particularities of the object. A new chemical plant has different effects on the environment from those of a new mine (or when these plants will not be established). Any planning of such facilities should involve ethical issues where minimum burden shall be inflicted on the environment.

Ethics – ethical approach

Are the two terms, ethics and investment linked to each other? If yes, how are they related? They seem to have nothing in common at first glance, but they are tightly linked. Their construction should be examined from the perspective which means that investments are always based on economic calculations that provide rational decision-making, but there are some non-quantifiable conditions for most decisions in every case. Ethical approach implies that further considerations shall be done to investments since silent conditions such as the flora and fauna cannot provide any feedback to the outsiders for minor changes but tensions can sum up in the long run. Most problems can only be identified when severe changes have been made to the natural environment in the long run and then the restoration (if it is still possible)¹ requires substantive financial investment. This level of changes is considered to be a giant leap in the philosophical approach. Environmental changes fall in this category in most cases. Decisions should be made with the consideration of business ethical issues and conscious responsibility.

Ethics, as it is well-known, is a discipline dealing with morals, that is, it refers to the social value of nature, human knowledge and talent. It regulates, harmonizes and controls the interests of individuals and communities. Morals and ethics may differ from time to time, civilization to civilization or continent to continent, they are linked to the changes of global economic processes and it controls the basic behavioural principles of a community. Business ethics – which should be the leading principle for businesses – defines the rules of a decent conduct in business that follow laws and written and oral rules of cooperation. (László Kákosi describes a 3500-year old saying in business ethics in “Ré fiai” (Sons of Ra): “I did not add to or take from the bushel”).

The definition and implementation of ethical business norms came to the foreground in the last years of the 20th century. Ethical codices were established that contained the rules of conduct for employees of banks, insurance companies or other firms. Kaplan Morris, business philosopher said that the most important problem with business ethics is not the fact that there are many who adopt unethical conduct but the fact that there are whole generations unaware of the need that they should adopt ethical conduct." There are, however, some positive changes: there emerged some ethical investments and ethical banks performing special activities in global economy.

Ethical investments – ethical banks

Every investor expects multiplied returns after their investments but some of them determine in what field the money could be invested so beside the economical issues, they pay attention to the use of the money and their consequences. This is a new approach in the domain of investments. Ethical investors attempt to withdraw money from investments inflicting damage to the environment and urge investments in human areas.

Ethical investment does not equal to an inefficient use of invested capital! Eco-efficiency and eco-productivity refer to the need that the job should be performed in an efficient way but with a considerate

use of the natural resources. Ernst Ulrich von Weizsacker and the couple Lovin conducted research (results were published in 1995) into eco-efficiency and they came to the conclusion that efficiency could be increased tenfold. The reason is that technical solutions show a relatively low level of efficiency while a substantive part (80 %) of goods are disposed of after one single use. It is important to encourage consumers to buy products that might be a bit more expensive but more environmental-friendly.

There are some new marks for products such as Socially Responsible Investment (SRI) and new terms for companies (however, they are very rare) such as Corporate Social Responsibility (CSR), which shows the voluntary responsibility of the company, and some ethical tags (codes of conduct) on the products of the companies.

Ethical investors adopt a different conduct from that of financial investors. Ethical investment offers free choice between traditional investment opportunities on the basis of ethical considerations. Ethical decisions are, in most cases, favourable to the business as well. This issue is so important that it has emerged on the agenda of the EU. The characteristics of the new approach of companies' social responsibility were comprised in the Green Book to provoke social dialogue in 2001. Two EU commissioners (for businesses and for social issues) are also concerned with ethical issues. The cash flow between banks and savers play a key role in this regard. If savers took ecological and ethical aspects beside economic ones into consideration, that would evoke change to global cash flows at international level.

Ethical investors trade in short-term advantages for long-term advantages. This requires a self-controlling way of conduct, which would support the business financially in the long run. This is to be considered even if financial conditions of the present days are not at all favourable due to high risks (for this recession or any other recessions of the past).

For investments, assisting partners may also play an important role. Ethical banks whose aim is to form the features of the current money and capital markets work together with ethical investors. Ethical banks perform traditional banking activities but with a consideration of human, social and environmental conditions. It's main objective is to establish a strong economy which is supported by a well-balanced community and a healthy natural environment.

Ethical banks differ from traditional banks in their business policy as they take responsibility for the allocation of financial resources. Their activities have the following features:

- money and humans have tight connections (customer, supplier, creditor, etc.) and this cooperation is important for non-economic aspects as well,
- the SMEs can adapt faster and easier to the changing conditions of economic life, compared to big companies, so these businesses can serve as a base for change,
- the use of loans is very important in the process since only ethical objectives can be supported with loans,
- trust plays a more important role than in classical banking,
- creating and offering favourable alternatives to investors for investment,
- agreements on interests that set the conditions for a long-term cooperation (it originates from German banks of the early 20th century).

Ethical banks are different from classical banks in classical market in the following aspects:

- there is a harmony between ethical and economic activities,
- they have a strict course of business, which aims to be satisfying to clients and the public and
- their activities are public all the time, information can easily be obtained on the company's homepage.

Ethical banks do not offer grants but loans to their clients. They suppose their clients would like to work, they are economically active but they would need some capital to start their businesses. These loans differ from conventional bank loans in two aspects. One aspect is linked to the client's classification as solicitors should not only meet the bank's requirements but endorse some ethical norms. The other aspect is the risks. These loans run with an extreme high level of risk as money is invested in non-conventional areas.

Ethical banks have a lot of duties but they could be summarized with two major points. One is the optimal and continuous production of returns and the other is financing environmentally-friendly investments. They have to look for and develop environmentally conscious investment opportunities.

Conclusion

Ethical investment highlights a new approach that supports sustainable growth by implementing environmentally conscious investments. These efficient investments are investment opportunities that offer a free choice between traditional investment forms by considering ethical issues. Such investments are backed by ethical banks that offer investment opportunities to ethical and responsible savers with the consideration of ecological and ethical aspects. These cash flows do not pursue any speculative aims and so they could alter the constructs of global cash flows. With the reduction of speculation, significant ethical investments and cash flows could lead us to a well-balanced path of economic development.

Notes

- 1 – For more information on this see Perkins, J.: Confessions of an economic hit man

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Decentralisation of Public Sector Finance in the European Union Countries in the Years 2000-2010

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Introduction

Decentralization involves transferring a part of entitlement of the central government to the authorities at lower levels, mainly in the economic, social and administrative area; it involves a reduction of centralization (Kopaliński, 2000). Today it is a common direction of reforms in countries realizing postulates of the subsidiarity principle (Sługocki, 2006). It is a complex process. The problem of centralization and decentralization occupies an important place in the sciences of management, political sciences, administrative law, sociology, political economy, public finance, microeconomics and sciences connected with regional sciences. This issue is also a part of an area of a continuous, and perhaps even an impossible to settle dispute about the role of the state in the economy¹. In many countries, including Poland, two trends collide in this area: on the one hand, there is a maintenance of the central control, as it provides, among others, the opportunity for a gradual leveling differences between regions and sub-regions, on the other hand, it is considered that there is the need for a gradual increase in the extent of decentralization and autonomy of local self-government units. The discussion about centralization and decentralization has a long history, it concerns practically all countries, especially large and medium ones (Flejterski, Ziolo, 2008; Sekuła, 2010). The most difficult aspect of decentralization is decentralization of public finances.

On the basis of public finances, there is a still topical question about the relationship between what should be the responsibility of the government, and what should be the responsibility of local self-governments. This dilemma is undoubtedly difficult to resolve. While arguments about the advantages and disadvantages, so about the effectiveness of decentralization, are divided, it is undisputed that the decentralization of tasks must be accompanied by the decentralization of finance. Keeping in mind the above considerations, it is assumed that the decentralization of the country functioning is often a condition for effective development. And at the regional and local levels the ability to create development through activation of the endogenous potential of a given territory is greater. The purpose of this study is a comparative analysis of the level of public finance decentralization in the European Union countries, in the initial and final year of the first decade of the 21st century (1st January 2001 - 31st December 2010²). Additionally, the year 2007 as the last before the crisis is included. The analysis separates the quantitative and qualitative aspects of public finance decentralization (Ruśkowski, 2004). Finance decentralized territorially (sub-national public sector) includes local government finance and the finance of federated states (in federal countries).

Quantitative aspect

Decentralization of public finance is expressed in the transfer from the central level to the decentralized territorially units (sub-national sector) of public financial reserves in order to provide financing the tasks realized by these units. This is the decentralization of expenditure. One of the basic measures used to assess its level, useful in international comparisons, is the share of the expenditure of sub-national governments in the total spending of the public sector. It shows the scope (size) of decentralization of public finances, that is the quantitative aspect of the process. Figure 1 shows the size of this discussed measure in the European Union countries in 2000, 2007 and 2010³.

¹ G. Kozuń-Cieślak describes the theoretical concepts of decentralization and delegation of competencies in modern trends in economics (Kozuń-Cieślak, 2011).

² Information from 31st December 2000 is given as the data from 1st January 2001. Therefore, the year 2000 is the first year in the charts.

³ Figure 1 does not show the data for 2000 for Ireland, as these figures are not comparable with the data for the subsequent years, because several items included in the expenditure 'local government sector' of Ireland in 2000-2004, since 1st January 2005 were moved to the expenditure, 'central government sector.' According to Eurostat, the sub-national public sector (S1313) includes Local Authorities and vocational education committees. Until 2004, the Health Board was included in S1313 as they were considered to be part of the Local Government Sector. The establishment of the Health Service Executive (HSE) in 2005 at the central level to replace the health boards has brought about significant reclassification in Government Accounts tables. Taking into account the size of the

An analysis of the illustrated in Figure 1 data shows, first of all, a considerable variation of the extent of public finance decentralization in the European Union countries. Conventionally, it can be assumed that the index above 40% means a wide scope of decentralization, the index between 40 and 20% - average, while the index below 20% - narrow. As shown in Figure 1 of the data in four unitary countries - Denmark, Spain, Sweden, and Finland - and in two federal - Germany and Belgium - the analyzed rate reached the level above 40%. In Denmark, local self-governments, realizing more than 60% of the total public sector expenditure, is a major subject in this sector. Similarly, in Spain. The average extent of public finance decentralization was in 13 of the countries studied. In this group countries which stand out are the countries with a higher average rate of decentralization with the index above 30% - Austria, the Netherlands, Poland, Italy. In eight countries the scope of public finance decentralization can be considered to be low. In this group there are three distinctive countries with the index of decentralization below 10% - Greece, Cyprus, Malta. An extreme case is Malta. Its municipalities spent, according to the data for 2010, only 1.5% of public sector expenditure. Maltese and Cypriot communities were the only local self-governments among European self-governments which are not the executors of tasks from three main areas of activity of EU local governments, that is: from education, social services and health care. Greek local self-governments do not have tasks from the scope of health care; education expenditures in 2010 accounted for just over 2% of their total expenditure, and on welfare 11% (*Subnational public finance ...*, 2011).

Despite the crisis of the recent years in most countries over the studied period, there was an increase in the scope of decentralization of public sector finance. The constant increase in the relation of the expenditures of the decentralized territorially units to a total expenditure of the public sector took place in eight countries (Cyprus, Slovakia, Slovenia, the Czech Republic, Lithuania, Italy, Sweden and Denmark). A specific strengthening of the financial position of the local self-government in the public sector between 2000 and 2010 occurred in Slovakia, where during the studied period a second level of local self-government in the form of eight regions was created (2002). Participation of the Slovak self-government public sector increased from 5% to over 18%. Establishment of the regional level took place during this time also in the Czech Republic (2001)⁴, Denmark (2007)⁵ and Greece (2010)⁶ - (*Subnational public finance ...*, 2011). In the first two it resulted in a slight strengthening of the financial position of local self-government in the public sector, which cannot be said about Greece plunged into the crisis. The extent of decentralization of the public sector finance in Romania more than doubled. Between 2000 and 2010 Romanian local self-government took a number of tasks in the field of education, health care, welfare, culture and other local public services (*Sub-national government in the European Union*, 2008).

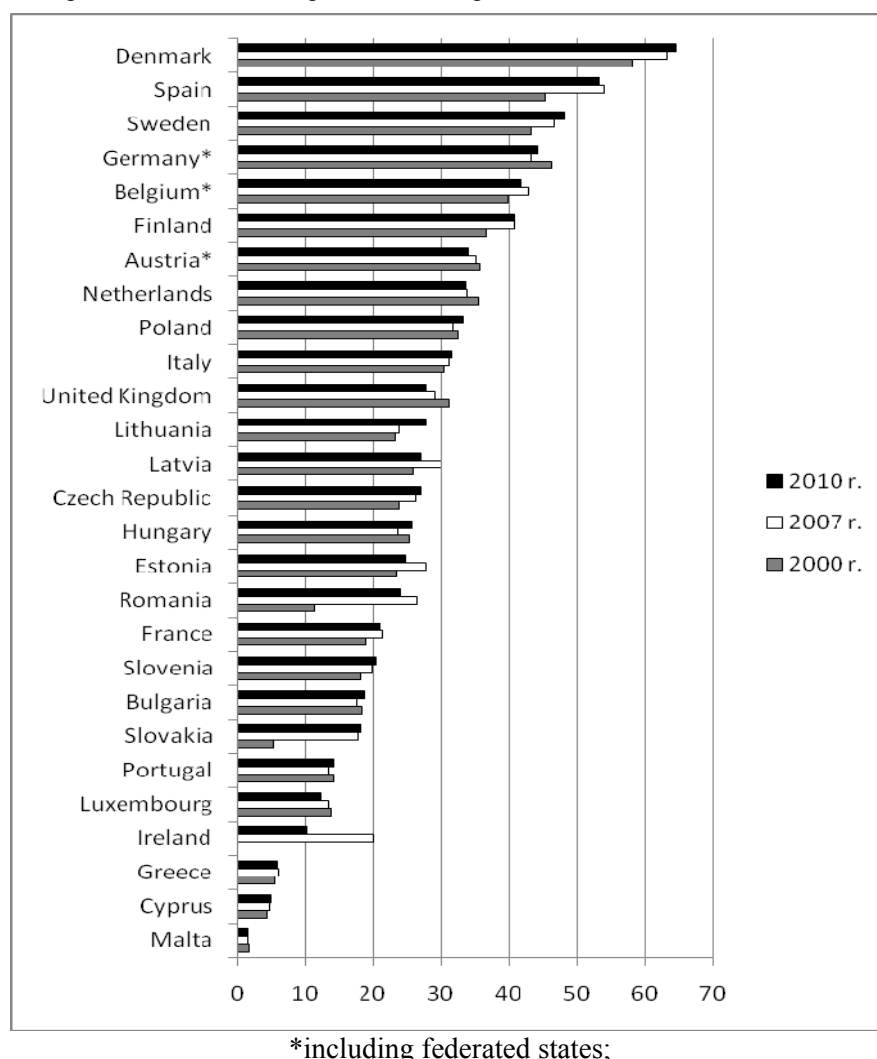
discussed relationship according to the Eurostat data from 2000 (39.4%) would indicate a nearly trebled reduction in the level of decentralization of public finance in Ireland.

⁴ 14 regions were created then.

⁵ As a result of the reform of local government structures in Denmark in 2007 the number of municipalities was reduced thrice (from 270 to 98) and five regions were created.

⁶ In this case 325 units of the basic level and 13 regions replaced the existing 1 034 municipalities and 54 units of the second level called '*prefectural departments*'.

Figure 1. Sub-national expenditure as % of total public sector expenditure - EU countries in 2000, 2007 and 2010 (%)



Source: own calculations based on the Eurostat data.

The year 2010 was the best in this regard for 11 of the 27 countries surveyed, the year 2007 respectively for 8 of them, and in the case of 6 countries (and Ireland), the highest extent of decentralization of the public sector finance was recorded in 2001.

Ireland appeared to be the country in which there was the largest decrease in the ratio of the sub-national expenditures to the total public expenditures - from the level of 20% in 2007 to 10.3% in 2010. This was caused by a significant decline in expenditure of the sub-national public sector at the time (i.e. by 24%), with a simultaneous increase in the expenditure of the general government sector (50%)⁷. The decrease in the sub-national spending was the result of the crisis, and it referred to both the consumer spending (connected with staff salaries and purchases of goods and services) and investment one. Ireland - next to Greece, Spain, Portugal and the United Kingdom - belongs to the group of the European Union countries which were strongly affected by the crisis of the recent years.

Within the public expenditure cuts in Great Britain there was a freeze in the public sector salaries and a reduction of employment (in England in 2010, 132 000 public workplaces were eliminated in so called 'non-essential' services, including 66 000 in local authorities). Also spending on purchasing goods and services was reduced, however, social spending increased (*Subnational public finance ...*, 2011). The crisis of the recent years and the reforms reducing the number of local self-government units in Great Britain caused that in 2000-2010 it was one of four countries in which there was a small but steady decline in the share of the sub-national expenditure in the total public expenditure. The other countries were Luxembourg, the Netherlands and Austria. In the Netherlands and Luxembourg, similarly to Great Britain (but also to Denmark, Latvia, Greece, Finland mentioned above) the number of municipalities was

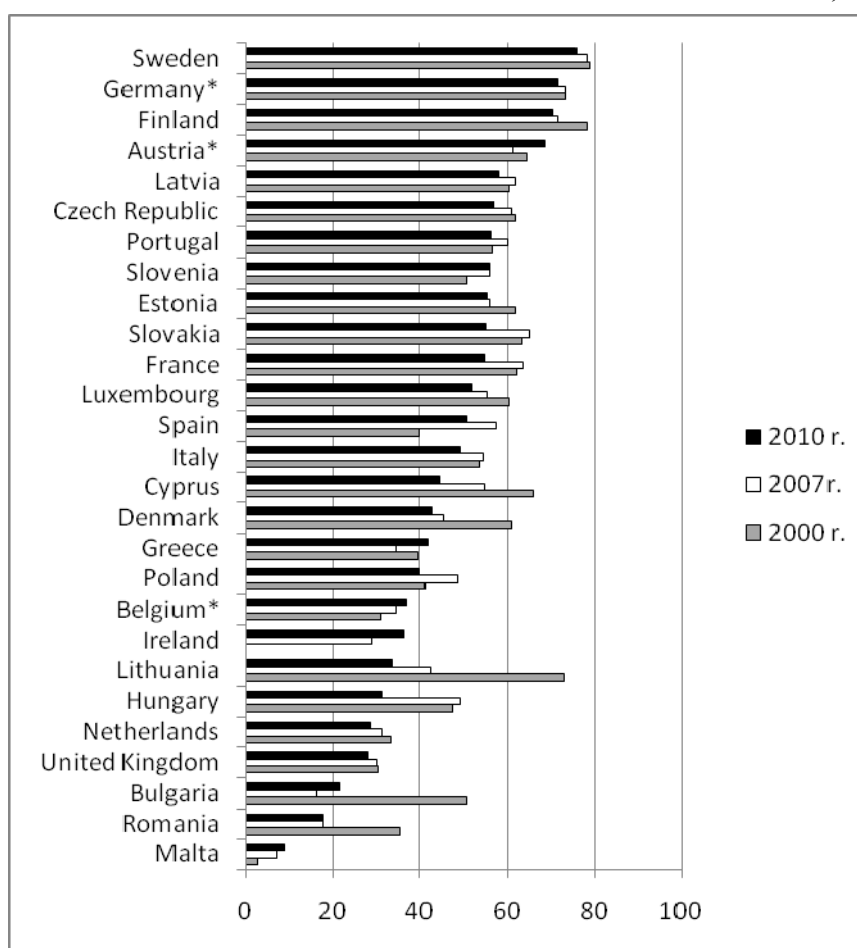
⁷ Own calculations based on the Eurostat data.

reduced. In Luxembourg, the project of restructuring municipalities, which started in 2008, is to reduce their number from 116 in 2009 to 71 in 2017. In the Netherlands the number of municipalities undergoes reduction from year to year - between 2007 and 2010 it decreased by 25 (from 443 to 418) - (*Subnational public finance ...*, 2011). These reforms aim at improving the rationality of the public funds management, as well as improving the quality of providing public services.

Qualitative aspect

Decentralization of public finances also means equipping the local self-government with its own sources of income and the possibilities of shaping their height (i.e. decentralization of revenues). One of the basic measures used to assess its level, useful in international comparisons, is the share of own revenues of decentralized territorially units (sub-national sector) in the structure of their revenues. It shows the scale of local government powers in the scope of collecting their revenue and their spending, which is considered as a measure of the quality of public finance decentralization and financial autonomy of sub-national sector units (Markowska-Bzducha, 2004). Figure 2 shows the size of the discussed measure in the European Union countries in 2000, 2007 and 2010.⁸

Figure 2. Sub-national own revenues as % of the total sub-national revenues - EU countries in 2000, 2007 and 2010 (%)



* including federated states;

Source: own calculations based on the Eurostat data.

The analysis of the data illustrated in Figure 2 shows, similarly to the case of the extent of decentralization, clear differences in the quality of public finances decentralization in the European Union countries. The share of own revenues in the structure of the sub-national sector revenues ranged from about 20 to about 80%. Malta was an exception. Its local authorities as the only ones among the EU-27 countries do not have tax revenues either their own or shares in state taxes (Markowska-Bzducha, 2005). Grants constitute over 90% of their income.

⁸ Similarly to Figure 1 the data referring to Ireland for 2000 is not presented.

By convention it can be assumed that the discussed index above 50% means a high quality of public finance decentralization, the index between 50 and 30% - average, while the index below 30% - low. The classification of countries according to the level of the analyzed index is shown in Table 1.

Table 1 Classification of the European Union countries by the quality of the public finance decentralization

Share of own incomes in total incomes of the subnational government sector	2000	2007	2010
high (over) 50%)	Sweden, Germany, Finland, Austria, Latvia, Czech Republic, Portugal, Slovenia, Estonia, Slovakia, France, Luxembourg, Italy, Cyprus, Lithuania, Bulgaria,	Sweden, Germany, Finland, Austria, Latvia, Czech Republic, Portugal, Slovenia, Estonia, Slovakia, France, Luxembourg, Italy, Cyprus, Bulgaria,	Sweden, Germany, Finland, Austria, Latvia, Czech Republic, Portugal, Slovenia, Estonia, Slovakia, France, Luxembourg, Bulgaria,
average (50 – 30%)	Spain, Greece, Poland, Belgium, Hungary, Netherlands, United Kingdom, Romania	Denmark, Greece, Poland, Belgium, Lithuania, Hungary, Netherlands, United Kingdom,	Italy, Cyprus, Denmark, Greece, Poland, Belgium, Ireland Lithuania, Hungary,
low (below 30%)	Malta	Malta, Romania, Bulgaria, Ireland	Malta, Romania, Bulgaria, Netherlands, United Kingdom,

Source: own study based on the data presented in Figure 2.

Distribution of the countries in Table 1 shows that in many countries the quality of public finance decentralization is high. The data illustrated in Figure 2 and Table 1 also shows that during the studied period there was a decline in the quality of decentralization of public sector finance in the European Union countries. In the first part of the period - between 2000 and 2007 - it was the result of an increase in the importance of transfers, mainly from the central budget, in the budgets of sub-national governments. Especially in the new Member States the extension of the scope of local self-government tasks was accompanied by a multiple increase in the transfers making its revenues, both current and capital (among them there also were funds from the European Union budget). Record holders in this area were Hungary, the Czech Republic, Lithuania, Romania, Bulgaria. In the group of the EU-15 countries, a multiple increase in the value of transfers directed to the budgets of local authorities took place in Denmark and Sweden⁹.

In the second part of the studied period, after 2007, a decrease in the quality of decentralization of public sector finance was largely the result of the economic crisis, which caused a decrease in the main component of own revenues which are tax revenues¹⁰. In the group of EU-27 countries, these revenues fell by 1.5% in 2010 in comparison with the previous year. This decrease was considerably lower than in 2009 (-4.3%), when the effects of the economic crisis in the tax area were the most noticeable. In 2009, the decline in tax revenues compared with 2008 took place in twenty countries. In 2010, a further decline in tax revenues occurred in ten countries, in several countries in Central and Eastern Europe (Slovakia, Hungary, Lithuania, Estonia), as well as in Spain (-14.4%), Luxembourg (-2.7%), Great Britain (-1.3%) and Germany (-0.9%). The deepest drop in tax revenues of local self-government in 2007-2010 took place in Hungary and was over 40%. Particularly

⁹ Own calculations on the basis of the Eurostat data.

¹⁰ Tax revenue accounts for, on average, 40% of total sub-national revenue in the EU-27 countries. This tax revenue comes from both national taxes that are shared with the central State (40% of taxation) and their own local taxes (60%). The main taxes that are shared with the local authorities are personal income tax (approx. 15 countries), company income tax (around ten countries) and, to a lesser extent, VAT (Federal States, Spain, etc.). This type of taxation is predominant in CEE countries and the Federal States where sub-national governments receive a portion of national tax revenue which is redistributed to them depending on specific sharing mechanisms. Sub-national governments have their "own-source" taxes when they have a degree of leeway on the tax rates and bases, even if this freedom is sometimes controlled. This concerns, mainly, property taxes, local taxes on economic activity, local income tax (Nordic countries, Belgium, Italy where there is a local surtax on income tax) and diverse indirect and direct taxes (taxes on real estate transactions, donations and inheritance, garbage handling, energy, automobiles, etc.). Own-source tax revenue accounts for the lion's share of local tax revenue in France and in the Nordic countries. (*Subnational public finance...*, 2011).

affected by the crisis were also incomes from assets (interests on deposits and investments, dividends, rents, etc.), which fell in 2010 in about 20 countries. On average in the EU-27 by over 16% compared with 2008 (-2.6% in 2009 and a further -14.0% in 2010). As a result, in the case of twenty countries the share of their own revenues in total sub-national revenues decreased in 2010 compared with 2007 (and in reference to 2000). The group of countries with high levels of financial autonomy of local self-governments was reduced from seventeen to thirteen countries, and the group with low levels increased from one to five countries (Table 1).

Summary

Made in the study the analysis of decentralization of public sector finance in the European Union countries in the years 2000-2010 allowed us to formulate some conclusions presented below.

In the studied group of countries in the analyzed period there was a clear differentiation in the level of decentralization of public sector finances, both in quantitative and qualitative aspects. In the qualitative terms, the largest group consisted of the countries with an average extent of decentralization, and in the qualitative terms, countries with a high level of autonomy of sub-national governments.

In most European Union countries in the studied period there was strengthening of the financial position of the sub-national public sector through increasing its participation in the implementation of public tasks, and consequently, in the total public expenditure. This concerned especially the new European Union countries (except for Malta), but also the EU-15 countries (Denmark, Spain, Sweden, France, Finland), in which the reforms of local self-governments were carried out.

Expanding the scope of decentralization of public sector finance during the studied period was accompanied by increasing the share of transferred revenues in the structure of sub-national revenues in most European Union countries. Funding transfers sent to lower levels of tasks and reduction in the tax receipts and assets (caused by the economic crisis) contributed to the reduction in the quality of public finance decentralization in the European Union countries in the studied period.

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Investment Decision-Making of Self-governments

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Abstract

The aim of the paper is to analyze the decision-making methods used by territorial self-government regions with an emphasis on the self-governments at the level of NUTS III. The first part of the paper focuses on the specifics of the investment activities; it approaches the differences from the normal operating activity, the time period to be considered and the basic principles of capital planning/budgeting. The rest of the paper is devoted to the practical point of view. First it states the basic features of the methodology of the primary research and then it presents the results of the investigation of the knowledge and use of decision-making methods based on economic evaluation and of the weighting methods in the multi-criteria decision-making. The research was conducted on the level of NUTS 3 and were addressed the self-governments of three neighbouring countries: Slovak Republic, Hungary and Czech Republic.

Key words

Decision-making methods, Weighting methods, Multi-criteria decision-making, Self-governments

Introduction

The investment decision-making is an important process through which the businesses entities, municipalities, cities and whole regions are trying to realize their strategic objectives. The investments contribute to the improvement of their performance and competitiveness.

Investment activities

Investment activity of the company or municipality, respectively region differs from a normal operating activity in several areas (Valach, 2006), namely:

- a decision is made in the long term,
- since it is a long-term decision, it is associated with greater risk of deviating from the original intent, whether the expected costs or the expected incomes from investments (this will affect the expected return),
- a capital-intensive operations that require large one-time deposits,
- investment activities and investment decisions are often time consuming and difficult to coordinate the activities of different actors of the investment process (e.g. investors, designers, contractors or subcontractors, etc.). These actors have their economic interests and goals,
- investment activities are very closely related to the application of new technologies, new products. Through the investments is implemented a large part of innovations,
- some investments have negative impacts on the infrastructure and ecology, requiring further investment in this area.

Within the investment decision-making it is important to consider the time period for which the decision is made. It can be:

1. long-term (strategic) decision-making, which takes into account the time factor and the associated higher risk. Concerns the substantive investment in fixed assets and long-term financial investments. Decisions of this type affect the future status of village, town or region and its financial situation.
2. short-term decision-making that can be characterized as a continuous search for ways of adapting financial resources and needs within a shorter period, usually one year. This type of decision-making is associated with a significantly lower risk than the long-term financial decisions and any changes are easier to implement (Valach, 2006).

Long-term funding strategy means the search of the most appropriate alternatives for financing investments by various funding sources. This includes the capital (financial) restructuring of existing assets.

The process of investment decision-making and the associated long-term funding of investments is in the modern theory and practice usually called **capital planning** (Capital Budgeting). It consists of several stages (Clark, Pritchard, Hindelang, 1989):

- a) setting long-term objectives and investment strategy,
- b) searching for new, promising projects and pre-investment preparation,
- c) development of capital budgets and forecasting of cash flows related to projects,
- d) evaluating the effectiveness of projects from different perspectives,
- e) selection of the optimal project funding,
- f) control of expenditure on projects and subsequent evaluation of completed projects.

Some phases of capital planning are overlapping and there must be a feedback between them. The starting points of the capital planning are the strategic objectives and procedures.

Material and methods

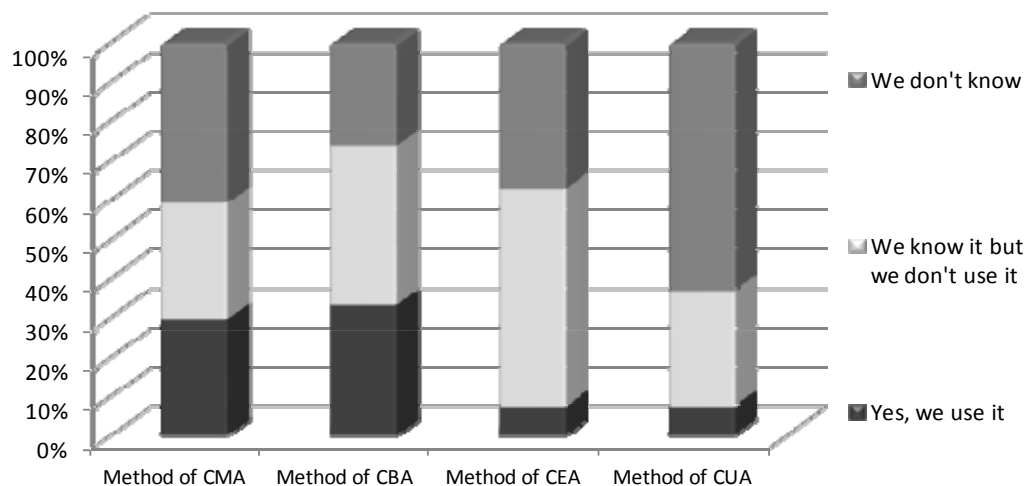
Within the research carried out, the respondents were contacted by telephone. Due to the geographical distribution of the research sample, we decided to implement a categorized (structured) interview by phone. A special questionnaire, on which we rely in this case, was created in the online platform offered by Google in the tool GoogleDocs.

As respondents were addressed the representatives of the self-governments at the NUTS 3 level in the three analyzed countries – the Slovak Republic, Hungary and the Czech Republic. There were addressed all the 42 regions, reliable data were get from 27 of them (6 in the Slovak Republic, 12 in Hungary and 9 in the Czech Republic).

Results and discussion

Knowledge of decision-making methods in terms of the criteria taken into account when designing the most suitable alternative investment is inevitable. The analysis investigates the level of knowledge of decision-making methods by self-governments and their practical use in decision-making process. Graph (Fig. 1) shows the state of knowledge and use of decision-making methods based on economic evaluation.

Fig 1 Knowledge of decision-making methods based on economic evaluation



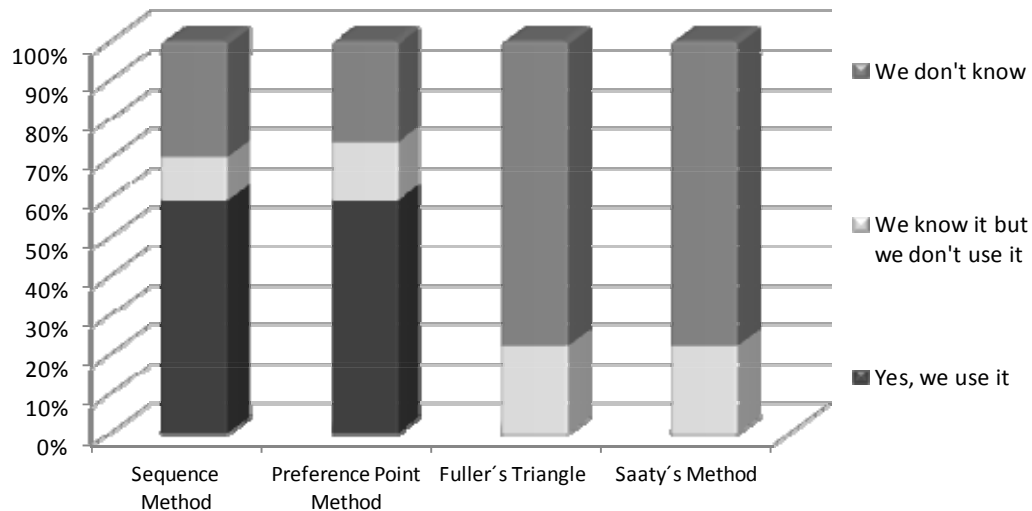
Source: self elaboration

Among the four analyzed methods the most popular method is the method of CBA (cost-benefit analysis) based on a calculation of costs and revenues in monetary terms. This method is known by 74% of self-governments and it is also the most used method. One of the two least used methods is the method of CEA (cost-effectiveness analysis) based on the quantification of costs and benefits (also the non-financial ones) of the investment project, even though it is among the most known methods with 63%. The second most used method is the method of CMA (cost-minimization analysis), in which only the inputs are quantified and it is known by 59% of the self-governments analyzed.

Within the survey we also found out that of 15 representatives of self-governments, who said they do not use any of the four methods, 7 representatives even know any of these methods. The representatives of 10 self-governments said they know all four methods, but the two of them also said that they do not use it.

In multi-criteria decision-making there are evaluated the investment possibilities according to several criteria. Investment variants usually do not reach the same results in all criteria, and therefore it is necessary to determine the importance of each. For this purpose we can use one of the weighting methods, these are the Sequence Method, the Preference Point Method, the Fuller's Triangle and the Saaty's Method. In the survey we investigated the potential use of multi-criteria decision making in self-governments. This potential is evaluated also on the base of knowledge of the weighting methods in multi-criteria decision making (Fig. 2).

Fig 2 The knowledge and the use of weighting methods in the multi-criteria decision-making



Source: self elaboration

The self-governments analyzed use only two of the weighting methods in multi-criteria decision making. These are the Sequence Method and the Preference Point Method. These two methods are used approximately at the same extent. Following from the findings of the research, the other two methods are not used at all, while around 22% of the self-government representatives responded that they know both of the methods. Only 10% of the self-governments indicated that they do not use the Sequence Method even if they know it. Similar results can be seen concerning the Preference Point Method, where 15% of self-governments which know this method of weighting are not using it.

The survey also shows that eight representatives of the self-governments stated that their institution is not using any of the four multi-criteria decision-making weighting methods and five of the eight representatives neither know any of these methods.

Summary

The results of the research described in this paper shows that the most known decision-making methods based on economic evaluation are the methods of CBA, CEA and CMA. The results also shown, that there is some disproportion between the knowledge and the use of these methods. The most known method, the method of CBA, is also the most used method, but the second one is the method of CMA that is nearly so frequently used as the first one. Although the CEA is quite known method, it is used relatively little.

The self-governments that would like to use the multi criteria decision-making need to know also the weighting methods. In this field has a bigger potential the Sequence Method and the Preference Point Method. These are the best known and also the most used methods of weighting within the multi-criteria decision-making of the analysed self-governments.

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Efficiency of Public Expenditure on Human Capital in the European Union Countries (Dea Approach)¹

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Human capital: a factor of economic growth and development

Human capital is considered to be one of the most important factors determining economic development. Investing in human capital increases the country's wealth, accelerates the progress of civilization and boosts the country's competitiveness in the international trade because competitiveness of the economy is determined by knowledge, qualifications and quality of human resources.² M.G. Woźniak writes that modern theories of economic growth prove that in the long term investments in human capital are the most efficient ones. Such investments increase productivity generating higher income for workers, businesses and even countries, run a lower risk of putting people out of work than other investments, strengthen the foundations of democracy and limit the influence of populist ideologies, and contribute to the inclusion of the national economy in the global trend of developing a new economy based on information and communication technologies (Woźniak 2008, p 20). It is also necessary to mention the changes in the assessment of the quality of life which occur together with the progressive development of civilization. While the quality of goods was the determinant of the standard of living in the industrial society, the postindustrial society is characterized by the quality of life determined by services in the areas of health, education, recreation and culture. Social services are activities aimed at the human, and their purpose is to shape and enrich people's physical and intellectual resources which result in the creation of human capital (Janoś - Kresło 2002, pp. 7-22). S.R. Domański defines human capital as a resource of knowledge and skills, health and vital energy contained in a given society. This resource is determined by genetic characteristics of the given population once and for all, but it can also be augmented by investment (Domański, 1993, p 19). The views presented in the literature on the subject are in agreement that it is possible to distinguish five major categories of actions that increase the quality of human abilities and thus can be called investments in people or in human life (Mikuła, 2006, pp. 109-110):

- development of health care services and facilities, in a broad sense, affecting life expectancy, vitality, strength and vigor of people,
- teaching children, adolescents and adults at all levels of education,
- migration of people in order to adapt to the changing conditions of their surroundings,
- seeking information about the economic situation of companies and professional prospects,
- scientific research that results in expanding knowledge and increasing the possibilities of its application.

This study is an attempt to evaluate the efficiency of public spending that is aimed at the improvement of human capital quality in 25 European Union countries.³ It is assumed that the condition of human capital will be assessed in two areas of the influence of the state: "education" and "health".

The "education" impact area reflects the potential of the examined society's knowledge. L. Zienkowski defines "knowledge" as the collection of information, views and beliefs attributed to cognitive or practical values, and the scientific meaning of this term usually is: all the reliable information about reality together with the ability to use it. Education is an organized process of scientific knowledge acquisition, its use and distribution (Zienkowski 2003, p 16). Since the specificity of the effects of the education system is that they are visible only in the long term, and they result from multiple activities at different levels of education, they are very difficult to measure and it is difficult to assess the level of knowledge of a given society.

The "health" impact area reflects the condition of the main economic resource, namely human resources, as only a healthy society is capable of creating national wealth. For particular individuals, health determines the possibility of personal development and of achieving economic security, it is a determining factor for high work output, efficient learning and a person's physical, emotional and intellectual development. Thus, it has an effect on the increase in the activity of individuals in many dimensions: economic, social or

¹ The article uses the parts of work titled „Ocena efektywności wydatków sektora publicznego w Polsce na tle krajów Unii Europejskiej” realised in 2010 within the research project by MNiSW No NN112069436 (decision No 0694/B/H03/2009/36).

² *Kapitał ludzki. Stan i perspektywy*, Report No 27 RSSG by RM, Warsaw 1998, p. 14.

³ Cyprus and Malta are excluded from the research due to the lack of data referring to the PISA result rate.

professional, ultimately contributing to the overall level of economic activity of a given society (Białynicki 2007). M. Janoś-Kresło writes that health is an individual, fundamental value of a person, ensuring their existence, development and actions. It is also a fundamental social value, which the social, cultural and economic development of a society depends on (Janoś - Kresło 2002, pp. 82-83). According to the WHO definition, health is the fullness of physical, mental and social wellbeing. Therefore, health should be treated not as an "absence of a disease", but as a positive value of economic importance in the context of socio-economic development of the country.⁴ To assess the condition of society's health is, therefore, not a simple matter, because the very definition contains immeasurable elements.

Based on the review of 20 different empirical studies on the influence of human capital on the pace of economic growth, M. Próchniak points out in his study that there is no good measure of human capital and lists the measures used by the authors of the studies he reviewed, where indicators of the universality of education, average number of years spent studying, but also test scores and IQ level were most often used to assess the quality of education. However, to assess the quality of health, mainly indicators of life expectancy and child mortality were used. Most of the analyzed studies confirmed the presence of a positive correlation between the condition of human capital and the pace of economic growth (Próchniak 2009, pp. 48-51).

The present study, in order to evaluate the efficiency of public expenditure on the strengthening of human capital resources, formulates a model of efficiency evaluation with the use of the Data Envelopment Analysis method (the DEA-BCC-O model),⁵ where:

- for input, public expenditure on education per student (EDU_EX_ps_PPP) and healthcare expenditure per capita (HEA_EX_pc_PPP) were used⁶, both expressed in terms of the parity of the purchasing power of money;
- for output, two synthetic measures were used, which are meta attributes created on the basis of statistically validated diagnostic features reflecting the potential of knowledge (EDU_SYNT) and health (HEA_SYNT) of the society in a given country.

The research used measures calculated as an arithmetic mean of the data for the period 2005–2009 for the output variables, and for the period 2000–2008 in the case of input variables (in the case of input, the data was used for a longer period of time, to take into consideration, if only approximately, the fact that the desired results in health care and education require time, and the events reflected in today's statistics are largely the result of expenditures incurred several years earlier).

The DEA model for the assessment of efficiency of public expenditure affecting the potential of human capital

When estimating efficiency of spending with the DEA method, so called technical efficiency is estimated, which examines the extent to which inputs are transformed into outputs. In this case, the assessment will concern the efficiency of transforming public spending on health care and education into "the potential of health and knowledge" of a society (expressed in terms of selected diagnostic features.)

Evaluation of technical efficiency is determined by the difference between the outputs/inputs ratio achieved by a given subject and such a ratio for the "best model" (which can be determined theoretically or empirically). Technical efficiency can be expressed as the potential for increasing the amount of outputs for a given quantity of inputs or the potential for reducing the inputs consumed to produce a given quantity of outputs. The level of technical efficiency is influenced by the size of activity (*scale efficiency*) of a given subject and by applied managerial practices (*non-scale technical efficiency*). Technical efficiency is based on "technological productive capacity," however, it is not associated with the level of prices and costs (Cooper, Seiford and Tone, 2007, p 11).

This study assumes that one cannot make an assumption that a particular change in inputs (public spending) will be accompanied by the same change in the value of outputs, therefore a variant of DEA-BCC assuming variable returns to scale (*VRS*) has been used in the calculations.⁷ At the same time, the

⁴ World Health Organization (<http://www.who.int/hac/about/definitions/en/>).

⁵ DEA is a nonparametric method using the techniques of linear programming. The research uses the output oriented BCC version that assumes the existence of variable returns to scale. The description of the theoretical basis of the DEA method can be found e.g. in the monograph (Guzik 2009), (Kozuń – Cieślak 2011).

⁶ For an interesting study on health care expenditure in EU Member States, see: (Markowska-Bzducha (a), 2009, p. 555-562; Markowska-Bzducha (b) 2009, p. 129-137).

⁷ The DEA model with variable returns to scale was developed by R.D. Banker, R.F. Charnes and W.W. Cooper in 1984 and it is symbolically marked as BCC after the initials of their surnames.

author chooses an output oriented model, which means that the research is oriented towards seeking solutions which will allow to improve the achieved outputs of the public sector activity in the area of health care and education with the same level of inputs.

To describe the potential of knowledge in all the analyzed economies, three diagnostic features, characterized below, have been chosen:

- 1) *Gross Secondary Enrollment Rate Index, GSE* – the ratio of the number of learners (as at the beginning of the school year) at the secondary education level (regardless of age) to the population (as on 31st December) in the age group defined as corresponding to this educational level. Secondary level of education can be seen as the level which generates awareness of the need for further upgrading of qualifications and for activities aimed at self-development, and simultaneously creates a predisposition to draw personal benefits resulting from the progress of civilization.
- 2) *Quality of Educational System Index, QES* – examines whether and how the quality of educational system is developing. The Index is measured on a scale of 1 to 7, where 1 means that the system does not meet the needs of competitive economy, and 7 indicates that education is of such quality that meets the demands of the modern competitive economy. R. Lewandowska-Nowak writes that education should not only suit current needs but it should be ahead of its times, so that it can prepare a person to consciously and responsibly shape the future both for themselves and for future generations (Lewandowska, 2006, p 148).
- 3) *PISA Index* – gives information about the skills of students who are 15 years old. PISA stands for the name of Programme for International Student Assessment – an international study coordinated by the OECD. The research examines students' skills organized into three areas: reading and reasoning in the humanities (*reading literacy*), mathematics (*mathematical literacy*), and reasoning in science (*scientific literacy*). These three areas are considered to be decisive when it comes to the possibilities of further development, both individual as well as social and economic. The PISA program examines the extent to which students in the final phase of the uniform universal education have the capital of knowledge and skills needed in today's world of adult life, including the labor market.⁸

Another area determining the assessment of human capital is "health". To describe the health potential in the surveyed countries, the following four diagnostic features have been selected:

- 1) *Infant Mortality Index, IM* – shows the number of infant deaths (i.e. children aged 0-1 years) compared to 1000 live births. Perinatal care is an important part of health care for the whole population, and its quality is a sensitive measure of the state's health policy. Any shortcomings in this area are revealed clearly by the infant mortality rate. This indicator is considered to be a synthetic measure of the society's health and the level of health services.⁹
- 2) *Unmet Needs for Medical Examination, reason: waiting lists Index, UMEW* – is the percentage of people who, although they felt the need for medical care, voluntarily gave up on it or were forced to do so because of an excessively long waiting period. This indicator measures the size of the problem of health service inefficiency due to a large number of patients.
- 3) *Suicide Death Rate Index, age: between 15-19 and 50-54 years, SDR* – indicates the number of suicide deaths per 100 thousand inhabitants. Suicide is the most tragic symptom of social and personality disintegration. It reflects the psychophysical "immunity" of a society.
- 4) *Self-Perceived Health as Good and Very Good Index, SPH* – is an attempt to determine the approximate state of health of a society. For this purpose, researchers use surveys to reach a statistical group with the question: "Would you describe your health as good or very good?" In this way they create the indicator which reflects the percentage of healthy people, who do not need medical services, in the entire society.

The collected statistical data relating to these factors of the outputs and the data referring to the amount of the inputs in the analyzed group of countries have been included in the appendix (Table A1.)¹⁰ The collected data have been subjected to verification with statistical methods. In order to eliminate a lack of balance in the

⁸See: IFiS PAN http://www.ifispan.waw.pl/index.php?lang=pl&m=page&pg_id=99.)

⁹ Quotation from the answer of the undersecretary of state in the Ministry of Health to the parliamentary question No 11852 on infant mortality in Lower Silesia (<http://orka2.sejm.gov.pl/IZ6.nsf/main/175EE7FC>.)

¹⁰ These variables were of course subjected to statistical verification in order to eliminate the phenomenon of "over-representation" of a feature among the output variables (it is assumed that the correlation coefficient cannot be higher than 0.75); the coincidence of input variables and the output variable were also examined.

impact of different features on the model, the input and output variables have been standardized with the quotient mapping method.¹¹ The choice of the standardization method was subordinated to the purpose of obtaining standardized variables with positive values in a constant interval (0, 1>. Because three of the selected output variables (*IM*, *UMEW*, *SDR*) are destimuli or variables whose higher values determine a lower level of the examined phenomenon, their transformation was necessary to unify the character of features (in this study, a differential method – subtracting from the maximum value, which after normalization is 1 – has been used). On the basis of thus obtained diagnostic variables two synthetic measures have been constructed: health (*HEA_SYNT*) and education (*EDU_SYNT*) – in both areas diagnostic variables were assigned the same weight. The final set of variables used to test the efficiency with the DEA-BCC method is shown in Tab. 1.

Table 1 The set of measures of inputs and outputs used to evaluate the efficiency of public spending on "education" and "health" with DEA

Country	Outputs		Inputs	
	EDU SYNT	HEA SYNT	EDU EX ps PPP	HEA EX pc PPP
Austria	0.8377	0.7823	0.6805	0.6693
Belgium	0.9582	0.7705	0.5652	0.5858
Bulgaria	0.6859	0.5583	0.1593	0.0978
Czech Republic	0.7981	0.7516	0.2997	0.3120
Denmark	0.9327	0.8029	0.8732	0.6524
Estonia	0.8138	0.4233	0.2485	0.1696
Finland	0.9703	0.6764	0.5336	0.4633
France	0.8596	0.7629	0.5753	0.6428
Germany	0.8203	0.7399	0.5227	0.6493
Greece	0.7228	0.8407	0.3014	0.3580
Hungary	0.7618	0.5787	0.2948	0.2282
Ireland	0.8961	0.7925	0.4590	0.5634
Italy	0.7355	0.7425	0.5367	0.4764
Latvia	0.7646	0.4323	0.2100	0.1180
Lithuania	0.7661	0.3326	0.2000	0.1538
Luxembourg	0.7825	0.8363	1.0000	1.0000
Netherlands	0.9153	0.8148	0.6026	0.5928
Poland	0.7791	0.4907	0.2012	0.1555
Portugal	0.7508	0.7387	0.3799	0.3626
Romania	0.6874	0.5904	0.1078	0.1042
	0.7319	0.6773	0.1994	0.2298
	0.8025	0.7110	0.4223	0.3492
Slovakia	0.7954	0.8335	0.4321	0.4024
Slovenia	0.8973	0.7149	0.6439	0.6150
Great Britain	0.8177	0.7523	0.4268	0.5463

Source: Own study based on the data contained in Table A1.

Evaluation of the efficiency of public spending on investment in human capital in the EU countries: results of the research

On the basis of the calculations made with the use of the *DEA Solver* program,¹² one can make the following assessment of the efficiency of public spending on building human capital in the studied group of 25 European Union member states. The results of the research, including efficiency coefficients and the position of each analyzed country in the ranking and the nature of the returns to scale achieved by studied economies, as well as reference solutions for the inefficient countries, are listed in Tab. 2.

¹¹ There are three main groups of standardization transformations: standardization, unitarization and quotient transformation. In the present study quotient mapping was performed according to the formula $z_{ij} = \frac{x_{ij}}{\max_{i=1,2,..,n} x_{ij}}$:, where:

z_{ij} - the value of the normalized feature x_{ij} . For more information on the standardization transformation, see for example: (Młodak 2006, pp. 37 - 41).

¹² *DEA solver*, Springer Science+Business Media, LLc, ©2008.

Table 2 Coefficients of the DEA-BCC-O efficiency, place in the ranking, types of returns to scale and reference solutions

Country	Results of DEA BCC-O calculations				
	Efficiency score	Rank	Economies of scale of the object*		Reference solutions for inefficient DMU
			efficient	inefficient	
Austria	0.9532	19		DRS	Luxembourg, Netherlands, Spain
Belgium	1	1	DRS		
Bulgaria	1	1	CRS		
Czech Rep.	1	1	DRS		
Denmark	1	1	DRS		
Estonia	1	1	DRS		
Finland	1	1	DRS		
France	0.9420	21		DRS	Belgium, Netherlands, Ireland
Germany	0.9168	24		DRS	Greece, Netherlands, Ireland
Greece	1	1	DRS		
Hungary	0.9605	18		DRS	Finland, Poland, Romania
Ireland	1	1	DRS		
Italy	0.8952	25		DRS	Luxembourg, Netherlands, Spain
Latvia	1	1	DRS		
Lithuania	0.9856	16		DRS	Latvia, Poland, Romania
Luxembourg	1	1	DRS		
Netherlands	1	1	DRS		
Poland	1	1	DRS		
Portugal	0.9352	23		DRS	Czech Rep., Finland, Spain
Romania	1	1	CRS		
Slovakia	1	1	DRS		
Slovenia	0.9612	17		DRS	Czech Rep., Finland, Spain
Spain	1	1	DRS		
Sweden	0.9357	22		DRS	Belgium, Finland
G. Britain	0.9446	20		DRS	Czech Rep., Greece, Ireland

* - CTS – constant return to scale, IRS – increasing return to scale, DRS – decreasing return to scale.

Source: Own study with the use of the *DEA Solver*, Springer Science + Business Media, LLC, © 2008.

With the DEA method, fifteen efficient economies (efficiency coefficient = 1) have been distinguished in the studied group: eight belonging to the so-called "old" EU member states (Belgium, Denmark, Finland, Greece, Ireland, Luxembourg, the Netherlands and Spain) and seven "new" EU members (Bulgaria, the Czech Republic, Estonia, Latvia, Poland, Romania and Slovakia). The average value of the efficiency coefficient in the studied group was 97.72% with a standard deviation of only 0.03. The lowest value of the efficiency coefficient amounting to 89.5% and belonging to Italy means that the worst-rated economy shows only 10.5% of inefficiencies as compared to the leaders. Therefore, it can be said that in the examined group of countries there is very little variation of the efficiency coefficient of public investment in human capital (coefficient of variation is only 0.03).

The BCC model, used in the study, makes it possible to estimate efficiency with the assumption of variable returns to scale and allows for so-called decomposition of technical efficiency, thus enabling us to say whether the inefficiency of a given object (in this case, a given economy) results from the so-called wasting inputs (so-called pure technical inefficiency) or from the fact that the activity is not in the optimal area of return to scale (the so called scale inefficiency).¹³

The studies show that Bulgaria and Romania experience constant return to scale (CRS), which means they achieve both pure technical efficiency (PTE) and scale efficiency (SE). All the other countries which were assessed as efficient in the DEA-BCC model see decreasing return to scale (DRS), which means they achieve operational efficiency (PTE), but at the same time their overall technical efficiency is affected by shortcomings in the achievement of scale efficiency (SE).

However, in case of the countries rated as inefficient in terms of the DEA-BCC model, it would be possible to improve efficiency, if they applied the solutions used in the countries described as referential (last column in

¹³ For more information on the interpretation of the decomposition of technical efficiency into pure technical efficiency and scale efficiency, see.: (Cooper, Seiford and Tone 2007, pp. 89–90).

Table 2). Thus, analyzing the case of Italy, which is last in the ranking, referential solutions are the solutions used in Luxembourg, the Netherlands and Spain. However, in this case, as well as in all other countries, the increase in efficiency after the use of referential solutions will be connected with a decreasing return to scale.

With the application of the DEA-BCC-O model (output oriented), it is possible to project the level of potential outputs for each examined country that would provide it with 100% efficiency (while keeping inputs at the current level), if the country adopted the methods of "producing results" (technology), such as are applied by the countries referred to as the recommended leaders. Recommended "technologies" (methods) of reference countries and the projection of potential growth of outputs and the possible reduction of inputs are shown in Table 3.

Table 3 Projection of potential growth of outputs (and possible reduction of inputs) in the inefficient countries after the use of reference solutions

Country	Reference country	λ^*	Projection of potential growth of outputs (and possible reduction of inputs) after the use of reference solutions		Change in %
Austria	Luxembourg Netherlands Spain	0.2174 0.7190 0.0635	EDU_EX_ps_PPP	0.6782	- 0.34
			HEA_EX_pc_PPP	0.6693	-
			EDU_SYNT	0.8788	4.91
			HEA_SYNT	0.8206	4.91
France	Netherlands Belgium Ireland	0.7960 0.0184 0.1855	EDU_EX_ps_PPP	0.5753	-
			HEA_EX_pc_PPP	0.5872	- 8.65
			EDU_SYNT	0.9125	6.16
			HEA_SYNT	0.8098	6.16
Germany	Netherlands Ireland Greece	0.5147 0.4204 0.0649	EDU_EX_ps_PPP	0.5227	-
			HEA_EX_pc_PPP	0.5652	- 12.95
			EDU_SYNT	0.8947	9.7
			HEA_SYNT	0.8071	9.7
Hungary	Finland Poland Romania	0.3228 0.1571 0.5201	EDU_EX_ps_PPP	0.2599	- 11.83
			HEA_EX_pc_PPP	0.2282	-
			EDU_SYNT	0.7931	4.11
			HEA_SYNT	0.6025	4.11
Italy	Luxembourg Netherlands Spain	0.0523 0.2248 0.7229	EDU_EX_ps_PPP	0.5001	- 6.81
			HEA_EX_pc_PPP	0.4764	-
			EDU_SYNT	0.8217	11.71
			HEA_SYNT	0.8294	11.71
Lithuania	Latvia Poland Romania	0.0252 0.9593 0.0155	EDU_EX_ps_PPP	0.2000	-
			HEA_EX_pc_PPP	0.1538	-
			EDU_SYNT	0.7773	1.46
			HEA_SYNT	0.4908	47.59
Portugal	Czech Rep. Finland Spain	0.4337 0.0357 0.5006	EDU_EX_ps_PPP	0.3744	- 1.46
			HEA_EX_pc_PPP	0.3626	-
			EDU_SYNT	0.8029	6.93
			HEA_SYNT	0.7899	6.93
Slovenia	Czech Rep. Finland Spain	0.7333 0.2146 0.0521	EDU_EX_ps_PPP	0.3568	- 15.51
			HEA_EX_pc_PPP	0.3492	-
			EDU_SYNT	0.8349	4.03
			HEA_SYNT	0.7397	4.03
Sweden	Belgium Finland	0.9323 0.0677	EDU_EX_ps_PPP	0.5631	- 12.56
			HEA_EX_pc_PPP	0.5775	-6.09
			EDU_SYNT	0.9590	6.87
			HEA_SYNT	0.7641	6.87
G. Britain	Czech Rep. Greece Ireland	0.0655 0.1382 0.7964	EDU_EX_ps_PPP	0.4268	-
			HEA_EX_pc_PPP	0.5185	- 5.08
			EDU_SYNT	0.8657	5.87
			HEA_SYNT	0.7965	5.87

* - λ (lambda) is the so called intensity ratio, also known as *benchmark*.

"Optimal technology", which places the analyzed object at the efficiency frontier, is calculated on the basis of the intensity ratio λ . Lambda serves, therefore, as a tool for projecting potential growth of outputs and reduction of inputs after the use of reference solutions (e.g. EDU_SYNT projection for Sweden: $: 0,9323 \times 0,9582 + 0,0677 \times 0,9703 = 0,9590$; as compared with the empirical value of 0.8973, it is an increase of 6.87%).

Source: Own study with the use of the *DEA Solver* program, Springer Science + Business Media, LLC, © 2008.

On the basis of the data in Table 3 it can be concluded that for all the analyzed countries the improvement of outputs is possible not only with maintaining the current level of inputs, but even with their partial reduction. For example, in Italy "technology/optimal method" obtained from the compilation of the methods used primarily in Spain ($\lambda = 0.72$), but also in the Netherlands ($\lambda = 0.22$) and Luxembourg ($\lambda = 0.05$) would allow to improve the outputs by 11.7% (even with the simultaneous reduction of spending on education by 6.8%). It is also worth mentioning that in the case of Lithuania the reference country which has the biggest impact on the "optimal technology" is Poland ($\lambda = 0.95$), with slight influence of Latvia ($\lambda = 0.02$) and Romania ($\lambda = 0.01$). Applying by Lithuania the solutions used primarily in Poland could enhance the outputs achieved in health care by nearly 48%. Outputs for the other economies can be interpreted in the same way.

Concluding remarks

The issue of examining efficiency in the public sector belongs to the most difficult and controversial matters, as it is part of a dispute over what is economically justified and what is socially acceptable. The normative nature of the discussion requires all research findings in this area to be treated with due caution. It should be noted that when estimating the efficiency of investment in human capital with the DEA method, so called technical efficiency is estimated, which shows the extent to which expended funds have been transformed into the "potential of health and knowledge" of a society (expressed in terms of selected diagnostic features). Therefore, the country most efficient technically is not necessarily one in which the level of health care and the quality of education system are the highest. Conversely, the lowest technical efficiency does not mean the worst level of health care, or the least educated society – it just means that certain funds are not used in this country efficiently, so in other countries they would be used in a better way, gaining better results expressed as a fixed set of diagnostic features.

Therefore, from the point of view of applicability of the study, the presented results should be treated primarily as a contribution to the discussion about reforms of the public finances and the desired shape of the health care and education systems, looking for best practices among the economies identified as referential.

For Poland, which is among the countries rated as efficient (alongside such leaders as, for example, Finland, Luxembourg or the Netherlands), such a diagnosis is a positive signal that the condition of human capital in Poland is adequate to the funds which are directed to building it. This gives grounds to believe that an increase in funding for health and education will produce visible, positive results such as the improvement of human capital, and in the long run it will be reflected in the economic growth and development of the country.

However, from the scientific point of view, any attempt to estimate the efficiency of public sector entities appears to be valuable, because it becomes a contribution to searching and improving methods of evaluating activities which can hardly be measured in traditional ways. Therefore, creating the models of assessing the efficiency in the public sector requires a specific approach, taking into account the specificities of this sector both at the level of formulating the concept of measurement and the selection of adequate quantitative methods.

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Appendix

Table A1 Diagnostic variables for the model of DEA - "Human Capital"

Country	Outputs				Inputs				
	“Health”	“Education”			“Health”			“Education”	
	UMEW	SDR	SPH	IM	GSE	QES	PISA	H_EX_ pc_PPP	E_EX_ ps_PPP
Austria	0.12	28.42	71.16	3.80	98.97	5.16	494.53	2610.65	8637.10
Belgium	0.00	36.60	73.76	3.74	128.91	5.78	509.84	2285.21	7174.00
Bulgaria	2.17	18.76	63.23	9.38	90.48	3.56	424.23	381.31	2021.68
Czech Rep.	0.24	30.10	60.46	3.10	92.96	4.7	496.18	1217.11	3804.27
Denmark	0.45	19.78	74.74	3.80	123.02	5.7	500.17	2544.81	11082.88
Estonia	4.24	41.68	53.40	4.68	98.06	4.54	514.65	661.68	3153.81
Finland	1.32	42.82	68.66	2.74	117.43	6.12	548.11	1807.04	6772.09
France	0.20	30.93	69.24	3.82	110.32	5.02	494.81	2507.38	7301.32
Germany	0.86	20.66	62.22	3.72	100.55	4.62	507.54	2532.71	6633.78
Greece	0.86	5.72	76.46	3.36	97.33	3.42	468.48	1396.37	3824.99
Hungary	0.54	51.40	50.34	5.70	97.53	3.84	494.05	890.04	3741.82

Ireland	0.74	27.16	83.62	3.54	111.15	5.56	502.92	2197.57	5825.28
Italy	1.42	9.90	61.18	3.62	98.09	3.52	477.17	1858.41	6811.68
Latvia	2.26	45.30	41.98	7.72	95.49	4.08	485.91	460.45	2664.93
Lithuania	3.20	73.40	46.62	5.86	99.97	3.96	480.08	599.87	2538.22
Luxembourg	0.14	23.98	74.04	2.24	96.26	4.4	483.42	3900.75	12692.25
Netherlands	0.24	19.50	76.94	4.20	120.92	5.26	519.81	2312.32	7648.32
Poland	3.12	36.22	56.00	5.92	100.13	3.96	500.74	606.66	2553.80
Portugal	0.66	13.14	47.26	3.42	102.43	3.56	480.27	1414.61	4822.03
Romania	0.43	27.00	69.53	12.40	86.20	3.86	418.11	406.51	1368.79
Slovakia	0.46	25.12	55.86	6.30	88.50	3.82	485.14	896.33	2530.85
Slovenia	0.12	41.80	57.32	3.02	100.00	4.38	502.22	1362.07	5360.01
Spain	0.28	10.90	69.32	3.48	115.86	3.74	480.26	1569.53	5484.60
Sweden	1.90	30.36	77.46	2.54	119.50	5.22	499.91	2398.93	8172.90
G. Britain	1.50	13.20	77.76	4.80	101.52	4.6	500.97	2130.90	5416.62

Source: Own study based on the data from the following sources:

EUROSTAT *online data* (IM, SDR, UMEW, SPH – arithmetic mean for the years 2005 – 2009, E_EX_ps_PPP – arithmetic mean for the years 2000 – 2008); World Economic Forum (QE – arithmetic mean from *Global Competitiveness Reports 2004-2005, 2006-2007, 2007-2008, 2008-2009, 2009-2010*); World Bank *online data* (GSE – arithmetic mean for the years 2005-2009); OECD *online data* (PISA – arithmetic mean for the years 2006 and 2009); WHO *online data* (H_EX_pc_PPP – arithmetic mean for the years 2000 – 2008).

An Analysis of the Level of Education in Slovakia and a Possible Correlation of the Level of Education of the Population with Unemployment, Focusing on the Tasks of the Institutions of Higher Education

Michaela Lichtigová

Abstract

It is the aim of the paper to use available data in pointing out a correlation between the level of education and unemployment in the year 2011 in the Slovak Republic. Many authors consider the acquisition of higher education and the increase of the level of education to be the most important aim of the education policies of the European Union.

The level of education and life-long learning play a key role in the economic and social development. It is the social capital that is designated as the key factor of economic growth and economic expectations on the level of the individual and many authors devote an increasing amount of effort to prove its extra-economic influences, including aspects pertaining to health and social intelligence.

Key words

Level of Education. Unemployment. Institutions of Higher Education.

No one doubts that the best insurance against unemployment is an attractive education. Of course, this is only a part of what is expected from an applicant for work. "Education is not the wealth of a nation of society, but a competitive advantage of an individual in the labour market and a precious possession, which is the subject of supply and demand of individual

subjects – with individuals interested in education on the side of demand and universities on the side of supply."

Already the presence of institutions of higher education in a particular region has a positive impact, be it in terms of direct regional economic influence pertaining to investing into buildings, taxes, consumption of goods by employees and students of the university or indirect effects, caused by multiplication effect. Institutions of higher education also have a positive influence on the companies of a particular region, which have the opportunity of acquiring highly qualified labour.

Giaccaria points to three areas of added value of a university for the region:

1. They create employment opportunities and a demand for buildings in a region,
2. They provide implicit benefits connected to knowledge-based economy – the role of the university in acquiring information and creating added value,
3. They contribute to creating a region of education, which helps reacting adequately to the changing conditions of the surrounding environment.

The above benefits enable universities to contribute not just to the development of the region, but also in acquiring the position of a region of education in knowledge-based economy.

If we want to evaluate this participation of universities in knowledge-based economy, we must define a conceptual framework of a region of education. The competitiveness of a region is directly influenced by the ability to quickly produce, collect and transform relevant knowledge and information.

The concept of knowledge-based economy sees knowledge as the elementary resource of economy and education as an important process for acquiring of this knowledge. (Ludvall and Johnson, 1994, p. 23)

Under the term *institutions of higher education*, we understand all public universities, state universities, private universities, foreign universities, which we perceive as units of organisation, which are given certain input from households, the government and from the business sphere, as a series of back-connections or influences of expenses, they are affected by the degree of taxation and consumption and they support activities of local businesses, whereby they generate certain output, create capital, the production of knowledge and increase attractiveness. The basic aims of these institutions include education, research, social tasks, socialisation, expert tasks, innovative tasks and the generation of regional networks. In order for these institutions to be able to fulfil these objectives, it is important to connect them with the region they are situated in.

The Ministry of Education of the Slovak Republic, in their national programme for regions of education specifies particular goals for these regions and their focus on:

- Regional and local support of life-long learning and counselling,
- Increasing motivation of inhabitants towards further education,
- Increasing knowledge (key competences) and the level of education of the region,
- Interconnecting education and the requirements of the labour market,
- Increasing employment,
- Structural development, mobility,
- Developing the ability to learn,
- Increasing the quality and effectiveness of education,
- Providing availability of education while maintaining equal opportunities for all (MŠ SR, národnom program pre učiace sa regióny, p. 7)

Table 1 Number of unemployed and the unemployment rate of individual regions of Slovakia in 2011

Regions	Total number of unemployed in thousands	Share for SR in % - number of unemployed	Number of unemployed Index 2011/2010	Unemployment rate %
Bratislavský	20,4	5,5	97,6	5,8
Trnavský	31,7	8,6	86,6	10,6
Trenčianský	25,9	7,0	84,4	8,7
Nitrianský	43,9	11,9	81,1	12,5
Žilinský	48,6	13,2	99,8	14,3
Banskobystrický	58	15,8	96,2	17,5
Prešovský	68	18,5	94,4	17,8
Košický	71,6	19,5	108,8	19,6
Overall SR	367,9	100	94,6	13,5

Source: Statistical Office of the Slovak Republic, 2012, original elaboration

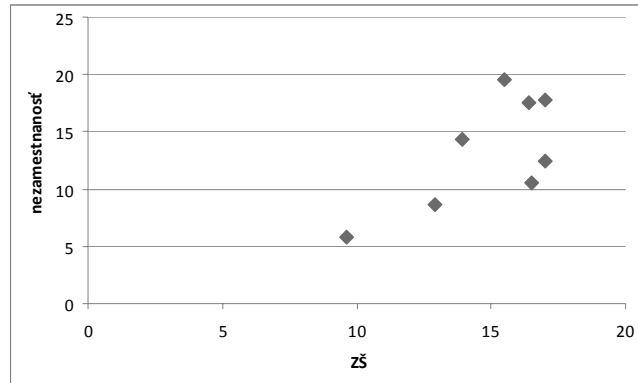
Table 2 Highest achieved education in Slovakia in 2011 in %

Regions	Primary schools	Secondary Schools without school leaving examination	Secondary Schools	University
Bratislavský	9,6	17,1	32	26,2
Trnavský	16,5	26,4	28,8	11,5
Trenčiansky	12,9	27	31,1	12,5
Nitriansky	17	25,8	28,9	12
Žilinský	13,9	24,7	29,4	13
Banskobystrický	16,4	22,5	30,2	12,4
Prešovský	17	21,7	27,6	11,6
Košický	15,5	20,2	29,4	13

Source: Statistical Office of the Slovak Republic, 2012, original elaboration

As we can see in Tables 1 and 2, the lowest unemployment rate and highest number of people with university education is to be found in the Bratislava region; whether the relationship between the high number of university-educated people and the low number of unemployed is causal cannot be determined. In correlating unemployment with the number of people with elementary education, secondary education without school-leaving examination, secondary education with school-leaving examination and university education, we are able to see a positive coefficient (Fig. 1), which points to the conclusion that the higher the number of people with elementary education, the higher the unemployment rate of a particular region.

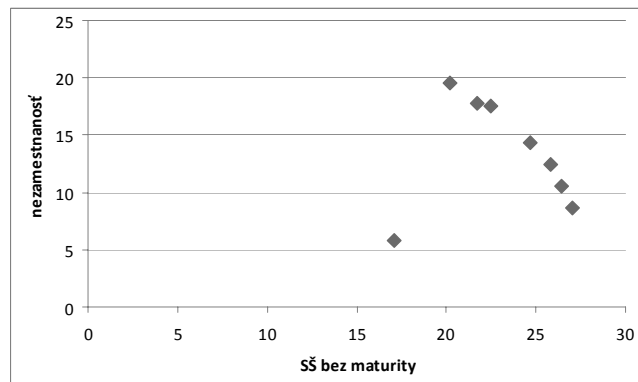
Fig 1 The ratio of people with elementary education (ZŠ) and unemployment in 2011 in Slovakia.



Source: Bavoľár, J., 2012, original research

In the second researched case (Fig. 2), relating to secondary education without school-leaving examination and unemployment, there was no relationship determined.

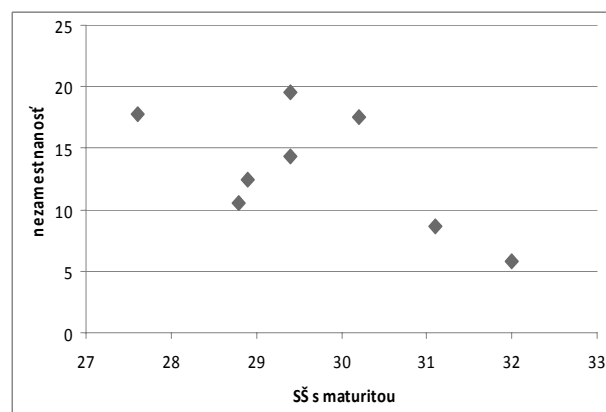
Fig 2 The ration of people with secondary education without school-leaving examination (SŠ bez mat.) and unemployment in 2011 in Slovakia



Source: Bavoľár, J., 2012, original research

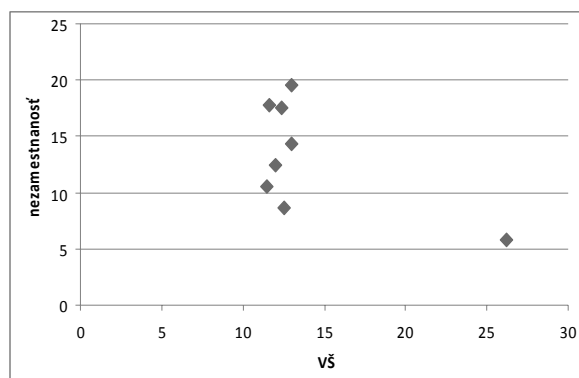
In the third and fourth researched case (Figs. 3 and 4), strong negative relations have been found, which points to the conclusion that the higher the number of people with secondary education with school-leaving examination and university education, the lower the unemployment. The X axis represents the ration of people with a particular education, the Y axis represents the percentage of unemployed.

Fig 3 The ration of people with secondary education with school-leaving examination and unemployment in 2011 in Slovakia



Source: Bavoľár, J., 2012, original research

Fig. 4: The ration of people with university education (VŠ) and unemployment in 2011 in Slovakia



Source: Bavoľár, J., 2012, original research

Table 3 Correlation of unemployment with the ration of people with education: EE, SE w/o SLE, SE w SLE and university education

Correlations						
		Primaryschools	Secondary schools without school leaving examination	Secondary schools	University	Unemployment
Primary schools	R	1	,446	-,858	-,855	,700
	P		,268	,006	,007	,053
	N	8	8	8	8	8
Secondary schools without school leaving examination	R	,446	1	-,312	-,731	-,082
	P	,268		,452	,039	,847
	N	8	8	8	8	8
Secondary schools with school leaving examination	R	-,858	-,312	1	,719	-,640
	P	,006	,452		,044	,087
	N	8	8	8	8	8
University	R	-,855	-,731	,719	1	-,603
	P	,007	,039	,044		,114
	N	8	8	8	8	8
Unemployment	R	,700	-,082	-,640	-,603	1
	P	,053	,847	,087	,114	
	N	8	8	8	8	8

Source: Bavoľár, J., 2012, original research

Summary

To talk about the causes and effects of this relationship, logical as though it may be, cannot predict, whether an increase in educated people will decrease unemployment. What may be true, though, is the fact that if there is more educated people, they will spend more time in school and study more. Getting close to European standards and adapting education to new trends is a long road, which brings about a negative aspect, which is the decrease in the quality of education, which should not be neglected.

Education always played an always will play an important role. Education is the cornerstone of the development of science, technology, culture, art and helps speed up the transformation of the Slovak society. "Education is generally that, which an individual brings into their life and becomes a part of society. It is, above all, the cultivated nature and rationality of man. ". (Sýkora, 1988).

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Evolution of Corporate Governance Models and Implications for Central-Eastern Europe Countries (The Case of Poland)

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Abstract

The purpose of this paper is to analyse global, mainly Anglo-Saxon and German experience in the field of corporate governance and then attempt to answer a question to what extent this experience should be used by the countries of Central Europe, including Poland. In the first part of the paper the author conducts a review of world literature and presents the most important conclusions from a discussion on the need for changes in both Anglo-Saxon and German corporate governance solutions. These changes are proceeding simultaneously and what is interesting - as the author concludes – both (Anglo-Saxon and German) models gradually get closer to each other (a convergence phenomenon). In the second part of the paper the author analyzes the Polish solutions against this background and tries to indicate these areas of Polish corporate governance, which already require significant changes. It is first of all about the system of power adopted in Polish corporations, which does not correspond to the present changes in Anglo-Saxon and German solutions. The whole paper ends with a recapitulation of the most important conclusions from the discussion.

Key words

Corporate governance, Anglo-Saxon and German models, Polish model, Monistic and dualistic systems, Boards of directors, Codes of good corporate practices

Introduction

Even a rough analysis of the corporate governance models operating in the world shows variety of used solutions, and, at the same time, their mutual differences. These differences apply almost to everything: legal, economic, social systems, the essence and role of corporations in the economy as well as the systems of management and control over the corporation's operations.

The aforementioned leads to a conclusion that the institutional and structural solutions with regard to corporate governance have individual character and are deeply embedded in the economic tradition as well as corporate culture of a given country. Corporate governance, as yet, does not have a single, widely accepted theoretical base, nor a commonly accepted paradigm (Tricker 2009: 233). Thus, each country should develop its own approach as well as own solutions in this field using, of course, the experience from other countries or regions in the world. The purpose of this study is the very attempt to identify directions with regard to improvement in corporate governance currently dominant in the world, and then on this basis to provide an answer to the question: what should be implemented or modified in institutional and structural solutions in this field in transition economies like Poland. Needless to say, this problem concerns practically all countries implementing the market economy.

The process of evolution of Anglo-Saxon and German models

Comparing the most interesting for us, Anglo-Saxon and German models, the first factor that differentiates both solutions is the level of concentration of corporate ownership. The Anglo-Saxon models are characterized by dispersed ownership and German as well as Latin models by the ownership concentrated in the hands of several shareholders (blocks of shares or votes). This is a result of relevant legal regulations or their absence. Specified legal restrictions, e.g. American investment limits with regard to holdings, shape such but not other ownership structures of companies. Lack of such limits e.g. in reference to German banks leads to their dominance in the ownership structures of local companies, and indirectly to a high degree of concentration of ownership in these companies. However, it is necessary to point out that the concentration of corporate ownership is not a clearly negative phenomenon. For the reason that there is no strong empirical evidence that the companies with concentrated structures of ownership, that is e.g. German, French or Japanese companies are less effective than the companies with dispersed shareholders' structure, that is the American, British or Australian companies.

The second factor diversifying the Anglo-Saxon from German models is the structure of shareholders. Individual shareholders are minority in all regions of the world. As a result of the process of institutionalisation of corporate ownership progressing since the mid-1970s, the holders of the largest stock packages in Anglo-Saxon companies have become institutions such as pension funds and investment funds. On the other hand, in German and Japanese companies this role is performed by banks, insurance companies and capital groups. In the Latin model, significant shareholders are also families and governments. In continental Europe and Japan the institutionalization of ownership is additionally reinforced by the so-called mutual or crossing shares that are used to expand and strengthen influences of capital groups as shareholders. The phenomenon of institutionalisation of companies' shareholder structure should be regarded as one of the most important features of contemporary corporate governance. It carries along important changes not only in ownership structures of companies but also in supervision and management systems of their operations. These changes were significant enough to gain a special name: investor's capitalism in the middle of the 1990s.

The discussion on advantages and disadvantages of particular models of corporate governance cannot lack an opinion about monistic and dualistic system of power in a company. The monistic system that is of one-level type, practiced in Anglo-Saxon as well as in Japanese companies and in most French companies, gathers management and supervisory functions in the hands of one body referred to as a board of directors. The board of directors usually distinguishes two groups of people, namely persons taking active part in the company's management processes (the so-called internal directors) and persons performing only supervisory tasks (external directors). Some managerial functions may be delegated to other employees of the company who are not members of the board of directors. A group of such officers is usually defined as corporate officers. It does not, however, create a separate managing body. The second one, dualistic system, that is of a two-level type, popular in a large part of continental Europe, clearly distinguishes between a supervisory function which is performed by a separate body, known as supervisory board (Ger. *Aufsichtsrat*). On the other hand, the management function is performed by a management board (Ger. *Vorstand*). Both bodies operate next to each other and none of them can issue binding commands to the other. The mutual impact is, however, quite evident. Just for the reason that it is exactly the supervisory board that usually appoints and dismisses the company's management board and determines the amount of its remuneration. In addition, the articles of association of many companies in the dualistic system obligate the management board to obtain a consent from the supervisory board to perform some legal activities, e.g. to enter into specific transactions. On the other hand, the supervisory board is strictly dependent upon the management board in the scope of the quantity and quality of information communicated about the company.

The dualistic system, practiced mainly in Germany and Austria and optionally also in France, is often criticized exactly for this reason, that complete knowledge about the company is not guaranteed for the persons performing the supervisory functions. These persons, coming from outside the company and not having exact knowledge about the company, cannot effectively monitor and control operations of the board of directors, or advise the board of directors. The enthusiasts of the dualistic system emphasize however that the persons from outside the company, having their own managerial or office experience, are able to more objectively look at the activities of a given company and, being independent persons, better represent the interests of shareholders and more carefully determine the remuneration of the board of directors. In addition, as independent persons, they may become experts in performing supervisory functions. Finally, a separate supervisory body in the case of Germany is a platform of cooperation of the investors' and employees' representatives (co-determination principle). On the other hand, it is difficult not to agree with the enthusiasts of the Anglo-Saxon model that the monistic system has this great advantage of providing members of boards of directors performing the supervisory functions with full knowledge about what is happening in the company and ensuring current monitoring of the situation.

A proof of this advantage is the decision-making process on the merger of companies Daimler-Benz and Chrysler, which is very convincing. This case shows a decorative role of the supervisory board in the greatest German industrial group, which is Daimler-Benz AG (Neubauer 2000). Therefore, E. Berglöf and E. L. von Thadden are right in saying that the two-level system of power in the company, that is separation of supervision from management, increases the power of managers and expands their influence through a broad informal network of various relations (extensive management networks) (Berglöf and von Thadden 1999).

The excessive position of management boards in German companies, their strong connections with suppliers and banks, and at the same time, a weak position of local supervisory boards arouses anxiety

among the German investors' environments, whose power of influence increases each year. Likewise in other countries, the associations of investors demand greater transparency, improvement in the internal control system as well as improvement in effectiveness from the management staff of companies. According to some authors, German companies and German management are gradually becoming "Americanized" (Schlie and Warner 2000). This applies in particular to large German companies operating on international markets, such as e.g. Daimler-Benz, Hoechst, Bayer, BASF, Bertelsmann Siemens, Thyssen-Krupp or Deutsche Bank. These companies adapted the American philosophy of managing the value for shareholders, with market share price as an important determinant of their effectiveness. They communicate to the investors such important information as the anticipated future profits and dividends. They apply the commonly approved measures of profitability as Return On Equity (ROE) and Return on Capital (ROC). In addition, they use modern forms of motivating managers (e.g. share options), and send young distinctive managers for MBA studies to the best American business schools. Finally, these companies take active part in the processes of mergers and takeovers as well as implement the international accounting standards (based on American patterns) and their business language is English. All these actions result from the presence of the largest German companies on the international capital markets, including the New York Stock Exchange.

The aforementioned leads to a conclusion that the German corporate governance tries to face the challenges related to the processes of globalization of business operations. This openness may give birth to an interesting combination of the American idea of value for shareholders with the German idea of social dialogue, social balance and company's social responsibility. Such a combination may become a model for other countries of continental Europe, including Poland.

At this point, the efforts for objective evaluation of each model require highlighting that the American model of corporate governance is also undergoing a far reaching metamorphosis. After a series of bankruptcies and corporate misuse at the beginning of the first decade of the 21st century (Enron, WorldCom, Global Crossing, Tyco International), studies were conducted that showed a high number of pathological phenomena in American public companies. And so, for instance, the phenomenon of excessive concentration of power came as a large surprise. In the middle of 2002, in as many as 80% of American companies covered by S&P 500 index, the function of the chairman of the board of directors as well as chief executive officer (CEO) was held by the same person. Also a surprise was the scale of the phenomenon of seating in the boards of directors of other companies at the same time. The analysis conducted by Bloomberg found that chief executive officers of the fifty largest American stock market companies are members, on average, of three more boards of directors in other companies, and some even seat in ten boards (Krzemiński 2003: 20). In addition, they often participate in works of audit as well as manager remuneration committees of these companies. In the opinion of the directors holding so numerous positions, the experience and personal contacts gained in this way are very beneficial for parent companies. A different opinion is held by investors, who accuse the directors of too little care for results of companies and interests of shareholders.

The aforementioned weaknesses of American corporate practices are nothing new. They constitute the inadequacies known for years. The investor's environment was however surprise in terms of the scale of some phenomena as e.g. combining the function of chairman of the board with that of chief executive officer, simultaneous membership in the boards of directors of many companies, or the constantly growing remuneration of managers, practically without connection with the results of the companies managed by them. In view of the above phenomena, the American associations of investors, especially the influential Council of Institutional Investors, assesses that this state of affairs can be attributed not only to the chief executive officers of the companies, but also to stock analysts, audit and rating companies as well as persons and institutions supervising financial markets.

The above comparison of the two most popular models of corporate governance proved that none of them is an ideal solution. On the contrary, each of them has many weaknesses or degenerations, caused by opportunism of managers, members of supervisory and executive bodies or dominant shareholders. These degenerations most often occur for ethical reasons. Nevertheless, to prevent them in all models, there are established or improved institutional solutions which eliminate harmful behaviour against the company as a separate economic entity, and in particular, against its minority shareholders.

It is interesting that the vast majority of these changes follow the same direction, regardless of the implemented corporate governance model. The most visible changes, showing this convergence are the following propositions:

- Strengthening the role of boards of directors (supervisory boards) as a strategic partner for the companies' boards (Stiles and Taylor 2002). This is caused by the progressing institutionalisation of corporate properties, and following it, return to the traditional, that is active role of shareholders in a company (investor's capitalism). The second factor strengthening the role of boards is sudden bankruptcies and corporate scandals in many countries (the United States, Japan, Germany, France, Italy, Great Britain). They attracted attention of investors and the general public to the monitoring and control function of boards as well as their key role in assessment of quality of the company's management. Instead of the boards created by managers, that is by people being controlled, the need for treating the boards as an extension of shareholders which is to be a guard of interests of all shareholders, not excluding minority shareholders, is reminded. It is worth emphasizing that the reinforcement of independence of boards and their pro-investor orientation is a common topic not only in the Anglo-Saxon countries but also in Japan and in Germany. E.g. in the case of Germany where so far the boards cared mostly about the interests of major shareholders and employees, a growing importance is assigned to the interests of minority shareholders. Following this, the quality of financial statements as well as any information related to companies' operation is improving (Witt 2000).
- The most important factor strengthening the role of the boards in the Anglo-Saxon models is independence of the so-called external directors that is the group of members of the board, which deals with supervisory activities. In the case of the monistic system, it is mainly about independence from the chief executive officer (CEO) and other top level managers. On the other hand, in the dualistic system the stress is laid on independence from major shareholders. The advisory company KPMG has tried to clarify the notion of independence by means of studies. The survey conducted among members of boards of 213 European companies found that 87% of the surveyed considered lack of financial and business connections of the members of the boards with its management as the most important criterion of independence (*Corporate ...* 2002).
- An important element of strengthening the position of the boards is separation of the function of chairman of the board of directors and chief executive officer. This applies in particular to American companies, because in the British companies separation of these two positions is a solution commonly used already for many years. Therefore the American model partially gets close to the over 100-year long idea of German corporate governance on separation of the supervisory function from the managerial function in a company.
- A solution strengthening the role of boards and recommended both in monistic and dualistic systems is appointment of committees. These are most often for audit, nomination, remuneration and often also for executive matters (involved in preparation of the positions of the board on key decisions of the company's management) and for financial matters (in the case of large international companies, running various investment projects and requiring extensive capital commitment). According to the formulated recommendations, the audit and remuneration committees should be formed only of independent members of the board.
- Another postulate formulated both in monistic and dualistic systems is to treat the board of directors or the supervisory board as a strategic resource of the company. The Board, and in particular its accordingly selected external members, may be the source of specialist knowledge as well as rich business experience as well as a source of valuable contacts. A concept of the supervisory board which effectively cooperates with the board and supports the board, especially with regard to strategic decision-making, involves the so-called resource-based trend in management of a contemporary company. It simultaneously means seeking balance between monitoring and supervision over the board of directors' work, on the one hand, as well as cooperation and advising the board of directors, on the other.
- Finally, an extremely important factor common for all models of corporate governance are "codes" of good corporate practices. The initiative started in Great Britain in the early 1990s, as a result of a well-known report by A. Cadbury, has become a platform for building a world standard with regard to corporate governance, among other things, in terms of the systems of informing investors, principles of protecting capital minority as well as principles of organizing general meetings of shareholders, work of supervisory boards as well as companies' management boards.

The aforementioned changes in the models of corporate governance show that we are witnesses of slow convergence of these models. Of course, these processes occur gradually and keep, at least in the nearest

future, a specific nature of national corporate governance, the example of what is the German and Japanese model. Just as J. Lorsch has envisaged, with the deepening globalization processes of business operations, corporations themselves, their systems of power and their management and control practices become more and more global (Lorsch 1997: 104).

In the case of member countries of the European Union, a factor supporting convergence of the national models of corporate governance are also some legislative initiatives. Such a solution is e.g. a concept of European corporation as a supranational variety of corporations as well as draft EC directive related to it, which obligates all member countries to allow public companies to select between the monistic and dualistic model of corporate governance (Siemiątkowski 2004: 53). Such a choice has already been enjoyed from the beginning of the 1960s by shareholders of French companies. The two models have been functioning there practically side by side. The first one, similar to the Anglo-Saxon model, envisages a combination of management and supervisory functions in the form of one collegial body (Fr. *le conseil d'administration*). The chairman of this board is at the same time managing director (Fr. *President Directeur Generale*). The second system with a separate supervisory board is a copy of the German model. It is highly symptomatic that more than 80% of French companies selected the first model.

Summing up, it has to be said that the observed worldwide process of converging various models of corporate governance is increasingly evolving in the direction of the Anglo-Saxon model. This phenomenon is also visible in continental Europe, where the German model remains in the formal-legal sense only in a few western countries (Germany, Austria, German speaking part of Switzerland). It must be added that this model is also changing, gradually absorbing some elements of the Anglo-Saxon models.

Polish corporate governance model – directions of changes

The principles of functioning of joint stock partnerships in Poland binding so far are based on the German model and have been written down in the form of a code in the middle of the 1930s. According to the essence of the German model, they stipulate separation of managerial functions from supervisory ones when running a company. Thus the management body, which is the management board, independently manages current operations of the company and represents it outside. The competences of the Board of Directors include any rights which under the provisions of the Polish Code of Commercial Companies (*Act of 15 September 2000 – Code of Commercial Companies* 2003) or articles of association of a company are not reserved for other company bodies – principle of presumption of competences of the board of directors (Sołtysiński et al. 2008: 592). Members of the board of directors are required to ensure proper operation of a company, in accordance with its purpose and object of operations specified in the articles, and at the same time demonstrate due diligence - to the extent higher than the generally required. This diligence should arise from the professional nature of operations of the company's administrator - Article 483, § 2 of the Polish Code of Commercial Companies (Sołtysiński et al. 2008: 753).

Apart from the board of directors, a body which is obligatorily appointed in Polish companies is the supervisory board. The main task of this authority is to carry out permanent supervision over the company's business in all fields, including supervision over company (companies) run by the company.

Like the management board, the supervisory board performs its activities jointly, which means that they are reserved for the whole board as the company's body. For practical reasons, the board may however authorize its member or members to perform specific activities by means of a respective resolution. The board may also appoint committees or commissions from among themselves and authorize them to perform supervisory activities in a given field of the company's operations. Position in a specific matter should however be established by the board jointly.

It is extremely important to underline that, in accordance with new Article 375 of the Code of Commercial Companies, the supervisory board is not authorized to issue to the board of directors any binding commands concerning matters of the company. Therefore, the rights of the Board of Directors and the Supervisory Board have been clearly separated, emphasizing that the management board, operates within the range of its rights independently and is not subordinate to the supervisory board (Sołtysiński et al., 2008).

In our opinion, the decision included in Article 375 of the Code of Commercial Companies is an expression of excessive faith in omnipotence of managers, which E. Berglöf and E. L. von Thadden are warning against (Berglöf and von Thadden, 1999). It deepens the dualistic character of Polish corporate governance, and, as a consequence, reduces mutual trust as well as hinders cooperation between the company's board of directors and the supervisory board. Furthermore, the solution is not in line with the

spirit of the latest tendencies in reforming corporate governance in the world, in particular in the so-called post-Enron age, after management abuses and corporate scandals that took place in the early 21st century in the United States and Europe. The answer to these phenomena is the strengthening position of boards of directors and supervisory boards, extending their activity not only with regard to the control function, but also with regard to the advisory function – in accordance with a common belief that the board is a strategic resource of the company that should be used by managers in strategic management processes.

It is also necessary to remember that supervisory boards in Polish companies have a slightly weaker formal and legal position than the boards in German companies operating in the same system. In the German commercial law, like in the Polish case, the supervisory boards jointly consent to the management board undertaking specific activities. In German companies, the list of these activities is, however, generally quite long. For instance, it applies to important investment projects, purchase or disposal of real estate, contracting credits in a specified amount, granting loans or credit guarantees by a given company to another entity, undertaking restructuring projects in large scope, opening or closing representative offices or a plant, undertaking a new type of activity, purchase or sale of shares, employment or dismissal of a high level employee, granting proxy (Hoffmann 1985: 69; Striebeck 1992). A list of decisions subject to acceptance may be even longer and is determined by the articles of the company or is determined, following a vital interest of the company, by the board itself, and the management boards of companies are unable to appeal against this type of decisions of supervisory bodies to general meetings of shareholders. Meanwhile, the Polish supervisory boards are unable to extend their control rights – Article 391, § 1 and 3 of the Code of Commercial Companies - as this type of change would each time require appropriate change in the articles of association, what belongs to the competences of the general meeting. Furthermore, when the supervisory board of a Polish company refuses to perform a given activity listed in the articles of association, its management board may apply to the general meeting for expression of such a consent – Article 384 § 2 of the Code of Commercial Companies. It is beyond doubt that these solutions put the Polish supervisory boards on a significantly worse position than the boards in German companies.

Looking at all the regulations contained in the Polish Code of Commercial Companies, the most significant changes include regulations concerning merger, division and conversion of companies. These problems of growing importance for the developing Polish economy did not have sufficiently mature legal grounds in the "old" commercial code. It should thus be agreed what W. J. Katner and co-workers stipulate that the presently binding Polish Code of Commercial Companies in this field meets the new needs of economic activity (Katner 2006: 137).

Summary

The above-presented selected areas of Polish corporate governance are obviously not exhaustive in view of the entire problem. If we assume that we need a more holistic approach to this subject (Hardi and Buti 2012) we should take into account the following elements: trade in securities, accounting as well as principles of preparing and publishing financial statements, external audit as well as principles of functioning of internal audit in companies. However, the adopted system of power in companies has the basic importance for business effectiveness of companies. The dualistic system - which is still in existence in the Polish Code of Commercial Companies - is clearly losing some of its importance not only around the world, but also in continental Europe. A convergence of monistic and dualistic systems that is visible in Europe for some years as well as the evolution of the dualistic system in Germany should become an impulse for breaking the previous conservative approach to the issues of separation of managerial and supervisory functions in the Polish commercial law.

After all, we cannot close our eyes to the fact that the monistic system is an absolutely dominant solution in the world and that it is clearly associated with the process of globalization of the world economy. In addition, some significant countries in continental Europe are withdrawing, or have already done it, from the dualistic system, e.g. Nordic countries, and others, like e.g. France, granted companies the right to choose a system. One of the intentions of the European Commission is to prepare a directive obligating the member states to allow public companies to make such a choice. Therefore, a question arises, what is the point of keeping further the division of managerial and supervisory functions, since more than a century long practice of this system has demonstrated no superiority of the dualistic system over the monistic one. The more so that this system causes a lot of dissatisfaction even in Germany. Anyway, the reform of corporate governance in Poland and other Central and Eastern European countries should become the subject of a major discussion among economists, lawyers and politicians.

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Slovakia In Terms Of The European Insurance System

Jozef Adamko

VŠEmvs

Abstract

The contribution is focused on insurance, insurance of the Slovak Republic on the insurance market in Europe. Developments in insurance and its characteristics in written premiums of life and non-life insurance for the years 2008-2010 in selected countries which are in the CEA.

The insurance industry has a significant position in Slovakia as well as in other market economies. We may say that it is a non-productive branch of economy, the task of which is to transfer the risk or remove risks which follow from the activities of the society. In Slovakia as well as in other countries, the insurance market is made up of subjects of the insurance market, e.g. insurance institutions, insurance brokers, insurance associations, clients and, of course, other institutions, which co-create the insurance market.

The European insurance market may be understood as a market of all member states of the European union or it may be understood from a geographic point of view, which means that we will include all European countries in this market. I focus predominantly on the insurance market of the CEA member states. CEA stands for The European insurance and reinsurance federation. The CEA was founded in 1953 and may be considered a voluntary international federation of insurance associations of European states with a market economy. In 200, this organisation comprised 29 associations and in 2011, the number grew to 33.

In 2010, 5 300 insurance companies were part of this federation, which is an increase by 455, with respect to the previous year, but in 2004, the number of members was 5371. Countries with the largest insurance market and the highest number of insurers include Great Britain, Germany, France and Sweden.

The strength and level of this market may be determined also by means of indicators like the prescribed insurance premium in the creation of the GDP, the prescribed insurance per capita, insurance benefits, the concentration of the insurance market. As far as the insurance market concentration goes, generally, the most powerful 5 to 10 insurance companies control and manage the greatest part of the insurance market. Indicators concerning the measurement of productivity of the insurance market are used in all modern economies. Basic indicators include prescribed insurance premiums, insurance benefits, the concentration of the insurance market, burden of losses, insurance rate.

All of these indicators are similarly used in the Slovak insurance market. In practice and as far as the insurance activities in the Slovak republic are concerned, the indicator of prescribed insurance premiums per capita is not used nor stated in the annual reports. Despite this fact, the indicator is commonly used in the other member states. Based on the annual report of the Czech association of insurance companies (ČAP), Slovakia has a place among the leaders in central and eastern Europe, as far as this indicator is concerned.

The insurance market of individual states is not demarcated by state limits, which means that the insurer may expand their portfolio and sale of insurance products abroad. In 2010, the European insurance market was in control of 37,34% of the world insurance market.

Europe is home to several large insurance companies, which, based on their market value, may be considered as belonging to the ten largest insurers. From the European space, these include the companies Allianz, ING, AXA Group, Generalli Group, Zurich Financial Services, Munich RE Group.

As far as the prescribed insurance premium is concerned, the largest European insurers include the German insurance company Allianz, AXA, Generalli, ZURICH, AEGON. The ten largest European insurance companies are stated in Table 6.

Table 1 Largest European insurers in 2009

P. č.	Top 10 biggest European insurance companies	Insurance premium (mil.€)
1	Allianz	93 296
2	AXA	86 655
3	Generali	70 530
4	Zurich	47 107
5	Aviva	38 934
6	CNP	32 586
7	ING	30 145
8	Crédit Agricole	24 581
9	Prudential	22 782
10	Talanx	20 923

Source: www.cea.eu – original formatting

As stated above, indicators are necessary to express the potential and level of the insurance market. First, we will focus on insurance rate. In looking into insurance rate, I will focus only on selected countries and express the insurance rate in per cent. I will express the insurance rate indicator as the relationship of the prescribed insurance premium in total and the gross domestic product in regular prices. The development of this indicator will be described in more detail in Table 2, which includes selected European states.

Table 2 Insurance rate indicator in selected European states (%)

Country	2005	2006	2007	2008	2009	2010
Belgium	11,15	7,68	9,29	8,46	8,35	8,3
Switzerland	10,9	10,05	9,5	9,77	10,01	10,00
United Kingdoms	14,53	15,1	17,84	13,72	13,03	12,17
Germany	7,1	7	6,7	6,65	7,22	7,22
Denmark	8,19	8,55	8,6	8,77	9,07	8,88
France	10,24	10,96	10,37	9,48	10,57	10,69
Italy	7,64	7,13	6,38	5,84	7,72	8,09
Netherlands	9,45	13,62	13,11	13,21	13,6	13,24
Sweden	7,5	7,25	7,36	7,5	8,06	8,16
Slovakia	3,4	3,23	3,13	3,15	3,22	3,14
CEA	8,44	8,65	8,74	7,77	8,25	8,15

Source: www.cea.eu – original formatting

If we look at the data presented in this table, we clearly see that in the selected countries, the insurance rate and its development is balanced. In the last evaluated year, the indicator in the selected states fluctuated between 7% to 10 %, with the exception of such states as Great Britain, France and Switzerland, positioned on the 10% level.

Looking at the insurance rate in Slovakia we may see that our country does not even reach half the level of the selected states. However, we may presume that Slovakia presents a large enough space to expand on insurance products, especially in the area of life insurance.

In looking into central and eastern European states, we may conclude that in evaluating the indicator of prescribed insurance premium, an increase of about 35% has been recorded, which is the result of the boost in the insurance market. These countries had to overcome problems pertaining especially to the fact that in the past, they had no market environment, as the market was dominated by one large insurance

company – in our country, this was the Slovenská štátna poisťovňa. To compare the development of insurance rates in central and eastern Europe to other European countries, we may have a look at Table 3.

Table 3 Insurance rates in central and eastern European states, taken from the CEA list in (%).

Country	2005	2006	2007	2008	2009	2010
Czech Republic	3.54	3.47	3.37	3.37	3.63	3.9
Estonia	2.27	2.12	2.7	2.28	2.65	2.97
Hungary	3.12	3.51	3.72	3.35	3.24	3.15
Latvia	1.69	1.82	2.08	2.08	2.01	1.8
Poland	3.16	3.54	3.72	4.63	3.82	3.83
Slovakia	3.4	3.23	3.13	3.15	3.22	3.14
Slovenia	5.38	5.56	5.48	5.42	5.86	5.91

Source: www.cea.sk – original formatting

As I have already stated above, insurance rate is an indicator, which relates the prescribed insurance premium and GDP in regular prices. As far as the prescribed insurance premium is concerned, we must add that prescribed insurance premium comprises life and non-life prescribed insurance premiums. Currently, we may detect an increase in life insurance, means its percentual increase compared to non-life insurance. The higher share of life insurance may be considered as a kind of indicator of maturity of the insurance market of the individual countries. This means that the higher the share of life insurance in the prescribed insurance rate is, the more advanced the market is. In the CEA countries, life insurance surpassed non-life insurance for the first time in 1994. The development of the ratio of life and non-life insurance in CEA countries is of interest due to the comparison of data pertaining to individual countries. The development of the ratio of life and non-life insurance in CEA countries can be found in Table 4.

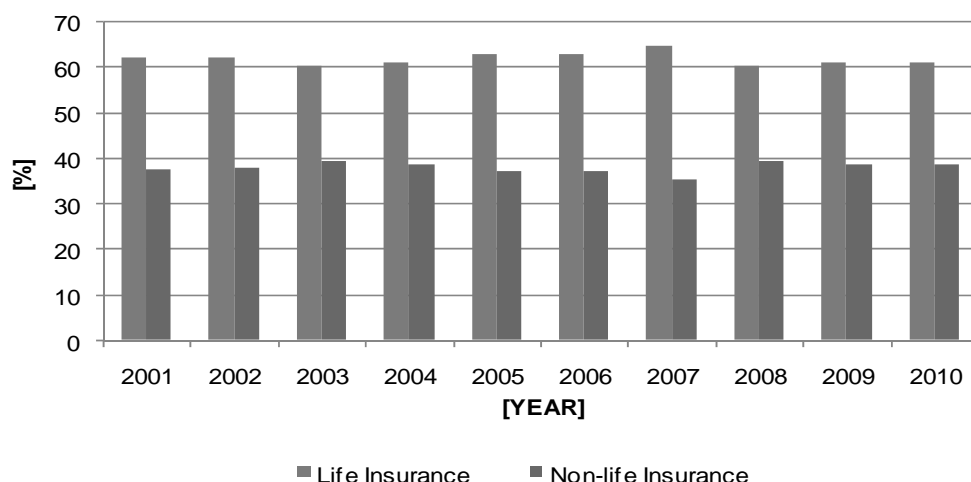
Table 4 The development of the ratio of life and non-life insurance in CEA countries.

YEAR	Total premiums written [mil. €]	Life Insurance		Non-life Insurance	
		[mil. €]	[%]	[mil. €]	[%]
2001	806 976	503 470	62.39	303 506	37.61
2002	872 314	541 921	62.12	330 394	37.88
2003	884 170	535 458	60.56	348 712	39.44
2004	935 518	572 515	61.2	363 003	38.8
2005	1 015 517	638 731	62.9	376 785	37.1
2006	1 100 704	692 393	62.9	408 310	37.1
2007	1 181 351	765 619	64.81	415 732	35.19
2008	1 059 731	641 773	60.56	417 957	39.44
2009	1 059 674	648 254	61.17	411 420	38.83
2010	1 104 221	676 052	61.22	428 168	38.78

Source: www.cea.eu – original formatting

For a better comparison of the development of the ratio of life and non-life insurance in CEA countries, we will use a bar chart, which used data from the table presented in bars in per cent, representing individual types of insurance. This graphic comparison is expressed in chart 1.

Chart 1 The development of the ratio of life and non-life insurance in CEA countries (%).



Source: www.cea.eu – original formatting

Based on the data presented in the chart, we may state that in the years in question, the highest increase of life insurance was reached in 2007. On the other hand, the large decrease of life insurance was recorded in 2003 and 2008, when both values reached a level of slightly above 60%.

In terms of prescribed insurance premium, an important indicator is the prescribed insurance premium per capita. This indicator is not stated in annual reports of SLASPO, but organisations part of the CEA use this indicator as one of their basic indicators. It is presented in table 6, if only for selected countries and in table 5, we can see central and eastern European countries, where Slovakia belongs.

Table 5 Prescribed life insurance premium per capita in 2009 and 2010, in selected states in (€)

P. č.	Country	Life insurance premiums written per capita in [€]	
		Year 2009	Year 2010
1	United Kingdoms	2 406	2 334
2	Germany	1 042	1 105
3	France	2 131	2 201
4	Netherlands	1 472	1 296
5	Denmark	2 593	2 686
6	Switzerland	2 502	2 775
7	Sweden	1 949	2 358
8	Ireland	2 092	2 159
9	Spain	633	592
10	Italy	1 344	1 486
11	Slovakia	196	207

Source: www.cea.eu – original formatting

Table 6 Prescribed life insurance premium per capita in 2009 and 2010, in selected central and eastern European states in (€)

P. č.	Country	The rated life insurance in [€]	
		Year 2009	Year 2010
1	Czech Republic	195	247
2	Estonia	99	136
3	Latvia	23	27
4	Hungary	146	161
5	Poland	183	206
6	Slovakia	196	207
7	Slovenia	308	320
8	Average of these countries	164	186

Source: www.cea.eu – original formatting

The presented tables give the indicator recording the prescribed life insurance premium per capita. The first table comprises selected CEA states, the second table presents countries of central and eastern Europe, i.e. developing countries. According to the data of the second table and considering the country average, Slovakia is slightly above the average, but does not by far reach the average of all CEA states.

As far as life insurance is concerned, it is obvious that Slovakia, with respect to the prescribed life insurance premium, does not come close to the level of developed European countries.

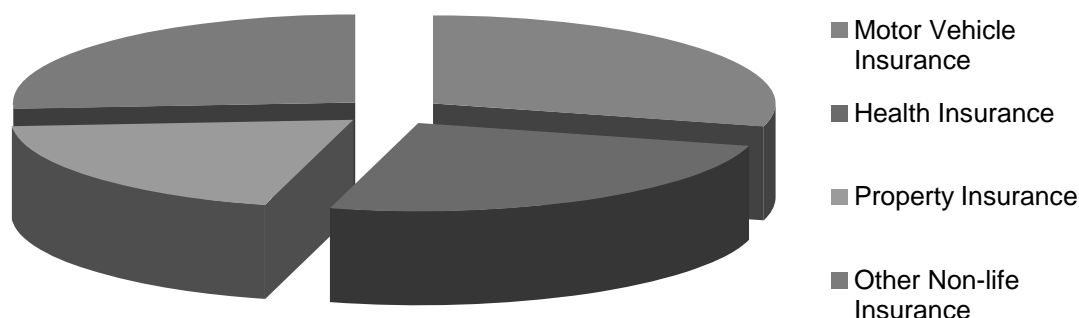
As far as the prescribed non-life insurance is concerned, I must stress that this insurance comprises several sub-types, which are important for the analysis of this type of insurance. These sub-types are: motor vehicle insurance, health and accident insurance, insurance of property and others. The sum of values of these sub-types of insurance create the value of the total non-life prescribed insurance. The values of this non-life insurance are presented in Table 7 and the share in the total non-life prescribed insurance, expressed in % is presented in Chart 2.

Table 7 Make-up of non-life prescribed insurance in CEA countries in mil (€).

Type of Non-life Insurance	Value in mil. [€]	
	Year 2009	Year
Motor Vehicle Insurance	121 227	124 583
Health Insurance	101 064	107 918
Property Insurance	80 382	83 963
Other Non-life Insurance	108 748	111 703
Overall Non-life Insurance	411 421	428 167

Source: www.cea.eu – original formatting

Chart 2 Graphic representation of non-life insurance in CEA countries in (%) in 2010



Source: www.cea.eu – original formatting

The term other non-life insurance includes accident insurance 7%, general liability insurance 7%, legal insurance 2%, aeronautic and maritime transport insurance 4% and other types of non-life insurance, which a total value of 6%.

Non-life insurance in terms of the total prescribed insurance rate in CEA countries, as stated in Table 8, presents 428 168 million Euro, which is 38,78%. Slovakia, in terms of CEA countries, provides the sum of 941 million Euro, i.e. about 0,22%. The value of non-life insurance is stated in Table 8, exemplified for CEA states.

Table 8 The development of prescribed non-life insurance in selected countries for the period of 2008-2010

Country	Year 2008		Year 2009		Year 2010	
	mil. €	%	mil. €	%	mil. €	%
Germany	84 946	20,32	86 168	20,94	88 489	20,67
France	60 826	14,55	61 717	15	63 363	14,8
United Kingdoms	61 254	14,66	54 671	13,29	61 187	14,29
Netherlands	52 067	12,46	53 282	12,95	56 292	13,15
Italy	37 454	8,96	36 686	8,92	35 852	8,37
Switzerland	14 880	3,56	16 024	3,89	18 069	4,22
Austria	8 852	2,12	8 999	2,19	9 196	2,15
Poland	5 724	1,37	4 866	1,18	5 693	1,33
Czech Republic	3 233	0,77	3 086	0,75	3 224	0,75
Hungary	1 706	0,41	1 496	0,36	1 457	0,34
Slovakia	965	0,23	965	0,23	941	0,22
Slovenia	1 377	0,33	1 440	0,35	1 438	0,34
CEA	417 957	100%	411 420	100%	428 168	100%

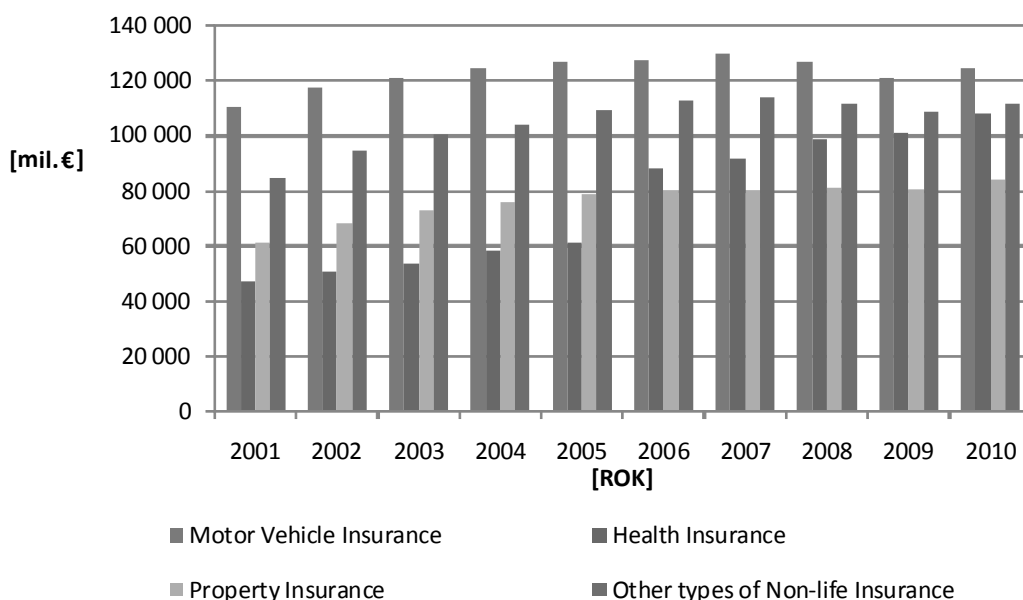
Source: www.cea.eu – original formatting

This table presents values of non-life prescribed insurance in total, for individual countries. The table consists of selected countries, whereby some may be termed developed and others developing countries.

As can be seen in the Table, Slovakia has the lowest value, but there are other countries with an even lower value of the prescribed non-life insurance. These include Bulgaria, Cyprus, Estonia, Croatia and others. The lowest value in CEA countries recorded in 2010 is held by Malta, with a value below 0,1%.

For a comparison of the development of individual types of non-life insurance, see chart 3, which states development data for the period from 2001 to 2010.

Chart 3 The development of individual types of non-life insurance in mill. (€)



Source: www.cea.eu – original formatting

Looking at the chart we see that the development of individual types of non-life insurance is not balanced, especially with respect to motor vehicle insurance, where a constant decrease and increase can be seen. The chart also shows that the highest increase of this type of insurance in CEA countries was recorded in 2007. In 2008 and 2009, there was a decrease in this insurance, but again followed by an increase in 2010.

In 2010, the share of Slovakia in the total value of motor vehicle insurance was 560 million Euro from a total value of 124 583 million Euro. In property insurance, Slovakia contributed with 218 million Euro, whereby the total value of this type of insurance in CEA countries was 83 963 million Euro. If other types of non-life insurance is concerned, from a total value of 111 703 million Euro, Slovakia contributed with 239 million Euro.

The Slovak insurance market as well as the total insurance market of Europe underwent several changes in the last years. The reason for these changes was the growth of competition, a liberalisation of the market and others. Moreover, there were certain changes in legislature, whereby Slovakia adopted the legislature and guidelines of the European union upon entering the same. The insurance market of the European union is governed by the following five principles:

1. System of a single licence – means that insurers established and registered in a EU member state may offer and sell their insurance products in other member states;
2. Abolition of a double licence system – means that insurers do not have to file for licence in the country of their establishment as well as in the country where they intended to offer their insurance products. Today, a report system is used;
3. Mutual recognition of licences;
4. Creation of a supervisory body to oversee the solvency of insurers by their stakeholders and management;
5. Freedom of investing temporarily freed funds + free capital flow.

The European insurance market is an example of an aggregate insurance space. Its basic goals are the integration, globalisation and especially the functioning of this insurance whole in the member states.

Integration is thus a sort of effort of insurers and insurance companies to extend the offer and sale of insurance products.

The basic legal document governing the insurance market in terms of the financial market is the Rome Convention. It formulates elementary freedoms of the insurance market in Europe, also known as three pillars:

- 1st pillar – freedom of the establishment of subjects
- 2nd pillar – freedom of provision of services
- 3rd pillar – free flow of capital

For countries to be admitted to the single European market, it was necessary for these countries to meet the conditions, set forth by the so-called White book. For Slovakia to be admitted to the European market, it was necessary that new guidelines be introduced, pertaining not only directly to the insurance market, but having an impact on it – e.g. protection of customers or economic competition.

The guidelines of the common insurance market in Europe fall into three generations. They are divided based on the years in which they were introduced. The first generation was introduced in 1973, the second generation in 1988 and the third generation in 1992. Each generation includes two guidelines, one pertaining to non-life and the other to life insurance.

1st generation of guidelines governs the conditions for granting and revoking insurance licences, as well as the conditions for the performance of this activity and set forth the rules for agencies and branches, the mother institution of which did not reside in the European Community.

2nd generation guidelines pertained to the 2nd pillar. In terms of life insurance, it touched upon offering insurance products in other member states without the necessity of a branch. In non-life insurance, it touched upon the definition of the risk under which the insurer was allowed to offer products in terms of the EU without the obligation to establish a branch or agency.

3rd generation guidelines caused a reorganisation in insurer supervision. It meant a significant step forward in the area European insurance market legislature.

It is moreover important to mention those guidelines pertaining to specific areas of the insurance market, e.g. legal insurance, assistance insurance, automotive liability insurance and others.

For a better summarization and comparison of the Slovak and CEA market, it may be beneficial to summarize some indicators. This summarization can be found in table 9.

Table 9 Summary of some indicators of the insurance market in CEA states and Slovakia in 2010.

Identification of indicator	CEA	Slovakia
Insurance Premium [mil. €]	1 104 221	2 067
Insurance Premium per capita [€]	1 869,91	380,13
Life Insurance Premiums per capita [€]	1 114,84	207
GDP in current prices [mil. €]	13 543 827	65 887
Insurance [%]	8,15	3,14
Number of Insurance companies [ks]	4 790	22
Population [tis. ks]	590 521	5 435

Source: www.cea.eu, www.slaspo.sk – original formatting

The table shows that Slovakia is on a relatively low level. The CEA comprises 32 countries including Slovakia, but it must be noted that from among developing countries, we do not show the worst values and indicators. It must be understood that the transformation of the insurance market in Slovakia was not completed by entering the European union. These changes in quality a long-term and do not take several years but several decades.

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Expansion of Polish Enterprises in the Terms of Direct Foreign Investments

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Abstract

Polish direct investments abroad are a direct effect of changes that have occurred in the Polish economy, particularly in the context of the level of its globalization. A dynamic increase in these investments points to the growing potential of Polish enterprises which have become active participant of the international system of investment capitals turnover. The intensifying trend in export of Polish capital has also caused changes in the international position of Poland, which gradually transforms from a recipient of capital in the form of foreign investments towards a more substantial source of this type of capital.

The capital today, with its numerous forms, is probably one of economic resources which show the highest mobility. Flows of capital occur not only on an international scale, but intensifying financial flows can be also observed in national economies and flows between and inside sectors. Analysis of mobility of capital reveals increased volume of inflowing capital, but also growing rate of its transfer and easiness of transformation in a variety of forms (direct investments, portfolio investments, bank and non-bank credits, loans), depending on a characteristics of host country market and interests of the capital owner.

According to Szostak (2005), one spectacular effect of globalization is the unprecedented expansion of international activity of enterprises, foreign exchange and capital flow, with particular focus on foreign direct investments. The essential role of FDI in the world economy in the past five decades was also emphasized by A. Sulejewicz (1997) who argued that the expansion of markets was a priority objective among transnational corporations considering the mass production paradigm that dominated the eighties of the 20th century. Those days, around 40% of world FDI were the investments that sought markets (Dunning, 1993).

FDI can be defined in a variety of manners. According to a generally accepted definition of OECD, direct investments abroad are defined as investments which were made by a resident in one economy (direct investor) in order to derive long-term benefits from the capital involved in the enterprise-resident (Grabowska, 2008) in another economy. It is adopted that a direct investor has at least ten ordinary shares (i.e. share of equity) or powers to at least 10 votes in general shareholders' or stakeholders' meeting. Direct investor is regarded to be a natural or legal person that is a resident in another country and have a considerable influence on company's management (OECD, 1996).

According to Krugman and Obstfeld (2002) *foreign direct investment is regarded as an international transfer of capital aimed at creation of a foreign affiliate in another country and to take control over this entity*. Budnikowski (2010) argues that *direct investment means establishment of an enterprise abroad or managing the existing enterprise*.

According to A. Bąkiewicz (2010), the concept of FDI consists in investments made abroad, although it is not solely aimed at having the assets in foreign markets but gaining effective control over them. This means that, if an enterprise buys foreign shares of other enterprises and needs something more than a dividend resulting from the investments in the form of higher selling price compared to buying price, this operation can be considered as portfolio foreign investment. Furthermore, if the enterprise is interested in gaining control over an enterprise abroad, they buy a suitable number of shares to acquire a controlling interest. These activities are also considered as FDI.

Foreign direct investments are composed of (Mińska-Struzik et al., 2007):

- inflow of capital in the form of purchase of stocks and shares,
- capital invested through contribution-in-kind,
- reinvested profits,
- increase in other debt or liabilities (including credits and loans).

Analysis of potential benefits for the enterprises involved in creation of FDI reveals the following reasons (Oziewicz et al., 2006, Budnikowski et al., 2000):

1. **Searching markets.** Investments are made with a view to obtain the access to the market in a particular country (host country which accepts FDI). The determinants of investment decisions include in this case: market size (magnitude of GDP and population), income per capita, market growth, access to regional and global markets, specific consumer preferences and market structure.
 2. **Improving effectiveness.** The goal of the investment is to increase the effectiveness of business activities through rationalization of the existing corporate structure. Increase in company's profitability will be favoured by the benefits derived both from production scale and the scope of activities as well as diversification of risk in different markets.
 3. **Searching for resources.** The goal of the investment is to make use of capacity connected with existence of natural resources, resources of cheaper qualified and unqualified workforce etc. in the host country. The access to the infrastructure (ports, routes, energy grid, telecommunications) are also of essential importance.
 4. **Acquisition of strategic assets.** The investor intends mainly to purchase the assets which are supposed to allow for maintaining or increasing competitiveness in regional and global markets. This might be a new technology, know-how, new distribution channels etc.
- The reasons behind involvement of investors in FDI according to selection of their type were also emphasized by M.A. Wares (2002) (see Table 1).

Table 1 Types of foreign direct investments according to investors' reasons

Type of foreign direct investments	Investors reasons
Investments in search for natural resources	Production cost reduction
Investments in search for markets	Avoiding barriers of customs character. Production and sales in local market.
Investments oriented towards improvement in the effectiveness	Extending the activities on foreign markets in order to increase global effectiveness in all the divisions
Investments in search for strategic resources	Acquisition of resources: know-how, technology, distribution channels

Source: M.A. Waresa, *Inwestycje niemieckie w Polsce a handel bilateralny: substytucja czy komplementarność?*, „Prace i Materiały Instytutu Gospodarki Światowej”, No. 240, Oficyna Wydawnicza SGH, Warsaw 2002, p. 39-43.

There is a common view shared in contemporary economic theory and practice that capital export, both in the form of tangible and financial investments can perform a number of functions which are very useful for the economy and the enterprises of parent countries that export capital (also from the developing and emerging economies). Investing abroad might be a precondition for survival, transformation and development of enterprises and is conducive to the reinforcement of their innovativeness and competitiveness in the international and national markets and positively affects (both directly and indirectly) the development of export in the parent country (Kotyński Bąkowska, 2010).

Direct foreign investments affect the countries that export capital and reap profits or make a loss on these investments. Similarly to the host countries, the benefits and loss can be analysed in the areas of technology transfer, employment, balance of payments, national income and other factors.

In the area of technology transfer, there is a threat of becoming technologically dependent and even losing the dominant market position because of the risk of being copied.

In the area of employment, there is a risk of diminished job opportunities because of moving business to another country and reduction in investments that promote employment in the parent country. However, growing employment rates can be typically observed in the investor countries, especially among executives and managers.

Balance of payment in the country which is a source of FDI might also be modified through increased export, particularly in the first phase of establishment of affiliates, since the equipment for the new investment usually comes from the investor country.

With national income, one can observe a decline in investments, production or budgetary revenues, and, on the other hand, stimulation of the economy through international relations and profit transfer. There are also some other positive effects of FDI, e.g. enhanced access to natural resources or fighting competition through acquisitions.

In order to stimulate foreign direct investments, some countries impose restrictions on sales of imported goods, which makes it easier for local (both national and international) enterprises to operate. In some Asian countries, the costs that importers must incur in the case of certain products might reach even 300% of the product value (Czemy, 2005).

Undoubtedly, the investments planned and made abroad have essential effect on reputation of the economy where capital comes from. According to the theory by J.H.Duning, an economy reaches the highest level of growth if national enterprises start pouring more capital abroad compared to the level of capital inflowing in the form of FDI (Radomska, 2010). The flow of direct investments is measured by **NOI index** (*Net Outward Investment*) **per capita**. Therefore, foreign expansion is the domain of the economies which have achieved higher level of development, which translates into the prestige of the country and the enterprises that invest abroad.

Polish Direct Investments Abroad

Polish direct investments abroad are a direct effect of changes that have occurred in the Polish economy, particularly in the aspect of the level of its globalization. A dynamic increase in these investments points to the growing potential of Polish enterprises which have become active participant of the international system of investment capitals turnover. The intensifying trend in export of Polish capital has also caused changes in the international position of Poland, which gradually transforms from a recipient of capital in the form of foreign investments towards a more substantial source of this type of capital.

In the light of the above motivations for more intensive investment activity abroad, the main reasons that make Polish enterprises invest abroad are in particular (Polskie Inwestycje Bezpośrednie, 2012):

- *capacious local markets*: this factor concerns in particular Asian countries and the countries of the Commonwealth of Independent States, which have considerable demographic potential and high dynamics of internal demand combined with perspectives of substantial economic growth

- *lower unit labour costs* – the most of the investments located abroad by Polish entrepreneurs are labour-intensive production. The use of a relatively cheaper labour, primarily from Asian and East European countries determines its competitiveness,

- *protecting the market position* – with global economy today, direct investments to other countries of a region are made in order to prevent expansion of other investors, considering these activities as a specific step ahead of potential competitors,

- *consolidation in the sector* – direct investments, usually in the form of mergers and acquisitions, are aimed at building a strong position of the enterprise in the region and, less frequently, a global position. In the case of Polish FDI, this concerns the specialized or declining market sectors,

- *opportunities of broader export expansion on the nearest markets*: presence of investments in foreign markets facilitates further expansion of business activity on geographically close markets, thus reducing the costs of such activity. Furthermore, the host countries have signed more favourable international agreements with third countries compared to Poland, which considerably reduces entry barriers to third party markets,

- *additional opportunities for export to the investment market* – investments made abroad usually involve the necessity of exporting components and other means necessary for continuation of the production or providing services,

- *avoiding customs barriers* – present (or suddenly introduced) custom barriers might become a limiting factor in export activity of the enterprise in a particular market. In this case, the only form of survival in the market and maintaining position is direct investment activity.

Analysis of the cases of Polish investments abroad reveals that the factor which is more conducive in making entrepreneurs expand abroad is new markets.

It seems to be certain that searching for resources has also been gaining in importance in recent years. One spectacular example is provided by KGHM corporation which bought Canadian company Quadra that owns large copper deposits in e.g. Chile. Moreover, the corporation also gained access to a number of other sought-after metal such as molybdenum, nickel, palladium or selenium. This allowed KGHM to broaden their opportunities of extraction and the company will become a more important market player.

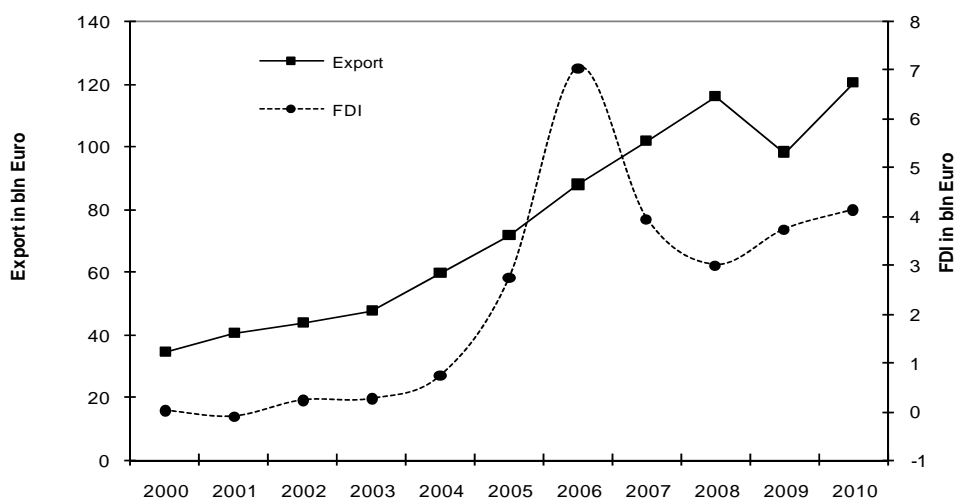
PGNiG gas corporation also invested in deposits, particularly in Norway, where they have e.g. 12% share in an international project operated by BP. Its daughter companies get contracts for exploration of oil and natural gas in many regions of the world, but PGNiG have not bought big concerns from other countries to date. However, this is yet to come. PGNiG is currently planning to buy a package of 49% of

shares of Słowacki Przemysł Gazowniczy, which controls an important transit piping that supplies natural gas to Western Europe.

Polish companies are also active in seeking strategic assets, which manifests in acquisitions of foreign companies with unique technological solutions and established position in their parent markets. This concerns in particular IT and automotive sectors. Although risky, the strategy preferred by Asseco has so far been successful, which is confirmed by the company's good financial results and constant entering into new markets. Buying local market players makes it easier for the enterprises to bid for tenders, especially those organized by the state authorities or self-governments, or to develop different IT systems. Asseco Group often finds small innovative enterprises and buys them before they are found by competitors. At the moment, their foreign assets are estimated to be roughly over 600 billion dollars.

Foreign direct investments that have been made by Polish companies since 2000 show in general an upward tendency (Fig. 1). The exceptional year was 2001, when economic downturn and reduction in investments by Polish banks caused withdrawal of nearly €0.1 million. A record-breaking year was 2006, mainly because of a single transaction which remains to be the biggest Polish foreign investment i.e. purchase of a refinery in Lithuanian city of Mažeikiai by Polish giant PKN Orlen (the transaction was priced at ca. €1.86 billion).

Figure 1 Polish export and FDI in 2000-2010 (billion Euro)



Source: Author's own study based on: *Polskie inwestycje bezpośrednie za granicą, 2010, 2009, 2008, 2007, 2006, 2005, 2004, 2003, 2002*,

Narodowy Bank Polski, Departament Statystyki, <http://www.nbp.pl/home.aspx?f=/publikacje/pib/pib.html> ; http://www.paiz.gov.pl/polska_w_liczbach/gospodarka

The years 2008-2009 were marked in the world economy by global economic crises. Although the value of FDI made by Polish companies was reduced insignificantly in 2008 compared to the previous year, it was revived in 2009. They year 2010 was a continuation of the upward tendency with the value of FDI exceeding the level from 2007.

In geographical terms, Polish investments were made primarily in European countries. This tendency has been steady for several years. In 2010, the above countries absorbed the vast majority of Polish FDI (93.6%). A noticeable dominance of this region as a region for Polish foreign investments shows that geographical and psychical distance is still a decisive factor in starting investment activity among Polish investors. In other continents, Polish investors were substantially less active in 2010 compared to 2009. A capital with the value of €296 million was withdrawn from America due to a considerable outflow of capital from Caymans (- €427 million), which could have been caused by planned taxation of the investments in tax heavens. A significant reduction was observed in the contribution of Asian countries to the structure of Polish FDI: it decreased from 2.1% to 0.5%, whereas nominally, Polish investments in this

continent amounted to €21 million. In 2010, a capital of €169 million was withdrawn from Hong Kong back to Poland.

Table 2 Polish foreign direct investments made abroad and withdrawn in selected countries in 2010 (million euro)

Country	Capital Outflow from Poland	Country	Withdrawal of capital from Poland
Luxembourg	1636	Norway	- 434
Switzerland	707	Cayman Islands	- 427
New Caledonia	497	Hong Kong	- 169
Belgium	495	Sweden	- 161
Cyprus	434	Russia	- 150
Germany	315	Brazil	- 79
the USA	235	Greece	- 42

Source: Author's own study based on: *Polskie inwestycje bezpośrednie za granicą w 2010 roku*, Narodowy Bank Polski, Departament Statystyki, <http://www.nbp.pl/home.aspx?f=/publikacje/pib/pib.html> ;

The year 2010 confirmed a high position of Switzerland, Belgium and Germany as the main destinations for location of Polish FDI. However, the country which absorbed the most of Polish investments with the highest value was, similar to 2009, Luxembourg.

However, this big concentration of Polish direct investments in these three countries is not synonymous with high interest of Polish investors in these markets. In the case of Switzerland or Luxembourg (and Belgium and New Caledonia in 2010), it is illegitimate to consider Polish foreign direct investments in classical terms. The most of Polish capital that was poured to these countries is purely financial. However, according to the generally accepted methodologies, it is qualified as foreign direct investments (Polskie Inwestycje Bezpośrednie, 2012).

Conclusions

Foreign investments are a natural stage in development of enterprises. Therefore, they are expected to be on the increase, though Polish companies are more selective in their decisions, especially because some initiatives (e.g. PKO BP in Ukraine or Orlen in Lithuania) were disappointing. The enterprises are aware that the investments abroad open up opportunities for increasing the area of operation and profits but they also generate higher risk and more intense managerial effort. Therefore, decisions of external expansion of enterprises must be preceded with an in-depth risk assessment and evaluation of costs and benefits of this concept of development.

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2. Management and Human Resource Management

Women in the Position of a Head Teachers of Secondary Technical Schools

Helena Harausová

Abstract

The first part of this article deals with the problem of gender inequality between men and women which correlates with the position in an organisation. The next part applies this theoretical knowledge to women – directors of secondary technical schools. The result of an analysis which studied the proclaimed feminisation of education, frequency of women representation as directors of secondary technical schools and women who work in the position of deputy director are described here. The recommendations which would be helpful for a female teacher of secondary technical school to get promoted to the position of a director and to effectively perform it are proposed in discussion.

Key words

Manager, Managerial skills, Gender inequality, Feminisation of education, woman, Director of secondary technical school

Introduction

Women working in managerial positions are not uncommon. There is a rising influence of women in the working process as well as in the area of management of manufacturing and non-manufacturing organisations. This concerns also the management of secondary technical schools. Their personal and professional preconditions allow women to hold the top managerial positions in schools. The professional preconditions are gained through study. Every woman who works as a director of a secondary technical school has a university education, which allows her to understand the conceptual and pedagogical side of the educational process at school. A woman who was previously a teacher could become also a successful manager; she should possess the personal preconditions and supplement her education also in the area of leading people and managing schools.

Women and management

In literature management is understood as the process which helps to transform inputs into outputs in order to achieve the set targets of an organisation. The manager leads this process and based on his key competences and with the help of subordinates he is able to meet these targets. Drucker (1979, in Bartram 2005) characterised manager as a person who sets targets, organises and allocates work, measures the performance of subordinates, motivates them, and helps with their development. Does this definition apply to the managers men or women likewise? Pounder and Coleman (2002) state that a lot of authors have noticed that women have a significant impact on the national economies by means of their participation in organisations or by owning them. They have also taken note of that increasing of number of women who play an important role in society will probably continue also in the 21st century. Physical and mental differences between men and women as managers are very often analysed in literature; there are questions if these differences have a significant impact on the ability to effectively lead an organisation. Bartman (2005) writes that men are characterised as less submissive, more independent, less sensitive and can better handle crisis situations. A woman who does not have these attributes, as Bartman (2005) further says, will be probably rejected as a manager and even though she possesses these attributes, she will be rejected anyway, based on the fact that she is woman.

Rosener (1990, in Bartman) brings a new perspective on woman – manager. He writes the woman as a manager has her own ways how to do things. Rosener's work is groundbreaking in a way that he considers the woman's viewpoint, enables women to express their opinions on the leadership and management. He assumes the application of such a managerial style which will consider female attributes such as: empathy, tenderness, obedience, sentiment, understanding of others, compassion, sensitivity, dependence. In contrast he states male attributes such as: dominance, aggressiveness, toughness, assertiveness, autocracy, analytical skills, independence, ability to compete.

Jogulu and Wood (2006) state that as regards to the managerial skills and abilities which have a significant impact on a manager's performance and they are oriented also on leadership, such skills and abilities were more significantly manifested by male than female managers. Based on their research, it

can be said that the gender inequalities do exist not only generally but also in terms of management quality and managerial skills. However, there is no evidence in their research that female managers are not able to give an adequate managerial performance.

O Connor (2001) writes that to get to the top position is as important for a man as it is for a woman. It brings a satisfaction to both genders for a number of reasons, and O Connor (2001) lists apart the top position itself also prestige, respect and power. Yet more women than men appreciate that they have done a good job, which has been appreciated and they have a feeling that they contributed to the meeting the targets so that they operate in the top position. O Connor (2001) is convinced that men and women can complement each other in business.

Women and management of secondary technical schools

Secondary technical schools are characterised in a way that the main content of their educational process is the teaching of vocational subjects e.g. economical, technical, food-processing, trading, and others focusing on services. It is generally known that predominantly woman are teaching the vocational subjects at secondary technical schools. In regards to the feminisation of secondary technical schools it could be assumed that the position of director would be held by women. If we take into consideration earlier presented differences between men and women in the management sphere and area of business of secondary technical schools where the main customers are pupils who require a sensitive and sympathetic approach from not only the teachers' side but also from the side of management, then this assumption is understandable. But is this really so? Are there more women than men in managerial positions at secondary technical schools? The answer to this question was looked for in statistical publications of the year 2009 and statistical data which were collected by the author of the years 2008 – 2011, during which she worked as a lecturer within the functional education of directors and deputy directors of secondary technical schools.

Analysis

The claims about the feminisation of education and especially secondary technical schools supports also the following table, in which the statistical findings about the frequency of men and women in the position of teacher at secondary technical schools are presented.

Tab 1 Feminisation of education

School type	Together	Women	Men	% representation of women
Grammar schools	7 999	5 918	2 081	73,98 %
Secondary technical schools	16 283	11 380	4 903	69,98 %
Conservatories	800	461	339	57,62 %

Source: www.uips.sk/sub/uips

As seen from the table, the feminsation of secondary education is real. Feminisation prevails also at secondary technical schools, where the technical subjects such as construction, engineering, electrical engineering, agriculture, etc are being taught and where one would expect that such subjects would be taught by men.

In December 2011 from 56 randomly chosen secondary technical schools in Slovakia 29 men (51.78%) and 27 women (48.21%) held the position of director. This does not show a considerable feminisation. The post of director is held rather by men than women, but the results indicate that the rising trend of women on the post of director is possible.

During years 2008 – 2011; 225 participants of functional training led by the author and who held the position of deputy director of secondary technical schools were women, what represents 88.00%. These results document the fact that there is a significant feminisation on the post of deputy director.

Discussion

The findings the author of this article come into conclusions correspond with the conclusions of Bosa and et al. (2009) who claim that in spite of the considerable feminisation of schools, there is still a significant vertical gender segregation. Feminisation of schools is more outstanding; it exceeded (approached) 80.00%. Yet the managerial positions are held disproportionally more often by men even though there is fewer of them among the teaching staff. Also the next part of their presented results correspond with the results of the author of this article and namely that there is an opposite trend with the

position of deputy director. There is a higher number of women on the post of deputy director – according to the author's findings 88%. Bosa and et al (2009) justify this fact so that the position of director is connected with the school representation while the position of deputy director is connected with administration and rather routine tasks, which women do more willingly. Based on the responses of the participants of the training, we can only agree with this justification.

How to increase the number of women in the position of director at secondary technical schools? A model suggested by Bartman (2005) could be applicable. This supports a possible woman's development for the effective operating on the post of manager:

1. To enable women to hold the position of the top manager
2. To exploit the trainings for strengthening such qualities and skills of women which ensure the effective management of an organisation
3. To eliminate the power relations that force women to accept subordinate status.

Trovato (2008) writes that woman is forced to divide her loyalty between family and work, therefore she must follow the plan which is very flexible. We can only agree with this opinion and based on that to recommend women who want to work as directors of secondary technical schools to work out such flexible plan.

O Connor (2008) indicates that some women have less interest in working in managerial positions. They prefer rather good interpersonal relationships and want to develop those competences which enable them to assert themselves in their profession. The author of this article associates herself with this view. This view is also supported by the responses gained during informal interviews with the participants of functional training.

Conclusion

There are a lot of factors which influence women's decision to hold the top managerial position in an organisation. These include for example: organisational and personal barriers, professional competences, performance, interpersonal relationships, family, discrimination of women, etc. Nevertheless, the majority of researches assume that women have also the needs to achieve the self-realisation through holding the top managerial position. They are capable of associating themselves with organisation's targets and give the desired performance.

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Impact of Globalization on the Use of Management Tools in Practice

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Abstract

Many companies have experienced a globalization process that has led to fundamental shifts and changes to the basic structure of firms. Globalization is an important factor that influences organizations, brings a lot of trends in management and has an important impact on the use of management tools. This article describes globalization and its impact on management, summarizes the latest management trends, and also, describes the management tools which are most commonly used in practice.

Key words

Globalization. Human Resources Management. Management Tools. Management Trends.

Introduction

Business success is largely determined the use of comprehensive management tools that allow them to sustainable growth and continuous value creation. Over the past three decades, management tools have become a common part of executive's lives. Whether trying to increase revenues, innovate, improve quality, increase efficiencies or plan for the future, executives have looked for tools to help them. The current environment of globalization and economic turbulence has increased the challenges executives face and, therefore the need to find the right tools to meet these challenge.

Globalization and its impact on management

Globalization is an important factor that influences organizations that compete for customers with high expectations for performance, quality and low cost (Morrison, 2005, in Friedman, 2007).

Globalization is a phenomenon “driven by many factors, of which technology, the related mobility of people, goods and ideas, and a liberal trading environment are perhaps the most obvious (McKenna, 2000, p. 75, in Perkins, 2003). Globalization has a major impact on the management of organizations. Organization must be “built to change” (Lawler – Worley, 2006, in Mohrman, 2007). Also describes the way in which organizations can to achieve growth, are:

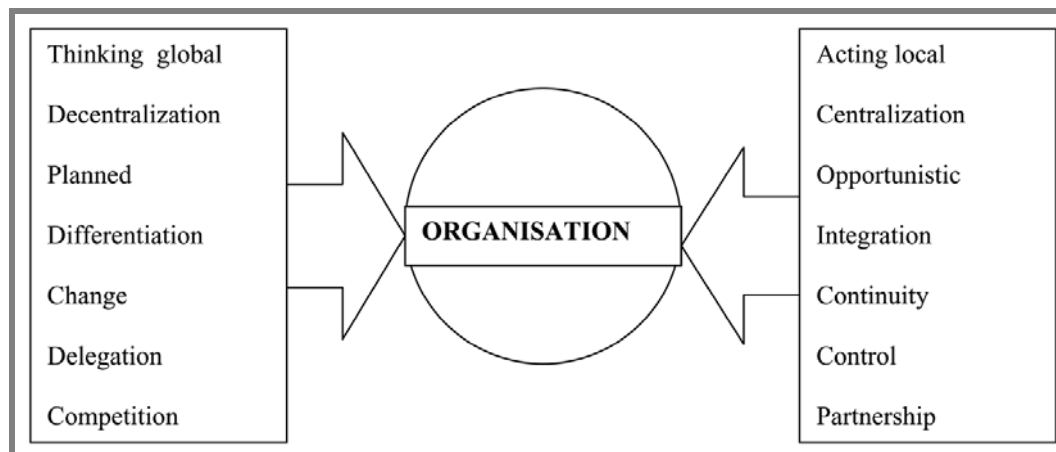
- *Growth that builds on the core business model and capabilities of the firm,*
- *Growth by developing new capabilities,*
- *Growth through innovation, and*
- *Growth through mergers and acquisitions.*

Globalization is having a tremendous influence on various aspects of business. It is accelerating the flow of resources and information, and hence, values, practices, and technology can be easily diffused. Globalization highlights the integration today's economies in terms of a number of aspects. It is often understood as a progressive integration of financial, product and markets across national boundaries (Jones, 2002). Guillen (2000, in Lui et. al, 2004, p. 238) defines globalization as “a process leading to greater interdependence and mutual awareness (reflexivity) among economic, political, and social units in the world”.

Globalizations may be perceived as leading to convergence in the way managerial skills are development, compared with the diversity between countries. O'Keeffe (2003, p. 233, in Perkins 2003) contends that the “advent of the global economy has brought a realization that the only lasting competitive advantage is an organisations ability to effectively exploit intellectual capital.” It symbolizes the structural making of the world characterized by the free flow of technology and human resources across national boundaries presenting an ever-changing and competitive business. A vital aspect of globalization is the way diverse challenge are being faced by nations in an increasingly inter dependent world. The expansion of business activities in a global scale has negligible consequences for management. The new form must transform many approaches to management and organizational structure, the formation of policies, procedures, planning, motivation, control, communication channels, working with people and so on. To have success in today's challenging global world means having a sound strategy, implemented and managed in the latest methods and practices in management, as well as the development and HR management.

Evans and Doz (1999, in Česynienė, 2008) have describes the managerial challenge in complex international organizations in terms of balancing the opposing dualities. They believe that the pace of change and the new complexity of globally operating companies create the need for harmonizing seemingly opposing forces, such as (Figure 1).

Figure 1 Opposing forces managers to balance in organization



Source: Evans – Doz, 1999, in Česynienė, 2008, p. 42.

The most important factor that these organizations are made up of people, and since Human Resources Management (HRM) is the set of activities which deals with the people factor present in any organization, this change has affected HRM itself a lot. We can say that the globalization affects not only the use of management tools but also brings the following changes: *Managing diversity of workforces, Managing outsourcing of employees - as one of many management tools, Managing part-time and temporary work, Managing productivity and Quality, Downsizing the workforce, and other.* The increasing prevalence of globalization is driven by a number of factors, including shortage of talent in developed countries, availability of low cost labor and growing consumers in developing countries, and technological process.

The use of management tools in practice

Starting in 1993, Bain & Company has surveyed executives around the world about the management tools they use and how effectively those tools have performed. The company focuses on 25 tools. Also, helps companies find where to make their money, make more of it faster, and sustain its growth longer. It helps management make the big decisions: on strategy, operations, technology, mergers and acquisitions, and organization. The main objective of global survey is *identified how the various management tools currently used depending on the sector and region in which organizations realize their activities.* Over time, research has provided a number of important insights. Among them (Rigby, 2010):

- *Management tools are much more effective when they are part of a major organizational effort;*
- *Managers who switch from tool to tool undermine employees' confidence;*
- *Decision makers achieve better results by championing realistic strategies and viewing tools simply as a means to strategic goal;*
- *No tool is a cure-all.*

Last global 13th survey was conducted by Bain & Company in 2010. The company now has a database of more than 11,000 respondents and can systematically trace the effectiveness of management tools over the years. As part of their survey, they also ask executives for their opinions on a range of important business issues. As a result, they are able to track and report on changing management priorities.

As shown in the document Management Tools & Trends (2011), in boom years companies use more management tools, rising with larger budgets and the launching of more initiatives. In tough times, companies cut back on almost everything, including management tools, and large companies consistently use more tools than smaller firms. Among the top 10 most used management tools depending on the region in which organizations realize their activities include: benchmarking, strategic planning, outsourcing, balanced scorecard and other, which describes Table 1.

Table 1 Top 10 most used management tools in 2010 depending on the region

Management tools	Global	North America	Europe	Asia	Latin America
Benchmarking	1	3	1	4	3
Strategic Planning	2	2	3	2	1 (t)
Mission and vision statements	3	4	5 (t)	3	1 (t)
Customer relationship manag.	4	1	2	1	6
Outsourcing	5	6	5 (t)	5	4
Balanced scorecard	6	12 (t)	8	10 (t)	5
Change management	7 (t)	9	4	8 (t)	9
Core competencies	7 (t)	5	8 (t)	6	10 (t)
Strategic alliances	9	7	7	8 (t)	8
Customer segmentation	10	15 (t)	12	10 (t)	7

Note: (t) = tied, 1- 10 = sequence

Source: Management Tools & Trends, 2011, s. 7.

13th survey was focused on 25 of the most popular management tools, are for example: *balanced scorecard, benchmarking, business process reengineering, downsizing, outsourcing, strategic planning, knowledge management, open innovation, total quality management, supply chain management, customer relationship management, customer segmentation, mission and vision statements, strategic alliances, scenario and contingency planning, satisfaction and loyalty management and others.*

Tool use helps give us a clear view of regional priorities. For example, benchmarking surfaced as the most widely used tool for firms in Europe, where economic uncertainty persists. North America, customer relationship management (CRM) ranked as the most used tools. We can conclude that breaking out tool use by region highlights distinct differences among the top 10 tools.

Overview the most used management tools from 2000 to 2010 describes the following table 2.

Table 2 Top management tools (2000 – 2010)

2000	2006	2008	2010
Strategic Planning	Strategic Planning	Benchmarking	Benchmarking
Mission and Vision Statements	CRM	Strategic Planning	Strategic Planning
Benchmarking	Customer Segmentation	Mission and Vision Statements	Mission and Vision Statements
Outsourcing	Benchmarking	CRM	CRM
Customer Satisfaction	Mission and Vision Statements	Outsourcing	Outsourcing
Growth Strategies	Core Competencies	Balanced Scorecard	Balanced Scorecard
Strategic Alliances	Outsourcing	Customer Segmentation	Change Management
Pay-for Performance	Business Process Reengineering	Business Process Reengineering	Core Competencies
Customer Segmentation	Contingency Planning	Core Competencies	Strategic Alliances
Core competencies	Knowledge Management	Mergers and Acquisition	Customer Segmentation

Source: www.bain.com

Breaking out tool use by region highlights distinct differences among the top 10 tools. In addition to being the heaviest users of social media programs, North American executives use downsizing more frequently than their counterparts elsewhere in the world. European firms lead in the use of change management programs. Asian companies are top users of knowledge management, a tool companies use to strengthen their organizations by taking full advantage of intellectual assets. Latin American firms use more tools than any other region. Their willingness to embrace a wide range of tools reflects their efforts

to identify growth opportunities and increase revenues in a vigorous economy. They're the lightest users of downsizing, rapid prototyping and CRM (Management Tools & Trends, 2011, p. 8)

Summary

In conclusion we summarize trends, which has identified based on the survey by Bain & Company. Important trends are: nearly all executives believe innovation is vital to their company's success, but few feel they have learned to harness its power effectively; many executives have serious concerns about how their organizations gather customer insights and manage decision making. While globalization may bring new challenges and trends to firms, largely influences the selection of appropriate management tools in different regions of the world.

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Making Competitive Strategy for Industrial SMEs

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Abstract

The study is devoted to develop the technique for the implementation of competitive benchmarking in an industrial company in strategy of the follower. The proposed technique is based on Free Disposal Hull (FDH) method and enable gradually develop and make informed strategic decisions that ensure the achievement of efficiency frontier and a leadership in its market segment. By a case of 60 Ukrainian dairies paper demonstrates how we can use proposed technique in a practice and what steps we should make to find company benchmark and improve our efficiency. Proposed technique enables to improve the various activities of the analyzed dairies. It is possible to use the results of this research to make competitive benchmarking for the other industries.

Key words

Strategy, Competitive benchmarking, SME, Efficiency, Dairy, Ukraine

Introduction

During the financial crisis, when investment resources are limited, not every company is able to make own innovation. Even if company has sufficient resources for innovation process, it does not always bring to success. Passing all stages of development and creation of new technologies and products is a long process, but dynamic competitive environment and globalized market does not allow for a long time to think. Thus it would be reasonable for the most companies (especially small- and medium enterprises - SMEs) to choose a competitive strategy based on a copying of the products, processes and technologies, i.e. strategy of “the follower”. According to Levitt (1966), this strategy is no less effective and is more reliable than a strategy of “the first mover” or “creative innovator”. Many authors support this view (i.e. Huang et al. (2010), Shenkar (2011)).

However, if company operates on the markets with intense competition and a large number of companies, choosing a strategy of “the follower” company's management is faced with the problem of selecting an object for the following (appropriate best practice), which will enable to develop business at minimum cost. Competitive benchmarking helps to overcome this problem. Boxwell (1994) believes that this type of benchmarking is the most difficult, and defines it as the measurement and improvement of your functions, processes, activities, products or services up to and above your competitors.

Offering competitive benchmarking methodology, some scholars emphasize different aspects of management, including quality management (Lobo, 1999) or humane resource management (Islam et al., 2012). Raa (2009) considers only analytical tools to measure the comparative performance. Dubodelova et al. (2010) limits by general theoretical statements and identify competitive benchmarking with the continuous innovation. Thus, there is no unity of understanding the essence of this important type of benchmarking.

Gunasekaran (2003) emphasizes the importance of the use of competitive benchmarking in SMEs along with generic and internal benchmarking. But as Monkhouse (1995) was found there is very poor (“embryonic”) use of competitive benchmarking by the SMEs. This is not surprising, because until now we do not have an effective methodological technique to implement this type of benchmarking and its major components as the process to improve a company performance for “the followers”, which as a rule are the SMEs.

This problem is particularly relevant for Ukrainian industrial companies, among which only every ninth implements innovation in its activity. Therefore, the aim of this study to develop the methodological technique for the implementation of competitive benchmarking in an industrial company that practicing a strategy of “the follower”.

Methodology

The offered technique is based on the use of non-parametric methodology to measure and analyze the efficiency, which has several advantages compared to other methods (see in Goncharuk (2009a)). In particular, for solving the problem of finding the best competitor, which may be equal to the analyzed company, we propose to use the method of Free Disposal Hull (FDH). This method was first proposed by

Deprins et al. (1984). Unlike more popular in the theory and practice a non-parametric method of Data Envelopment Analysis (DEA), FDH has important advantages that make preferred its use in finding the best competitors. The major ones are the following:

- (a) FDH rejects the hypothesis of convexity (concavity) of the frontier of production capabilities (efficiency), while for the DEA a convexity is the main hypothesis;
- (b) FDH does not include into the efficiency frontier the points on the lines connecting the best companies;
- (c) FDH does not have many limitations associated with the production technology;
- (d) FDH excludes from consideration the hypothetical (not existing) enterprises, analyzing the actual parameters of real competitors.

The main objective to develop FDH method was to provide assurance that the evaluation of the efficiency is the result of actual parameters, rather than hypothetical (Cooper et al., 2006). For example, such a point (the company), as Q' in Figure 1 is not taken into account, because they are not actually observed objects, and were calculated and are hypothetical.

Figure 1 FDH efficiency frontier and companies

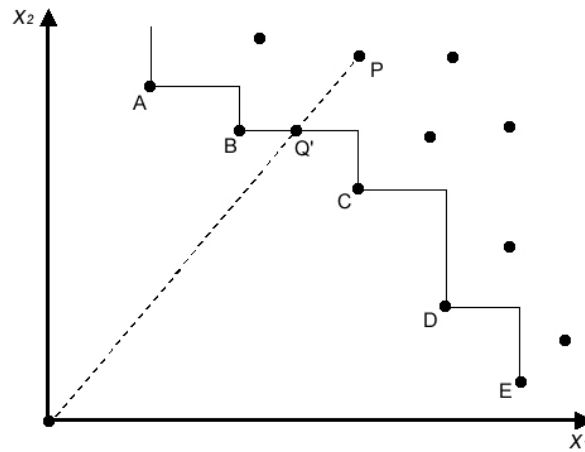


Figure 1 shows a simple example of constructing the efficiency frontier by the FDH for the case of production of one output of the two types of inputs (x_1 and x_2). The frontier that connects the many companies on the figure is a "hull". This hull defines the minimum set of companies and includes all production capabilities, which can be obtained from observations.

Formally, this is as follows:

$$P_{FDH} = \{(x, y) | x \geq x_j, y \leq y_j, x, y \geq 0, j=1, \dots, n\}, \quad (1)$$

where $x_j (\geq 0)$, $y_j (\geq 0)$ are actually investigated parameters for $j = 1, \dots, n$ companies. No point located below the function (frontier) on Figure 1 does not meet the conditions of a set of production capabilities P_{FDH} .

Input-oriented FDH model with using a mixed integer programming can be written as follows:

$$\begin{aligned} & \min \theta^{FDH}, \\ & \text{subject to:} \\ & \sum_{j=1}^n \lambda_j x_{ij} \leq \theta^{FDH} x_{i0}, i = 1, 2, \dots, m, \\ & \sum_{j=1}^n \lambda_j y_{rj} \geq y_{r0}, r = 1, 2, \dots, s \\ & \sum_{j=1}^n \lambda_j = 1, \lambda \in \{0, 1\} \end{aligned} \quad (2)$$

where θ^{FDH} is a scalar that determines the efficiency of the i -th enterprise; λ is a binary variable taking only two values: 0 or 1.

Thus, the FDH method determines the actual companies included in the frontier as effective. The benefits of its use in competitive benchmarking is that this method allows for any ineffective company to find nearest actual company from the efficiency frontier. The latter is best practice for it in terms of reducing costs.

The Technique

We propose the following steps for methodological technique of competitive benchmarking in an industrial company that was chosen for itself the strategy of follower without making own innovations:

- Step 1: Formation of a sample of companies for performance analysis;
 - Step 2: Selection of performance indicators for business performance analysis;
 - Step 3: Construction of the efficiency frontier using the FDH;
 - Step 4: Choice of effective company-benchmark (best practice);
 - Step 5: Analysis of opportunities to develop decisions to eliminate the lagging behind the company-benchmark;
 - Step 6: Making the decision to improve the efficiency of the investigated company.
- The work of the proposed technique we will show on a case of the dairy industry of Ukraine.

The Case

Step 1. We have selected 60 operating dairy companies with:

- (a) the number of employees from 40 to 1300 people;
- (b) the main type of products is dairy products;
- (c) supply products mainly to the domestic market.

The selected enterprises have a different form of ownership and legal form: from private enterprise to a public joint stock company.

The total volume of output in the sample exceeds 580 millions USD.

Step 2. Like in previous studies (i.e. in Goncharuk (2009b)) in this study as input parameters we examined the material cost, depreciation of fixed assets and number of employees that adequately characterize the use of the basic three factors of production. As an output parameter net sales of dairy products (in wholesale prices without VAT and excise) are used.

Considering that results of using the FDH like the DEA are sensitive to errors in initial data, the annual reports of the companies, reliability of which is confirmed by the auditor conclusions, were used as a source of information.

The descriptive statistics of a sample of the companies is framed in Table 1.

Table 1 Descriptive statistics for companies sample, (in thousands USD, except employees)

Variables	Ukrainian dairy companies		
	Mean	Median	Stand. dev.
Material cost	8710	4466	9842
Depreciation of fixed assets	403	123	612
Number of employees	345	253	308
Net sales	15404	6717	18969

Step 3. To construct the efficiency frontier and to determine estimates of the relative efficiency of each company of the sample we used FDH model (2) and the software DEA Frontier™.

The result of evaluation shows that 33 companies are on the frontier of efficiency. They can become a benchmark for the competitive strategy of «the follower» for the rest companies of the sample.

The partial results of an estimation of efficiency scores by input-oriented FDH model for Ukrainian dairies are reflected in Table 2.

Table 2 FDH-efficiency scores for Ukrainian dairies

Company name	Number in rating	Efficiency score
Balta dairy factory of baby products	1	1.000
Bershadmoloko	1	1.000
Galakton	1	1.000
Galychyna	1	1.000
Kharkov dairy factory	1	1.000
Kulykivske moloko	1	1.000
Molochnik	1	1.000
Ostrog dairy plant	1	1.000
Vimm-Bill-Dann Ukraine	1	1.000
Volodymyretska dairy plant	1	1.000
...
Dairy plant Olkom	51	0.440
Ovruch dairy factories	52	0.415
Bahmachkonservmoloko	53	0.401
Ivano-Frankivsk dairy plant	54	0.364
Lviv city dairy plant	55	0.290
Slavmoloko	56	0.286
Kryvorizky city milk plant No. 1	57	0.181
Factory "Prydniprovskiy"	58	0.127
Kupyansky dairy factory	59	0.057
Uzhgorodmoloko	60	0.032
<i>Average on sample</i>		<i>0,708</i>

Step 4. The chosen method allows you to set the near company-benchmark, i.e. lies on the efficiency frontier. Ineffective company can achieve a level of performance of such benchmark with minimal costs. For example, according to the results of analysis, Ostrog dairy plant (ODP) is a benchmark for Slavmoloko. Notionally, if Slavmoloko is point P on the Figure 1, then ODP corresponds to point B. Actually, the former lags the latter in terms of labor productivity by 24%, return on assets in 3 times and the level of material-output ratio at 6.7%. This means that if Slavmoloko will choose a strategy of the follower, it can look at these figures as the reserves of performance improvement and ultimately eliminate the backlog on them.

The company-benchmark most suitable for implementation of competitive benchmarking have been established for each observed inefficient dairy (the follower) and partially presented in Table 3.

Table 3 Optimal benchmarks for Ukrainian dairies

Inefficient company	Company-benchmark
...	...
Dairy plant Olkom	Bershadmoloko
Ovruch dairy factories	Balta dairy factory of baby products
Bahmachkonservmoloko	Bershadmoloko
Ivano-Frankivsk dairy plant	Polonyna
Lviv city dairy plant	Bershadmoloko
Slavmoloko	Ostrog dairy plant
Kryvorizky city milk plant No. 1	Vimm-Bill-Dann Ukraine
Factory "Prydniprovskiy"	Kulykivske moloko
Kupyansky dairy factory	Polonyna
Uzhgorodmoloko	Molochnik

Steps 5 and 6. If a company-benchmark produces products that are close to their consumer properties, works in the same market segment, then lagging company should, first of all, look for weaknesses in marketing, logistics, manufacturing process and organizational management system, i.e. internal factors of relatively low efficiency.

Identified weaknesses in the internal systems of the company may be removed by the internal process benchmarking tools (see in Binder et al. (2006)). This type of benchmarking enables to improve the processes, operations and functional areas of business. But to successful implement internal benchmarking a company's management must overcome different types of barriers defined by Amaral and Sousa (2009):

organizational barriers (people, culture, and context); benchmarking project management barriers (planning and implementation, leadership, and business pressures) and benchmarking data barriers (difficulty to access/compare data).

In order decisions to reach the goal, it is advisable to combine an internal benchmarking with appropriate system of personnel motivation. This combination usually gives the positive results (Goncharuk and Monat, 2009).

If there is no significant influence of internal factors, it is necessary to develop a strategy to eliminate the influence of external market factors that lead to a break in the level of efficiency and relatively low sales volumes. Here we can offer the following options for a strategy of the follower:

(a) duplicate the product, packaging of the company-benchmark and sell your goods on the market, where has not yet presented its products;

(b) copy the product name and packaging of the company-benchmark, avoiding unimportant or little marked differences;

(c) reproduce some of characteristics of the product of company-benchmark, but preserve the differences in packaging, advertising, pricing, etc.;

(d) modify or improve the product of company-benchmark, starting from the other markets to avoid a direct conflict of interests.

These options of the follower strategy allow not only achieving a level of efficiency of the company-benchmark, but also enable the company implements its candidate to become a leader on a market segment. Achieving a leading position in the market means a finishing the follower strategy and a choice of new strategy of the company development and success.

Conclusions

By the results of study it is possible to draw the following conclusions.

(1) The application of the FDH method in competitive benchmarking allows us to establish the optimal in terms of reducing costs company-benchmark for further improvement of the various activities of the analyzed company;

(2) The proposed methodological technique for the implementation of competitive benchmarking in an industrial company in strategy of “the follower” enable gradually develop and make informed strategic decisions that ensure the achievement of efficiency frontier and a leadership in its market segment;

(3) By a case of 60 Ukrainian dairies paper demonstrates how we can use proposed technique in a practice and what steps we should make to find company benchmark and improve our efficiency.

This research is limited by a single industry (dairy products). This is explained by requirement of technology (product, service) homogeneity when using FDH model. However the further research will be associated with application of the proposed technique to the other industries and its adaptation to specific factors.

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The Human Capital as the Factor of the Enterprise's Competitiveness - Challenges for the Management

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Abstract

The article presents the main issues concerning due managing the human capital as the crucial factor of the competitiveness of the enterprise, as well as its permanence, renown and development. The analyses conducted in the article, have theoretical character and being based on possessions of the scientific literature, underline the importance of competing for the position of the market leader with exactly a human capital.

Key words

Human capital, Competitiveness, Enterprises, Management, Development

Introduction

In the world of contemporary global economy, competitiveness becomes one of the more important factors and prospects of assessing company performance in the market, and it is also perceived as a development determinant. The bigger the company competitiveness, the greater is its chance for survival. The lack of competitiveness means elimination from the market, loss of its power over the future and subjugation to the domination of the more powerful. Generally, one can say that competitiveness, reflects the company potential – resources, skills and capabilities which ensure its advantage over other subjects operating in the same sector. In the environment of knowledge-based economy developing in the world, knowledge, skills, capabilities and experience of employees have more and more importance as a factor of competitiveness of contemporary enterprises. Thus, it is the human capital which should be the most important capital in every well-functioning enterprise.

The man brings to an organisation not only expert knowledge, acquired skills and experience, but also his own commitment in company affairs. The organisation which wants to survive and develop should care about its most valueable assets, that is its employees.

The article presents and tries to justify the following thesis: *Appropriate management of human capital focused on the development of each employee is the key factor of company competitiveness, as well as its stability, reputation and development.* The analyses conducted in this article are theoretical and based on scientific literary output.

The concept of company competitiveness

Since the concept of “competitiveness” became popular at the beginning of the 90s, a number of its definitions have appeared. Reviewing these definitions, one might assume that their variety results mainly from which factors they are identified with. Very often competitiveness is identified with price, product quality, resource productivity, production costs or competitive advantage itself (Lomban 2006, 34). These synthetic approaches to competitiveness based on single-factor considerations, such as the approach to company competitiveness as greater production efficiency (Ambastha, Momay 2004, 26), supplying products and services at a more attractive price (Dwyer, Kim 2003, 5), are rather fragmentary and difficult to apply in practice (Flak, Głód 2012, 40).

Generally, it can be said that competitiveness reflects the company potential, that is all the resources, skills and capabilities assuring its advantage over other subjects operating in the same sector. Hence, competitiveness can be defined as a multidimensional feature of an enterprise resulting both from its internal characteristics and connected with its adaptability to change in the environment. It is a feature defining distinguished abilities of an enterprise to undertake such moves which assure stable and long-term development and contribute to building its market value (Gorynia, Łaźniewska 2009, 26). The word „competitiveness“ is sometimes used to describe mutual relations between enterprises in a given sector and also while comparing the activities of selected companies. The competitiveness of a company is analysed against other, comparable subjects operating in the same sector. In this view, competitiveness is

perceived as the result of activities undertaken by an enterprise, connected with competing for a customer. It can mean a general way of coping with competition, which allows to determine mechanisms and tools of competing in a short and long period of time (Pierścioneek 2005, 9).

Interesting and slightly controversial view on competitiveness is J. Owen's. In his view, the competitive advantage is not based on any abstract concept of absolute perfectness. To get competitive advantage one must simply be less incompetent than its competitors (Owen 2003, 71). However, in practice one does not always gain the advantage just because it is more competent. John Kay rightly notices that competitive advantage does not result from outstanding capabilities of a company but from its domination or more favourable position in the market (Kay 1996, 42), since in the market you can encounter enterprises which take advantage of natural monopoly, or benefit from certain market limitations. One must agree here with with an accurate statement that the capability can be outstanding only when it results from the feature which other companies lack. However, the feature which is outstanding only is not enough. It must be also stable and exclusive property of a company (Dunbar, McDonald 2003, 262).

Factors influencing competitiveness of contemporary enterprises

Based on the definitions presented, one can say that determinants which affect competitiveness should be analysed comprehensively, seeing their mutual relations and interdependence, since key determinants of competitiveness of contemporary enterprises are interactive, as they are a combination of interconnected factors which form a multidimensional space. They should not be seen as single, isolated variables, but as a set of interrelated elements which appear at the same time horizon, and interpenetrate, creating a synergy effect (Walczak 2009, 219).

This approach, highlighting the existence of synergic influence of a number of variables on competitiveness, proven in management practices, is represented by Barbara Dobiegała-Korona and Stanisław Kasiewicz, who emphasise its nature as the ability to develop, gain benefits and profits and build a competitive advantage (Dobiegała-Korona, Kasiewicz, 2000, 89).

Yet, it is worth emphasising that there is no full agreement on determinants of company competitiveness, and the controversial problems are (Kaleta 2000, 20):

- placing the sources inside or outside the company,
- tangible or intangible sources of competitiveness,
- opportunity to create and develop advantages of competitiveness.

Every enterprise acts for the environment and is under its influence. This interactive relation of this interdependence shows in the fact that, on the one hand, a company draws on resources from its environment, while providing the environment with the right products or services, responding to the existing market needs.

In the face of increasing changes in the world¹, i.e. moving from industrial economy to knowledge-based economy, one cannot disagree with T. Stewart, who says that "All the countries, companies and all the people are more and more addicted to knowledge – patents, processes, skills, technologies, information on customers and suppliers, and experience. All those elements together constitute knowledge which is the intellectual capital" (Stewart 1998, 18). In order to ensure its functioning in a changing and competitive environment, every organisation should build their way to success by increasing the value of intellectual capital. It is the human capital which has an essential role in creating an intellectual capital, and it is the intellectual capital which is considered a potential source of competitive advantage.

Human capital as a factor of competitiveness

As mentioned before, the consequence of changes in the environment of contemporary organisations is the increase in importance of knowledge, which is becoming an important feature of the new economy in which knowledge is created, absorbed, transferred and utilised more efficiently by companies,

¹ There are many concepts defining violent changes occurring in economy and lifestyle of the present generation. Peter Ducker (1999) speaks about "Post-Capitalist society", Daniel Bell (1973) about "Post-Industrial Society", Alvin Toffler (1996) about "Third Wave", Don Tapscott (1998) about "Digital Economy", Charles Handy (1998) about "The Age of Insecurity", Lester Thurow (1999) about "Knowledge-Based Economy", John Naisbitt (1997) about "Knowledge Society". Other, equally popular definitions are: "The Era of Knowledge", "Society Appreciating Knowledge", "Information Era" and "Information Society", "Technotronic Age" ("Taylorism", "The Economy of Relations", "Knowledge-Driven Economy" (Instytut Zarządzania Wiedzą, 2002, p. 12).

organisations, individual people and societies, fostering fast development of economy and society. (Piasny, 2007, 21).

More and more enterprises gradually acquire the features of enterprises based on knowledge (Pocztowski, 2010, 263). The analysis of literature proves that an organisation which is an “intelligent innovator” is assumed to be the ideal enterprise of the future (Romanowska, 2001, 26). The basic aim of such an organisation is violent and constant revival dependent on fast and stable learning (Rowley, 2000, 7-15).

Knowledge workers are a dominant category among the employees in such enterprises (De Waal, 2007, 3). P. Drucker, characterising this category of employees, wrote: “Leading groups in a knowledge society will be qualified workers, i.e., is educated practitioners who are able to utilise knowledge for production purposes, just like capitalists knew how to divide capital for production purposes. Thus, the economic challenge for the post-capitalistic society will be the productivity of labour requiring knowledge, and a labour-equipped worker” (Drucker, 1999, 14). Likewise, Alvin Toffler thinks that knowledge is the richest source of power and the key to seizing it. It not only refers to accessible, codified knowledge, but also to the so called hidden knowledge, connected with the knowledge rooted inside every human being – with his skills, experience, attitudes and system of values (Toffler, 1974, 439). It is this knowledge rooted inside the man which can be the source of creating competitive advantages of both the enterprises and the whole nations. Still M. Crozier indicated that that the well-known English slogan that “organisation is an art of doing extraordinary things with ordinary people” is out-dated. Organisations of today, and organisations of the future even more so, need exceptional people, and are trying to make their employees such (Crozier, 1993, 48). In his later work he also pays attention to the fact that “there is an urgent need to change our methods of managing and governing. We must absolutely release initiative and innovative capabilities instead of hindering them, so as to better share the shortage.” (Crozier, 1996, 24).

So the productivity of employees’ knowledge becomes the key factor of company success. It is what the efficiency of the whole system depends on, unlike in case of enterprises in the traditional economy where the system, e.g. TQM, is the agent for the staff productivity. It means that workers appear as capital, and not labour, carriers. (Drucker, 2002, 76), whereas this capital productivity and return on investment becomes one of the most important aims set before HRM specialists.

Challenges for HRM

Considering the issue of HRM, it seems justified to look at this form of resource taking into account:

- an employee – managing the employee’s intellectual capital,
- a team of employees – managing the team of employees’ intellectual capital (management of company human capital),

According to the definition by W. J. Hudson the intellectual capital of a man is a combination of genetic heritage, education, experience, attitudes towards life and business. It consists of psychological abilities of a man, knowledge acquired and attitudes formed during the process of education, upbringing, practical actions, skills learned, and outstanding gifts, i.e. talents (Hudson, 1993, 15). The intellectual capital of a man has two important features (Mikuła, 2006, 189):

1. some of its elements, such as knowledge, experience, skills, relations, not used on a day-to-day basis, get poorer with time until they can disappear,
2. while, if frequently used, they can develop.

Treating the intellectual capital of an individual person as an object of management differs from the classical HRM and needs changing methods of implementing many practical activities, such as recruitment and selection of employees, predicting and implementing professional careers, selecting methods of learning and professional development, professional aptitude and competence tests for a position in terms of stress resistance and reacting in critical situations, health condition, relations with other people etc. Maintaining the intellectual capital of an employee at a high level and its degree of usability depend on the ability of an organisation to engage an employee in participating actively in organized learning processes, and his/her health condition. What contributes to it is creating the best possible systems supporting the development of individual intellectual capital and their continuous improvement (Bouchikhi, Kimberly, 2003, 121).

Teams of employees of an organisation create its human capital. It is often defined as knowledge, skills and experience of company employees and managers; yet, as stated by L. Edvinson and M. Malone, it

cannot be a simple sum of those measures (Edvinson, Malone, 2001, 34). And here, also a classical HRM is not enough. Aware of the role of a human factor which, in the conditions of fast developing knowledge-based economy, determines the company value and its competitive advantage, organisations are looking for new solutions supporting the creation and development of human capital.

This is reflected in contemporary emerging trends of personal function development, of which, considering the subject of the article, the most important are (Listwan, 2010, 239):

- dynamic development and setting the sub-discipline which is knowledge management,
- rise of a new trend called "Talent Management", which means identifying, developing and utilising people of outstanding potential for the success and purpose of an organisation,
- intensification of education and development processes which, individually, counteract professional outdating to improve and constantly facilitate the employee's willingness for permanent improvement and opportunity grasping. This process is often assisted by internal and external subjects, by coaching, mentoring, among others; however, the burden of responsibility for employee's development moves onto the employees themselves,
- new form of career management – here we deal with a clear paradigm change: from a bureaucratic career, position advancement within one organisation, to the entrepreneurial paradigm – creating a career with no borders.
- on the collective level a new phenomenon in the development of human capital potential is the concept of a learning organisation, according to which learning is a continuous process, a way of life and survival, including all the organisation levels. Here, it is important to equally develop all the elements of the concept: system thinking, personal mastery, thinking models, building a common vision of the future and team learning.

It is evident that in the period of knowledge-based economy, the development of human resources should go towards creating a learning organisation. It can be achieved by (Jemielniak, Koźmiński, 2008, 391):

- assisting employees in the process of creating and using knowledge,
- creating networks for cooperation,
- involving in a double loop learning process.

Continuous acquiring new knowledge, sharing it among employees, learning from each other and using the knowledge in practice may contribute to the growth in innovativeness in the company, as well as improve many business processes. Employees, rich in information, knowledge or experience, have greater creative potential. This, in turn, may be the source of inspiration, new solutions, improvements, patents, and licences etc. These, in turn, can become the key factor of company competitiveness.

Conclusion

Presently, market success depends mainly on the ability of organisations or units to learn. A company with highly qualified and constantly learning employees has greater chance to gain higher profits and a stronger position than its competition, whose employees have fewer possibilities of development. Development and improvement of employees is one of the ways in which a company can acquire knowledge. Therefore, HRM proper, focused on the development of each worker, is the key factor of company competitiveness, as well as its stability, reputation and development.

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Innovation of a Process as a Tool for Increasing Competitiveness of Organizations

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Abstract

In my article, I want to point out that business must be viewed not only in terms of functions, divisions or products, but of key processes. Achievement of order-of-magnitude levels of improvement in these processes means redesigning them from beginning to end, employing whatever innovative technologies and organizational resources are available. We call this approach an innovation of a process and it combines the adoption of a process and application of innovations to key processes.

An innovation of a process should help any organization to achieve major reductions in process cost or time, improvements in quality, flexibility, service levels or other business objectives.

Key words

Process management, Innovation of processes, Process approach, increasing of profitability and competitiveness

Processes

The processes have an important role in all organizations and are the main part of the transformation process. Under the transformation process we understand the process, which transforms inputs to outputs. The definition of the process according to STN EN ISO 9000:2006 is: "The process is a set of interrelated resources and activities that transform inputs into outputs." (STN EN ISO 9000:2006, 2006)

"A business process is a logically and sequentially ordered set of transformations (technical operations, managing activities, process steps, activities) having a common goal, where the output of the previous transformation is connected with the input into the next transformation." (Hromková, 2001, 58)

"A Process is simply a structured, measured set of activities designed to produce a specified output for a particular customer or market. It implies a strong emphasis on how work is done within an organization, contrary to the emphasis on the product itself." (Devenport, 1993, 11)

Modern business science knows more ways of classifying processes. Common classification talks about the management processes, major processes, secondary processes, support processes and shared processes. At same time we can say that: (Částek, 2006, 2)

- "Management processes are those that go through the whole enterprise line from the top management so that it achieves the strategic objectives that were set out by management policies.

- We can subdivide the major processes according to the type of business into key processes. Ultimately, the major processes are the ones that create real value which is important for customers and helps to meet corporate vision. Major processes such as product development include activities that draw on multiple functional skills. New product designs are generated by research and development, tested for market acceptance by marketing, and evaluated for manufacturability by engineering or manufacturing.

- Secondary processes are so closely connected that they do not have any big impact on the corporate vision and strategic plans for top management as the main processes, but their output is also important for an external customer of processes (the customer) and they are also useful for outsourcing.
- Supporting processes contribute to the added value for external customers so that their outputs create the conditions allowing the proper running of the major processes.
- Shared processes fall into a set of supporting processes and they are characterized by creating favorable conditions for all other processes in the enterprise. "

The process is characterized: (Harrington, 1991)

1. By definition through attributes:
 - Input and output.

The processes have their boundaries, have a process beginning and ending. These are determined by inputs and outputs for all processes. Inputs start the process, they give an initiation for its beginning. Outputs are the products of the process given to the customer. The output also ends the process work.

"The input signal is some customer need, which starts a sequence of activities and which creates a product or a service according to the rules of use or consumption of certain corporate resources. It is output that satisfies the initial customer's need." (Hromková, 2001, 58)

Because a process perspective implies a horizontal view of the business that cuts across the organization, with product inputs in the beginning and outputs and customers at the end, adopting a process oriented structure generally means deemphasizing the functional structure of the business.

- Responsible and co-operating entity, respectively working position.

Process owner is a person responsible for the efficiency of the process. It has adequate responsibility and authority.

„The difficulty in defining ownership, of course, is that processes seldom follow existing boundaries of organizational power and authority. Process ownership must be seen as an additional or alternative dimension of the formal organizational structure. During periods of radical process change, it takes precedence over other dimensions of structure. Otherwise, process owners will not have the power or legitimacy needed to implement process designs that violate organizational charts and norms describing the way we do things around here.“ (Devenport, 1993, 13)

- The objectives of the process.

Process objectives should be derived from strategy and include the overall process goal, specific type of improvement and numeric target for the innovation, as well as the time frame in which the objectives will be accomplished.

Process objectives must be quantified as specific targets for change. Examples of quantitative process objectives for various industries might include:

- reduce new development time by 30% in two years,
- double customer service satisfaction levels in three years,
- reduce involuntary employee turnover to 15% by the end of the fiscal year,
- reduce processing costs for customer orders by 40% over five years.
- Resources for the implementation of the process, the transformation of inputs to outputs.

“The main objective of benchmarking in the public sector is to identify and implement “good practice”. The term “good practice” means proven innovative practice proved successful in various organizations. Benchmarking provides the input and his driving force is learning through sharing good practice. It is legal, systematic, ethical and public process, which is based on the principle “win-win”. (Muchová, 2012, 79)

Resources are work equipment (infrastructure), human labor, supplies, finances and information. The difference between resources and inputs is that resources are not consumed at once, but gradually.

1. Other parameters of the environment, in which the process is (has to be) performed.
2. Process flow.
3. Necessary costs.
4. Creation of an added value.

Michael Hammer and James Champ define business process as "a set of activities that requires one or more kinds of inputs and creates output that has the value for a customer." (Hammer, Champy, 2000, 41)

Hammer example - the order is considered for an input and results in delivery of goods ordered. Delivery of ordered goods to the hands of a customer is value created by the process.

It may be easier to apply process thinking to manufacturing firms, because structure and measurement have traditionally been applied to manufacturing processes, but the benefits of process thinking are clearly achievable by service industries as well.

The basic differences between process and functional management

Functional management is a traditional form of management of basic business functions. It is focused on organizational units, which represent the basic activities as a closed unit. It was created by the division of labor.

The disadvantage of the functional management can be that the organizational unit works regardless of further use of its own output. It is a common movement of powers and responsibilities from one person to another. It can lead to prolongation of the communication and competition between departments. Also the departments do not communicate with each other when employees of a functional unit have a lot of work associated with these departments. (Mateides, 2006, 279)

Today, almost every large business organization is characterized by the sequential movement of products and services across business functions—engineering, marketing, manufacturing, sales and customer service. This approach is not only too expensive and timeconsuming, but it often does not serve customers well. In functionally oriented organizations, handoffs between functions are frequently uncoordinated. As a result, no one may be responsible for measuring or managing the time and cost required to move products from laboratory to market or from customer order to receipt. Process management demands that interfaces between functional or product units be either improved or eliminated and where it is possible, sequential flows across functions is made parallel through rapid and broad movement of information.

According to Trunček, the main differences between the process management and the functional management are: (Trunček, 1999, 120)

1. Horizontal management, where a few hierarchical autonomous units with a strong horizontal ties are used. Vertical integration is used only at the key strategic and corporate development activities.
2. Process teams which have considerable autonomy and operate under the business enterprise. (The principle formulated by Tomas Bata in the 1930's.)
3. A new way of motivation based on collective motivations depends on contribution of the process to the value of the customer. Motivation is connected with the results of the process and not with the activity alone. The customer and his satisfaction is the main measure for the remuneration for the team.
4. Direct commands are replaced by coaching.

Identification of processes

To understand the performance of the organization in connection with process management as accumulation of ongoing performance of all processes, it is necessary to identify and know the processes.

While reengineering of the processes is performed, it is necessary to select the business processes, where redesign is necessary. These are also those processes that do not work as they should work. As a rule, we choose first those that have the greatest impact on the customer and which are also suitable and manageable in a given situation. Examples for dysfunctional processes: complexity and massive amount of specific cases, a strong need for control mechanisms, large stocks of reserves, which means the inability to meet the uncertainty, a lot of redundant data and rewriting, re-work and repairs and thus the missing feedback between departments.

The identification of process is one of the main problems in the implementation of process management. Description of workers activities cannot to be considered as a process, but not even implementing processes cannot to be separated from management processes.

It is important that each process can be measured by at least three aspects: time, cost and quality. Processes that are clearly structured are amenable to measurement in a variety of dimensions. Such processes can be measured in terms of the time and cost associated with their execution.

The most important aspects of process management is the setting of key core processes whose final output is destined for an external customer and which is directly involved in creation of an added value for customers. (Závadský, 2004, 190). However, those processes need to enable the integrity of its support processes, such as planning, organizing, controlling and coordinating. These support processes take place mainly in the internal environment and participate on the output indirectly.

Summary

An innovation of a process combines the adoption of a process view of the business with the application of innovation to key processes. The main result of this application should be a major reduction in process cost or time, or major improvements in quality. When we reduce cost or increase customer satisfaction, we have improved the process itself.

An innovation of a process can also respond to the need for better coordination and management of functional interdependencies. Better coordination of each department, for example manufacturing with marketing and sales, will allow a company to make only what its customers will buy.

Adopting a process management and process view of the business represents a revolutionary change in perspective. Process management involves elements of structure, focus, measurement, ownership and customer. A process approach to business also implies a relatively heavy emphasis on improving how work is done, in contrast to a focus on which specific products or services are delivered to customers.

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Employee Engagement

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Abstract

In recent years, there has been a great deal of interest in employee engagement. However, most of what has been written about employee engagement can be found in practitioner journals where it has its basis in practice rather than theory and empirical research. Given the limited research on employee engagement the aim of this article is to provide the theoretical basis for better understanding of the importance of employee engagement in organizations. Based on the analysis of domestic and foreign resources this article defines common indicators of selected definitions of employee engagement. Furthermore it provides information about basic models and theory that form the theoretical basis of employee engagement. There are identified antecedents of employee engagement.

Key words

Employee engagement, Organizational commitment, Organizational citizenship behavior, Job involvement, Job enrichment, Burnout, Social exchange theory

What is employee engagement?

The employee engagement (EE) is a managerial concept of company management, which in the recent years, has noticed an increased interest in the field of management, human resources development and employee performance improvement. What does this often used term exactly mean?

The academic community provides various **definitions**:

- Kahn (1990, p. 694) defines personal engagement as "the harnessing of organization members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances." Personal disengagement refers to "the uncoupling of selves from work roles; in disengagement, people withdraw and defend themselves physically, cognitively, or emotionally during role performances. Thus engagement means to be psychologically present when occupying and performing an organizational role.
- Rothbard (2001) also defines engagement as psychological presence but goes further to state that it involves two critical components: attention and absorption. Attention refers to "cognitive availability and the amount of time one spends thinking about a role" while absorption "means being engrossed in a role and refers to the intensity of one's focus on a role" (Rothbard, 2001, p. 656).
- The proponents of the burnout theory define engagement as the opposite or positive antithesis of burnout (Maslach et al., 2001). According to Maslach et al. (2001), engagement is characterized by energy, involvement, and efficacy, the direct opposite of the three burnout dimensions of exhaustion, cynicism, and inefficacy. Research on burnout and engagement has found that the core dimensions of burnout (exhaustion and cynicism) and engagement (vigor and dedication) are opposites of each other (Gonzalez-Roma et al., 2006).
- Schaufeli et al. (2002, p. 74) define engagement "as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption." They further state that engagement is not a momentary and specific state, but rather, it is "a more persistent and pervasive affective-cognitive state that is not focused on any particular object, event, individual, or behavior" (Schaufeli et al., 2002, p. 74).
- Most often it has been defined as emotional and intellectual commitment to the organization (Baumbruk, 2004; Richman, 2006; Shaw, 2005) or the amount of discretionary effort exhibited by employees in their jobs (Frank et al., 2004).

From above mentioned we can conclude, that selected authors consider EE as unique and distinct construct, which consists of cognitive, emotional, and behavioral components.

Even though that the EE has been defined in various ways it is possible to define its common factors. The negative factor is that some of the definitions sounds similar to the better known and established

terms for example organizational commitment and organizational citizenship behavior (OCB). Robinson et al. (2004) states that EE has many common features with the organisational commitment and COB however does not match with any of them.

The differences between engagement and others frequently used terms are as follow:

- **Organizational commitment** indicates a personal attitude of an individual and the attachment towards the organization. Engagement expresses the degree to which the employee is willing to be engaged in the performance of their roles.
- **OCB** involves voluntary and informal behaviors that can help co-workers and the organization. The nature of engagement is the formal role performance beyond the fulfilment of the job role.
- It is also important to highlight the difference between the engagement and **job involvement**. According to May et al. (2004), job involvement is the result of a cognitive judgment about the need satisfying abilities of the job and is tied to one's self-image. On the other side engagement has to do with how individuals employee themselves in the performance of their job. Furthermore, engagement involves the active use of emotions and behaviors in addition to cognitions.

Employee engagement models and theory

Although that the EE has become widely used a popular term, there has been only limited empirical research in this field. As a theoretical base can be considered the following models.

Kahn's model

In his qualitative study on the psychological conditions of personal engagement and disengagement at work, Kahn interviewed summer camp counsellors and organizational members of an architecture firm about their moments of engagement and disengagement at work. Based on this research he has found that there were three psychological conditions associated with engagement or disengagement at work: *meaningfulness, safety, and availability*. In other words, workers were more engaged at work in situations that offered them more psychological meaningfulness and psychological safety, and when they were more psychologically available (Saks, 2006).

May et al. (2004) in his study tested the Khan's model. He has found that meaningfulness, safety, and availability were significantly related to engagement. The results of his study are the following findings:

- job enrichment and role fit were positive predictors of meaningfulness;
- rewarding co-worker and supportive supervisor relations were positive predictors of safety while adherence to co-worker norms and self-consciousness were negative predictors;
- resources available was a positive predictor of psychological availability while participation in outside activities was a negative predictor.

Maslach et al.'s model

The next model is based on the burnout theory. This model describes engagement as the positive antithesis of burnout.

According to Maslach et al. (2001), six areas of work-life lead to burnout and engagement: *workload, control, rewards and recognition, community and social support, perceived fairness, and values*.

This model claims that engagement is related to:

1. sustainable workload,
2. feelings of choice and control,
3. appropriate recognition and reward,
4. supportive work community,
5. fairness and justice,
6. meaningful and valued work.

Similar to the burnout syndrome also in the case of engagement it is appropriate to connect six areas of work-life with various work results and outcomes (Maslach et al., 2001).

Despite that Kahn's and Maslach et al.'s models indicate the psychological conditions it is important to notice the fact that the antecedents do not fully explain why the employees respond to those conditions on individual basis.

Due to this reason Saks (2006) claims the social exchange theory (SET) provides meaningful theoretical base for better understanding of EE.

Social exchange theory

SET states that obligations are generated by series of interactions between the parties who are interdependent. The basic principal of SET is that the relationships develop over certain time into trusting, loyal, and mutual commitments as long as the parties abide by certain "rules" of exchange. The rules of exchange usually involve reciprocity or repayment rules such that the actions of one party lead to a response or actions by the other party. For example, when individuals receive economic and socioemotional resources from their organization, they feel obliged to respond in kind and repay the organization (Cropanzano, Mitchell, 2005). This statement is in accordance with the statement of Robinson et al. (2004), that engagement is mutual relationship between the employer and employee.

One of the way how the individuals can repay to the organisation the received benefits is via the level of their engagement. It means that the employees decide to be engaged in various levels as the reaction to the received benefits. Bringing oneself more fully into one's work roles and devoting greater amounts of cognitive, emotional, and physical resources is a very profound way for individuals to respond to an organization's actions. It is very difficult for employees to vary their levels of job engagement because their performance is evaluated and used as a base for their enumeration and other administrative decisions. To sum it up the level of engagement changes in accordance from the resources and the benefits, which their organisations provide (Saks, 2006).

Antecedents of employee engagement

Although there is little empirical research it is possible to find the factors predicting the EE. However in the case of Kahn's and Maslach et al.'s models there can be identified many antecedents

Job characteristics

According to Kahn, psychological meaningfulness can be achieved from task characteristics. Kahn's study is based on Hackman and Oldham' job characteristics model and in particular, the five core job characteristics: *skill variety, task identity, task significance, autonomy, and feedback* (Saks, 2006).

May et al. (2004) found that job enrichment was positively related to meaningfulness and meaningfulness mediated the relationship between job enrichment and engagement.

The workload and control conditions from the Maslach et al.'s model also suggest the importance of job characteristics for engagement. In fact, job characteristics, especially feedback and autonomy, have been consistently related to burnout (Maslach et al., 2001).

From a SET perspective, one can argue that employees who are provided with enriched and challenging jobs will feel obliged to respond with higher levels of engagement (Saks, 2006).

Rewards and recognition

Kahn (1990) states that the level of engagement varies on individual basis and is dependent on employees perception of the benefits received from their roles. Furthermore he claims that the sense of investment return can come from external rewards and recognition for meaningful work. Therefore it can be expected that the level of engagement will increase with higher amount of rewards and recognition received for employees work.

Maslach et al. (2001) have also suggested that while a lack of rewards and recognition can lead to burnout, appropriate recognition and reward is important for engagement.

In terms of SET Saks (2006), when employees receive rewards and recognition from their organization, they will feel obliged to respond with higher levels of engagement.

Perceived organizational and supervisor support

An important aspect of psychological safety is related to the amount of care and support of employees from their organisation and also from their direct superiors. Khan has found that supportive and trusting interpersonal relationship same as supportive management significantly contributes to psychological

safety. The members of an organisation felt safe in such a job environment which has been characterised by its openness and supportiveness. Such an environment allows its members to experiment and to try new things and even fail without fear of the consequences (Kahn, 1990).

May et al. (2004) in their empirical test of Kahn's model, also found that supportive supervisor relations was positively related to psychological safety.

One of the conditions of Maslach et al.'s model is also the social support. The study done by Schaufeli and Bakker (2004) concludes that a measure of job resources that includes support from colleagues predicted engagement. On the other side Maslach et al. (2001) found that lack of social support has also consistently been found to be related to burnout. Saks (2006, p. 605) claims „two variables that are likely to capture the essence of social support are perceived organizational support (POS) and perceived supervisor support (PSS)“.

The perception of organisational support is related to common believe, that organisation values the employees contributions and cares about their well-being. In other words, when the employees believe that the organisation cares about their well being there is higher probability that they would try to fulfil their obligations towards the organisation with higher level of engagement. Additionally the employees have the tendency to perceive the attitude of their supervisors as the attitude of the entire organisation. From this point also the perception of supervisor support is important predictor of EE (Rhoades, Eisenberger, 2002).

In fact the lack of support from supervisors has been found to be an especially important factor linked to burnout (Maslach et al., 2001). Various researchers consider first-line supervisors as very important in building the EE (Bates, 2004; Frank et al., 2004).

Distributive and procedural justice

Psychological safety identified in Khan's model includes social situations that are predictable and consistent. For organisations it is very important to predict and to be consistent mainly with the regard to the distribution of rewards as well as the procedures used to allocate them (Kahn, 1990).

While distributive justice pertains to one's perception of the fairness of decision outcomes, procedural justice refers to the perceived fairness of the means and processes used to determine the amount and distribution of resources (Colquitt, 2001; Rhoades et al., 2001).

The research of organisational justice has found that the perception of justice is related to the organisation outcomes such as job satisfaction, organizational commitment, OCB, withdrawal, and performance (Colquitt et al., 2001).

Saks (2006) claims that when employees have high perceptions of justice in their organization, they are more likely to feel obliged to also be fair in how they perform their roles by giving more of themselves through greater levels of engagement. On the other hand, low perceptions of fairness are likely to cause employees to withdraw and disengage themselves from their work roles.

Fairness and justice is also one of the work conditions in the Maslach et al.'s model. Maslach et al. (2001) concludes that the lack of fairness and justice can deteriorate the burnout syndrome, while positive perceptions of fairness can improve engagement.

Summary

In summary, although the definition and meaning of engagement in the practitioner literature often overlaps with other constructs. In the academic literature it has been defined as a distinct and unique construct that consists of cognitive, emotional, and behavioral components that are associated with individual role performance. Furthermore, engagement is distinguishable from several related constructs, most notably organizational commitment, organizational citizenship behavior, and job involvement. Theoretical foundation to explain why employees choose to become more or less engaged in their work and organization provides SET. The conditions of engagement in both Kahn's and Maslach et al.'s model can be considered economic and socioemotional exchange resources. When employees receive these resources from their organization they feel obliged to repay the organization with greater levels of engagement. In terms of Kahn's (1990) definition of engagement, employees feel obliged to bring themselves more deeply into their role performances as repayment for the resources they receive from their organization. When the organization fails to provide these resources, individuals are more likely to withdraw and disengage themselves from their roles. Thus, the amount of cognitive, emotional, and

physical resources that an individual is prepared to devote in the performance of one's work roles is contingent on the economic and socioemotional resources received from the organization.

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Process Management in Relation to the Systems Thinking

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Abstract

The paper contains reflections on the essence of process management, the relationship between system and process, process control and other related problem areas.

Key words

System, process, System approach, Process approach, Management of processes, Process management.

Introduction

The main principles of quality management system (QMS) includes process approach and systematic approach. In this context, we often meet with the fact that differences of opinion as to the relationship between the system and processes and also the relationship between management of process and process management. The authors of this paper explain and justify their understanding of that relationship.

Understanding the system and process

System is defined by the structure and behavior. The system can be described by system characteristics. One of them is the transformation process by which we mean "the way the process is running, it means transformation of inputs to outputs." Definition of Process according to ISO and CAF application handbook reads: "Activity using sources, which is managed to enable the transform inputs to outputs, can be understood as a process" and "a set of activities that transforms inputs to outputs, adding them a value." So it is not completely identical.

In the above mentioned definitions is implicitly expressed the understanding of the process as a system, not only its transformation process. Hence the process which is the object of management and is in accordance to STN EN ISO 9000 can be treated as objects, on which system can be applied.

The definition of the system as an object and its description by system characteristics is more transparent.

Understanding of process management

- Understanding of the process management by Tuček:

"Process management is defined as a methodology for evaluating, analyzing and improving key business processes, based on the needs and desires of customers."

"The aim of optimization of business processes is especially the continuous improving of quality, accessibility and effectiveness of creating products with simultaneous reduction of associated costs."

"In the selection of indicators for measuring process performance is necessary to respect the need to optimize three basic parameters of the process: cost, time and quality."

- Understanding of the process management by Hanke:

"Process orientation requires a significant shift in the understanding of the organization and operation of the company. The whole operation is synchronized business horizontally via processes and not vertically via individual departments. Though these organizations usually continue to maintain the structure of departments."

"Process managed organization is focused on the outcome of all company activities that are integrated and incorporated into the process, i.e. the added value brought to the customer (internal or external) and he is willing to pay for it. Process-oriented organization is sufficiently flexible and can respond quickly to market changes and customer preferences."

Understanding of process management by authors of this contribution

Understanding of process management is explained in this simple form of reflection and hence with a high level of abstraction.

Each organization is a complex dynamic system (the organism). Addressing issues related to its effective functioning and also to increase its performance therefore asks for transparency of its structure.

Transparency (clarify) can be achieved in various ways, but our opinion is that the best way to achieve this objective is system approach, i.e. systemic decomposition of the system, which represents systemic definition of subsystems of the system, or sub-processes of the organization process.

This might serve the models that are available and their applications are confirmed by experience (quality management system models, logistic models, structural models, ...). Preferably, in this respect can be used a model of quality management system (QMS) according to EN ISO 9001/2000, 2008, where an organization (company) as a system or business process is decomposed into subsystems, or sub-processes i.e. processes of responsibility of management, management resource processes, product implementation processes, measurement, analysis and improvement processes.

Obviously in terms of resources needed for the functioning and development of the organization the sale of its products is crucial because the organization obtains income, which is also used as a source for its development.

The amount of sales of organization depends on the characteristics of the product which address customer requirements. From the perspective of the customer the product quality, price and time to meet its ongoing requirements are the key features of the product. In the process management we consider the implementation process of product as crucial and other subprocesses are seen as supporting for this process, which delivers the result of the organization.

Mentioned product features are dependent on the process capability to achieve the desired level of quality, acceptable price in relation to the height of costs and time of product supply.

System creation and improvement is the basic condition for establishing suitable and rational functioning of processes. It means, that in system which has to produce the outputs will be incorporated in all the factors (elements) in such quantity and quality as necessary, in regard to produced outputs (product) and that interactions between them will be rational. Nothing more, nothing less.

If we declare the sub-process of product realization as a process, we can further decompose this systemically, i.e. sub-processes, for example: negotiation with the customer on delivery of a product - product technical preparation - manufacture the product - the supply of product - product service. That decomposition can be, of course, different and more detailed. We obtain a sequence of sub-processes of product realization process by this decomposition and other stages of decomposition. The output of the first sub-process is input to the second sub-process, which clearly defines inputs into sub-processes and their outputs, in regard to object in view. There can be, of course, more inputs and outputs.

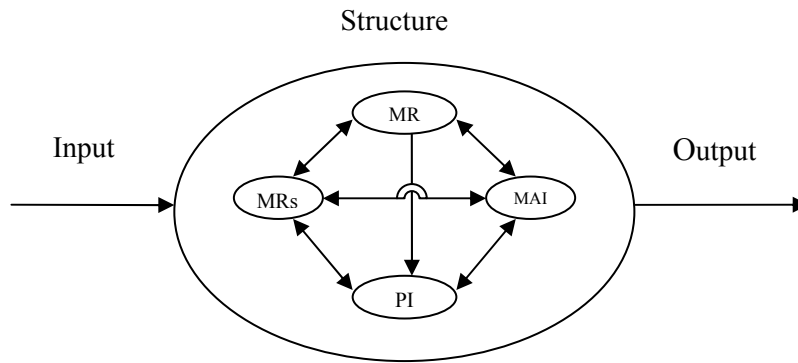
If we create processes according to above mentioned system creation, we will achieve a basic condition for their ability to meet the desired objectives, which fulfill customer's requirements.

The process is like a flowing river. If we want to reduce costs and shorten time of process running, we must remove obstacles to the flow (a smooth and desirably rapid). We have to apply methods and techniques to meet this aim, respectively we have to apply them.

Considering the facts previously mentioned, it is necessary to comment the functions of other sub-processes of the organization process. These sub-processes in the interaction create system of the organization, but each one contributes – by the performance of its functions – to the rational functioning of the organization as a whole.

System business process decomposition

The organization as a system - an approach to decomposing the organization as a system is based on the model according to STN EN ISO 9001:2008 (the decomposition approach can be different, of course).



According to the standard, the organization structure, as a system, consists of processes:

- Management responsibility - MR;
- Management resource - MRs;
- Product implementation - PI;
- Measurement, analysis and improvement - MAI.

These processes can be declared from system elements, which include interactions. Interactions at the interfaces between processes (system elements) and result of the functions to be performed. Doing so may be variable in frequency and significance such as sourcing (MRs), the management targets (MS) in implementing the products (PI) in a specified quantity, quality, in time and at the right price (MAI).

The organization has determined the final target behavior, resulting in products (goods, services, ...), applying to the relevant inputs.

Each of these processes can be broken down into the following sub-processes by its character and needs to the level of thread, which are elements of such a character whose internal structure has no need to examine.

Decomposition of process on the sub-processes

This is such the preparing process and implementing the product. For simplicity, we abstract from the fact that the individual sub-processes may be a variant outputs, for example negotiation for the delivery of the product can be output: yes, no, then further investigation and so, no.

Sub-processes of processes

Negotiations with customers - preparing the product - product implementation - delivery of the product - product service.

These subprocesses can declare elements of the system, among which are generated by interaction of their interfaces.

Sub-processes as a system

Each of the sub-processes is modeled as a sequence of activities and interactions between them, respectively as a process, respectively system in which it achieved such a level activities whose internal structure has no need to decompose (clearly the nature and clearly specified requirements - human labor, method of measurement, etc.) .

At this level, therefore we work with the basic elements that usually are: human labor, infrastructure, work environment, work practice, measurement, components entering the system during the process, other specific elements.

Among these elements are generated in the system interact, which is determined by the structure of filling certain functions.

In connection with the previously mentioned are required to take a position on the functions of other sub-processes of process the organization. The interaction with the system consists system of the organization, but each of them contributes - the performance of its functions - the rational functioning of the organization as a whole.

Functions of the processes defined standard STN EN ISO 9001:2008.

Managerial processes

The task of these processes is to prepare organization's future, provide the necessary resources for achieving its objectives and address the most pressing operational issues. The fulfillment of long- and short-term objectives of the organization is provided by their stratification into implementation plans and processes within the organization.

The process of resources supply

It is the responsibility of the management of organization to provide resources for achieving its both short and long term objectives.

The processes of measurement, evaluation and improvement

Measurement, evaluation and improvement is incorporated directly into the implementation plans, system documentation and documentation setting the running of processes (organizational guidelines, rules).

Process management of the company is therefore, according to our understanding, management of the company as a system, whose elements are processes, which follows above mentioned ideas as well as the standard STN EN ISO 9004/2000, 2008. Emphasis is put on:

- The resulting performance of the company as a result of all operations,
- Creation of added value and comparative advantages,
- Shortening the intermediate times of preparation and product realization,
- Ensuring product quality desired by customer,
- Reduce costs for all business activities.

In concentrated form, can our understanding of process management be defined as follows:

Process management is understood as a systemic management of activities transforming inputs to outputs, while the focus is on selected attributes of output, or the process of chosen activities.

Where:

- a) The controlled sequence of activities is viewed as an object for which it is possible to implement a system, having its own structure and its targeted performance. It means that this object can also be described by the system characteristics. It also allows us to systemically improve this object (systems analysis) and project the system (system synthesis), while in the system, according to its targeted performance, all elements and all the interactions between them must be on necessary quantity and quality, according to targeted system performance.
- b) Activities in the broadest sense are understood as activities of every kind and at every level of management - action, operation, the entire production process, or workplace, workroom, plant operations, enterprise...
- c) The attributes of activities presenting requested output - output parameter, the cost of output, time of production and so on. If e.g. time of preparation and realization of output is determining for us, activities related to the process will be set according to defined output - their inputs, process, and output. Certain conditions and restrictions can be part of it as well. But it is crucial to what we give emphasis to define output parameters.
- d) The basic approach here is system thinking, systemic comprehension of managed object. This approach is, in our view, the prerequisite for an understanding of process management.

Understanding of process management

As a process management we understand the process of managing the process as an object. Authors of the article agree with Linczeny on the nature of process management

"If the processes are managed in terms of quality, then the focus should be on outputs realized in these processes. There are useful outputs as well as virtual, redundant and false outputs. And we must be able to manage processes so that the usefulness of the process is the highest."

Summary

Authors of article, through continuing analysis of basis of process management and system thinking, induct their system relations. Identification of relations leads to their application in common interoperation, and as consequence it creates synergy effect. It is a great contribution for knowledge development not only in given area, but also for applications in practice. It is dealing with process improvement to reach declared quality level of products, production cost reduction and shortening of customer needs satisfaction times.

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Host Country Specific Factors and the Transfer of Human Resource Management Practices in Multinational Companies

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Abstract

This paper discusses about the transfer of human resources management (HRM) practices from parent company to subsidiaries in multinational corporations (MNC's) and it examines how various factors resulting from cultural and institutional framework of the host country affect this transfer. By using the empirical data we describe how transferred HRM practices are adapted to the specificities of the host country and also which different strategies can be used for the transfer of HRM practices in multinational subsidiaries.

Key words

Human resources management (HRM), Multinational company (MNC), MNC subsidiary, HRM practices.

1 The typology of human resource management (HRM) strategies in multinational companies (MNCs)

In today's world of globalization and increasing competitive pressure, it is important for the survival of the company to concentrate on successful companies and try to identify the causes of their success. In recent years, the steadily growing importance of international trade and MNCs. The only way to survive and to be successful is to find out a competitive advantage over others. For company this competitive advantage can really be efficient workforce. According to Barlett and Goshal (1991), development of HR assets is just a source of competitive advantage for MNCs. HRM is gradually evolving from support functions to companies in their strategic importance. Barlett and Goshal (1991) continue, their work indicate that the policies and practices of HRM become critical, because they can act as a mechanism for coordination and control of international operations. “*Values and HRM systems help to shape organizational culture and people who operate within and influence that culture; and MNCs therefore attempt to transfer their HRM practices abroad*” (Barlett - Goshal, 1991, s. 384). On the other hand, Adler and Bartholomew (1992) argue that HRM is major limitation when MNCs try to implement global strategies. This is mainly due to the complexity of implementation and management of people with different national and cultural backgrounds.

Human resource management can be conducted as a part of an overall corporate strategy and Perlmutter (1996, In: Štrach, 2009) states that there are three strategic types:

- Ethnocentric type - knowledge, management style and practices of human resources are taken from the parent company as well as regulation are becoming managers of the parent country, who have the task to implement procedures and practices to subsidiary.
- Polycentric type - there is limited communication between parent and subsidiary companies, as they are in it more or less independent. That is why the decision-making authority of the parent company decreased. For this type is characteristic that they are employed by local workers, because the parent company considers it difficult to understand a foreign culture.
- Global (geocentric) type - the type that tries to find a company to recruit independently of their nationality. They try to work their team get the best workers from around the world, working as the parent as well as subsidiaries.

In 1979 (Perlmutter - Heenan, In: Pichanič, 2004), this typology was accompanied with:

- Regiocentric type is often used in MNCs operating in Central Europe. It focuses on the acquisition, selection, and filling posts subsidiaries workers in a region. Manager for various areas are chosen in a region that has a common market and cultural characteristics. The result is often a specific mix of workers.

Another categorization which is focused on more studied factors was described in 1998. Bird, Taylor and Beechler (1998) in their study described a typology of strategies for HRM created by the ten-year study, based on extensive research of Japanese MNCs, as well as to further the work of experts in this

field. Finally, a series of extensive analyses of the process design of a typology of approaches to international HRM used by Japanese companies in their management of human resources at overseas locations. This approach consists of four distinct, mutually exclusive prototypes that can be modulated in three critical dimensions (Bird – Taylor - Beechler, 1998), where the first of these dimensions is precisely "the degree to which HRM system of subsidiary is reflecting the system HRM of the parent company", the second dimension is the "the source, to which attach management of subsidiary problems when the system fails" and third "the degree to which multinational corporations sharing HR, innovations, created at the subsidiary with other subsidiaries, or parent".

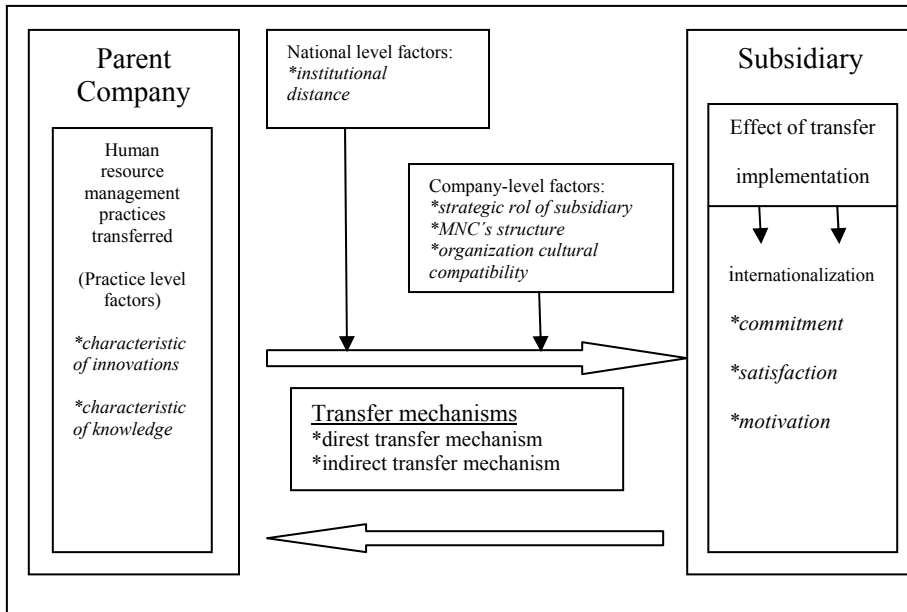
On the first dimension attracts continuous attention in theoretical and empirical literature (Rosenzweig - Singh, 1991; Yuen - Kee, 1993, In: Bird – Taylor - Beechler, 1998), but it is necessary to pay attention to the second and third dimension as well, because they are important contribution to understanding international HRM.

Using these three dimensions there is described the typology of international HRM. Bird, Taylor and Beechler (1998) samples from 205 subsidiaries of Japanese parent companies located in different countries, especially USA have identified four basic models of international HRM:

- Export model - for this model is typical of that in developing policies and strategies of in the subsidiaries, the MNC trying to "transplant" HRM system of the parent company to subsidiaries. This approach is its implicit assumption that the way the parent realizes things are best. This model is described as an export model, because it exports HRM practices of the parent company to overseas subsidiaries. This approach is similar to the "ethnocentric" approach.
- Adapted model - this model shows the superiority of HRM methods of the parent company and their implementation in subsidiaries could not mean efficiency. Therefore, some companies have decided to adapt to local situations as possible. This approach leads to a relatively sparse set of strategies and practices in overseas subsidiary. Many companies which were studied and using this model are not taking HRM system from the parent company as a key competence. Adaptive MNCs believe that human resources should be managed as effectively as possible, and that the strategy of the parent company can be not used in overseas locations, as they face a much different legal, social and cultural conditions in their activities.
- Closed-hybrid model - third group of companies involved in the research adopted the model, which is described as a closed-hybrid model. This approach is characterized by dependence on the model of the parent company for the initial development of its HRM system, but also then trying to adapt to local conditions by establishing a subsidiaries. Closed-hybrid model is similar to the export model considering the dependence on the model of HRM system of the parent company as a starting point for creating their own HRM systems.
- Open-hybrid model - the last type, which is designated as open-hybrid model, includes MNCs that adapt their HRM system for overseas subsidiaries in a number of basic points. Firms in this model may or may not begin with the model of the parent company as the basis for their systems. They tend to move very quickly by focusing on the parent company to focus on the host country. They are looking for a position that represents the duality in attitudes - the current emphasis on parent and local perspective. In this sense, these companies are hybrids of local HRM and HRM system of the parent company. These companies are called the company to open a hybrid model, because the company is adopting open innovation and good ideas regardless of where the company originated.

This typology does not give clear answers on the transfer of HRM practices abroad. Just talk about whether the companies focus more on local HRM system, or system of the mother country. Transfer of HRM practices in themselves, however, involves a complex mechanism (model), which is in its course influenced by several factors (Figure 1). The main problem, and one of the central questions remains the extent to which subsidiaries act and behave like local companies - "local isomorphism" - or to what extent such practices are the parent, or a global-standard "internal consistency" (Rosenzweig - Nohria, 1994).

Figure 1 Model of the cross-national transfer of HRM practices in MNCs



Source: Liu, 2004, p. 511

2 Transfer of HRM practices in multinational companies (MNCs)

In relatively recent times research carried out has begun to indicate that firms in different countries are different also in their policies and practices of HRM (Ferner, 1997). He noted, as well as other authors, that the transfer of personnel policies and practices to different countries can be quite difficult (Bae et al, 1997; Hofstede, 1980; Kovach 1994; In: Mylonite – Harzing - Mirza, 2004). The main obstacles are associated with the host country culture and institutional environment.

One of the dominance theories in this field is American management theory. Although this management theory led mainly to the faith of universal HRM practices that can be used anywhere, research shows that managerial attitudes, values and behavior is different with regard to national culture. There is no one best way of managing because that ethnic differences and variations in addition to other factors (Figure 1), which require different management practices. The central argument of this paper is that the companies / countries are really different from each other and this difference is manifested in how the company is managed. The organization and its management can be not isolated from their particular cultural environment (Mylonite – Harzing - Mirza, 2004).

In the same way as the much of the management practices, and HRM practices and procedures reflect the underlying assumptions and values of national cultural. This leads to the question what happens when MNCs try to transfer some of their management practices overseas, especially if the assumptions and values that reflect the culture do not correspond to the receiving host. Failure to adapt the practices of the host country's culture can lead to significant negative consequences that adversely affect the performance of the subsidiary.

Recent research has shown that MNCs are trying to adapt to a certain degree of national culture within which they operate (Beechler - Yang, 1994). In these studies it was even found that subsidiaries that are managed in accordance with national culture served better performance as compared to the subsidiaries that were not so controlled.

Cultural values and cultural differences are not the only factors that affect the management and conduct of individuals. The behavior of people is also partially dependent on internal social structures that affect humans as supporting or limiting, through their roles and positions in various institutions and overall social status within the social system (Fay, 1996; Lukes, 1973, In: Mylonite - Harzing - Mirza, 2004). The institutional theory and research in last 20 years focus mainly on the impact of social forces in the organizational structure and behavior. The main idea is that social institutions systematically affect business practices in the structures and processes that reflect the national pattern. The research attempted to give empirical answers to how the organization shapes the institutional system to be functional for their local environment as a form of their size, structure and etc. (Scott, 1995; In: Mylonite - Harzing - Mirza, 2004). Regarding the transfer of management practices in the host country, the question is what extent

companies are able to transfer practices because it largely depends also on the national business environment of the host country and its institutions, which can either facilitate or preclude transmission. The laws of host countries have also the strong pressures on the environment and legal environment in which MNCs can significantly reduce embedded transmission of HRM practices of the parent (Beechler - Yang, 1994).

2.1 Research study about transfer of HRM practices from MNCs to subsidiaries in Greece.

By using the empirical data from the research of authors Mylonite, Harzing, Mirza (2004), we describe how transferred HRM practices can be adapted to the specificities of the host country. The research study is focused on the transfer HRM practices of MNCs to subsidiaries located in Greece. The objective of the research is to examine the degree to which certain HRM practices in MNC subsidiaries resemble local practices.

Methodology

The research sample consisted of HR managers of MNC subsidiaries located in Greece and HR managers of Greek local companies. The method for collecting data was used a questionnaire and interviews with HR managers. Questions were concentrated on HRM practices with a focus on managers. Questionnaires were distributed personally or by post. During the interview managers provided also qualitative data on HRM practices in companies.

All questionnaires were addressed to HR managers of MNC subsidiaries located in Greece, as well as HR managers in Greek firms. Given that the population of multinational companies located in Greece is rather medium (about 150 subsidiaries with over 50 employees in Greece at the time of research), subsidiaries were selected independently from the type of industry, size or form, because that a sufficiently large sample enables to obtain meaningful statistical results. Greek companies were then selected to match the industry structure of the MNC subsidiaries which created the sample. Data collection was realized over a period of 3 months, between March and May 2000. In total, 269 companies were addressed, including 150 MNC subsidiaries and 119 Greek companies, 135 participated in the survey, which represents 50% of the total respondents.

For the purpose of research there were used 82 questionnaires from MNC subsidiaries and 53 questionnaires from local companies. The sample consisted of subsidiaries of various parent companies, while 75% have involved multinational companies based in the USA, the United Kingdom, Germany, France and the Netherlands. "Green field" represent 80% of the sample, while the rest are acquisitions. In both Greek firms and MNC subsidiaries, there is the equal representation in the manufacturing and services sectors, the largest number of responses came from companies operating in the following sectors: chemical, pharmaceutical, electronics, food / beverages, banks and hotels. The most of MNC subsidiaries and Greek companies have more than 200 employees. Therefore, the research sample is representative for large Greek companies and not for the entire population (Mylonite – Harzing - Mirza, 2004).

Measures

Some items were used to measure the dependent variables that capture aspects of selected HRM practices, such as recruitment and selection, compensation and performance appraisal. Respondents were asked to describe how closely these items correspond to the current HRM practices in the company by using 7 point Likert rating scale. Respondents were also asked specific questions about the level of transfer, which was conducted within each of these groups of practices. In addition, the questionnaire included questions aimed at interaction 's level of MNC subsidiaries with the host organizations, as well as the controlled variables such as industry, age and size (Mylonite – Harzing - Mirza, 2004).

Results

1. Recruitment and selection

The results suggest that local Greek firms use less standardized methods of recruitment and selection of employees. Local Greek firms prefer internal recruitment and there is increasing using of references and recommendations compared to the MNC subsidiaries. This is due to the high degree of family (collective) orientation of Greek culture, which demonstrates that they prefer recruitment of people whose they know and trust and selection of employees is based on less objective criteria than in MNC subsidiaries (Mylonite et al., 2004). However, it should be noted that interviews and biographies play a very important role in the selection process of Greek firms, they are used in 85% of Greek firms, while references are used in 55%

of firms. Interviews with HR managers have showed that the recommendations and personal contacts are not as important as in the past. These findings may indicate a slow shift towards the use of more objective criteria by Greek companies. At the same time, a small percentage of MNC subsidiaries using standardized methods as assessment centers, group interviews and psychometric tests are in contrast to the significant use of references and recommendations (although much less than in the Greek companies), as well as their preference for internal recruitment and informal selection criteria, which may indicate that some MNC subsidiaries have adapted their methods of selection to some extent, local cultural norms (Mylonite – Harzing - Mirza, 2004).

2. Compensation

Some differences were found in relation to determining the level of a basic salary. Although Greek companies still heavily rely on collective (or industry) agreements, the influence of the company obtains more importance. This image is not the same for MNC subsidiaries. The basic salary is conditioned by the company itself and it is determined at the individual level, although there have been no significant differences compared with Greek companies. Collective agreements are rarely used in MNC subsidiaries as opposed to Greek companies. These results may reflect the shift towards more flexible legislative amendment, which leaves some room for maneuver for multinational companies. The achievement of group goals and the individual performance were identified as the two most important aspects in determining wage levels for both groups - the Greek companies and MNC subsidiaries. Although the traditional characteristics such as level of education and experience of employees, as well as the principle of seniority are still considered important in Greek firms than in MNC subsidiaries, the level of their significance drops. On the other hand, collective agreements, the support of the principle of seniority are in conflict with a performance - oriented compensation, which wants to introduce the most of the MNC subsidiaries. At the same time, the principle of seniority is considered as important in the field of labor law in deciding on the provision of certain forms of benefits (Mylonite – Harzing - Mirza, 2004).

The offer of share options is limited for both categories of firms - Greek firms and MNC subsidiaries, since the stock market is not very developed in Greece and the most of companies will largely depend on bank financing. Furthermore, the stock market is unstable, and as one HR manager said: one can not depend on such insecure funds for employees's pay. The most of employees in Greece prefer immediate payment and they don't want to rely on actions that can be paid in the long run. Some MNC subsidiaries are able to offer share options which are traded on foreign stock markets, but it only covers some of the top management positions. Culture as well as the tax regulations affect the transfer of fringe benefits.

The results also show that the share of temporary contracts is relatively low in both types of companies. HR managers reported that it is difficult to introduce flexible work contracts, such contracts for part-time work are not common in Greece. As one respondent said, "everyone wants to have a permanent contract, this is the traditional way in Greece." However, the majority of respondents highlighted the fact that the legal framework in Greece is gradually becoming less complex and more flexible. Also the relationship between unions and employers is less tense and both sides are involved in constructive social dialogue to promote goodwill and finding solutions that will bring mutual benefits. Moreover, the managers agree that young workers do not have the interest in the collective agreements, and permanent employment, but they prefer a more performance-related pay (Mylonite – Harzing - Mirza, 2004).

3. Performance appraisal

Written reports are used much more in MNC subsidiaries than in Greek firms. The results also show that personal interviews between supervisors and employees are often used by companies in both categories, and the superior is clearly responsible for performance appraisal in both cases. However, the employees, their peers or subordinates participate less in the evaluation of work performance in Greek firms than in MNC subsidiaries.

Performance appraisal is a practice that is still in the development in Greek companies, and it is based on more subjective criteria which is in line with family-oriented culture and power distance, which is typical for Greek culture (Mylonite et al, 2004). Findings of research show that multinational companies significantly affect the performance appraisal of MNC subsidiaries. On the other hand, it isn't quite common for peers and subordinates to participate in the performance evaluation process, and even in MNC subsidiaries. Moreover, almost none of the subsidiaries has implemented 360-degree performance appraisal, although the most of their headquarters have implemented that practice. HR managers reported that employees are not prepared to accept this kind of evaluation, and it will take some time before it will

be able to be applied. In addition, both categories of companies use performance appraisal in order to promote, rather than for career development and they evaluate the results more than process. It may also be due to the low performance and future-oriented Greek culture (Mylonite – Harzing - Mirza, 2004).

The preceding discussion shows that MNC subsidiaries are adapted to local conditions, to a certain extent, depending on the specific nature of HRM practices. Specifically, there were found some practices that are very difficult or even impossible to transfer to the current Greek environment. Some of these practices, such as specific selection procedures or 360-degree performance appraisal, are not in accordance with cultural norms, similar to the example - compensation practices - such as providing fringe benefits or temporary employment contracts are not in accordance with the labor legislation.

Culture and Institutional interactions with control variables

Industry

Analysis showed that the banking sector had the lowest degree of transfer of HRM in the services sector, which was confirmed in the realized interview. Banks are very localized because of competitiveness of local markets and the dynamic nature of this sector. Banks are also characterized by very strong unions. In another interview, bank unionism is a major obstacle for the transfer of some HRM practices, which led to the fact that some multinational companies give up the establishment of subsidiaries in Greece. However, it should be noted that the impact of industry on the transfer of HRM practices persists (Mylonite – Harzing - Mirza, 2004)..

Age

The analysis also showed that older subsidiaries have a lower degree of HRM transfer, compared to younger subsidiaries. Indeed, the majority of HR managers in older subsidiaries confirmed that culture is a particular problem because of the way of thinking of the majority of employees who have been working at this company for many years. In such cases, to change of people is very difficult, as a change is a shift from a known situation and from their comfort zone. One HR manager said that the subsidiary provided an excellent working environment, the staff were friendly and showed a high loyalty to the company. "The parent company has found it difficult to transfer some of their HRM practices, particularly those related to the evaluation of performance. In such circumstances, objective performance appraisal system and the using of face-to-face interviews, would be viewed with great suspicion. Another possible reason why the older subsidiaries showed a lower degree of transfer is the fact that at the time when these subsidiaries were established, the Greek institutional environment was very strict. Complicated labor law and extensive bureaucratic controls restricted their freedom to transfer certain HRM practices (Mylonite – Harzing - Mirza, 2004).

Size

Quantitative results showed that the transfer of performance appraisal practices were significantly higher in small subsidiaries (chi-square: 9.156, $p = 0.027$), while the recruitment and selection practice was mostly transferred to small and medium-sized subsidiaries (200-500 employees) (chi-square: 7.040, $p = 0.075$). Moreover, transfer of compensation practices was lower in large subsidiaries, although not significantly. In addition, there was found that the larger subsidiaries use more traditional local practices, such as with regard to the principle of seniority in determining the salary level, or more based on collective agreements in determining the basic salary. At the same time, small subsidiaries much less recognize collective bargaining. The implication of these findings is that HRM practices are generally more difficult to transfer to larger subsidiaries. This is also in line with the argument (Gooderham et al., 1999) that large firms should adopt more socially responsible practices, because they have more visibility and they are under more pressure to get the legitimacy and the positive acceptance (Mylonite – Harzing - Mirza, 2004).

The aim of this research study was to investigate how factors originating from cultural and institutional environment of the host country affect the transfer of HRM practices in MNC subsidiaries located in Greece. The results suggest that certain cultural and institutional influences lead multinational companies to adapt practices to some extent to local standards. At the same time, they point to a considerable degree of HRM transfer, something that results in the use of hybrid HRM practices. The results confirm the claim that some HRM practices are more localized and influenced by cultural and institutional environment of the host country, while other practices are more integrated across the whole multinational company and they exhibit a higher degree of compliance with the practices of the parent company (Mylonite – Harzing - Mirza, 2004).

Summary

The article deals with the transfer of HRM practices in multinational companies. It describes different types of HR strategies used in multinational companies, depending on the degree of adapting their policies and practices to the environment of a host country. The actual transfer of HRM practices is affected not only by the willingness of the parent company but also by cultural and institutional characteristics of the environment in which the MNC subsidiaries operate. To get a deeper understanding of the described issues there is used a research study of authors Mylonite, Harzing, Mirza (2004), which analyzes the problem of the transfer of HRM practices in Greek.

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Tools and Methods of Quality Management

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Abstract

A Quality tools are used by organizations to help manage and improve quality of processes, products, services and systems. This article give a brief explanation of the seven basic tools of quality, the seven new quality tools a anothers tools and methods of quality. The Seven Basic Tools of quality is a set of graphical techniques for troubleshooting issues related to quality. They are called basic because they can be used to solve the majority of quality-related issues. Using the Seven new management tools makes it easy to clarify the situation, establish a plan, and get to the root cause of the problem. Each tool has advantages for certain situations and not all tools are used for all problem solving. Once a tool is learned, it can be adapted to different problem solving opportunities. As with anything else, using tools properly takes practice and experience.

Key words

The seven basic tools of quality, The seven new quality tools, Control chart, Pareto chart.

Tools and methods of quality management

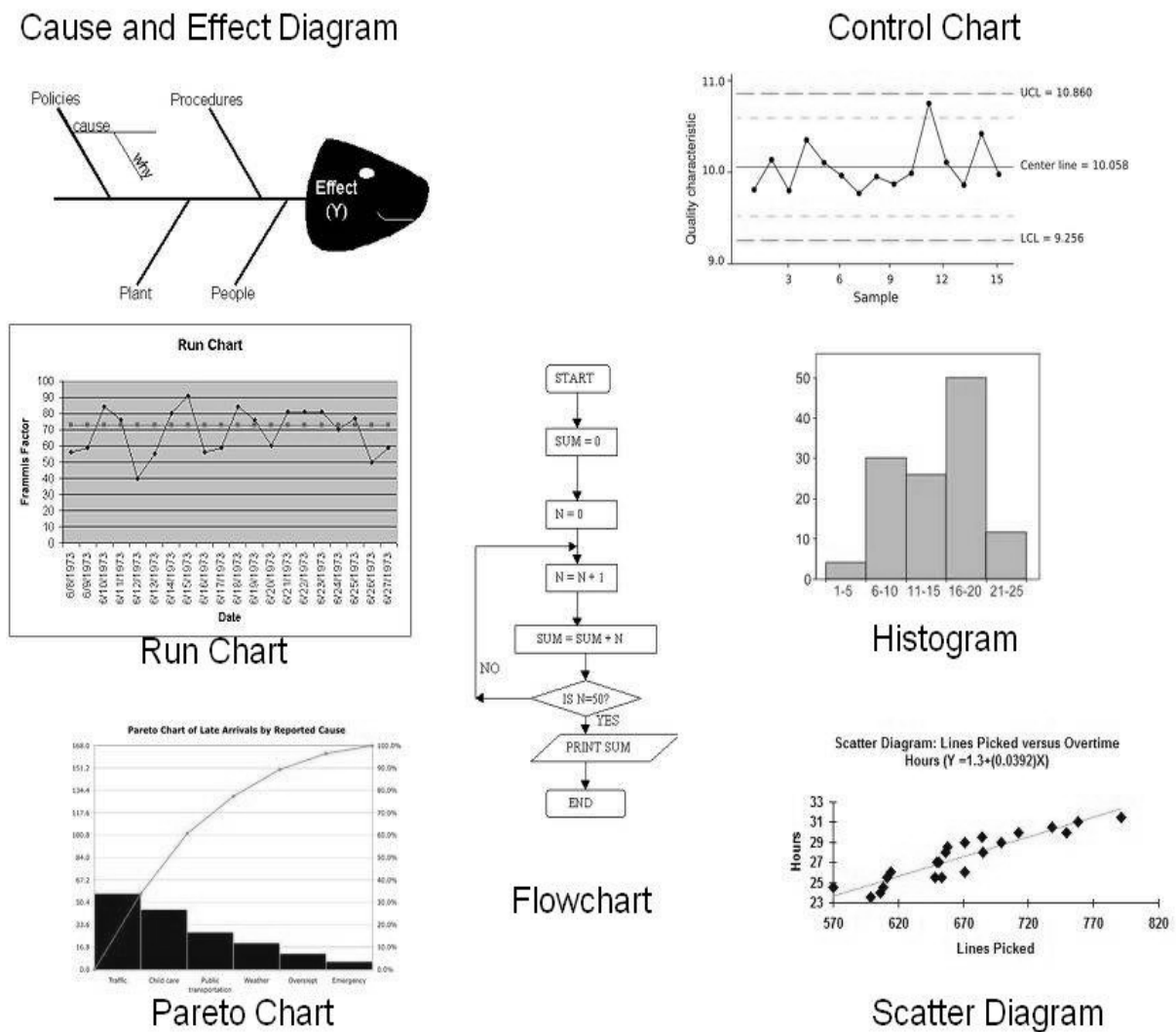
The Customers are changing their requirements for quality, they become increasingly demanding. To ensure the required quality, to verify that it is achieved and it is being achieved repeatedly, and to identify requirements and customer feedback - can be reached only by using a set of tools and methods that have been proven in quality management practices. (Brodský, 2009, 92) A method of quality management can be understood as a way to achieve a predetermined goal by planned and systematic procedure to solving problems related to ensuring and improving quality. Methods and tools of quality are a separate group of the management disciplines. They relate to quality assurance in production and service. Of course, the quality as an attribute, the property can't controlled. The processes that lead to excellence quality can be managed. In the processes people and equipment, that are involved in making quality products and services can be managed. Modern approaches to quality assurance are based on the prevention of unnecessary spending of resources. This prevention can be ensured through continuous acquisition of information about the behavior of processes and their analysis in order to operate the process in such a way that the outputs have the desired properties and functions. Statistical Process Control (SPC) is a preventive tool of quality management, because through early detection of significant deviations in the process of pre-set level enables to make interventions in the process to keep them on the acceptable long-term and stable, or facilitate the process of improvement. (Noskievičová, 2000, 165) ISO 9000 standard states (2006, 16) that the use of statistical techniques facilitate better use of available data to assist in decision making. Statistical analysis of such data can help to provide a better understanding of the nature, extent and cause of variability, and help to solve and even prevent problems that may result from such variability. It may promote continual improvement. The variability is an inherent feature of phenomena. Even in a relatively stable conditions the process and its outcomes are effected by a range of effects that cause this variability. Therefore, two completely identical products, cannot be produced but it is possible to study the effects of variability in causing and creating the conditions to be stable within certain limits and minimize the number of products not meeting the requirements of their level of quality. The Guidance on statistical techniques in quality management system is given in ISO/TR 10017. The purpose of certification according to ISO 9000 standards is also the use of statistical methods for quality assurance (Statistical Process Control - SPC), which allows investigation of variation of variables, its evaluation, compliance or improving the production quality, accuracy and reliability systematically. This principle of permanence and consistency is used by a total quality management, too. The object of statistical process control (SPC) is to facilitate achieving and maintaining the process to a tolerably and stable standard so as to ensure consistency of product and service with specified requirements.

The seven basic tools of quality

For statistical tools can be widely used in organizations, they need to be both simple and effective. Seven basic (so-called traditional) quality tools are simple procedures that have proven in organizations, not only in manufacturing but also in search of relationships, investigating the causes, setting priorities

and identifying opportunities for improvement. Together, they bring and organize large numbers of ideas and information on the subject in logical groups. They provide a graphical and numerical presentation of data. The Group of seven basic tools of quality management (see Figure 1) consists of the Histogram, Cause and Effect Diagram, Flowchart, Pareto Chart, Scatter Diagram, Control Chart and Run Chart.

Fig 1 The seven basic tools of quality



Source: [citované 2012-06-10].
dostupné na <<http://leadershipchamps.wordpress.com/>>.

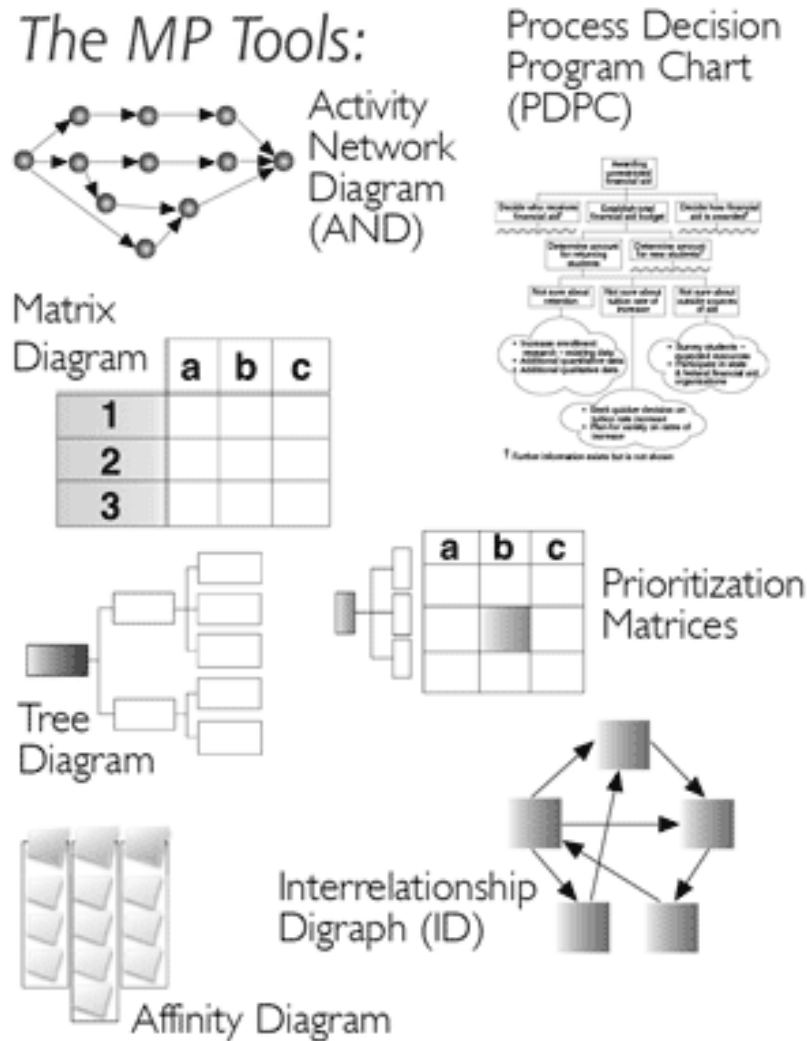
The Histogram is a graphical layout of the measured values of quality characteristics, divided into classes. The histograms are quite frequently used statistical tools, because of their clarity and relatively easy to assemble. Scatter diagram graphically shows the dependence of two random variables. The Flowchart is a universal tool for the description of any process. The main purpose of flowchart is to create a comprehensive summary of the usual verbal description of the procedures and operations in graphically simple and straightforward form, whose filling is due a well-know content or symbol of the terminology relatively easy to understand. (Horálek, 2004, 11) Pareto Chart is based on the idea that 80 to 95% of the problems in management is due to 5 to 20% of causes, which should be focused, analyzed in detail and suppressed. Pareto principle enables to get insight into the essence of the most diverse phenomena, distinguish the essential phenomena (so-called vitally important) from non-essential (so-called insignificant), determine the main problems and their causes, and thus determine the direction of corrective actions. This makes the principles a logical and sensible decision-making tool. It is of course possible that after mastering the vitally important problems of the first phase of the solution, the initially

insignificant problems will become of vital importance in the second stage of solution. Over time the importance of the problems may change, which marks the dynamics of his approach. (Floreková, 1998, 7) Cause and Effect Diagram logically arranged in a graphical form shows the cause-effect. It can be used to analyze the variability of the process and to define the potential factors, which could lead to desired results. Another tool for management quality is a Control Chart. "This is a graphical means using statistical tests of significance in the management of the production process." (Liberko, Šutaj-Eštók, Mihok, 2005, 59) It is a tool dynamically showing the variation of process, which allows to separate random cause of variability of processes from definable causes. One of the functions of the effective use of control Charts is to provide a statistical signal when determinable cause, starts to be effective and to avoid unnecessary signal, when no significant change occurred in the process. In terms of efficiency of Control Chart and the basic decisions about statistical manageability of process is crucial to determine the Upper Control Limit (UCL) and Lower Control Limit (LCL). This is called the regulatory action limit, which defines action of only random causes of variability. (Tošenovský, Noskievičová, 2000, 171) When establishing control charts, the desired so-called reference value of characteristics, needs to be defined, which shows how the so-called Central Line (CL). Control Chart shows graphically the dynamics of the process. In the chart is marked as extent necessary variance, which lies in the interval of upper and lower control limits. To estimate the regulatory limits three times the standard deviation is used. (Gašparík, Kovářová, 2008, 47) Control Charts can be interpreted using the terms such as stability, instability, warning signs, trends and cyclical phenomena. The observed phenomenon is stable if all the points are defined in the UCL and LCL in Control Chart. The process is under control. The process is unstable (not under control), when some observations fall outside the UCL and LCL. This phenomenon refers to a specific variation. Warning signals is a condition when more consecutive observations performed are above or below average, this indicates the term trend. If the trend becomes more pronounced, it could mean that a trend is being more positive or negative. If the phenomena are repeated, it is the cyclical phenomena. (Mateides, 2006, 451) Currently these methods play a major role in all phases of the process improvement and knowledge of them is essential for teamwork to improve. Generally, the following methods have from the use of the benefits. They improve information on processes, provide information necessary to make changes, improve communication, giving an opportunity to discussion based on factual data and support a reach agreement of the implementation measures. (Vytlačil, Mašín, 1999, 105)

The seven new quality tools

However, facts and information related to the improvement of the processes are not just numeric data. But also, for example, include the opinion of customers, whether internal or external, thoughts, wishes, comments and other data, which are very important, although these are not in a numerical form and therefore cannot be illustrated by numerical charts. Therefore, the group so-called seven new tools of quality management has been developed. These tools are very flexible in its application, the output of one tool can be input into the second tool. In such way we are able to raise their contribution to planning and quality management and process improvement. Seven new tools of quality management (see figure 2) is the Affinity Diagram, a Interrelationship digraph (ID), a Tree Diagram, Matrix Diagram, Prioritization Matrices, Process Decision Program Chart (PDPC) and Activity Network Diagram (AND). Interrelationship digraph (ID) is used to determine the cause-effect relationships between items of information pointing to the identification of root causes. The Affinity Diagram groups and organizes a large number of ideas and information on the subject into logical groups. The Tree Diagram shows the relation between the topic and its constituent element of decomposition for each level. The Matrix Diagram helps identify connections between different dimensions of the problem. Prioritization Matrices is used to detect hidden relations in a matrix diagram. The Process Decision Program Chart (PDPC) identifies potential problems that could arise in addressing the situation. An Activity Network Diagram (AND) is used to determine the logical time sequence of individual steps of problem solving. The Seven new tools of quality management is characterized by its simplicity (which sometimes leads to underestimation), the modest source, illustration (each instrument is accompanied by a graphic form) and those that perform support functions for organizing, visualizing and analyzing information. (Plášková, 2004, 24)

Fig 2 The seven new quality tools



Source: [citované 2012-06-10].

dostupné na <<http://www.goalqpc.com/mobile/7mp.html>>.

Application of quality management tools

Statistical process control is the key to understanding the apparently chaotic performance of any system through time. (Pidd, 2012, 182). Any process can be considered a transformation mechanism of different input factors into a product or service. Process control is vital and SPC should form a vital part of the overall corporate strategy. Quality and productivity increase as variability decreases and, because all things vary, statistical methods of quality control must be used to measure and gain understanding of the causes of the variation. In the application of SPC there is often an emphasis on techniques rather than on the implied wider managerial strategies. SPC is not about plotting charts and pinning them to the walls of a plant or office, it must be a component part of a company-wide adoption of total quality and act as the focal point of never-ending improvement in business performance. For many companies SPC will bring a new approach, a new 'philosophy', but the importance of the statistical techniques should not be disguised. Simple presentation of data using diagrams, graphs and charts should become the means of communication concerning the state of control of processes. The responsibility for quality in any transformation process must lie with the operators of that process – the producers. To fulfil this responsibility, however, people must be provided with the tools necessary to know whether the process is capable of meeting the requirements, know whether the process is meeting the requirements at any point in time, correct or adjust the process or its inputs when it is not meeting the requirements. The SPC approach, correctly introduced, will lead to decisions based on facts, an increase in quality awareness at all levels, a systematic approach to problem solving, release of valuable experience, and all-round improvements, especially in communications. (Oakland, 2003, 16) The behavior of the process is the

behavior of one or more so-called controlled variables/parameters. The assumption is that their behavior is controlled regularly (by test, measurement, inspection, etc.) and that they have defined criteria against which to control if the requirements for parameters have or have not been fulfilled. However, an uncontrolled (unstable) process and incompetent process cannot be controlled. SPC is applied to the critical features, not unmeasurable and insignificant parameters. SPC does not serve not to detect failures, but to guard the reserves. (Sestak, 2006, 23) Each company should find a place, where an error occurs and then control and eliminate them to improve its services. We can use the Ishikawa diagram to find such places. As a specific example is an analysis of claims in terms of financial losses and the reasons of claims. We find the causes of problems that are causing the problem (make a claims) after the development of Ishikawa diagram. One such reason is the failure of human factor. There are other causes associated with this factor, resulting in further errors, such as inattentions of the employees in carrying out their activities, time pressure, system errors, poor communication between staff and customers, which leads to incorrect data. Another frequently occurring factor is worker's ignorance, which make causes poor provision of information about the service required for customers. Based on these findings, the company can focus on eliminating these mistakes and avoid the filing of the claims. (Turisová, 2010, 2) Another application was developed for the TEMPUS-EQUAT project realization, and relates to the causes, whose removal would enhance the quality of education. Benková (2007, 12) states the following areas of causes management, machines, materials, methods, measurements, manpower and others. She states that the basic subcauses of management are lack of funding (state budget, sponsorship, legal obstacles of obtaining incomes), the possibility of increasing the responsibility of educational institutions for its work with more competence. The causes of the machines is the lack of basic equipment of classrooms, laboratories with modern instrumentation and computer technology. In the area of materials are listed such subcauses as limited access to information (libraries, databases), in the area of the methods there are under-use of new forms (cooperative learning, distance learning, multimedia support for learning, telelearning, training, network training - Internet, Intranet). In the area of measurements it is the low community award of education and science (problems with the arrival of young workers) and in the area of the causes manpower, it is professional and moral level of workers. Subcauses of the others are low contacts with practice – employers who employ of graduates and insufficient contacts with foreign partners. It is clear that at present it is necessary to prioritize preventive approach to quality. The practice appreciates control charts because of their preventive. As an example of the Use of Control Charts in Healthcare, consider the time (in hours) required to complete a particular lab procedure. This control chart provides statistical evidence that the new procedure did, in fact, change the lab processing times for the better. The amount of improvement (here, reduction) in both the duration average and variation can be quantified from the plotted values that occur in control charts. New control limits now could be calculated based on these improved values and the process monitored to ensure these quality gains are maintained. (Woodall, 3) Krnáčová (2011, 2) states the results of research have shown that the use of tools and methods to some extent depends on the phase in which the organization is in terms of continuous improvement, essentially as it is mature in terms of continuous improvement. The so-called preparatory phase, the organization has focused attention on the instruments by which to obtain the necessary information (for example analysis of quality costs) about a current status. In another so-called stage of involvement and commitment of management" analytical tools prevailed (cause and effect diagram, flow charts, Pareto analysis) to help identify problem areas, quantify and determine the causes of their order of importance for their solutions. During the last so-called phase of continuous improvement more complex tools (for example statistical process control, FMEA analysis of errors and consequences) that are combined with the above basic tools were applied. Application of tools and methods of a quality management is important to support and develop the principles of continuous improvement in organization despite the fact that organizations often have to deal with different problems currently associated with their proper use and application in practice.

Summary

Most of the seven basic tools of quality is based on the numeric data. They use relations among numbers to obtain information necessary for taking effective decisions. If we combine the new tools of quality management in a manner appropriate for that purpose, we achieve a very efficient opportunity to analyze and process non-numeric data, to identify priorities reliably, and to plan effectively. (Vytlačil, Mašín, 1999, 111) The proper use of modern statistical methods is an important element in providing quality products and services.

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Quality Management System as a Tool of Competitiveness

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Abstract

This article deals with of quality management systems of services. The decision to introduce a quality management system in the organization and selection of a suitable model is important strategic decision. The basic concepts of quality management is the concept of corporate standards, the concept of ISO standards and TQM. Process model based on the requirements of ISO standards, model EFQM or CAF is focused on continuous improvement of the quality management system, based on customer requirements towards sustainability and meet customer needs through a process that the organization carried out. The quality management system is expected to deliver in the form of retaining and acquiring new customers, maintain the competitiveness of the organization, the resources saved through more efficient management and communication within the organization and the similarly. The aim of this article is to highlight the advantages and disadvantages of selected quality management systems of services.

Key words

Quality management system, CAF, ISO standards, EFQM, PDCA, RADAR.

Quality Management System

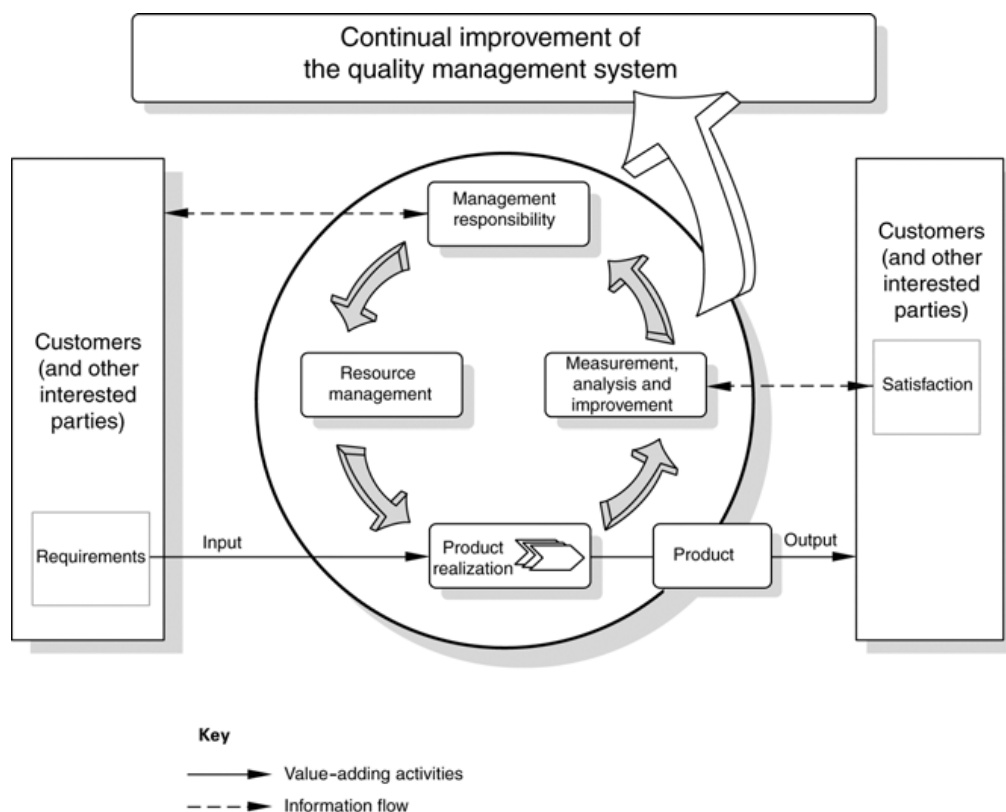
At present the Quality management system is considered one of the most effective and efficient means of systematization, continuous improvement and competitiveness of the organization. Dr. W. E. Deming says that most quality problems lies in the system, and not in humans. The so-called Deming 85/15 Rule, which comes from his own experience is well-know. 85-15 Rule, holds that „85 % of problems in any operation are within the system and are the responsibility of management, while only 15 % lie with worker.“ (Walton, 1986, 242) It follows that most of the problems causing the loss are problems of management system. It is therefore important to implement and improve management systems, which include the quality management system. ISO 9000 standard (2006: 20) defines the quality management system as „a management system to direct and control an organization with regard to quality.“ Quality management system is the determination of rules and implementation of policy in organizations. According to a CAF (2006, 180) quality management system is defined as „a system that gives the instructions necessary to improve the policies and procedures, management and integration processes, ultimately leading to better performance.“ The basic concept Quality management is the concept of industry standards, the concept of ISO standards and the concept of TQM (total quality management). Quality management is defined in the so-called quality standards. In public service organizations effective quality management systems can establish and operate based on ISO 9000 standards, model CAF and EFQM and others. Process model of organization created by the requirements of ISO, model EFQM or CAF is focused on continuous improvement of the quality management system, based on customer requirements and towards a lasting satisfaction of customer needs through processes that are performed in the organization. It is the focus on customer that helps to identify changes in trends in demand. The outputs, which indicate the need for change, are obtained by measuring the process. And this stimulates improvement. And helps to quickly adapt to changes than competitors, and thereby improve the market position.

Series of ISO standards

Series of ISO 9000 standards has universal validity. They can be applied not only to manufacturing organizations, but also to in organizations of services including public administration. The objective of ISO standards is to define the minimum requirements for quality management system necessary to achieve customer satisfaction. By the evaluation of quality management systems according to ISO 9000 standards it is determined whether the requirements that attach to the quality management system ISO 9000 standards have been fulfilled. The Compliance with the requirements is proven by a certificate, which indicates so-called element of external recognition. However, the ISO standard does not reveal the results of the organization of society, so called corporate social responsibility. The standards differentiate between requirements for quality management system and product requirements. ISO standards do not specify requirements for product, but complement each other. Requirements for Quality Management

System according to ISO standards are shown in Figure 1. The general requirement is the management process. One of the principles of quality management is a process approach. As the Homzová states (2012, 60) states, „Any process-driven transformation of the company is very challenging because it requires the introduction of changes. These changes affect every activity and every worker in the company. Everyone needs to forget about work style they have had by now and learn a whole new way of thinking.”

Fig 1 Model of process-based quality management system



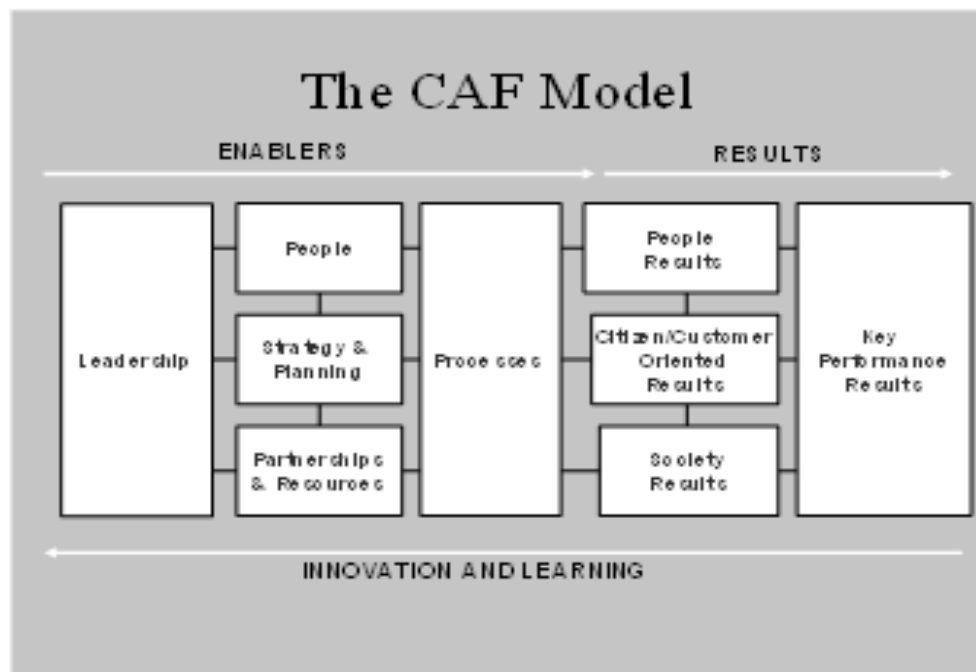
Source: STN EN ISO 9000: 2006, Systémy manažérstva kvality. Základy a slovník. Bratislava: Slovenský ústav technickej normalizácie, 2006. p. 12

„The purpose of the process approach is to uncover the processes that are covered by the functional organization, to purify these processes from all activities that do not add value, give them the spotlight and create infrastructure and corporate culture that will enable smooth implementation and continuous improvement of the remaining processes and, where appropriate, continuous improvement of new processes.” (Šmída, 2007, 30) Series of ISO 9000 standards directly requires a system approach to management. „System approaches emphasize the need for a comprehensive understanding of the management of sub-processes and their coordinated alignment of target behavior in the integrated functioning whole.” (Liberko, Šutaj-Eštók, Mihok, 2005, 14) ISO 9001 standard also requires management responsibility, resource management, product realization, measurement, analysis and improvement in accordance with the requirements specified in this standard. ISO 9001: 2008 allows organizations to apply the exception, so-called flexible range. This gives the organization an option meet the requirements adequately. Exemptions under the remission of certain requirements relate to the requirements of section 7 of standard product realization. But even exceptions permitted are applicable to all types of organization (not dependent on size) and the eligibility of each exception must be justified. This makes it possible to apply a simple rule, which states that you cannot leave out any requirements affecting the quality of the product or service. (Návod na implementáciu systému manažérstva kvality (QMS) podľa noriem ISO 9001:2008 pre malé a stredné podniky, 26). ISO standards are used to create requirements that products, services, processes and systems have to meet at the market. They allow for easier and more transparent management of organizations and responses to the question of whether the customer can trust the product, or service offered by the organization.

TQM models

The CAF (Common Assessment Framework) is recommended by public organizations. Its aim is to improve the quality by using quality tools, focusing on solving their tasks in favor of the citizen/customer and enabling employees to develop. CAF is a self-evaluation system based on TQM principles and uses principles and experiences derived from the model EFQM. It includes and evaluates all areas of management and the very existence of the organization. Self-assessment is conducted by trained personnel of organization, who gradually answer the questions individual sub-criteria by the designated method and determine their the degree of fulfillment. The organization conducts self-assessment according to nine criteria: leadership, people, strategy and planning, partnership and resource, processes, people results, citizen /customer oriented results, society results and key performance results. (see Figure 2). As Jurkovičová says (2005, 89): Based on the experience of the project it is to be noted that the CAF is a method used in all organizational units of all types of organizations of public administrations. It encourages improvement activities in organizations. It introduces a measure of satisfaction of stakeholders and regularly evaluates trends. It supports the initiative of staff in the improvement and teamwork. It initiates a dialogue between employees and their superiors, and further supports the implementation of quality tools in support of the criteria of the CAF.

Fig 2 The CAF model



Source: The Common Assessment Framework (CAF), Improving an organisation through self-assessment. 2006. Resource center EIPA 2006. p. 3. <http://www.eipa.eu/files/File/CAF/Brochure2006/English_2006.pdf>.

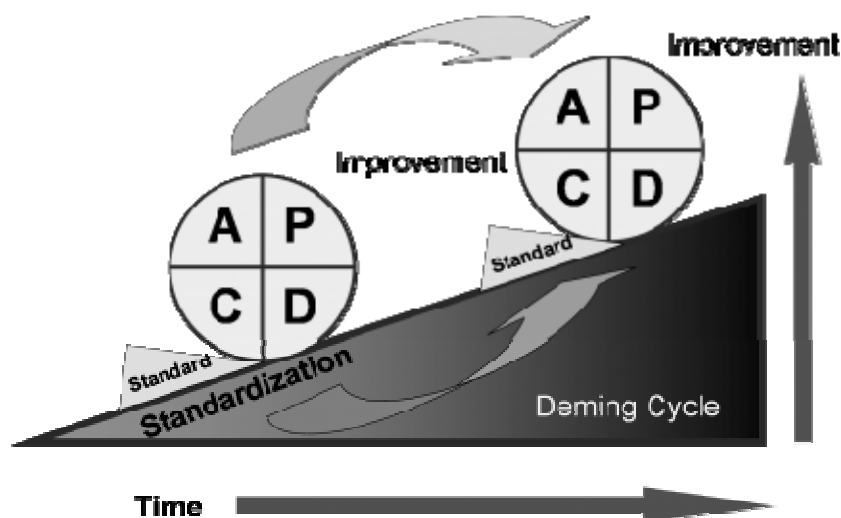
CAF is just one possible tool to improve the activities of the organization, its culture, image and can be combined with other instruments, for example, the certificate of ISO. Model CAF is not introduced, but used. Therefore, is not possible to say that the organization, which used the self-assessment according to this model, has this model. In addition, CAF does not serve to support the daily decision-making process, but supports the management as an analytical basis for bringing long-term remedial actions (annually or less frequently). (Bogdanovská, Floreková, Terpák, s.67) However, if an organization plans to apply TQM principles in depth, it is advisable to use some of the more detailed models (for example EFQM model). The EFQM Excellence Model is a management tool for self-evaluation and performance improvement of organizations, of both private and public sector. Organizations involved in the competitive European Quality Award, or National Quality Award of the Slovak Republic are evaluated according to the EFQM model, so it points to element of competitiveness, which contains the EFQM model. The Model EFQM includes criteria that allow comparative assessment of performance. Comparing the results with other organizations, the evaluation can become a very interesting basic for benchmarking. The structure of the EFQM model has 9 main criteria. Five criteria are prerequisites to recommend such an organization should achieve results. The other four criteria are results that show what an organization

should achieve. The essence of improvement directed to excellency isn't in fact in maintaining the certificate, it ensure that the management obtains a relevant information about the organization, which is necessary for making further improvements. The organization obtains a quantitative and qualitative evaluation, which is directly expressed in words and score - what is missing, what is good, what is bad, what are the strengths and weaknesses of the approach and results of business. (Hnátek) The benefits of the EFQM model is the possibility of excellent results of the organization the recognition, making apparent and understanding the driving forces for achieving the results of the organization, actively involving employees in self-assessment and increasing their interest in further improvement of the organization, creating a balance between the interests of all stakeholders (owners, employees, customers, partners and surroundings), free staff training on new tool and so on.

PDCA cycle and RADAR

Is necessary to continuously improve and adapt the quality management system to changing external and internal conditions of organization. Deming circle, the so-called PDCA cycle is considered a universal model for quality improvement. PDCA cycle is a procedure of process improvement in steps Plan - Do - Check - Act (P - D - C - A). The Application of PDCA cycle provides effective solutions and improve processes and systems. It can also be used as a simple method to introduce changes. PDCA cycle is applied in quality management systems of organizations. The main aims of the CAF are „To introduce the principles of total quality management in public administration, methodically leads organizations in understanding and application of self-assessment in the transition from a system of the planning and execution to a fully integrated PDCA cycle." (Průručka modelu CAF 2006,2006, 10). One of the mandatory elements of the CAF is the scoring system, based on the PDCA cycle. This evaluation allows you to score all phases of the PDCA cycle for each sub-criterion. In The Evaluation panel enablers, the level PDCA can be achieved only if one part of a cycle of continuous improvement are activities of benchlearning. In The ISO 9001 standard specifies that methodology PDCA can be applied to the process (see Figure 3). PDCA cycle is „ a systematic approach to prevention and correction of defects in improving methods and procedures. It removes the root causes of problems and constantly establishes and reviews new standards." (Gašparík, Kovářová, 2008, 8) It is a never ending process without the beginning and the end. It is a recurring cycle. The PDCA cycle is therefore an integral part of continuous quality improvement. Pohančaník relies on three basic conditions for successful realization of the PDCA cycle in the organization (Mateides et al., 2006, 94): Any activity, whether within or outside the organization is perceived as a process and can be improved accordingly. Only the solution of the problem is not enough, fundamental improvements are successful. The third enabler is that top management has to set an example. Taking responsibility is not sufficient.

Fig 3 PDCA cycle

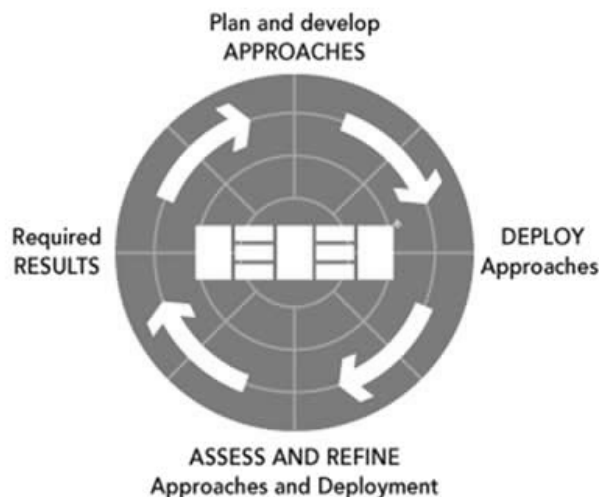


Source:

<http://totalqualitymanagement.wordpress.com/2009/02/25/deming-cycle-the-wheel-of-continuous-improvement/>.

The RADAR methodology (see Figure 4) can be used to ensure the continuous improvement of the organization. RADAR is a unique methodology designed to evaluate the organizations involved in the competitive European Quality Award, which is a part of the EFQM model.

Fig 4 The RADAR methodology



Source: <<http://www.efqm.org/en/tabid/171/default.aspx>>.

In Slovakia, the RADAR methodology is used in the National Prize of the Slovak Republic as a quality assessment tool, where evaluators assess the level of excellence of organization in terms of the five basic perspectives, which we refer to as R - Results, A - Approaches, D - Deploy, A - Assess, R - Refine. RADAR is a dynamic evaluation framework and performance management tool. The Organizations can also use RADAR methodology in the self-assessment. The organization sets the expected results and develops approaches to achieve those results then the approaches are subsequently applied in practice. Then organization assesses the achievement of its objectives, the appropriateness of the chosen approach and the degree of their real implementation and improvement. An overall assessment is established from the obtained data, and it includes designing ways to correct and eliminate the lack of results. RADAR method logic is based on a modified PDCA cycle. P (A) - Plan your approach to achieving results, D (D) - do, in other words, deploy the approach, C (A) - Check, or assess and A (R) – Review by improving Act. According to RADAR methodology, the individual sub-criteria of the EFQM model are evaluated according to the following attributes, or questions for each part of the closed circuit RADAR. Enabler sub-criteria are assessed in terms of approach, application and evaluation and review, while the result sub-criteria only in terms of degree of achieved results. Points are gained for each criterion. The overall sum of the points enables to assess the level of quality management in the organizations, or the level of excellence of the organization

Summary

It needs to be noted that, the ultimate aim of public organizations is not the quality management system, but the quality of the outputs of the organization, thus it provides quality services and satisfaction of all stakeholders (interested parties). Ensuring the quality of public services is a long and never-ending process, which results from the continuous growth of requirements of citizens/customers and the rapid development of technology that opens up many new opportunities to meet the requirements. The service provider has to comply with and meet customer requirements and the only one those who realize it find their way their customers and to the overall success of the organization.

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Analysing the Requirements of Performance Appraisal Systems

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Abstract

The article deals with the requirements analysis of performance appraisal methods at various levels of organization. The aim of this article is to analyze approaches of different authors to the problematic of performance appraisal. Analysis of the issue of performance appraisal often point out to the need of systematic approach to the requirements of performance measurement methods. Requirements of performance appraisal methods often differ, but the common sign is the current competitive environment, which requires a high degree of adaptation and the ability to harmonize the requirements of the performance measurement methods with the organization objectives.

Key words

Performance management, Performance appraisal system, Performance appraisal, Requirements

Theoretical framework of Performance appraisal

In the present dynamic period it has become a rule more than exception that companies draw attention to the performance appraisal of their employees, saying that efficient and motivated employee is an asset to any employer. The actual employee performance reflects the fact how he deals with given working tasks in required time and quality. By selecting and implementing the most suitable method of evaluating performance, company should focus on existing corporate culture, which is characteristic for that company or organization. Selected methods don't have to be accepted in every case and in practical way this can cause negative impact on whole employees evaluation system. Analysis of the issues of performance evaluation, often point out to the need of systematic approach to the requirements of the performance measurement methods.

Numerous authors in the literature have paid attention to the development of performance appraisal. Fletcher (2001) suggest that the „Performance appraisal was once considered as a process involving a line manager completing an annual report on subordinate's performance. But as time passes it has become an integral part of performance management system and performance appraisal is today considered as the key element of performance management.“ According to Ryners (2005) „Performance appraisal is perhaps the most ubiquitous human resource tool used in organizations.“ Armstrong (2004) describe performance management “as a strategic and integrated approach to delivering sustained success to organizations by improving the performance of the people who work in them and by developing the capability of teams and individual contributors.” Roberts, G. (2007) suggests that „Performance appraisal is a yearly rite of passage in organizations that triggers dread and apprehension in the most experienced, battle hardened manager.“ Fletcher, C. (2001) defines performance appraisal as „a general heading for a variety of activities through which organizations seek to assess employees and develop their competence, enhance performance and distribute rewards.“ Scullen (2003) has the appraisal process categorized into four following steps: Establishing job criteria and appraisal standards; Timing of appraisal; Selection of appraisers and Providing feedback. Dessler (2011) claims that „the most difficult and most distasteful human resource management task for line managers to perform is the process that appraises employee performance and acts on that appraisal - termed Performance Appraisal. “

Performance appraisal has been and still is the most problematic human resource area and the most avoided human resource area for line managers and human resource departments alike.

Coens and Jenkins (2002) identify five elements common to almost all performance appraisal systems:

- 1) The performance, behaviors or traits of individuals (not teams, groups, or departments) are rated or judged by someone else;
- 2) These ratings/judgments are scheduled (usually annually or quarterly) as opposed to being tied to completion of particular tasks or projects;
- 3) Such ratings and judgments are not applied to selected individuals, but rather are systematically undertaken with all employees of a particular department or organizational unit;

- 4) The process is either strictly mandatory or tied to some reward system (such as pay raises or promotions);
- 5) Information is recorded and kept in the employee's file by the employer.

It is undeniable that the Performance is a multidimensional term, which has a variety of meanings, therefore it is not easy to give an exact definition. However, in the most general form is the term performance used in the context of defining the very nature of business existence in the competition market, it's success and ability to survive in the future.

Requirements of Performance measurement system

The authors clearly agree in saying that the design of an optimal performance measurement system, which would meet all the necessary criteria is difficult and sometimes an impossible task.

Tangen (2005) describes a successful performance measurement system as a set of performance measures (i.e. a metric used to quantify the efficiency and effectiveness of action) that provides a company with useful information that helps to manage, control, plan and perform the activities undertaken in the company. The information retrieved from the PMS must in turn be accurate, relevant, provided at the right time and easily accessible for the persons who need it. Furthermore, the performance measures must also be designed to reflect the most important factors influencing the productivity of the different processes that can be found in the company. Caruth and Humphreys (2008) suggest that a successful performance appraisal system is one that has resulted from hard work, careful thinking, planning and integrated with the strategy and needs of the organization. Crawford and Cox (1990), for example, believe that performance must be measured in ways that are easily understood by those whose performance is being evaluated. They also propose that measures should evaluate a group, not individual work. Bourne et.al. (2003) emphasize that performance measures should be derived from strategic objectives to ensure that employee's behaviour is consistent with corporate goals.

Not all requirements are mutually compatible, exemplified by the fact that on one hand the performance benchmarks should be designed to provide the most exact data and on the other hand, performance benchmarks should be easy to measure and easy to understand.

As the requirements for performance measurement systems are so different, according to the opinion of Tangen (2005) it is necessary to answer two questions: "What should be measured?"; and "How should it be measured?".

He suggests that these two questions should be handled separately, which in turn means that requirements fall into two categories:

1. System requirements. These represent criteria important from an overall system point of view, such as: support strategy and selection of both financial and non-financial performance (i.e. what to measure).
2. Measure requirements. These represent criteria important when designing an individual performance measure, such as: have an appropriate formula and include necessary specifications (i.e. how to measure).

Tangen (2005) further describes the basic system requirements for the performance appraisal methods that are:

Provide accurate information: The most important requirement of a performance measurement system is of course that it provides its users with accurate and exact information. A system, which provides wrong information or includes many errors should cause confusion and is highly likely to have a negative influence on the performance of the company.

Support strategic, tactical and operational objectives: A successful performance measurement system should be derived from the company's objectives and supports the strategy of the company. Equally important is that the strategic objectives, specified at corporate level, are in turn translated into tactical and operational objectives to the lower levels of the company. One must ensure that all parts of the company are striving towards the same goal.

Guard against sub-optimization: The importance of this requirement lies entirely in the employees seeking to improve the measure of their performance often make decisions that are contrary to the desires of management. It is, for example, not rare that an improvement in one area leads to a deterioration in another and in worst case also resulting in a decline in the performance from an overall point of view. A performance measurement system have to guard against sub-optimization, possibly by establishing a clear link from the top of the company all the way to the bottom, to ensure that employee's behaviour is consistent with corporate goals.

Include a limited number of performance measures: A large number of performance measures increase the risk of information overload, meaning that it is practically impossible to distinguish information with high importance from information with less value. Information overload can lead to their all information being ignored instead of used. In other words, it is vital that "old" performance measures, that are no longer of interest, are removed from the performance measurement system.

Kondrasuk (2011) points out that an "Ideal Performance Appraisal System" it is assumed that many present performance appraisal system components should be retained in general. The components to retain: establishing expectations for employee performance, allowing the employee the resources to perform the job, appraising that employee's job performance, reviewing the appraisal process and continuing the cycle of following steps.

Kondrasuk (2011) has defined further six additional aspects where important changes could be made to produce a more ideal performance appraisal system. Those aspects are:

- 1) Performing the recommended changes recently recommended,
- 2) Clarifying the goals and role of performance appraisal,
- 3) Focusing on both results and behaviors,
- 4) Adding an appraisal category,
- 5) Properly timing the performance appraisal process,
- 6) Involving more constituencies in the process.

Designing an ideal performance appraisal system offers a plenty performance appraisal methods to select. Knowing that performance appraisal methods are a significant part of every organization, it is no surprise there are many different performance appraisals that can help a appraiser take the performance and attitude of a subordinate to the next level. Performance appraising is a means of identifying the strengths or weaknesses of an employee and to look for possible skill development and improvement strategies for that particular employee.

As Bilgin (2007) declares effectively implemented and monitored performance management has the following advantages:

- Performance management facilitates the implementation of business strategy by indicating what to measure, determining appropriate means of measuring, setting targets and linking the measure with organizational performance.
- Performance management improves the organizational performance.
- Improves processes within the organization.
- Improves employee performance.
- Improves team performance.
- Eases implementation of change in the organizational culture.
- Improves customer satisfaction.
- A competitive advantage is obtained.
- Improves quality of supervision.

Summary

The article has provided some information on what needs to be changed in order to improve performance appraisal methods. Equally it provides useful insights by analyzing the requirements of effective performance appraisal systems. All performance appraisal methods carried out by every company have some similarities. But the design of an optimal performance measurement system, which would meet all the criteria is a difficult and sometimes impossible task. Therefore it is necessary to deal

systematically with all the requirements of performance measurement system. Unfortunately an ideal performance appraisal system can't be applied the same way in all situations, because conditions differ from case to case. Well-prepared and well-conducted performance appraisal process provides the platform for development and motivation from the top of the company all the way to the bottom.

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Creativity: the Crucial Factor in Education and Training of Future Managers

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Abstract

Creativity is closely associated with management. Practice shows that successful are those employees and managers who can bring new and creative solutions to problems. Growing demands for skilled and creative people necessitates the change of traditional teaching and learning processes in higher education, managerial education not excluding. Fostering and enhancing students' creativity as well as improvement of students' problem solving ability has become a crucial issue in managerial education.

Key words

Creativity, Education, Managerial education, Teaching creativity

Substance of the creativity

In unstable, constantly and unpredictably changing world becomes the creativity a crucial factor for organisations and their efforts to gain and sustain competitive advantage. Creativity is the basis for innovation because every innovation processes begin with idea generation. It enables to bring innovative ideas and turn them into profitable activities. Simply, creativity is the process of generating something new that brings value to an organization or individual.

According Gilford (1950, in Hossieni-Khalili, 2011) creativity is a collection of individual characters and abilities and means thinking in different dimensions. Strenberg (1985, in Hossieni-Khalili, 2011) indicates that for creativity are necessary elements such as having interest to risk, refusing limitations, having ability to make new and particular things, asking questions and building a lot of hypotheses and being curious.

There are many definition of creativity. Most of them emphasise the generation of ideas, the innovation of products and services and the adding of value to organisation (McLean, 2009). In this regard Bilton (2007) points that individual creativity must to be integrated with organizational resources, capacities and systems – just so new ideas will bear fruit.

According to Hodock and Adamo (2011) the link between individual creativity and new-product success is evident. However, most of the people aren't very creative. Creativity is very interesting phenomenon: small children are more creative than their parents. This is due to the existence of barriers to creativity that suppress the children's creativity (Hodock&Adamo, 2011).

Teresa Amabile (1983, 1996, in Hirst et al., 2009) – author of componential model of creativity – identifies three building blocks necessary for individual creativity: domain-relevant knowledge (skills), creativity- relevant skills, and intrinsic task motivation. The creativity requires a confluence of these three blocks.

Creativity has two aspects – it is about *novelty* and difference (a deviation from conventional tools and perspectives) and *freedom* given to individuals i.e. freedom to express individual talent or vision. Creativity means to make or think something new or a new combination of existing elements. But this novelty alone is not enough because the idea must also be useful or valuable (Bilton, 2007).

The term creativity is often associated with *innovation*. Although these words are interrelated they are perceived differentially. Definitely, without creativity there is no innovation. Gurteen (1998, in McLean, 2009) indicated that creativity is the process of generating new ideas and innovation is about implementing those ideas and turning them into reality. Both, creativity and innovation are knowledge-creation processes which, when developed and transformed, generate business value and competitive advantage for the organisation (McLean, 2009). In order to promote innovation as an output of creativity, the organisation must itself be creative and imbibe a culture of innovativeness.

John Howkins (2009, in Kloudová, 2010) explains the difference between creativity and innovation as follows: creativity is an internal, personal and subjective, and innovation is external and objective manifestation. According Howkins creativity is able to drive innovation, but innovation can never manage creativity.

Creativity and business performance

Ability to be creative and innovative is essential for modern organizations because it has vital and non-replaceable role in enhancing business performance and sustaining economic growth. Creativity in management is according Bilton (2007) used to describe alternative approaches to business processes, such as strategy formation and organizational change as well as new product development and technological innovation.

Although creativity has always been at the heart of business, until now it hasn't been at the top of the management agenda. It is essential to the entrepreneurship that gets new businesses started and that sustains the best companies after they have reached global scale (Amabile-Khaire, 2008).

There is a correlation between creativity and innovativeness. Lorenz and Lundvall (2010) measured the volume of creative work and link it to the national economic performance in Europe. They demonstrate that the frequency of creative work correlates with national innovative performance.

Teaching creativity vs. creative teaching

In the changing world increase the importance of creativity. Every person (mentally healthy individual) has the potential for creativity. Important is whether this creativity is enhanced and developed or not. It is possible to train and develop creativity (through the activity).

Currently can be seen a shift towards fostering *students' creativity*. There is a strong tendency to nurture and develop the creative potential and enhance the creativity of the students. Many educational reforms intend to incorporate creativity into the curriculum.

Creativity has several factors. One of the methods of evaluating students' creativity is the Torrance Tests of Creative Thinking (TTCT). This test of creativity involved simple tests of divergent thinking and other problem-solving skills, which are scored on four scales:

1. *Fluency*: the total number of interpretable, meaningful, and relevant ideas generated in response to the stimulus.
2. *Flexibility*: the number of different categories of relevant responses.
3. *Originality*: the statistical rarity of the responses.
4. *Elaboration*: the amount of detail in the responses.

As stated Cardoso de Sousa (2011) the movement towards *creativity in education* born of the initial post-World War focus on gifted and talented children, was led by the United States and has spread to other countries and has been adopted at further educational levels, in a sort of opposition to the so called traditional style, mainly around the development in the students of Guilford's original divergent functions: fluency, flexibility, originality and elaboration.

Barak and Doppelt (1998, in Davies, 2012) noted that "in the era of information explosion, change, dynamism and pluralism, there is an increased need for education to equip the school graduate with higher order cognitive skills. Future society may particularly reward those who not only possess logical thinking, critical thinking and problem-solving skills, but are also enterprising, innovative original and creative". According Claxton (1999, in Kerr-Lloyd, 2008) „learning opportunities enabling expanded awareness, adaptability, resilience, resourcefulness and play (that then develop a capacity for creativity, reflection, decision making, and self-awareness) are imperative for management educators and business organisations in the 21st Century“.

Recently becomes very popular the concept of *creative teaching*. In this regard Cardoso de Sousa (2011) emphasizes that there must be made the distinction between the creative person who happens to be a teacher, and the act of teaching in a creative way.

Figure 1 Comparison between „traditional“ and „creative“ teaching

„Traditional“ teaching	„Creative“ teaching
The student goes to school to acquire knowledge which has existed for a long time and is handed down on authority.	The student goes to school to acquire skills which enable him/her to continue learning to deal with unknown/ unpredicted events and challenges. Part of these skills involves the ability to acquire data (knowledge) necessary for the task in hand.
Subject matter taken on authority is educative in itself.	Subject matter provides the raw material for learning but has value only when put to use in relevant and meaningful ways.
The best way to set out subject matter is in unassociated fragments or parcels.	The best way to attain knowledge is through active, experiential learning in a setting meaningful to the individual.
A fragment or parcel of subject matter is the same to the learner as to the teacher.	What is relevant, meaningful and sensible to the learner varies according to each individual's background, experience, characteristics and needs.
Education is supplementary to and preparatory to life, not life itself.	Education involves growth, and is, therefore, a component of living.
Since education is not present living, it has no social aspects.	Personally meaningful learning involves interaction and effective communication with others.
The teacher can and should furnish the purpose needed for the acquiring of knowledge.	The learner's needs and involvement provide the initial purpose for creative learning.
Working on tasks devoid of purpose or interests is good discipline.	It is important to involve the learner in choosing tasks which are interesting and have relevance for the learner, or to find ways of making given tasks interesting or purposeful to the learner.
The answer to the problem is more important than the process.	While solution to problems may have immediate importance, learning a problem solving process has great long-range importance.
It is more important to measure what has been learned than it is to learn.	It is both possible and important to document the impact (effect) and value of creative learning.

Source: Isaksen and Parnes (1992, p. 427, in Cardoso de Sousa, 2011)

Education and Training of Managers

Preparation of future managers is very important for future of the society. Difficult reality and constantly changing environment highlight the importance and the difficulty of management education. Managers are - more than ever before - forced to continually widen their knowledge and skills because environment in which organizations operate is increasingly dynamic and unpredictable.

Creativity is along with self-reflection, self-management, motivation and communication key interpersonal competency of modern managers. Many problems in organizations result from mismanagement and incompetence of management. This leads to the discussion about the quality of managers as well as the quality of managerial education and training.

Transformational changes in Slovakia in the end of 20th century evoked the qualitative changes in Slovak education system. Socio-economic changes caused a change in consciousness, personality and attitudes of students. All mentioned required a change in approaches to students' motivation which is based on the move from the position of "passive recipient" to position of "active co-actor" in the learning process.

Many scientific polemics concern the effectiveness of traditional teaching methods. Very often mentioned the need for more interactivity and the use of more active forms of learning. Conventional teaching methods are shown to be not always the best to prepare future managers.

The societal changes require teachers to use more recent approaches that are able to motivate students more and mobilize their creative potential. Although student community changed and no longer can be considered as "classical", in the educational process are mostly used classical (traditional) methods. Sufficiency of available theoretical information especially in electronic form in the networks (as well as other social factors) caused that the theoretical information predominate and practical experience absent. This is the reason for the use of innovative approaches based on the creativity. Traditional teaching transfers knowledge in finished form which supports and encourages mediocrity and passivity and it is

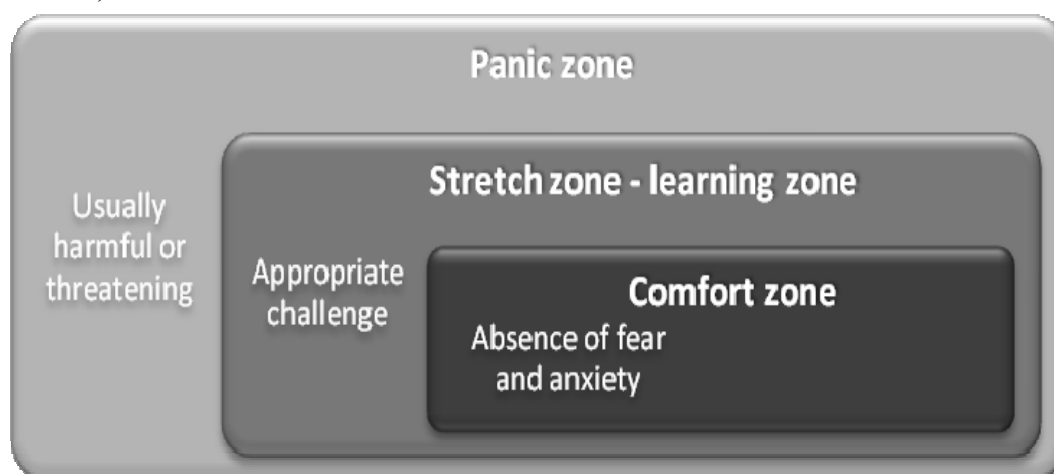
carried out in the mass form. In traditional teaching prevail informative-receptive and reproductive methods.

According Hossieni (2011) traditional methods of teaching „emphasize direct transmission of knowledge and maintain these processes through inflexible structures which limit the engagement of learners in innovation, discovery and mental growth. Problem-solving and inquiry oriented approaches on the other hand, offer opportunities for exploring and discovering complexities, involving learners with the process of learning, and enhancing internal motivation.“ Creative learning and teaching include, establish and maintain those processes (Hossieni, 2011).

Like in other areas also on education issues can be applied Comfort, Stretch and Panic Zones Model that consists of three zones of comfort (Figure 2):

- *Comfort zone* - a zone in which a person feels safely, knows the environment, people and ways of working. But he/she learns nothing new, works only on the basis of previous experience and knowledge, and does not have a need or motivation anything to change. In this zone is student when classical educational methods are used.
- *Learning (stretch) zone* - a place where a person encounters own current borders of skills and abilities and finds that they can be further developed. The incentive to change behavior under the established rules comes mostly from internal or external environment. Student is in this area when are used creative approaches in teaching that improve motivation of the majority of students.
- *Panic zone* - the current possibilities of a person are exceeded. In terms of student learning there is impossible move anywhere because there is a threat of regress because of bad experiences and fear.

Figure 2 Comfort, Stretch and Panic Zones Model



Source: according to Tej – Krasnodebski, 2009

Teacher's or lecturer's activity should unambiguously lead to move students from the comfort zone for which they were accustomed in to learning zone. Comfort zone can be expanded through the progressive learning, the acquisition of theoretical and especially practical experience and successful solutions to new situations in the educational process.

The aim of all creative methods is the acquisition of intellectual skills, in particular decision – making and creative judgment as well as development of communication skills. Important element is the application of knowledge and experience in training, change of the motivation that will shift a student from passive recipient to active co-actor. Creative teaching methods act as high motivators and result in retention of up to 90% of knowledge. High motivation of students creates a good relationship to the subject matter, increases self-confidence and develops a young person - next manager. Students – managers enter in to the practice not only with knowledge but also with basic experience, the ability to state their own case and views and the ability to compete in the labour market.

Results and conclusion

Creative methods of teaching and experiential learning (such games, case studies, projects, simulations) mean for students some form of self-realization and enrichment of traditional education methods. Our personal experiences shows that among the applied "creative" methods and techniques (applied on seminars on the subject Creativemethods of management and management games) students prefer the games aimed at addressing the problems such as brain storming and case studies, games aimed at communication and games aimed at team and team work development. Based on the facts and own experience of using creative teaching methods and management simulation exercises can be concluded that:

- There is a problem of insufficient motivation of students-future managers,
- In relation to the management education it is necessary to modify the curriculum which currently lacks synthesis and creativity;
- There is demand for new approaches to management education and training;
- Most new trends prefer a shift to wards more flexible, experiential and informal approaches;
- Current situation requires a change in thinking and scientific progress in many traditional educational priorities.

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Trends of Human Resource Management in Current Century

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Abstract

The paper describes the main changes in today economic environment on world-wide base. Described are demographi , social, market ,changes and changes resulting from globalization, knowledge economy, labor relations and changes from increased competition. Described are main impacts on specific areas of human resource management and possible way of reaction, namely, in: workplace changes, diversity, competitive advantage, core competences, organization performance, and shift of paradigm.

Key words

Human resource management, economic environment, trends in human resource management, impact on human resource management.

Introduction

Organization operate in world wide in very dynamic environment. The influence of this fast changing world has significant impact on the role and function of human resource management, and implies an uncertainty both in the role of human resource management (HR) and the best ways for an organizations to develop its staff to enable it to succeed in the competition. The purpose of this article is to identify the main changes of economic environment and impacts on human resource management (HRM). and also insinuate the possible way of solutions.

The main changes in the economic environment in current century

For many years is possible to hear the buzzword "human resources are our most important assets". To gain and maintain competitive advantage of an organization, management must treasure its human resources. To achieve this, organization rely not only on technology, patents or strategic position but also on the successful management of their workforce. Literature reveals that there are many factors that influence the shape of human resource management in current century. Economic and politic environment has changed very significantly. On the base of literature and author experience, the main change elements are following.(Wright, 1994).

1. Market changes
2. World financial and economic crises
3. Demographic changes
4. Knowledge economy emergence
5. Changes in labor relations
6. Globalization of the economy and breakdown of trade barriers
7. Increased national/international competition

In next paragraph will be described main reasons which implications have abovementioned changes on trends in human resource management (HRM) and also will be pointed out the main possible way of solution.

The main trends and the implication for HRM

Market changes

Current market is more complex than ever before. The enterprises are facing increased competition, on world - wide base. Organization try to resist competition through creation of strategic alliances, to gain access to cheap material resource and labor. The outcome of globalization is, that it must be formed new generation of managers – so-called global manger, which are able operate on world - .wide base. It seems, that this task is difficult to ful fill, especially in new developed countries. Global manager will have possess the multicultural skills, required to work with the international team.

The need for international activities will increase as the free trade agreement are signed and the European Union was established. It is possible too expect the resurgence nationalism. Prevention programs may include hiring a local labor force to solve this problem.

Demographic changes

We are facing the trend of an aging population, that will continue until 2040, when 21.9 % of total EU population will be over 65. (Lipiec, 2001). The population portion is a significant indicator, because the cost of welfare benefits for aged workers will grow, which affects the competitiveness of many companies. We must also remember, that different training programs have to be applied to young and older workers. The first group must learn a lot before becoming a valuable worker. They may change job frequently. A shortage of young workers will lead to aggressive recruitment processes and higher levels of compensations.

Next aspects of population aging is growing share of women on job positions and minorities. Two-thirds of new work positions created between 1985 and 1990 were taken by women, (Lipiec 2001) It means that human resource policies must through the HR- practices create a balance between family roles and their careers. Special packets dealing with cultural and educational aspects must be applied to integrate minorities with other employees.

Social change

The role of trade unions has changed. It seems, that role of trade unions will not be strong as it was at the end of last century. Also employees attitude toward trade unions have changed. In the 80s trade unions were perceived as strong opposition to employers. The employee - employer relationship depends on loyalty and mutual cooperation. The role of trade unions will be weaker in future.

The next social problem is the legislation. Employment legislation become more standardized and more restrictive. Attitude toward work have changed. People now want to develop in work and to be more autonomous. That's why increasing numbers of part-time workers contracts have appeared. Part-time contracts may be very suitable for women, because they want to share a career within a company with the family role.

Management changes

Human resource management is a part of complex management, thus changes in management are closely interrelated. The most important aspects of management that touch HR today is decentralization, IT using, flexibility and skill building programs.

More and more decentralization of decision will be shifted to lower positions. This will result in creation of business unit that have more autonomy. Thus the role of HR must be revised to accommodate to this new challenges. Development in IT technology allows using of telework. Especially for women it is most suitable, because they can reconcile their professional lives with their family roles.

Flexibility in the management is also significant aspect, because it enables the management team react to market changes and exceed employee expectations. Two kinds of this flexibility exist; internal, and external (Lipiec 2001). Internal flexibility reduces lack of motivation, absenteeism, while external flexibility is relevant for designing HR policy and taking into account macroeconomic changes.

Change in workplace

Literature on workplace indicates, that the workforce in future will comprise more women, more dual carrier families, more single parents, more disadvantaged employees and more workers who change jobs more often. (Wright 1994)

Workforce characteristics and profiles, therefore, are changing and assumptions regarding workforce homogeneity, skill levels and availability cannot be predicated from past experiences.

Restructuring of the workplace and workforce is today reality. This restructuring is global phenomenon, affecting the entire industrial world. Changing workforce demographics, the decline in number of traditional work settings, and rapid expansion in service sector, high tech industries, are major contributing factors. The application of new technologies, including using of computers, robots and automation in general has had a profound impact on what employees do, how they do it, and how many do it.

New work positions are created, especially in service sector. This trend will continue as the level of income per capita grows.

It seems to be useful to establish in successful organizations mechanism/ procedures for “scanning the environment” to anticipate relevant changes and implications for their respective organizations.

Knowledge economy

Second reason for new work position creation is knowledge economy. On classic work position the work is clear assigned for worker, procedures are codified. On so called knowledge work position is practically impossible to outline accurate work procedure. The result is, that all work places must be divided in categories in accordance with a complexity of work. According Wiig () useful categorization of work complexity consist of six levels:

1. Routine work tasks (simple repetitive and well understood).
2. Logical or less common variations (transformations) of routine situations.
3. Complex, yet expected extensions of known routines integrated with external factors.
4. Unexpected challenges (conditions) but with a mix of routines and external factors.
5. Totally unexpected situations and non-routine challenges yet within the larger job scope.
6. Unusual challenges outside job scope. (Wiig, 1995, s.12).

Main role of HRM outgoing from knowledge economy is to do the workplace classification, creation, selection a distribution of knowledge, especially tacit knowledge.

Diversity

Diversity will be an increasingly important factor. Due the immigration population will be more heterogeneous in ethnicity, age, gender and so forth. Diversity presents particular challenges for future managers. Employees from a broad range of culture and different backgrounds will have a significant influence on the cultural and societal changes and communities and organizations.(Patrickson and O'Brien, 2001, In:du Plessis, 2006). HR department must staffed with people representing the ethnic diversity of country, but predominantly all managers should intensify their effort to develop their skills in managing across cultures. This would involve first of all learning about others cultural groups, their attitudes work and styles of working Different cultures have different styles of decision - making as well and HR could encourage ethnic groups to understand each others' preferred practices.

From the strategic perspective however HR managers should consider the carefully selection of people for foreign assignments and promote the development of suitably to become proficient in foreign languages. (du Plessis, 2006).

Change and competitive advantage

Human resource managers who don't make an attempt to learn and to accommodate their activity to changing environment will find often themselves in reactive, then proactive position. Competitive advantage has been described as the ability of one business to outperform other business because it produces desired goods and services more efficiently and effectively than that its competitors.(Jones and Georg 2003). Organizations must constantly seek the ways to use their resources more effectively to improve efficiency to stay competitive.

Emergence of support systems

The changes in the workforce dynamics alone suggest here ample justification for most organizations to provide the human resource with work life balance and to guaranty the adequate quality of work - life. Traditional money measures will be replaced by relational measures, like employer assistance with children or elder parents, flexible work time, homework, etc. Relational measure are more difficult imitable and they are a source of idiosyncratic advantage.

Many organizations will in next future adopt quality work life programs and/or work – life balance programs. The work load is steadily increased

Developing distinctive HR core competencies

A competency can be defined as a technology or skill that can create a competitive advantage for enterprise. (Lufthans, 1997).Core competency must:

- make a contribution customer,
- be competitively unique,
- be capable of generating an array of goods and services.

In additions, the enterprise must know how to effectively exploit competencies. Core competences become a part of HRM and must be aligned with overall strategies of the firm to attain sustainable competitive advantage. It is possible to benchmark or emulate best HRM practices. However many enterprises have found, that it is better to develop and sustain a competitive advantage with a distinctive competencies. Distinctive competencies are imitable only with difficulties. Distinctive core competencies are resource of permanent advantage. In the next future superior organization will develop their own distinctive core competencies. Some examples of distinctive core competency are organizational learning, external recruitment and promotion, pay for performance, etc.

In connection with core competencies organizations ought to develop skill - building programs. The aim of skill-building programs is to increase core competencies of their personal, while also linking rewards to these skills.

Emphasis on organizational performance

All effort in future will be more concentrate on work performance. Of primary importance in the private sector is improving competitive advantage. Many studies now indicate, that companies with progressive HRM policies tend to be more successful than firm with traditional outlooks. More attention will be paid to alignment of business strategy and HRM strategy. This is valid not only for private business organizations but also for organization of public sector.

Computer literacy

Information technology is now used to allow faster access to HR information and decision making. Computerization of HR activities may streamline operational aspects of HRM and reduce much of administrative burden of this functional area. This fact will free HR manager to devote his effort and energy for human side of enterprise. The world has been changing more rapidly than ever before and it is expected from managers and employees to perform at much higher level.

Consequently, HR professionals will need more computer literacy then they have had in the past. Providing e-HR will enable HR managers to play a more consultative role with line managers and take a more active role in the strategy formulation and implementation. Thus, HR professionals with knowledge and skills in both HR and information technology will be uniquely positioned to make the HR function a value adding contributor to their organization.

Anticipating internal and external changes in the organization

Du Plessis argues, that HR managers are in most cases inward oriented and then they have difficulty seeing the forces current opportunities and threats. According Walker (2002) In: du Plessis, 2006, only 12% of today HR managers is capable of anticipating the effect of internal and external changes on organization. HR strategy should be based on sound business strategy, but HR manager don't operate in luxury environment. They operate in unstable, difficult predictable environment, as political, social and economic changes are affecting all organization in their human resource management activities. Changes in an organizational environment result in a new kinds of opportunities and threats. Any organization has a set skills, capabilities, competencies and resources. Managers need to use their competencies and managerial skills to make right decision. Managers must recognize the need for decisions and must act proactively, but most important is that they must respond timely and in an appropriate way.

Managers as the change agents must plan changes and must predict resistance to these changes. Resistance to change is common human behavior. Knowledge and anticipation of changes is therefore a critical for HR managers in ensuring the success in business ventures (Schuler, 2001, s 57), and therefore an important strategic tool, which can support innovative behavior to enhance competitive performance. It therefore can be deduced that the HR manager of the future will develop a greater capability of the awareness of internal and external changes, and strive to proactively influence the organization to respond positively to those changes.

Paradigm shift

The fundamental changes which is expected in the future is "paradigm shift". According to Thomason (1991) this shift is moving from tactical or pragmatic, short - term,, reactive and ad hoc approach, to one

which integrates HRM with business and other strategies. In this connection is possible to distinguish between hard and soft HRM.

Hard HRM(Brewster and Burnois, 1991; Kamoche 1990) focuses on “resource” side of human resource management. It argues, that people are organizational resources and should be managed like any others resources.

Soft HRM concentrates on “human” side o human resource management. It argues, that people are a resource unlike any other - for most organizations far more costly than other resources, but for all organization the one factor which can create value from the other resources. This is the resource whose creativity, commitment and skills can create real competitive advantage. This most precious resource therefore requires careful selection, extensive nurturing and development, proper rewards and integration into organization. In the future all effort will be concentrated on soft dimension of HRM.

Conclusion

According Schuller (1989), In.: Wright 1994, s. 35, organization in 21st century can be described in following terms:

The organization will be much more global than now, leaner, flatter more flexible, faster, more customer oriented, more quality focused and more innovative. Tomorrow´s organization will be constantly changing. Change will become constant. Restructuring, retraining, and retooling will become “modus operandi”. There will be more employee involvement and skill utilization. A mindset of flexibility and adaptability will be found in employees. An organization plan will promote acceptance of preparation for change. Above mentioned changes should fulfill the needs of organization in area of human resource management.

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The Practical Contribution of Information Systems in Times of Globalization

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Abstract

The article is focuses on contribution of information systems. Information systems are constantly changing, advancing development, and therefore it is necessary to implement measures to continuously improve the quality of the information system. The ability of firms to thrive in your area depends mainly on the ability to quickly respond to external influences and the ability to adapt to new conditions. A part of this article is analysis use of information system in a company in Presov. The analysis was focused on measuring the use and satisfaction with information systems managers of individual sections.

Key words

Information system, Trends in information system, Approaches to information systems, Objectives of information systems.

Definitions of the information system

On a general level, we can understand the information system as a system designed to capture, store, transform, upgrade and provide data for use of their information. (Vodáček, 1997). Jenčo and Vyhnaľ (2008, s.64) said: "The information system is a special arrangement of relationships between people, data sources, processing procedures, including technological means." We share the view (Molnár, 1992) that people use information systems primarily on obtaining the necessary information to be retrieved later and used in everyday life or at work. The concept of an information system is initially associated with the area management. In this context, we define an information system as a set of people, technical resources, methods of ensuring the collection, transmission, storage and data processing for the creation and presentation of information for the users active in the management.

Characteristics and trends of the current IS

Information systems are rapidly developing. As writes Voříšek (1997), what is now the top technological level is two to three years out of date. Similarly, the rapidly growing importance of IS for individuals, businesses and the entire national economy. A firm that evaluates and upgrades its IS developments must take IS into account as a bad choice can in the short term bounce in worse and worse economic flexibility for the enterprise. Nor must take account of developments in the IS and a government that seeks to create an optimal economic environment in the country. Trends in IS are obviously important for suppliers of IT and related services. The most suppliers do not seek to follow the global trends but mainly trying to create trends and gradually form one global standard. A classic example of such companies and products was in 80. years IBM with your IBM computer, or in the 90. years with the company Microsoft Windows Word, Excel. The company, which is to enforce its products to the extent that the product becomes the industry standard, gaining a significant competitive advantage.

Objectives of information systems

As writes Jenčo (2006, p. 57) business environment is changing and changing and the information technology is changing the mission and objectives to be met for an information system. While in the past served as a computer device for paper documents and its performance was measured by the number of documents processed per day, currently focuses on the computers that we receive the right information at the right time and for specific people. The information system is to improve the performance of people in companies through the use of information technology. Development stages of the information system by Vyhnaľ (2006):

1. **stage:** IS for data processing – the aim of IS was to increase the efficiency of business operations for the automation of information systems.
2. **stage:** IS for a management – these IS were focused on improving the effectiveness of management information satisfying the requirements management

3. **stage:** Strategic IS should contribute to increasing competitiveness of enterprises by inducing changes in the way of business
4. **stage:** The global IS aims to contribute to the globalization of information and immediate communication companies worldwide.
5. **stage:** Evolving IS, at the beginning of the new millennium are clearly the system gradually, starting the fifth stage. They focus on global communication and cooperation, including site co-operation of competitors on a global scale. Most new products are constantly replenished from a variety of technologies, especially ICT.

As writes Vyhnaľ (2006), information systems development in their subject content changes varied to create criteria for their classification. This is a breakdown in terms of content automation, in terms of managerial support services, possibly in terms of formalization of the information system.

Approaches and methods for designing of information systems

The problem of planning, development and management information systems can be basically divided into three levels - organizational level information system, the level of data management information system and technical quality of the information system. The development of systems at the organizational level is mainly used methods in system analysis, structured systems life cycle approach, organizational engineering, prototype approach, the level of data management method of software engineering, information engineering, object modeling, structural analysis and many others. At this level, the address data models. Some of these methods will interfere more or less in the two previous levels. The third level is the selection of appropriate software (operating system, database system and application software package) and hardware to implement the information system. A good information system should not be solved at all three levels. (Kimlička, 2006) Similar to architecture of the building must make a number of aspects, and information system architecture has three main levels:

1. information: What is building information system (information or data model)
2. system: (organizational), How to build an information system (organizational - functional model)
3. technical: Where and what is information system builds (technical program resources and their configuration)

Information level - (information or data model of organization) creates a complete picture of the data structure of the Fund and is the starting point for organizing and managing data sources. It introduces a standard technology and improves the communication between the departments of the organization. It creates conditions for the integration of processes tied to the same category of data.

System level - referred to as the application architecture, a detailed model application systems needed to support the activities of the organization. The model identifies specific application systems and defines their interfaces and integration requirements, as well as links to external systems. System level architecture takes into account various important aspects when designing the structure of the information system, in particular:

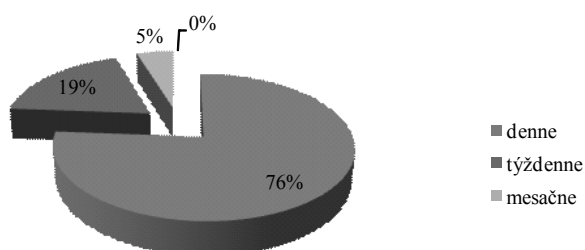
- specific needs of each level of management: strategic (executive IS), tactical (IS to support decision-IS to direct management), operational (transaction IS)
- creation of infrastructure information system (single system of organization of data, interfaces to external information systems and services, internal services, such as. Electronic mail, automated and integrated office, etc.).
- specific needs arising from organizational structure and geographical distribution components of organization

Technical level - a technical solution to meet the proposed security system, spatial distribution of hardware and interfaces to the surrounding environment. Includes hardware and software page including communication within the system and between systems and surroundings. Rabenseifer (1993) in his analysis of modern methods of design of information systems emphasizes the importance of the information system architecture. The architecture can be seen as an overall conceptual understanding of the information system. It provides the structure determines the location and function of each system, their interrelationships and relationships to the surrounding environment is a prerequisite for system integration.

Analysis of information systems in society

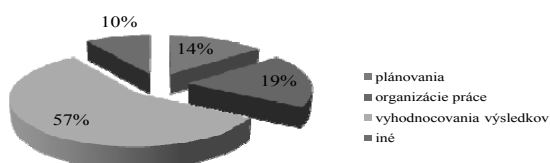
The analysis was realized at an unnamed company in Presov. The company is focused on the production. The analysis was to determine the extent to which use and are satisfied with the information system managers of individual departments. Twenty-one questionnaire completed by respondents - managers and supervisors of individual units. The survey results are as follows:

Graph 1 The rate use of information system of employees



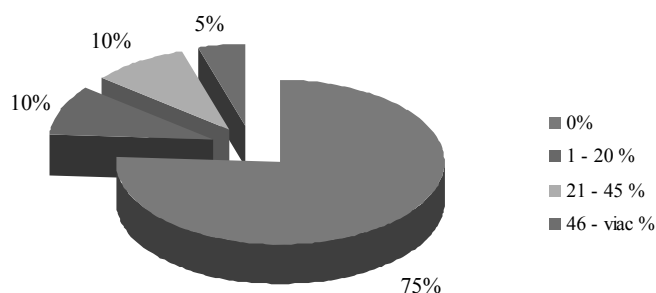
(76% daily, 19% weekly 5% monthly)

Graph 2 Areas of work in which the information system helps employees of company



(57% evaluation of the results, 19% organization of work, 14% planning, 10% other)

Graph 3 The need for revision and amendment of the information system



Tab 1 The question on satisfaction with the information system

<i>How would you rate the information system do you use?</i>	Answer of respondents %
satisfies	86%
unsatisfies	0%
I don't know	14%

The information system used by managers of all departments in the company:

- Department of quality management.
- Department of marketing and technical production.
- Department of economics and finance.
- Head of Department.

Summary

Analysis, we found that the information system used in their work all managers and supervisors of individual units. Using this system streamlines their work and its operation considered to be easy. Skills needed to work with information systems staff to receive regular training in-house and in the case of proposals for the amendment are as follows (after consultation with the leadership) accepted.

Conclusion

The information systems in the company is still progressing and that it was still correctly track new trends and new information systems on the market. The information system was very important for proper functioning of the company, and also for the proper functioning of personnel management. Some external factors forcing companies to the data and information in their daily activities collected and processed, extracted the data and a strategic importance for their future decisions. It is essential that workers who use information systems to know what is necessary for its operation, and how it can use to streamline their work activities.

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The Analysis of the Social and Machiavellian Intelligence of the Managers and Head Officers in Work Environment

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Abstract

The research is aimed to analyse the Social and Machiavellian intelligence of the managers and head officers on the chosen sample of the respondents in Bratislava and Presov companies. Hypotheses were confirmed by the EMESI, MACH-IV questionnaires on selected sample of 111 respondents. The objective of the research was to refer the differences and interdependencies between social and machiavellian intelligence on the sample of 46 male and 65 female, 69 managers and 42 head officers.

Key words

Machiavellian intelligence, Social intelligence, MACH IV., EMESI

The recent studies on the social intelligence present the connection of the social intelligence and other psychological units (as social competence, social abilities, empathy, etc.) as the relation on certain internal predisposition and the units that in different extent form the construct of the social intelligence (Kihlstrom, Cantor, 2000). Social intelligence is constructive, which includes reception of other people, internal states and moods, general abilities to deal with other people, facts about the social norms and life, orientation in social situations, usage of social techniques, charisma and social adaptation (Silvera, Martinussen, Dahl, 2001). Social (interpersonal) intelligence is one of the forms of personal intelligence, which reaches out to other people. It is the ability to understand other people: what motivates them, how they work, how to cooperate with them. (Frankovský, Štefko, Baumgartner, 2006). Social intelligence is without a doubt multiform construct. It's understanding as a multidimensional construct is according to Birknerova, Frankovsky (2011) indisputable.

According to Goleman (1997) many psychologist were cynical about the intelligence in interpersonal relationships. It was considered as ability to manipulate with people, "to do what we want, no matter what they want". The principle of the manipulation is social influence. This influence according to Wróbel (2008) lies in the fact that the manipulator uses his knowledge of the rules of human behaviour, tries to exert pressure on the person or group, without them noticing it. The interest of the individual it's not always identical to the society interests. Machiavellism concerns the behavior strategy including manipulation to obtain personal goals and maintain power over the others. The behaviour of these persons is cold, includes intentional deception, blandishment and lack of morality (Wilson, Near, Miller, 1996). Machiavellists do not cooperate, show lack of empathy or do anything to achieve their goals (Wróbel, 2008).

Research

The research objective

The objective of research is to identify gender differences and differences between managers and head officers in Machiavellian and Social intelligence. Also to identify interdependencies between Machiavellian and social intelligence. The results were processed in statistic programs SPSS.

The research object characteristic

The research sample was based on 69 head officers and 42 managers in Bratislava and Presov County, working in both private and public organisations. The questionnaires answered 111 respondents, 65 female and 46 male. The research was held in months January and February 2012.

The research methodology

The research was aimed to map social intelligence (SQ) and Machiavellian intelligence (MQ) of the managers and head officers in work environment. Social intelligence was checked by EMESI (Birknerová, Frankovský, 2011) questionnaire and Machiavellian intelligence by MACH IV questionnaire. (Christie, 1970).

EMESI

The EMESI methodology is inspired by PESI methodology, which was developed by Kaukiainen, Björkqvist, Osterman, Lagerspetz, and Forsblom (1995). The original methodology was created for children of same age or their teachers to identify the level of perception of social intelligence. It contains 10 items within its internal consistency (Cronbach alpha) is 0,90. The methodology EMESI contains 21 items, which are considered in 5 – points scale (0 – never, 4 – very often). By factor analysis were extracted three main factors – empathy, manipulation and social irritability. Frankovský, Birknerová (2012) extracted 3 factors of social intelligence:

- *Empathy*: The individual with higher scores know how to identify intentions, feelings and weakness of the others. They can adapt to new people and fulfil their expectations.
- *Manipulation*: The individuals with higher scores in this factor are able to convince others to do what they need. They know how to use them and convert them to stand on their side. They do not hesitate to use lies as a resource for their own benefit.
- *Social irritability*: Persons with higher score in this factor are annoyed by communication with other people, not able to adapt, can't stand weakness.

These factors by number and content correspond with results of EMESI methodology on Slovak research sample (Birknerová, Frankovský, 2011). Extracted factors show 47,7 % variance, which is acceptable and allowed to specify factors by content. Internal consistency of individual factors was determined by Cronbach's coefficient and the values are acceptable.

MACH-IV

Mach IV scale contains 20 quotes, concerning respondent's personal opinions to the individual situations, relations and human strategy. The evaluation is made by Likert scale from „1 – don't agree“ to „5 – agree“. Persons with score 61-100 points are identified as „strong machiavellist“. Up to 59 points are defined as; light machiavellist“ and score 60 points define person as an average machiavellist. In this scale we identified 4 components of Machiavellism: *Blandishment*; *Deception*; *Lack of morality* and *Cynicism* (Hunter, Boster, Gerbing, 1982).

Hypotheses

H1: Assumption of gender differences in Machiavellian and Social intelligence.

H2: Assumption of major differences in Machiavellian and Social intelligence between managers and head officers.

H3: Assumption of interdependencies in Machiavellian and social intelligence

Verification of hypothesis 1:

Hypothesis 1 assumed the existence of gender differences in Machiavellian and Social intelligence. Table 1 compares Machiavellian and Social intelligence according to gender of respondents.

Table 1 Statistical significance according to gender

	Gender	Mean	Std. Deviation	t	Sig (2 tailed)
Empathy	male	2,1174	0,48168	-3,050	0,003
	female	2,4077	0,49127		
Manipulation	male	1,7360	0,57536	1,865	0,065
	female	1,5407	0,52031		
Social irritability	male	2,4190	0,73817	-0,644	0,521
	female	2,5022	0,53994		
Blandishment	male	2,7826	0,76487	0,527	0,599
	female	2,7154	0,57939		
Deception	male	2,4620	0,59853	0,585	0,560
	female	2,3846	0,74225		
Lack of morality	male	3,2101	0,53222	-0,138	0,890
	female	3,2256	0,61550		
Cynicism	male	2,7446	0,45488	-3,669	0,000
	female	3,0846	0,49859		

Based on the data in Table 1 in two dimensions of working behaviour (out of seven) females have higher score, in one dimension, males have higher score.

In social intelligence females have higher scores in Empathy. Females are more empathetic than males. They adapt more quickly to new employees, listen to their needs and can assess the feelings of other people. They can recognise the intentions of other colleagues, their feelings and weaknesses. Males achieved higher scores in Manipulation. It means they can manipulate better than female, they have better ability to convert people to stand on their side. They know how to use colleagues and can exploit lies of the other people to their own benefit. They have no problem to convince employees. In social intelligence according to genders is social irritability irrelevant.

In Machiavellian intelligence the major differences were in Cynicism. The other dimensions (Blandishment; Deception; Lack of morality) were statistically insignificant. The dimension Cynicism is more visible in females. Females won't reveal the real reason of their action, if it's not beneficial for them. They assume that every employee has characteristic feature (malice) and this malice feature will appear immediately with any opportunity in work environment. They think that every employee who completely trusts to anyone else from working team is asking for trouble.

The other dimensions are insignificant according to gender of respondents. **Hypotheses 1 was verified**, as we assumed the gender differences in Machiavellian and Social intelligence.

Verification of hypothesis 2:

Hypothesis 2 assumed the existence of differences in Machiavellian and Social intelligence between managers and head officers. We used t-tests to identify differences in Machiavellian and Social intelligence between managers and head officers. The results are shown in Table 2.

Table 2 Statistical significance according to position

	Position	Mean	Std. Deviation	t	Sig (2-tailed)
Empathy	managers	2,2778	0,51423	-0,344	0,732
	head officers	2,3125	0,49669		
Manipulation	managers	1,6977	0,57642	1,891	0,050
	head officers	1,4966	0,48393		
Social irritability	managers	2,4030	0,67828	-1,450	0,150
	head officers	2,5714	0,52796		
Blandishment	managers	2,8768	0,60273	2,817	0,006
	head officers	2,5238	0,69801		
Deception	managers	2,4457	0,61666	0,570	0,570
	head officers	2,3690	0,78910		
Lack of morality	managers	3,2126	0,57727	-0,154	0,878
	head officers	3,2302	0,59121		
Cynicism	managers	2,9167	0,46902	-0,718	0,475
	head officers	2,9881	0,56835		

Statistically higher significance in two dimensions had managers. One dimension is in Social intelligence (Manipulation) and one in Machiavellian intelligence (Blandishment). These findings say that, managers are able to convince others and use them for their own benefits, use them and convert them to their side.

In Machiavellian intelligence observed significant findings in dimension Blandishment, the other dimensions were insignificant. Managers think that the best way to deal with people is to tell them what they want to hear and flatter to important people at work to benefit from it. Managers use Blandishment in work environment more often than head officers.

Hypothesis 2 was verified, as we assumed significant differences in Machiavellian and Social intelligence between managers and head officers. These were confirmed in favour of managers.

Verification of hypothesis 3:

Hypothesis 3 assumed the existence of interdependencies between Machiavellian and Social intelligence. The research analysed interdependencies between Machiavellian and Social intelligence by Pearson's correlation coefficient. Table 3 shows interdependencies between factors Manipulation (EMESI) and Deception (MACH IV) as well as interdependencies between Social irritability (EMESI)

and Deception. Statistically high interdependencies were found between factors Social irritability (EMESI) and Lack of Morality (MACH IV).

Table 3 Correlation of components of Social intelligence (EMESI) with Machiavellian intelligence (MACH IV)

	Blandishment	Deception	Lack of Morality	Cynicism
Empthy				
Manipulation		,257**		
Social irritability		,223*	-,257**	

** p<0,01 * p <0,05

Respondents, which are able to convince others and use them for their own benefits, can manipulate and lie for their own benefits. Managers often use lies to manipulate with employees. They do it for their own career progress. People which don't like contact with others, aren't comfortable with other people feelings and can't adapt to them, usually use deception to benefit from it. The correlation of components showed one negative interdependence between Social irritability (EMESI) and Lac of Morality (MACH IV). It means, the more employees adapt, the more they think people are nice, kind and moral. Factor Empathy (EMESI) and factors Blandishment and Cynicism (MACH IV) did not significantly correlate with any other factor.

Discussion and conclusion

The research of the article is based on the analysis of Social and Machiavellian intelligence, which were researched from the view of the individual dimensions. We found gender differences as well as differences between managers and head officers. Through research, we examined the interdependencies between the Machiavellian and Social intelligence.

The development of the individual dimensions and their analysis enables employees to realise his own potential, to develop abilities and become better manager of head officer and be an example for other people (Gyurák Babel'ová, 2010; Droppa, 2010). This approach helps to develop social abilities, which help to develop relations with colleagues and manage everyday situations in working environment (Zibrínová, 2011; Suhányi, 2011). Overall, this approach contributes to development of the features and skills that helps employee to manage his position.

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The Differences in Managing Difficult Situations in Management

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Abstract

The article describes research results of managing difficult situations on selected sample of 102 respondents of Presov and surrounding companies. The hypotheses were evaluated by COPE and SSPMPR questionnaires. The objective of research was to identify gender differences in coping strategies, where participated 62 females and 40 males. Also, identify differences of managing difficult situations between 61 managers and 41 head officers.

Key words

Difficult situations, Coping strategies, COPE, SSPMPR

The ways of managing difficult situations are characteristically different and diverse (Fedáková, 2011). The general selection according to the level of activities includes active or passive techniques (Křivohlavý, 1994). Hošek (2003) divides strategies of managing difficult situations to the groups according to methods of solving difficulties to: person relaying on itself – intrapsychic style, or transfer solution – alopsychic. In literature can be found other techniques. The most important is that major techniques are considered as personal character. People with predominance of active techniques are in literature (Morley, Shockley-Zalabak, 1998) described as „confronters“, and people with predominance of passive techniques as „avoidances“. Křivohlavý (2003) considers the strategy of stress managing as a specific way of stress managing. Strategy shows the plan under which person achieves given aims.

Arnold (2007) states, that the authors Cummings and Cooper were studying how does the stress work. According to them, individuals are trying to keep thoughts, emotions and relations with world in equilibrium, to feel good. Once that status is disturbed, person is trying to rebuild the comfort. Individual realizes deflection and gets scared, it causes further stress. People try to manage stress by different ways. The only possible solution is to eliminate source and change the life style. The most important thing is positive thinking. Authors Baumgartner (2001); Frankovský, Kentoš, Lajčín, Sláviková (2011); Frankovský, Lajčín, Birknerová (2011) aimed their studies and research to Management of difficult situations.

Research

The research was aimed to managers and head officers to see how they manage stress in different work areas. The research was held during months December 2011 – February 2012 using COPE and SSPMPR questionnaires. In research participated 102 respondents from different companies, 62 females and 40 males. According to their job position it was 61 managers and 41 head officers from Presov and Kosice county.

The research methodology

The managing job is directly connected with managing difficult situations. The ways of managing these situations affect manager's life and effective running of all company. To identify manager's behaviour while coping with difficult situations we used SSPMPR Questionnaire (Lajčín, Frankovský, 2011) and COPE (b) – Questionnaire of coping strategies (Brief COPE, Carver, 1997).

Questionnaire COPE (b)

Different situations can cause different reactions. COPE questionnaire showed how people manage difficult and stressful situations. It contains 28 entries with four possible answers (on scale from never to very often). The questionnaire contains 14 subentries: *Self-scattering, Active managing, Denial, Addiction, Social support, Instrumental support, Behavioural rejection, Ventilation, Positive change, Planning, Humour, Acceptance, Religiosity and Spirituality, Self-blaming*. The scale is shorter version of COPE questionnaire (Carver, Scheier, Weintraub, 1989).

SSPMPR questionnaire – The ways of behaviour in managing position

This questionnaire was developed and verified to identify ways of managing difficult situations. The questionnaire should measure different ways of managing difficult situations by managers. Its development was based on qualitative analysis of concrete situations. (Lajčín, Frankovský, 2011).

SSPMPR questionnaire contains 9 model situations, which represent concrete difficult situations in managing. To each single situation is designed few possible ways of behaving. Respondents had to choose on Likert's 5-scale (1-definitely yes, 2-yes, 3-don't know, 4-no, 5-definitely no). Questionnaire identifies 5 factors, that describe tendencies of managers to manage difficult situations (Lajčín, Frankovský, 2011): *Emotional factor, Cognitive factor I., Cognitive factor II., Behavioral factor I., Behavioral factor II.*

The research objective

The research objective is to identify, on selected sample of respondents using COPE and SSPMPR questionnaires, the gender differences in coping strategies and the differences in managing difficult situations by managers and head officers. Statistical methods SPSS were used to analyze the data.

The research hypotheses

H1: Assumption of gender differences in coping strategies.

H2: Assumption of differences in managing difficult situations between managers and head officers.

Verification of hypothesis 1:

Hypothesis 1 assumed the existence of gender differences in coping strategies. Table 1 shows statistically major gender differences in individual coping strategies (COPE, SSPMPR).

Table 1 Gender differences in individual coping strategies

	Gender	Mean	Std. Deviation	t	Sig (2-tailed)
Active managing	male	2,7250	0,60922	1,979	0,050
	female	2,4919	0,56170		
Addiction	male	1,4500	0,65828	2,583	0,012
	female	1,1452	0,43783		
Social support	male	2,1375	0,64039	-2,753	0,007
	female	2,5161	0,70110		
Instrumental support	male	2,0625	0,67166	-2,917	0,004
	female	2,4758	0,71533		
Ventilation	male	2,1500	0,56840	-2,338	0,021
	female	2,4516	0,67575		
Religiosity and Spirituality	male	1,9000	0,78610	-3,041	0,003
	female	2,4435	0,93697		
	female	2,5726	0,54957		
Emotional factor	male	2,3611	0,50949	2,832	0,006
	female	2,0905	0,44504		

To compare differences in managing coping strategies was used mathematical and statistical method: T-test. The research was aimed to gender differences. The main differences had 5% significance. Differences in individual strategies are caused by different stressful situations, approach to stressful situations and their interpretation. First strategy with significance is Active managing, which is more notable for males. They put more effort to improve their situation. On the other hand males often find solution for problems and stressful situations in alcohol and drugs. In that case significance was on their side, which doesn't give them the best credit. In personal life as much as in working life is sober view on life very important.

The rest of COPE strategies were more significant in females. Significances were found in Social support, Instrumental support, Ventilation, Religiosity and spirituality. In general, females in stressful situations use strategies orientated to Social support (which for them means sympathy, understanding and support). To this strategy is connected strategy Ventilation of own emotions. Females unlike males solve their problems by telling it to someone, or cry. According to our results, females often need to rely on someone to have feeling that someone will help and advise them. The social support nowadays it's very important, but they need to build the respect too. Females often find resort and shelter in religion, by looking peace and satisfaction, through prayer or meditation.

Interesting results came up in strategy Emotional factor (methodology SSPMPR) with higher scores for males. Even though males try to hide their feelings and be professional, sometimes have to solve situations not just within working environment. The other strategies were insignificant according to gender.

Hypothesis 1 was verified, as we assumed the gender differences in coping strategies.

Verification of hypothesis 2:

Hypothesis 2 assumed the existence of differences in managing difficult situations between managers and head officers. Table 2 shows significant differences in managing difficult situations between managers and head officers. To identify the differences in managing difficult situations between managers and head officers was used mathematical and statistical method T- test.

Table 2 Statistical significance according to position

	Job position	Mean	Std. Deviation	t	Sig (2-tailed)
Planning	managers	2,8299	0,595371	2,142	0,046
	head officers	2,3811	0,55322		
Active managing	managers	3,2375	0,51256	2,114	0,040
	head officers	2,7776	0,47540		
Emotional factor	managers	2,2796	0,49379	1,988	0,050
	head officers	2,0861	0,45395		
Cognitive factor I.	managers	2,6279	0,61268	3,070	0,003
	head officers	2,2775	0,47040		

Table 2 shows statistical significance in two strategies of COPE questionnaire and in two factors, which describe how to manage difficult situations in company by SSPMPR questionnaire. Planning, Active managing (COPE) and Emotional factor, Cognitive factor I. (SSPMPR). In all these factors have higher score managers, which shows they are implemented to managing environment.

Managers can better explain strategies and procedures and intensively think about the steps. They try to focus on improving their job. The significance of two other factors is interesting. Even though managers manage difficult situations quickly, they are still under the strong emotional pressure. They are often in difficult situation because they have to make decisions which are not often pleasant. In managing position, next to the general duties and authority position, important thing is human aspect. Manager is a human, which has to have charisma and social empathy, because it can't be just about the relation superior-subordinate. Manager should be interested if people have good working environment, or interpersonal relationships.

Hypothesis 2 was verified, as we assumed existence of differences in managing difficult situations between managers and head officers.

Discussion and conclusion

Through the research we tried to identify the differences between males and females in managing stress situations. First strategy with significance is Active managing, which is more visible in males. They put more effort to improve their situation. Significant difference was in strategy drinking alcohol and taking drugs with higher score for males. It's not the right solution. Managers can lose their authority by taking alcohol and drugs. Females had higher significance in strategies Social support, Instrumental support, Ventilation, Religiosity and spirituality. Woman is fragile person and it's confirmed by strategies they use in difficult situations. Those strategies are considered as a positive strategies and it's always better to use prayer or meditation to manage the problem. The last strategy with significance is Emotional factor. Surprisingly, higher score in emotional factor had males. Even though males try to be professionals no matter what, it's good to know that, they have feelings and follow the emotional factor.

Further part of our research shows the differences in behaviour between managers and head officers. Method T-test identified significances in factors Planning, Active managing, Emotional managing, and Cognitive managing I. In all these factors had higher score managers. These factors have mutual social and emotional factor. Managers who use these factors to manage difficult situation are very popular, because they are sober, responsible, think about the things in advance and don't forget about the human factor. Managers have to rely often on themselves, own sources and possibilities. They communicate

problems with colleagues and specialists but the final decision is on them. Sometimes is better for them to concentrate only on their problems connected with their managing position.

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Management Trends in Slovakia's Tax Revenue Administration and Its Process Model for Slovakia's Economic Performance

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Abstract

Within the framework of the research on the issue, we started from the existing functional organizational structures and tax administration systems not only in Slovakia, but also in Hungary, Poland, the Czech Republic, and Slovenia, whereas the fundamental assumption of the investigation was increased efficiency of the system as a whole. On the basis of a trend analysis we assume that the upcoming reform of the tax and customs administration will significantly contribute to an increased efficiency of the system and, eventually, to a positive perception of taxes as socially unpopular obligations.

Key words

Taxes, Tax reform, Tax administration, Efficiency, Process management

Introduction

The examination of Slovakia's tax revenue administration should be perceived in a wider context. In order to it, it is necessary to start from the existing functional organisational structures and tax revenue administration systems in Slovakia, but also in the neighbouring countries, e.g. Hungary, Poland, the Czech Republic and Slovenia, while we think there is an objective need to change the organisational structure and to do its process-orientated optimisation, as well as to introduce marketing principles in the area of orientation on the customer in order to achieve a positive image of the tax revenue administration in the eyes of the public. We assume that the reform of the tax revenue and customs administration currently being prepared will significantly contribute to an increase in the efficiency of the system and, eventually, also to the positive perception of taxes as socially unpopular obligations.

Development of the organisational structures of tax systems

▪ Structuring by type of tax

The basic criterion for the start of the oldest type of organisational structure of tax revenue administration was the structuring of executive bodies by individual existing types of tax. That type determined the creation of separate multifunctional departments for each type of tax, while such units functioned separately and mutually independently. The organisational structure divided in such a way fulfilled its purpose, but, despite that, it had its own functional shortcomings. It created space for the duplicity of functions, which caused inefficiency. If a taxpayer was subject of multiple types of taxes, the so adjusted system became complicated for him, with excessive amount of bureaucracy on the one hand and, on the other had, it was too complicated to manage the performance by taxpayers, separate control and debt collection. The inefficiency of the structure made around the type of tax is also underlined by the fact that there is an increased probability of unequal treatment of taxpayers and a decreased flexibility of the use of workers specialised in a certain type of tax. That eventually makes the planning and coordination of activities in the tax revenue administration managerially unsustainable.

▪ Structuring by functional groups

This approach to the organisation of the tax revenue administration's work was made with the objective to improve the standardisation of work processes, to simplify the information flow and procedures concerning taxpayers, and to improve the operational efficiency in general. Such an organisational structure places workers into functional groups (e.g. registration, accounting, information processing, control, collection, appeals, etc.), but, in general, works along a type of tax. When compared with the structure described in the previous chapter, created around types of tax, the application of the organisational structure based on groups increased the performance of the tax revenue administration (e.g. provided individual access points for tax enquiries, simplified the system of taxpayer registration, access to tax payments and accounting, etc.), and also increased the efficiency of the tax control and debt collection. The modern theories of management, however, criticise such organisation of work for the division by functions, leading to the provision of poor, insufficient services and standardisation that does

not bring efficiency to the tax revenue administration due to taxpayers' varied and differing behaviours in the fulfilment of their obligations.

▪ Structuring by individual types of taxpayers

The latest development in some developed countries has brought a model of organising services and law enforcement based on the principle of taxpayer segmentation (e.g. big taxpayers, small/medium-size taxpayers, employers, etc.). In this case the rationalisation in organising such functions by taxpayer types is in the fact that each group of taxpayers has different characteristics and behaviour and consequently represents a different level of risk in relation to the tax revenues. In order to manage those risks effectively, the tax revenue administration needs to develop and implement strategies (e.g. interpretation of the law, education of taxpayers, improving of the quality of services, focused tax inspections) that are suitable for the unique characteristics and ways of the fulfilment of tax obligations in the cases of individual types of taxpayers. From the management perspective, such a type of organisational structure creates space for the delegation of tasks and a vertical expansion of management, copying the needs of taxpayers, through the centralisation of key functional activities within a single management structure, which, consequently, improves the level of performance. Despite a multitude of advantages and its modern management approach, the application of such an organisational structure is, for the present, in its initial phase. In some countries, departments and divisions for big taxpayers are being introduced into the tax revenue administration system.

Trends in the management of the tax revenue administration in Slovakia and in neighbouring countries

Each of the monitored V4 countries and Slovenia declare the orientation of their tax revenue administrations that corresponds with the decisive parameters of the effective tax revenue administration of the European Union countries. The upcoming trends in the management of the tax revenue administration (TRA), in relation with the mentioned facts concerning the TRA management in the individual V4 countries and Slovenia, irrespective of the advancement of their economies, can be summarised into the following several points:

- a) Effort to increase the voluntary fulfilment of tax and health and social welfare insurance obligations, professionalism, partnership and correctness in the relations with the tax revenue administration clients;
- b) Continual activities supporting the decreasing of tax arrears and tax evasion;
- c) Building an organisation communicating with its employees and clients professionally, openly, intelligibly and timely;
- d) Effort to use human resources more effectively, to be an employer offering a job perspective and the growth of the employees' professional level;
- e) The utilisation of the information technology in the TRA with the objective to get closer to the taxpayer and to speed up the tax offices' work processes in the area of administration;
- f) To constantly look for new opportunities for the improvement, increasing of the quality and making services more effective without major modifications of the legislation;
- g) Education and training of workers in order to create a more versatile work potential;
- h) Effort to implement an effective system for the measurement of the quantity and quality of work at all levels of the tax revenue administration, set for each critical factor of success and representing a measurable value.

As a starting point of the upcoming trends in Slovakia' tax revenue administration we take the Government's Programme Declaration¹ of 4.11.2002, which, in the part "Economic Policy", sets out the following objectives in the tax revenue administration: simplify the tax legislation, update the parts of the tax laws that allow ambiguous interpretation, simplify the sanction system in the area of tax revenue, decrease direct taxes, shift the tax burden from direct taxes to indirect taxes, reassess the application of property tax rates, unify income tax rates, analyse the possibility to introduce a flat tax, strengthen the tax revenues of municipalities, specify own tax revenues of higher territorial units, secure strict, direct, fair and effective collection of taxes, decrease tax rates, restrict tax evasion, and create a new system of horizontal financial balancing.

¹ <http://www-8.vlada.gov.sk/index.php?ID=918> – Programme Declaration of the Government 2002

„Slovakia is the eighth most attractive European country from the perspective of tax systems. In the KPMG International's ranking, compiled on the basis of a survey of European company representatives' views on the attractiveness of domestic tax regimes, Cyprus was placed at the top, followed by Ireland and Switzerland. All three countries obtained high ranking thanks to a unified interpretation of the tax legislation, minimum changes in tax laws and relatively low tax rates.”²

The survey³ was carried out by KPMG International⁴ and its results reflect the views of more than 400 tax specialists in multinational companies in Europe. The evaluation criteria included the attractiveness, administrative demands, consistency, long-term stability, extent of legislation, tax rates and relations with tax offices. At the European level, according to the survey results, the least attractive area is the extent of the tax legislation. The order of the countries is specified on the basis of “absolute attractiveness”, which was calculated as a difference between the percentage of the respondents according to whom the key aspects of their domestic taxation systems were attractive, and the percentage of not satisfied respondents.

Slovakia, and not just by the last tax revenue administration reform of 2007 or by the introduction of a flat tax rate, joined the progressive countries of the European Union and significantly boosted its attractiveness and competitiveness.

From the perspective of tax management levels within Slovakia, the current state can be defined as an officially two-level management, but by the transfer of some competences of the Financial Directorate of the Slovak Republic (FR SR) to the Tax Offices located in the central cities of the Higher Territorial Units (VUCs), it is, in fact, a three-level management, whose justification is based on the need to manage 102 tax office centres, which is not possible to do from a single centre. Such organisation of the tax revenue administration is not optimal due to the following reasons:

- The performance of the main processes is fragmented by the territorial principle, while each tax office (TO) centre (small, medium as well as large) runs all processes related with the administration and control of taxes and tax execution, so it is not possible to achieve the optimisation of the performance of such processes or of costs of their performance from the perspective of the tax revenue administration as a whole;⁵
- The system of the deployment of tax offices is little flexible, as it does not allow to adapt the deployment of the basic organisational units to the needs of taxpayers;
- In the current system of management, TOs represent an administrative level of management, while there has been a long-term need in their work to concentrate the performance of some processes (e.g. accounting, payroll) that are unnecessarily split between the FR SR and the TOs and increase administrative and communication demands;
- In the work of FR SRs' employees, there are problems that are characteristic for organisations that, along the line management, also apply other types of management (e.g. project, specialised-methodological, etc.). It is, for example, the case of the assignment of tasks by specialised managers of DR SR, which can collide in timing with tasks assigned by Slovak tax office line managers.

On the basis of the above-mentioned, the concept of the reform being prepared takes into consideration the principle of justice, neutrality, simplicity, unambiguousness, efficiency and the exclusion of double taxation. The Financial Policy Institute's analyses dated to 2001 – 2004 show the reasons for the clear need of a reform:

- Complexity of the tax law – lack of clarity;
- A lot of exemptions, liberations and reliefs, leading to social inefficiency, when the production and consumption is not influenced by the supply and demand, but also by tax advantages;
- Variability of the specification of the tax base, which allows the optimisation by the taxpayer, which increases administrative costs and decreases the possibility to control.

From the perspective of the management and organisation of the tax revenue administration, as further reasons we can consider:

- Complexity of the organisational structure – duplicity of functions and powers at the central and regional levels;

²<http://ekonomika.sme.sk/c/3685557/Slovensko-ma-osmy-najprizlivejsi-danovy-system-v-Europe.html>

³ <http://www.kpmg.com/SiteCollectionDocuments/2007CorporateandIndirectTaxRateSurvey.pdf>

⁴ KPMG is a global network of companies providing services in the field of auditing, taxes and consulting. Its member companies operate in 145 countries and employ more than 123,000 workers

⁵ RAŠNER, J., RAJNOHA, R.: *Nástroje riadenia efektívnosti podnikových procesov* (Tools for Managing the Efficiency of Enterprise Processes), Zvolen : TU in Zvolen, 2007.

- A costly administrative apparatus of the FR SR;
- Non-transparent project management, decreased possibility to control processes;
- The taxpayers' unwillingness to pay taxes;

The Slovak government's intention, declared in the mentioned Slovak Government's Programme Declaration, is to carry out the reform of the tax revenue administration in a way that makes it more effective, with the objective to methodologically help the taxpayers with a good taxpaying discipline and to uncover taxpayers that avoid the payment of taxes. The objective is to create conditions for an effective co-ordination of public administration bodies, to guarantee the access by citizens via the Internet, and to secure the interconnection of information systems of public administration bodies. The reform of the customs administration, with the vision of uniting the tax, duty and health and social welfare insurance premium collection processes, is also a priority task of the Slovak Ministry of Finance. The reform should take place in two phases: the first one will unite the tax revenue and customs administrations; in the second one, the tax, duty and health and social welfare insurance premium collection will be united.

The first phase has the name UNITAS I and part of it is a reform of the tax revenue and customs administration. For that phase it is proposed to examine the possibilities of process synergies in the tax revenue and customs administrations, to adopt legislative changes resulting from both audits and to subsequently coordinate the implementation of changes in both institutions. That determines the subsequent decision whether the optimization process will result in the uniting of the tax revenue and customs administrations or whether they will keep existing separately. It is proposed to develop a feasibility study, which would comprehensively assess the essential preconditions, possible benefits, and risks of uniting the tax, duty and health and social welfare insurance premium collection.

The second phase of the reform being prepared, also called UNITAS II, and its launch, will be influenced by the successful realisation of the benefits of the UNITAS I phase. In the UNITAS II phase, after the development of process models in the institutions concerned, a process model of the united collection should be developed, with a subsequent change in the legislation and the adaptation of the information technology (IT) support of the affected organisations.

The optimisation of the processes in line with the above-mentioned intentions focuses in particular on:

- Centralisation of the tax revenue and customs methodology at the Financial Directorate (FR SR);
- Centralisation of services for the public at the FR SR;
- Centralisation of the payment contact and of the accounting of taxes, fees and duties at the FR SR;
- Concentration of the execution process at Financial Offices (FOs);
- Concentration of the control process at the FOs;
- Concentration of taxes;
- Splitting of tax administrators' tasks by the character of activities and the uniting of tax administrators' registration and administrative activities;
- Centralisation of support processes at the FR SR;
- Unification and simplifying of forms for obliged taxpayers;
- Introduction of a unified identifier for natural persons and legal entities;
- Development of electronic services and elimination of paper-based communication;
- Development of electronic communication with other public administration bodies and with other bodies and institutions;
- Reduction of bureaucracy through the introduction of e-government, electronic communication and digitising of files;
- Reduction of the taxpayer's loading by the removal of the duplicity of the provision of information to public administration bodies.

Through that process, Slovakia is getting closer to an effective taxation system, which will mean an increased efficiency and competitiveness of our country within EU countries. The impacts of the proposed changes can be split into two basic categories. The first one includes the benefits of the reform of the tax revenue and customs administration that have in particular the character of cost and time savings, of increased added value and work efficiency, etc. The second category is represented by the expenditures made to achieve the individual objectives on the reform of the tax revenue and customs administration. Both of the mentioned categories are further split into the impacts on the taxpayer, i.e. the user, and the

impacts on the public administration. The expenditures and benefits of the reform either have a one-off, time-limited, or permanent character. From the financial perspective, the impacts with a permanent or repeating effect are of the greatest significance.

Conclusion

In the research of the issue, we started from the existing functional organisational structures and tax revenue administration systems not just in Slovakia, but also in Hungary, Poland, the Czech Republic and Slovenia, while the basic assumption of the examination was an increase in the efficiency of the system as a whole, through a change in the organisational structure and its optimisation, as well as through the introduction of marketing principles in the area of orientation on the customer in order to achieve a positive image in the eyes of the public.

The introduction of the reform in the financial administration (FS) of the Slovak Republic (SR) that is being prepared lies in the optimisation of the number of TOs and in the change of the organisational structure, which will bring significant savings in their budgets. In the next phase, the uniting of the tax revenue and customs administrations is being planned with the objective to subsequently unify the collection of taxes, duties and health and social welfare insurance premiums.

From the managerial perspective, the following expectations of the benefits of the reform are significant:

- Better administration of the state's receivables with the possibility of their mutual compensation and a stronger position in receiverships;
- Optimisation of the number of employees by the elimination of the performance of duplicate activities and by the reduction of management positions;
- Decreased costs of the running of a united organisation.

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The Personal Controlling as a Practical Need for the Management

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Abstract

The article is focused at the personal controlling as a practical need for the management. Increasingly, we follow the literature and practical discussion on how to effectively manage valuable business resources. In this context, often inflects the term "human capital", which begins in companies seen as an essential asset for success in the market. Creates new management methods, tools and concepts that help manager of an undertaking to handle increasingly difficult market conditions, competitive pressures, the continued globalization and the necessarily related changes in the structure of employees and increase turnover. Such tools include the personal controlling. The personal controlling as a subsystem controlling of enterprise which may help to demonstrate the contribution of human resources for business success.

Key words

Corporate controlling, Personal controlling, Controlling tasks, Duties of controller, The objectives of controlling

The concept and definition of the controlling

The term "controlling" comes by Potkany (2005) of the verb "to control". Find unique Slovak equivalent is difficult because the dictionaries we can meet with about fifty of his substantive meanings. Controlling term is often incorrectly confused with control. Its content is more effort than the inspection itself, it means take all the necessary information to achieve objectives and the ability of setting the right road to achieving these objectives. According Nesterak and Bobáková (2003) Controlling the economic category usually associated with the control, but the English verb "to control" generally means the management, control and monitoring of socio-economic processes and economic performance of the company. "Controlling the system of rules that helps to achieve business objectives, avoid surprises and turns red in time when the risk occurs, requiring the appropriate management measures" (Mann, Mayer, 1992, p. 15). According to Horwath, (1992, p. 163) is directly connected with controlling management system, and therefore must be seen as a management subsystem, which provides support for the adaptation of the system, forming and coordinating planning and control. Underpinned by controlling properly functioning system, which provides necessary information to senior management and staff responsible for different areas of business.

The objectives and tasks of controlling

The objectives of controlling by Steinle (1999, p. 20) are not only closely linked to business objectives, but one can deduce directly. Steinle corporate objectives divided into four groups, which are directly consistent with the objectives of controlling:

- strategic and management objectives. These are concepts that indicate the importance of business management principles necessary for successful management. These principles serve as focal points for management in various areas such as planning, control, information security etc. Steinle also gives guidance on risk, or chance, according to which a distinction is offensive or confidence to focus search market.
- performance-economic objectives include decisions on product and market performance, the types of products, quality, quantity. The main tasks of executive-economic objectives are the preparation of all necessary factors to ensure production.
- the social and personal objectives are the objectives related to personal management, such as the successful recruitment, motivation and low turnover.
- finally, Steinle gives financial and economic objectives that represent the business intentions. It is all about ensuring liquidity, income sources, or to maintain market success.

The place and role of controller in the system of business management

According to Eschenbach (2000, p. 116) as a function of controlling space Controller, two different concepts, since the mere implementation of controlling functions are not subject to allocation controller in

the enterprise space. The equity allocation controlling unit makes sense to speak mainly in medium and large organizations. This does not mean that when such a department in the organization commit, controlling only remains in the hands of the very controller. Controlling is always a matter for the manager and controller. Eschenbach (2000, p. 122) also points to the typical ideal division of labor between managers and controllers. Their tasks are compared in the following table:

Tab 1 The division of tasks and responsibilities between the controller and manager

Controller	Manager
Coordinates the basics of planning and decision-making process is the manager of budget	Planned budget values, corporate objectives and performance measures to achieve objectives and implement decisions
Periodically inform the level and causes of deviations from targets	Establish corrective management measures for the goals
Periodically inform about changes in the corporate area	Operates and responds to the objectives and actions reflect the changing environment
It offers business - Economic consulting	"Buys" business - economic consulting
It consists of take-economic methodologies and tools and coordinated decisions	"Buys" a business - Economic Consulting
Participates in the development of business (eg support for innovation)	Controls with a focus on goals and making use of planning and control
He is the navigator and consultant for a manager	Controller, understood as a necessary partner in the management process

Source: Eschenbach, 2000

Department of controlling by Eschenbach (2000, p. 30) may be within the organizational structure of a linear space, or staff units and depending on whether the company is considered a priority for controlling power management, and support for management. Important in this context and state of the controlling company. Eschenbach (2000, p. 127) also notes that there is no binding recommendation for inclusion in the controlling company, or the internal organization of the controlling department. In terms of amendments to management as the central task of controlling the apparent location of the second rank, and also that the optimal organization should be tailored to the needs of the task.

From the company controlling to the personal controlling

As already mentioned controlling affects all functional areas of business management. In recent years, high and increasing its value in the management of human resources are a significant factor in business success. It is a logical consequence of the increasing value of human resources in the enterprise. Good staff is hard and obtainable at the same time the most important factor in productivity and competitiveness, and therefore tends to many businesses through effective use of human resources to optimize value creation personal deployed. Its formation was conditioned by the social consequences of various economic, technological and market changes also, on the basis of which changed the look of personnel work and its position in the company. There was a demand for effective management and evaluation of not only the supply or production processes, as well as HR processes and measures in the context of increased also need to justify their "economic necessity" for the company. These challenges can only fill an efficient management and coordination system, which combined traditional instruments of controlling, with the old personal management tasks and adapt to their specific needs of personal management. From the time of controlling personal underwent various stages of development and critical assessment of many authors and a consensus on this trend still exists. As in the historical development of varied opinions on the importance of personal management and human factor in organizations as varied and personal view of controlling. Using the following chronological division personal controlling some of the definitions will change this approach more clearly: "The personal controlling the use of HR tools work (employee testimonials, descriptions of functions, negotiating objectives, the system of salaries, evaluation etc.) manager has to take into account the consequences of these instruments to the employees . If the manager tools aligned with individual employees, so it can be better managed by their motivation and willingness to submit performance "(Blazek 1976, p. 196).

Justify the need for implementation of the personal controlling

According Strenitzerovej (2007) are some activities described as necessary for controlling the management of each area, thus the area of human resource management. The importance of human resources in terms of performance the company moves personal controlling the position of a strategic management tool. Personal controlling the company streamlines the personal area and brings it to the needs of its "customers", managers and other employees. Each project implemented within the organization is established by signaling a need to appear as a strategic management system within the company. Such a situation can also come along with human resource management in this context provides the following benefits Strenitzerová personal controlling the introduction:

- personal controlling increasing degree of certainty with which decides on the management of human resources personnel manager in cooperation with the strict management of the company,
- provides information necessary for effective management of human resources and improve the quality of decision-making
- offers a different perspective to enable decisions on human capital as one of the most important business factor,
- the introduction of personal controlling the management system greatly enhances the value of the company to its external customers, business partners and internal customers, employees,
- proper functioning of the personnel controlling the company saves money on staff and all areas of personal management (selection, dismissals, etc.).

Tab 2 The tasks of personal controlling in system management of human resources

The area of personal management	The function / task of controlling
Survey the number of employees	Performance analysis on the number of employees
Determination the needs of employees	Determination of the needs of employees with the needs of the planning employees
Recruitment of employees	The cost setting most effective way of recruitment. Develop tools for objective selection
Development of employees	Control of education. Control the career development
The redundancies of employees	The cost determine the most appropriate form of release of employees. Monitoring / supervision of the course
Staffing of jobs	Planning staffing personal
Management personal costs	Help with budgeting personnel costs. Monitoring of actual personnel costs. Analysis of indicators. Analysis of variations.

Source: Strenitzerová, 2007

Tab 3 The next tasks of personal controlling in system management of human resources

Personal deployed	Controlling of jobs Controlling of work's tasks Controlling of work's time
Personal management	Controlling of motivation Controlling of management Controlling of culture

Source: Scholz, 1994

The personal information system as technical support of personal controlling

According Wunderer and Jaritz (1999, p. 169) is now almost impossible to have an efficient system of personal controlling and measuring the value creation in personal management without the support of computer technology. The success of personal management is based on the volume and quality of available personal information. Performance of personal information systems depends on the technical possibilities and defining its purpose. As the personal information system is in addition to the information systems of other functional areas, such as. sales, production, accounting integrated part of the overall

management information system, it is necessary to ensure their interconnection to be integrated with data management ensure their integrity and avoid redundancy of information. HR information systems can also significantly reduce the burden on personal management on a number of administrative tasks and thus increase economic and social level of efficiency and value creation in personal management.

Summary

We believe that in future in respect of this surge of information technology will increase the business requirements for personal information system, which creates space for enforcement personal controlling the growing number of businesses. Personal was in controlling the increasing time of restructuring and reorganization of enterprises, it was necessary to substantiate the importance of the functional areas of business operation. This revision passed and personal departments, which are considered as centers that have no direct impact on profit, making them a long time been attributed to a prominent position within the organization. Personal controlling is one of modern management tools to help change this mistaken judgment. The biggest boom reached at a time when the organizations began to radically reassess the importance of human factor in achieving competitive advantage.

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Management Responsibilities in Practice

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Abstract

The paper deals with the managerial skills that are an integral part of management practice at work. Attention is paid to personality competencies that are part of our everyday. Our goal was to highlight the personal competence manager and the most common cause of failure of a manager who is not only professional competence.

Key words

Competence, Personal competence manager

1. Competence

Development of human resources based on competencies to be applied more frequently. The traditional job description of duties and tasks that the worker is in a position to exercise, is inflexible. Competencies can well distinguish between average and above-average performance and is able to predict employee success at that position (Cepelova, 1997). Management responsibilities are defined by many different authors. They can be defined as the ability of certain managers. Kubes (2004). According Porvazníka (2007, s.27) or under capacity. competency means "File declarative, procedural and conditional knowledge, organized by the rules and procedures in certain circumstances allows not only identify problems but also solve them. "Competency management entity is given a measure of its capacity simultaneously and holistically apply in identifying and solving human problems, human attitudes (social maturity), expertise (theoretical knowledge) and practical utility (acquired experience and skills)" (Jay, 2010, p. 5). The concept of competence can be understood in two senses: First Competence seen as a power of individuals make decisions that are usually mediated by formal authority. Since it also depends on responsibility for the outcome and impact of the decision. Second Perceived competence as a set of knowledge, experience, attitudes and practices of an individual which the individual uses to manage and life situations (Vetěška, 2008) Competencies, thus gaining skills gradually over the course of our entire way of life. So how can we develop in life, we can also lose some capabilities. "Competencies are also influenced by the age of the wearer and the culture of the social environment" (Veteška, 2010, p.25).

Managerial competencies can also be divided into four components: First Professional (technical) competence - to the knowledge of the department to which the manager focuses respectively. specialized and got him to a specialist (a degree in high school). Second Methodology (conceptual) competence - this is a manager's skill in a certain way to divide problems into some kind of structure, especially to distinguish priorities and focus on achieving results (strategic planning, decision making, ability to influence and interpret the environment, etc.). Third Social Skills - a certain ability to establish and maintain long term relationships with all stakeholders in the business both within the organization and outside the organization. 4th Moral competence - the ability to include self-reflection, the ability to effectively respond in certain situations, also includes self-reliance, responsibility and overall readiness, and so on.

1.1 Moral competence

Moral competence together with a certain departure from the use of psychological methods of assessing managers is appreciated. Mika (2001, page 25). The term means personal competence: "ability to control the body to maintain a professional level in a physical and mental condition to be able to the objectives and tasks effectively implemented. "There are many scientific studies as well as concrete experiences, which confirms the importance and the fact that the most common cause of failure is not just a manager, professional incompetence, but also that the majority of stress and crisis situations fail proven ways of managing a business manager is usually not ready for such a sudden change mentally handle. It follows that the manager only just enough to handle the functional capabilities of various levels of management, but must above all be able to manage yourself and cope with stress situations (Tomek, 1999). For personal competences can be considered:

- self-knowledge
- develop skills

- physical condition
- mental (psychological) condition (Mika, 2001).

Competent person:

- the interior characteristics, abilities, knowledge, experience it needs.
- is motivated to use such behavior, he sees value in the desired behavior and is willing to spend the necessary energy in that direction.
- the opportunity in this area also use behavior (Kubes, 2004). Crisis manager under (Stork, Dytrych 1968) to confirm their competence to hold job roles and hence must have formed the necessary personal qualities. The research results of subsequent prefer them:
- knowledge of the issue of crisis management and the ability to apply it in practice,
- ability to lead people to coordinate their action in crisis management,
- the ability to navigate quickly in a crisis situation, predict its evolution and consequences, to know the environment and register changes
- ability to make decisions in non-standard situations, experience of work of the Task Force,
- physical and psychological resistance allowing long-term bear physical and psychological stress, psychological readiness to solve unexpected problems,
- formulate a clear and concise decision and orders, factually inform the public know to negotiate and influence,
- the personal property then in particular, determination, independence, creativity, reliability, resolution, perseverance, discipline, willingness to undergo a tolerable risk, and also demands honesty, consistency and identification of functions and tasks of crisis management in peace and war conditions.

1.2 Personality characteristics

Every manager should also have their personal characteristics, that is what it characterized as a personality. Several authors stated the following characteristics, which the manager would have had as a person, they are:

- Intelligence - manager should have above average intelligence, but not at the level of genius. It is understood that a good manager should be a little smarter than his subordinates.
- Initiative - namely the ability to recognize a need to intervene and make something. The initiative is linked with energy and vitality of man, which decreases with age.
- with confidence - in other words, the confidence, faith in what the person does. This refers to how people are aware of where their place in society.
- "helicopter feature" - it is a manager's ability to rise above any situation, see it in a broader context, and later to notice the details of it (Sojka, 2007).

2 Management competencies and working environment

Managerial competencies are in the work environment a life cycle. These powers, which have some relevance today in an organization, that is sufficient for the functioning of the organization for some time under changing conditions are no longer sufficient, and their overall importance in the organization is not so great. Therefore, each organization should monitor the importance of competence. Preparing managers for developing their programs and future requirements is the biggest contribution to the success of the company (Kubes, 2004). Most organizations are aware of the need for new skills is often only when they cause serious problems. The introduction of new skills can be largely predicted the development of new trends in technology and market behavior. Important is also very responsive and business managers to their competencies and their importance, but particularly susceptible to new emerging needs to change and improve their competitiveness (Kovacs, 2009).

The life cycle of a variety of long and begins as follows:

- The introduction of new powers;
- Growth and subsequent peak powers - such as full use of powers. growth of expertise and complexity;
- Then set the other situations such as:
- Termination of competence - competence begins to age and time lapse (eg enforcement of already inadequate standards of performance;
- Maintenance - subject to time and are still needed (eg, delegation, planning, motivation, etc. ...);
- Development - to develop a higher level of competence;
- New powers - in place for a new mode of governance (Kovacs, 2009).

2.1 Tools for measuring managerial competencies

Measurement of competence is very difficult work, for which the evaluators so. assessor must train. Training of assessors and takes several days to ensure high accuracy of observation and compliance of the evaluators observed the same phenomenon. Assessor to observe the so-called learning. significant behaviors (indicators of competencies), learning to associate them with the corresponding value in all exercises, which will be in evaluating managerial competencies used (Kubes, 2004).

The total training consists of the following:

First: Identification of competence - in this part of the evaluators learn to select those indicators which relate to the competencies measured.

Second: Summary of observations - after exercise aimed at identifying the competencies evaluators summarize all the signs (behavioral indicators) and the responsibility of each observed separately. They will get the picture of what was provided in a training manager observed, as were the quality and how often they occurred.

Third: Valuation levels of competence - Each competency is based on the results evaluated on a scale determined beforehand by the evaluators.

Managers as evaluators - in practice, the measurement of competencies often act as evaluators managers. This happens when a company provides assessment of their own resources. This practice is justified, but also some risks (Kubes, 2004).

The measurement of managerial competence requires use of a large number of methods. If a competency model that we examine a more extensive, it becomes a total assessment of the candidates rather complex technical operations. Therefore, instead of the application of methods for the assessment of managers in different situations in practice began to use the so-called. assessment centers (English Assessment Center) (Miner, 2008). Association Assessment Center (assessment center), according to Miner (2002, s.35) can be translated as: "an assessment center, or diagnostic - training center, which is not an institution, but a process that results in an assessment." Assessment centers are seen as a set of diagnostic methods and techniques for the identification of selected personality characteristics, available and shortages of staff at various levels of management and certain optimal development of personal potential (Bartak, 2001).

Currently, the increasingly greater importance attached to the right personal characteristics of managers, which is especially desirable to have powers under other physical or technical elements of working capacity. Not only market products and services, but also in the human work is still harder konkurencia. Tak as companies are forced to constantly innovate its products and capabilities, as well as any individual who wants to go somewhere professional and grow, must upgrade their knowledge and competence . Professional competence of the manager is to be developed mainly in two ways: in their specialties and in all areas of management.

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Improvement of Work Quality on the Basis of the 5S Rules

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Abstract

The implementation of the 5S practices in an Irish company „Meridian” was presented in the following essay in short. Drawn conclusions may be used to develop the work organization on different posts in similar, as well as in different organizations.

Key words

5S rules, 5S techniques, Quality, 5S method

Introduction

One of the methods of work organization is the 5S practice (5S rules, 5S techniques, 5S method). It is a set of simple rules leading to effective behaviors. Thanks to this method it is possible to have the working place clean, ordered and functional. The definition 5S originates from the first letters of the five Japanese words: *seiri* – *seiton* – *seiso* – *seiketsu* – *shitsuke* (English: *sort* – *systematize* – *sweep* – *sanitize* – *selfdiscipline* or: *sweep away* – *sort* – *spotless* – *standardize* – *step-by-step*). The 5S means in practice the care of order and appropriate management, which are often interpreted by the employees as cleaning. Meanwhile, the 5S method is one of the most important conditions of good management. Even if it seems to be rather simple and easy to introduce, it often causes difficulties, and instead of successful 5S, only the first three are being established. Accordingly, there is a statement saying that if an organization is able to introduce 5S, it is ready to establish similar or even more demanding production management techniques.[5] [4].

In the reference books the presentation of the effects of the introduction of the 5S method in reference to production stage only may be found, therefore the aim of this essay is to reveal the possibilities and effects of the 5S rule introduction in the field not connected with production – in the storage room in the office.

Initial audit of 5S in the storage room

The analyzed process of the 5S practices introduction was carried out in the small storage room of the Irish company “Meridian”. This business is a leading, international supplier of services aimed at reclaiming overpaid tax. Pioneer introduction of the 5S practices had place in the basic stockroom – “lock-up”, which is the place for storage of the articles used in the office.

Before starting the 5S practices introduction (in compliance with the methodology) in the storage room the initial audit was carried out. It was aimed at examination of the actual state and simplification for introducing respective 5S pillars. In order to achieve it, the 5S initial audit charter was primarily created.

The results of the executed initial audit were not satisfactory, but such state of the affairs was already expected due to the observation of the storage room. The audit proved general disorder in the stockroom. Picture 1 presents general view of the state of the storage room before the 5S practices introduction.[3]

Picture 1 The view of the interior of the analyzed storage room



general view from the entrance



view of the rear wall

Stages of the 5S introduction

Stage 1 - Selection

The first stage is the selection. According to the assumptions of the selection, the actions executed within this stage are aimed not only at the selection of goods on: these, which are supposed to be useless and these useful.

During the selection stage the technique of sticking red labels on the objects, towards which there was even temporary uncertainty whether they should be stored, was used. All the objects labeled with red tags were gathered in one place, creating so called red labels area.

What is more, the objects towards which there was a doubt whether they are useful were gathered in another place. After the opinion on the choices made was given by the Logistics and Supply department supervisor, more than 90% of the objects were removed from the storage room. The selection stage was hence successfully completed.

Stage 2 - Systematics

During the introduction of the changes connected with systematics, the followed principle was that even a person rarely using the storage room should not have any issues with finding particular articles. For labeling each object on the shelves, special device for printing labels was used.

During the operations, the selected articles were arranged. Part of them changed their regular storing place. The example is so called secure tape. After placing the articles accordingly to the established rules, the stage of tagging the places for its storage, with the use of previously printed labels, has begun.

Stage 3 - Sweeping

In the analyzed stockroom, no systematic cleaning has been organized so far. As a result, the articles placed on the shelves or top boards were dirty and therefore part of them was no longer usable. Hitherto, all the people using the storage room were responsible, as a group, for its cleanliness. A well-known rule of work organization was confirmed and no one paid too much attention to keep the stockroom in order. Within the introduction of the third element of the 5S practices, the supervisor created the roster of cleaning the storage room, assigning the task to particular person for the particular day.

Stage 4 - Standardization

In the case of analyzed stockroom, the standardization stage was aimed at consolidation of the three previous stages. In the standardization they installed the board, on which each employee will be able to pin documents and revise them. It was fastened on the wall. Within standardization they created also new regulations binding in the storage room.

Stage 5 - Self-discipline

Without efficiently implemented self-discipline the achievement of any benefits from the 5S introduction is almost impossible. The implementation of the first four pillars changed the stockroom into a more pleasant and better organized work place. The deployment of self-discipline was not connected with usage of any particular tools or techniques. Moreover, it is impossible to measure its effects by any means in a short period of time.

In order to notice the positive effects of the 5S introduction (besides the evident visual changes) the second audit (final audit) should be carried out.

Audit after the implementation of the 5S method

The comparison of the results of the initial audit and the one, carried out after the implementation of the 5S method, indicated a considerable improvement in the field of the storage room organization. The view of the stockroom after the 5S introduction is presented on the picture 2.

Summary

As of today it can be said, that 5S practices were successful in the analyzed storage room. It is impossible to predict how it will look like in the next six months or in a few years' time. Hence, all the efforts should be made in order to keep the implemented changes permanently as a part of employees' behavior, as well as to prioritize them by supervisors.

While implementing the 5S method, the particular attention was paid to the following subjects, which may be useful in the introduction of the 5S in other fields of the same company or in another organization, with the special consideration of the warehouses and offices.

Picture 2 The storage room after the 5S implementation



front part



rear part

The most important are:

- During the selection stage, relatively radical principle should be followed – it is better to remove a probably unnecessary object, than to leave it,
- it was very important to introduce red labels,
- the standardization stage showed, that a lack of appropriate equipment of the work place will probably result in an independent employees' performance,
- the most important was the consciousness of the 5S implementation.

From the Meridian board's point of view, the 5S method was not only efficient, but also, what is equally important, did not require a lot of funds, which became its essential advantage.

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Security Management in Municipal Services

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Abstract

Security management is a component of the overall measures taken and implemented in the field of municipal services' activity. The specific scope of activities include the programming of activities in the field of engineering security. The components of municipal services having a significant impact on social safety are: the need for security, water supply, sewer and waste disposal, protection of media and other needs necessary to satisfy the safety of the residents' life.

Key words

Security, Management, Municipal services.

Local security

Ensuring security and public order is one of the own tasks of the commune. For its implementation the communes form, among others, municipal security guards services, they fund and support programs to combat violence, and organize the after school activities for children and teenagers.

The sense of safety of communes' residents as well as a low crime rate are two of the factors showing the development and attractiveness of the communes. Often the level of security is taken into account by the potential investors.

The main state's authority appointed to ensure the security and public order is the Police. According to the Act, Police is a uniformed and armed serving formation, designed to protect the safety of people and to maintain security and public order. The Commune Self-government Act states that one of the commune's own tasks is to meet the collective need of the community, which is the public order. However, the Act of transcommunal type is on the public order and citizens' safety. The concern for public order is therefore the task of both levels of the local government.

The cooperation between the police and the community is very important and requires special attention. Under the conditions specified in the agreement between the executive of district or commune and the relevant District (city) Police Commander, the district council or commune council may grant the financial means constituting the district's or commune's own income for the Police, with the purpose of:

- money compensation for the time of service exceeding the norms provided for the police officers,
- award for special achievements in service for the police officers of the locally relevant district (city) Commands and police stations, who perform tasks related to preventive services.

The very agreement between the local authorities and the Police should specify the types of Police statutory duties financed on the base of the agreement, the amount, the mode and date of the transfer of the police funds by the local government, and the procedure of assessment of the proper execution of the agreement.

At the request of the district or commune council, there may be a change in number of the Police posts in the district manors and police stations, of more than the number established by the Chief Constable. Such a solution is possible if the local authorities provide a defrayal of posts maintenance expenses for the Police for five years under the conditions specified in the agreement between the district or commune authority and the relevant Provincial Police Commander, approved by the Chief Constable. The parties to the agreement may extend the date of the agreement duration for the five consecutive years. The extension of the agreement duration requires the relevant annex, which is liable to approval by the Chief Constable.

In order to fulfill the obligation of assuring the safety of residents, the local self-governments create district manors and additional police stations, what, to a large extent, depends on the budget means of the Police. For these reasons, a cooperation between local governments and the Police is of great importance here. The local community and local government representatives influence the formation of e.g. district manors by indicating the need to create them and by providing an appropriate support to the Police. It is most often manifested through the free of charge lending of the premise for the police station or through renovating the existing facilities as well as through covering the costs of maintaining additional district posts. The communes very often also decide about setting aside money from the budget resources for the

purchase of communication equipment, cars, motorcycles and fuel for the transport equipment. This kind of cooperation between local authorities and the Police is undoubtedly beneficial for improving the security of the rural population.

Complementary to the work of the Police and the district constables, who contribute to the improvement of the residents' safety, may be the appointment of municipal security guards services. A municipal security guard service is a self-government uniformed formation appointed to protect the public order in the commune, which is supposed to serve the local community. It is formed by the commune council, and the costs related to their functioning are fully covered from the commune's budget.

The municipal security guard services perform the tasks in the field of public order protection that result from the acts and files of the local law. The scope of tasks of the guards is however diversified depending on the assigned by the communes criteria of the cooperation with the Police, on the employment, training and experience condition of the guards. For many years, in most cities there is a basic tendency to appoint the municipal security guardians the role of Police supporting formation in fighting the common crime, public order and peace disturbance as well as social pathologies (including alcoholism, drug addiction). In these areas the municipal guards have demonstrated an increased activity. Another priority are the regular tasks associated with the aesthetics of the city and the environment protection. The municipal security guards service patrols keep watch, for example, that the people do not litter the forests or parks, thus making the Police responsible for punishing such minor offenses.

In addition, municipal security guards are often included in the implementation of prevention programs, particularly directed at children and teenagers. They also take over many tasks of an administrative-ordinal nature that were previously fulfilled by the police, e.g., enforcement of the order regulations, escorting intoxicated people to detoxication wards.

The commune's municipal security guard service may be formed by the commune council by enquiring the opinion of the territorially relevant Provincial Police Commander. The neighboring communes in the area of one province may conclude, after enquiring the opinion of the territorially relevant Provincial Police Commander, the agreement on the establishment of a joint security guard service. Such agreement shall specify in particular the territorial scope of guard's operations and also its financing by the interested communes, and it appoints a commune council, which will grant regulation of the municipal security guard service and to which it will be subordinate.

The municipal security guard services are directed by the Commander who is appointed and dismissed by the mayor and the Provincial Police Commander. The superior to the opinion of the relevant is the mayor, vice-mayor, who also control its operations, and in the professional scope – the Chief Constable through the territorially relevant Provincial Police Commander.

The Municipal Security Guard Services may be an important supplement to the public safety system. Often its achievements in fighting public disorder can be invaluable. The problem, however, may be money, because only big and rich communes can afford financing the Municipal Security Guard Services. However, this form of improving the safety has no practical application in small communes that are not able to set aside the necessary funds.

In the area of communes, in which local communities feel threatened by various types of crime, sometimes there are formed self-defense groups. Most often, they operate on the principle of neighborly assistance and vigilance as well as civic guards. The activities of these groups include in particular the preventive rounds of the threatened places and informing the non-governmental authorities of the existing threats. The cooperative with the Police, well organized and operating legally, self-defense organizations considerably influence the improvement of immediate environment safety, such as housing estate, street, block, house, car park and allotments. In most of the communes, these are the Police and allotment owners who are the initiators of their formation. However, local authorities show more and more interest in their creation and support. For, such form of safety improvement does not require major expenditure. The only problem may be the reluctance of society, which, particularly in large urban centers, is too busy to participate in such ventures. For this reason, these are primarily small and poor communes that are interested in the creation of civil guards.

According to the Act on the Commune Self-Government in matters not regulated in separate acts or other laws of general application, the commune council may issue ordinal regulations, if it is necessary to protect life or health of citizens and to ensure order, peace and public safety.

These regulations may provide a fine inflicted in the manner and on terms specified in the law and petty offences. In urgent cases, the ordinal regulations may be issued by the mayor, in the form of an ordinance. It is a subject to approval at the next session of the commune council. Its validity expires in the

event of refusal to approve or when it is not submitted for approval at the next session of the council. In case of not submitting for approval or refusal of approval of the ordinance, the commune council determines the date of its expiration. The mayor sends ordinal regulations to the mayors of the neighboring communes and the district authority where the commune lies a day after it was made effective.

The above-mentioned structures, which ensure security in the commune, constitute only part of the method scope of how to deal with problems in everyday life. As far as crime of different kind is concerned, the local and police authorities are trying every year to improve their performance in order to minimize it. There is extra money allocated to fight against the above problem as well as additional trainings of police officers are organized, so that they could perform their duties as good as they can.

The municipal services

The rules and forms of municipal services of the territorial self-government units are defined in the Act on the municipal services of 20 December 1996. According to art. 1, sec. 2, the municipal services include in particular the tasks connected with public utility, the purpose of which is to meet current and uninterrupted collective needs of the population through the provision of the commonly available services. The Act of 8 March 1990 also includes the definition of the public utility tasks. As the Act states, the public utility tasks are "own tasks, defined in art. 7, sec. 1, the purpose of which is to meet current and uninterrupted collective needs of the population through the provision of the commonly available services".

Municipal activity is conducted by the commune, it is aimed at satisfying the collective needs of a given local self-government community. The legal rules provide two methods of implementation, namely:

1. Direct - through the use of (involvement of) the commune's own structures,
2. Indirect - by concluding agreements with contracting parties situated outside of a given local self-government unit (commune), which thus agree for the participation of those entities in the implementation of the public tasks.

In the latter case, the role of the coordinator falls to the commune, which determines the standard of services and provides their appropriate funding. The responsibility for satisfying the collective needs of a given local community lies with the commune, regardless of whether it performs the tasks in a direct or indirect way.

The existence of such a model of municipal services straightforwardly settles art. 2 of the Act on municipal services, according to which municipal services can be conducted by the units of the territorial self-government especially in the form of a budgetary entity or the commercial law companies, as well as art. 3, sec. 1, which states that local self-government units may entrust the execution of tasks related to municipal services to individuals, the legal persons or organizational units without legal status, by way of the agreement on general principles with regard to the provisions on the public finance or volunteer work. The existence of such a model of municipal services is also confirmed by art. 9, sec. 1 of the Act on Commune Self-Government, according to which the commune in order to carry out the tasks can create organizational units, and draw up agreements with other entities.

The essence of the municipal services and the commune's organizational units that carry out the tasks within the municipal services expresses the Resolution of the Constitutional Tribunal of 12 March 1997, stating that the organizational units which carry out tasks of this type, perform them regardless of whether they are able to cover the relevant expenses from their own income. Therefore, their activity cannot be oriented on the maximization of the profit and is most often funded from the public means.

The Act on municipal services provides a fairly great autonomy for the commune, allowing it to determine independently the principles and standards for the conduct of municipal services, including in particular its financing. The commune may perform the activities connected with public utilities, both by means of instruments relevant to administrative law, and by means of the institution relevant to the civil law. The art. 4 of the Act on municipal services describes that if the special provisions do not provide otherwise, the constituting authorities of local self-government units decide about: the choice of the

conduct method and forms of municipal services, the amount of prices and fees, or the method of determining prices and fees for municipal services of public utility type of the local self-government units.

If the municipal services are conducted by the commune, the tasks are performed with its own forces, with the help of its structures, and the task execution order is in a form other than a contract. In this situation, there is lack of granting order under the provisions of the act on public contracts law and there is also lack of entrusting specific tasks to external entities which are in any way dependent from the commune. We deal with the situation of public contract when entrusting the execution of public tasks in the form of a contract.

When creating a broadly understood organizational units, the commune determines at the same time (e.g. in the statute) the scope of their duties and is responsible for financing their activities according to the terms of the Act of 30 June 2004 on public finances. The organizational units of the commune should be formed when the commune's authorities set specific tasks to the given unit, especially when the only way to satisfy the perceived community is to carry out certain tasks only by the commune on behalf of which, for example, another commune legal person acts. The art. 2 of the Act on municipal services does not limit, in principle, the organizational forms acceptable in the implementation of municipal tasks. Therefore, we may deal here with legal and organizational forms appropriate to the public finance sector and the legal and organizational forms appropriate to the private sector.

According to the provisions of the Act of 1 July 2011 on the amendment of the act on maintaining cleanliness and order in the communes and certain other laws, the commune self-governments are obliged to organize the collection of municipal waste from the owners of properties where the commune residents live. The commune council may also decide to collect municipal waste from the property owners where the residents do not live and where the municipal waste is produced. The specific tasks of the commune in maintaining cleanliness and order include:

- 1) Creating conditions for the performance of works related to the maintenance of cleanliness and order in the commune or ensuring the implementation of these works by creating appropriate organizational units;
- 2) The assurance of construction, maintenance and exploitation of the own or joint with other communes:
 - a) Regional systems for the municipal waste recycling,
 - b) Catchment stations, in case where the connection of all properties to the sewage system is impossible or results in excessive costs,
 - c) Installation and equipment for collecting, transporting and neutralizing the animals' carcasses or their parts,
 - d) Public toilets;
- 3) Including all property owners in the commune in a waste management system;
- 4) Conducting supervision of municipal waste management, including execution of the tasks entrusted to entities collecting municipal waste from the property owners;
- 5) Implementation of the selective collection of municipal waste, including at least the following waste fractions: paper, metal, plastic, glass and multimaterial packaging, and biodegradable municipal waste, including biodegradable packaging waste;
- 6) Creating points of the selective municipal waste collection in a manner that guarantees an easy access for all residents of the commune, including an indication of places where a collection of the used electrical and electronic equipment from private households can be conducted;
- 7) Ensuring the obtaining of appropriate recycling levels, preparation for re-use and recycling with other methods, and reducing the municipal waste weight undergoing biodegradation, being transferred for storing;
- 8) Prevention of pollution of streets, squares and open spaces, in particular by: collecting and disposing of mud, snow, ice and other contaminants being removed from the sidewalks by property owners and the waste collected in the containers designed for this purpose and situated on the sidewalk;
- 9.) Maintaining cleanliness and order at the communication stops, of which the owner is the commune, and which are situated in its area by the public roads regardless of the category of those roads.

The maintenance of road infrastructure in accordance with art. 7, sec 1, item 2 of the Act on Commune Self-Government is the duty of the commune, in accordance with art. 1, sec. 3 of the Act on village fund one of the conditions of the possibility of allocating funds for specific projects is to show how they serve the improvement of the living conditions of residents. These are residents, who in the reasons for the village fund application indicate how the project serves to improve living conditions. In case of road repairs, its current state can be indicated and how it hampers the communication and people's lives.

The task independence of the commune is restricted by law through the introduction of institutions, of compulsory own tasks. The commune cannot evade from their execution, if this provides the Act. It also performs the commissioned tasks from the scope of the government administration. These tasks are executed after providing the financial means by the government administration.

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Utilization of Gainsharing in Improving Work Performance

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Abstract

The paper is concerning of utilization of Gainsharing in improving work performance, the primary theoretical aspects of Gainsharing, implementation and reasons of implementation of Gainsharing and discuss about utilization of Gainsharing motivational system of remuneration in particular firm.

The experience of management of top companies is evidential, that it what is individual of top companies from standard and below standard is not using of technology or formally practices of organisation and management, but in the first place is competence of utilization of creative potentition of personnel and their connection to integrated ambition for prosperity of firm targets and together subserve personable contemplation, which is implicit from personnel needs.

Key words

Gainsharing, Improving work performance, Motivation of personnel

Introduction

Any employee who performs work exactly as expected, the situation of the firm's wage does not affect or has affected only minimally. There is some difference between understanding the relationship of business performance and rewards.

Plays an important role in this diversity needs of the business and employees. The company needs a low absenteeism, increasing product quality, compliance procedures, reducing inventories in production, energy savings, reducing unit costs of production. Needs of employees are work safe, fixed salary and bonuses, interesting work, the possibility of working environment, social support co-workers, and increase education, careers and career affect the process of performing work and understanding of management. All the business needs of employees and basically, for various reasons are never satisfied. The most effective way is to link the interests of achieving a target of the effect depends on the performance of participants. This effect may have a different name and different forms, but always it can be expressed in money, which everybody understands (Eastaugh, 2004).

Brief description of Gainsharing

Gainsharing is a team incentive system and belongs to the category of incentive systems, which include a group of workers to increase the productivity and sharing the resulting revenue through improving the overall performance of the group. Better use of inputs (such as labor, capital, materials and energy) creates a more productive and cost-efficient income. Gainsharing plans to distribute revenues reflecting increased productivity and profitability of the company in respect of previous periods among employees according to a predetermined relationship (Myers et al., 2004).

According to Mericle, Kim (2004) Gainsharing plan divides the revenue from increased productivity and profitability of the company in respect of previous periods between employees and the company agreed in advance by the state. Important common features are:

- to improve performance
- the participation of most or all employees
- the involvement of the staff
- for special application areas
- of long-term cooperation
- orientation of the group

According to Mericle, Kim (2004) necessary conditions for success Gainsharing:

- need for change and a strong desire to do things better,
- consent and support of top management with outcomes and performance of employees,
- high interaction and cooperation,
- absence of major threats to job security or societal problems,
- reasonable amount of information on productivity and costs,
- setting performance targets,

- involvement of employees in the change process,
- agreement with the calculation of profit, which is reasonably simple, perceived by employees as fair and which reflects the management objectives.

It largely depends on the success Gainsharing good coordinator, good relations with workers and management of internal pressure that the system is introduced.

Implementation of Gainsharing in practice

According to Boyett (2004) as with any change, as well as in implementing Gainsharing pay system, it is necessary to define its objectives in relation with the team prize. Targets can be directed to:

- to increase productivity,
- increase the flexibility of staff,
- to increase staff motivation,
- support the extension of workers' skills,
- to achieve cooperation in the process of improving,
- to promote acceptance of responsibility,
- teams to support independence,
- the support team behavior,
- to promote the creativity of workers.

According to Bohlander, Snell (2010) most companies can be misleading under Gainsharing momentum for the implementation of this system, grouped into three broad categories:

1. *Enterprises with problems*: they need to change is clear.

Circumstances:

- of poor performance,
- of poor management and staff relations,
- of deteriorating business - selling.

Important variables:

- clear need for change, everyone will agree with the need to change,
- the desire to introduce new concepts and procedures,
- often for new leadership.

2. *Successful enterprises*: they introduced gainsharing because they believe in fair pay employees more self-monitoring of employees, their involvement and the like.

Circumstances:

- good past performance,
- good potential for growth,
- good salaries,
- good communication,
- about taking part and good power.

Important variables:

- of confidence in the fair sharing,
- high level of dedication and effort,
- faith in capitalism and the effectiveness of money,
- search for continuous improvement and change.

3. *Stabilizing enterprises*: the reasons for implementation are due to the fact that many companies begin to bind wage or part of it on organizational performance.

Circumstances:

- the new venture is more likely to enforce,
- contract with the union,
- opportunity for salary adjustments.

Important variables:

- by the majority of employees or the concept of variable pay contingent compensation?
- on the concept that long?
- management will try to control premium?
- participants changed their behavior?
- participants changed their attitudes toward variable compensation when problems occur or consolidate their position?

From the literature Gomez, Berrone, Franco-Santos (2010) it is known that most companies that implement Gainsharing, the manufacturing companies with 50 to 1,000 employees. Approximately 40% of them are associations of business majors. Gainsharing is slowly moving into the service sector such as hospitals, banks and insurance companies and it is expected that also in this area will in future make more use of Gainsharing system.

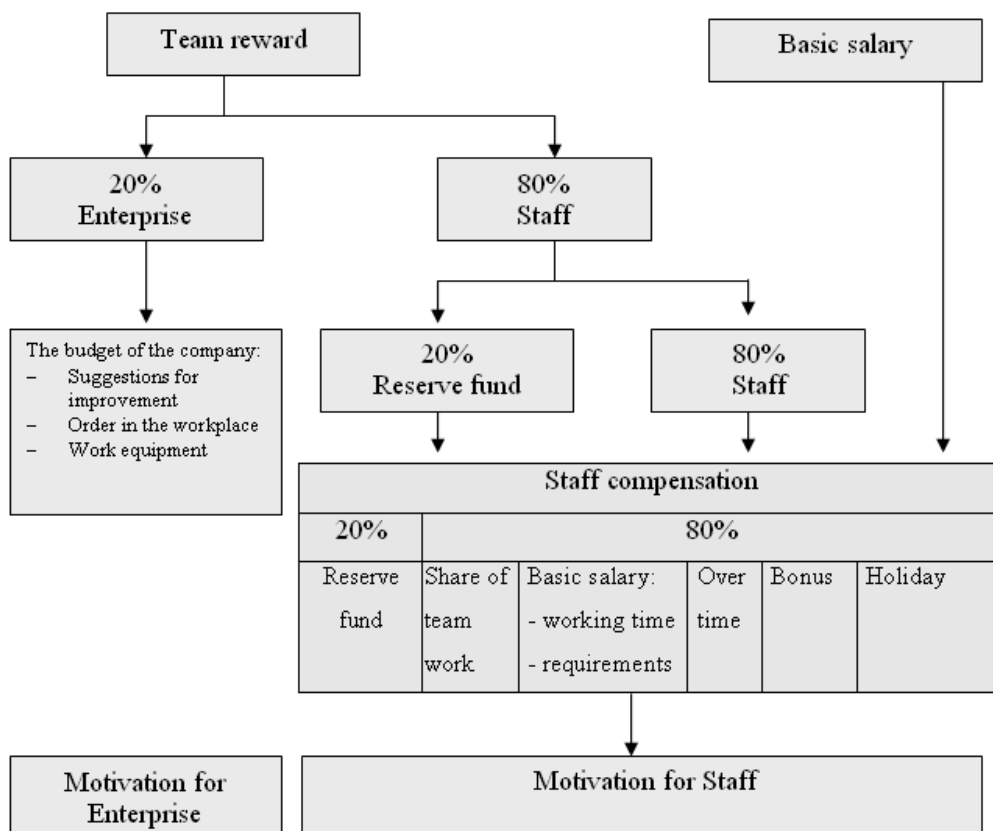
Research

Brief description of the selected company

Enterprise was established at 1.7. 1993, entry into the Commercial Register of District Court in Košice as a Limited Liability Company. The company is equipped with office space in addition to the large scale workshop, which is equipped with a large range of machine tools and forming machines, overhead cranes as well as tools, equipment and accessories needed to fulfill the production programs of the company. The company has steady production program, the piece deals with the production according to orders in engineering. The company employs 50 staff, of whom 42 (84%) males and 8 (16%) women.

Draft of Gainsharing incentive compensation system in the chosen company (Fig. 1). Gainsharing model of incentive pay in an enterprise based on Scanlon plan.

Fig 1 Draft incentive compensation system in selected enterprise



Source: own processing

Part of the deferred compensation of employees in the reserve fund will be established only in periods with positive premium. In periods when productivity falls, the loss is paid from the reserve created.

The proposed project is motivating companies to meet your needs as agreed in the collective agreement and can be used to pay the individual, if the project excludes the share component of teamwork.

Gainsharing system is especially beneficial in economic and human resources. Important economic benefits from the company clearly in the fact that this system may be based on existing strategies without large investments. Equally important is the fact that there is no need to create more jobs and that supports the further qualification of flexible personnel deployment planning. With the rotation of workers can "ease" workload (which can reduce the number of accidents, sick leave etc.), which is often caused by unilateral and monotonous work.

Benefits of Gainsharing reward system can also connect with the interests of workers. In this context, it is possible to mention in particular the following arguments: teamwork to satisfy human needs in terms of social contact, sense of proximity, security, recognition and awards. Personal benefits are in relation to work - more possibilities schedule of work, division of labor, higher qualifications, higher earnings, better self-realization, the possibility of mutual assistance for problems, the possibility of job rotation and the like.

Motivation and a sense of satisfaction from the work performed is an important determinant of quality of working life. The relationship of man to the work performed is favorably influenced by the nature of work and some personal and social factors. It reinforces the work that is varied, stimulating and motivating.

Summary

Growing businesses are keenly aware that the most profitable company's capital is its employees. Without motivated personnel can not be successfully implemented any improvement program. Way of motivating employees is extremely complex activity that can be successfully used in his business as management that recognizes this fact.

Organizations need active people. Open management, employee empowerment, continuous improvement, participation of all the management teams and managing oneself are terms that attempt to enable the employee that creates a more integral part of their work. It Gainsharing is a system that would allow these concepts and put into real life and practice. Gainsharing would be able to create from employees and supervisors partners, consolidating the teams and staff would provide a sense of fair compensation and satisfaction. In organizations, however, little information about it and therefore, employers make no attempt to change the management system. If the Gainsharing system better known and supported by both organizations, but the State would have found application in our country.

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Risk Management Competences in Slovak Companies

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Abstract

Paper look over determinants of firms ability to deal with risks. Here three possible determinants of risk management skills are considered. It is shown that micro enterprises and small enterprises have same level of risk management competences, while medium enterprises have superior risk management competences.

Key words

Risk management, Risk management skills determinants, Firm characteristics effect

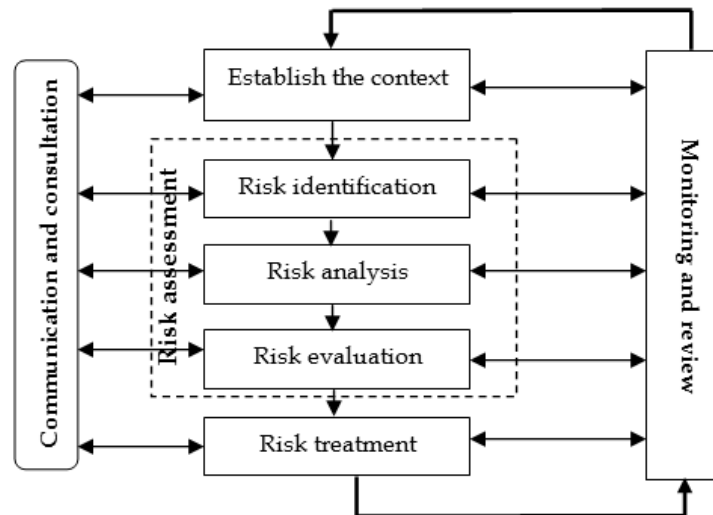
Introduction

Risk and uncertainty are unthinkable parts of our life. John Maynard Keynes (1926) stated in his essay “The end of laissez-faire” that risk and uncertainty are reasons of misery of market economy. Nowadays, when socio-economical processes are becoming more complex and dynamic, risk and uncertainty influencing economic agents are more notable. Uncertainty is phenomenon which is difficult to describe by numbers, one can only assume about it. On the other hand, risk is measurable dimension, which is closely related to uncertainty. Economic subjects are under influence of changing environment forced to measure and evaluate impact of risks. Matrix for today’s economic crisis was lack of risk measurement and risk analysis, what finally has led to loss of confidence toward bank sector.

Economic theory distinguishes several approaches toward risk. Some of risks can be reduced by enterprise, some of them not (Fotr, 2005). Modifiable risks are those which can be reduced by enterprise. For instance modifiable risks can be influenced through quality of production, quality of after sale service, technological and technical equipment of production lines, terms of warranty etc. (Šimák, 2006). Risk factors which cannot be modified by enterprise are: commercial risk, trade risk, fiscal risk and other government measures, political situation, global policies effects etc. (Smejkal, 2006). In term of risk nature, we differentiate between systematic risk, also known as market risk and nonsystematic risk, known as firm-specific or nonmarket risk (Rybárová, 2010). Market risk is the systematic un-diversifiable risk which affects, with different measure, all firms in given economy. Nonmarket risk is the risk related to firm and is not directly connected to condition of economy, thus can be diversified. Here we assign risk related to liquidity, risk related to course of exchange, risk related to interest rate, etc. (Nývtová, 2010). Hnilica and Fotr (2006) classify firm-specific risks as follows. Market risk related to product success on market. It concerns volume of sales and selling prices. Credit risk related to insolvency. Legislative risk related to economic and legislative policy of government. Here we refer changes in tax legislative, anti-monopole office, changes in customs duties etc. Environmental risk related to costs induced by damages on surroundings, taxes related to exploitation of non-renewable resources etc. Human capital risk related to skills of personnel.

Nowadays risk management is integral part of strategic management. Departments of risk management has prior place in organizational structure of enterprises (Szabo, 2005). The goal of the risk management is not exclusion of risk from enterprise running. Useless risk aversion can lead to menace of risk and is contra-productive (Spending, 2008). Effective risk management encloses risk identification, evaluation on impact analysis, identification and analyze of solutions, adoption of solutions, monitoring of results (Jolly, 2007). According to “ISO 31000:2009 Risk management – principals and standards”, risk management is cyclic process which incorporates five phases (see Figure 1: Process of risk management).

Figure 1 Process of risk management



Source: Ciocoiu and Dobrea (2010)

Material

Study was focused on risk management understanding and application of risk management tools and methods by micro, small and medium enterprises in Slovak republic. Data was collected using online questionnaire. In total, 81 firms from all sectors of economy participated in survey. Questionnaire consisted of 21 questions and was divided into five topics. Topics were as follows.

1. Identification data which classified firms upon its age (ordinal variable: younger than 1 year, aged from 1 to 5 years, older than 5 years), number of employees (ordinal variable: less than 10 employees, between 10 and 50 employees, more than 50 employees up to 250), turnover (less than 2 million €, between 2 million and 10 million €, more than 10 million €), region where plant is situated and sector of activity is (nominal variable consisting of 8 Slovak region).

2. General knowledge about risk management. This set of questions was focused to establish firms' management knowledge about risk. We asked whether managers are studying literature about risk (binary variable: yes/no), whether they have attended seminars oriented on risk management (binary variable: yes/no), whether they identified and defined possible risks at the beginning of their mission in enterprise (binary variable: yes/no) and how they value their risk management skills (Likert scale), if their information level about risk management is satisfactory (binary variable: yes/no).

3. Attitudes toward risk. Here we focused on attitudes of managers toward risk (ordinal variable: risk averse, risk neutral, risk seeking), their attitudes toward risk management place in managerial process (binary variable yes/no).

4. Risk assessment. This set of questions was focused on formal code of risk management in enterprise. Questions detected whether firms evaluate risk on regular basis (binary variable yes/no) how often firms evaluate risk (ordinal variable: once a week, once a month, once a term, do not evaluate, respectively evaluate less often than once in term), whether firms have employee or department focused on risk management (nominal variable: yes risk management is performed by owner of enterprise, yes risk management is performed by employee, but only as an extra duty, yes risk management is performed by dedicated employee, respectively by risk management department, no there is no one who evaluate risk in enterprise), which methods are used to risk evaluation (nominal variable: upon personal inference, using quantitative methods, using probability trees).

5. Risk management tool. Here we focused on tools that firms are using to reduce risk and we verified firms' acquaintance about risk management tools. We asked, which strategy of risk avoiding firms are using (nominal variable: risk avoiding, risk taking, risk reduction, transfer of risk on another subject). We also verified, whether firms are using and know: insurance (nominal variable: using, not using, do not recognize), covers on invoice (nominal variable: using, not using, do not recognize), factoring (nominal variable: using, not using, do not recognize), hedging (nominal variable: using, not using, do not recognize), leasing (nominal variable: using, not using, do not recognize), bank guarantee (nominal variable: using, not using, do not recognize), long-term supply contracts (nominal variable: using, not using, do not recognize), commission agreement (nominal variable: using, not using, do not recognize).

Hypotheses

In our study, we focused on three possible determinants of risk management skills and competences in Slovak companies. We supposed as a possible risk management skills determinants firms' age, firms' size and firms' turnover.

Age effect

First set of hypotheses concerns firm's age and its impact on risk management skills.

H₀: Firm's age has impact on firm's risk management skills.

H₁: Firm's age has not impact on firm's risk management skills.

Size effect

Second set of hypotheses concerns firms' size (in term of number of employees) and its impact on risk management skills.

H₀: Firm's size has impact on firm's risk management skills

H₁: Firm's size has not impact on firm's risk management skills.

Turnover effect

Third set of hypotheses concerns firms' turnover and its impact on risk management skills.

H₀: Firm's turnover size has impact on firm's risk management skills.

H₁: Firm's turnover size has not impact on firm's risk management skills.

Methods

The aim of this study is to find out, whether is there any relation between risk management competences and firm's characteristics. Here we consider firms age, firms size and firms turnover to be linked to risk management skills. To measure firms' competences in risk management we use questionnaire, where two types of questions were present: self-assignment about risk management competences and real situation. Self-assignment is statement on Likert scale about capacity of enterprise to manage risk. Likert scale was set as follows: 1 – no competences, 2 – weak competences, 3 – fair competences, 4 – good competences, 5 – excellent competences. Real situation is aggregate variable which is obtained as the sum of score in objective valuation of risk management, thus tangible tools and methods of risk management. Here we consider:

- Studying literature about risk: binary variable obtaining + 1 if yes, -1 if not.
- Attendance of seminars oriented on risk management: binary variable obtaining +1 if yes, -1 if not.
- Identification and definition of possible risks at the beginning of managers' mission in enterprise: binary variable ranking +1 if yes, -1 if not.
- Evaluation of risk on regular basis: binary variable obtaining +1 if yes, -1 if not.
- Frequency of risk evaluation: ordinal variable. Here we set score as follows. Firm obtain +3 if it evaluates risk once a week, +2 if it evaluates risk once a month, +1 if it evaluates risk once a term, 0 if it do not evaluate, respectively evaluate less often than once in term)
- Methods used in risk evaluation process: nominal variable. Here we assign +3 points if firm use quantitative methods, +2 if it uses probability trees and +1 if firm use simple personal inference.
- Risk management tools used to reduce risk. Here we rated +1 if given tool is used in firm, 0 if firm's management at least know given tool and -1 if firm's management does not know given tool.

We suppose that more points firm scored out of possible 16 points, more competences it have in terms of risk management.

Results – age effect

First of all we look closer on firms' age effect on its capacity to handle risks. Here we suppose big firms to be more qualified in risk management than younger firm. In our analysis 14 forms have less than 1 year, 26 have more than 1 year up to 5 years and 21 have more than 5 years. We run Shapiro Wilk normality test for datasets of three possible age categories.

Shapiro Wilk normality test hypotheses:

H₀: Datasets are from normal distribution.

H₁: Datasets are not from normal distribution.

Results of Shapiro Wilk normality test are in Table 1.

Table 1 Shapiro Wilk normality test of data classified upon firm's age

	p value	W statistic	n	Average	Std. deviation
Young firms	p= 0,87	0,96	14	8,86	3,27
Medium aged firms	p= 0,92	0,97	26	8,85	2,27
Old firms	p= 0,94	0,93	41	11,9	2,65

It is evident that data are normally distributed, thus we can perform Welch t test. We remind our assumption that more points firm scored out of possible 16 points, more competences it have in terms of risk management.

Welch t test hypotheses are follows:

H₀: Means of two datasets are equal.

H₁: Means of two datasets are not equal.

Table 2 Welch t test of data classified upon firms' age

	p value
Young firms and Medium aged firms	p = 0,99
Medium aged firms and Old firms	p = 5.04x10 ⁻⁶
Young firms and Old firms	p = 0.00533

According to Welch t test results we can conclude, that there is a systematic difference in firms' risk management competences between Medium aged firms and Old firms and between Young firms and Old firms. There is no difference in terms of risk management skills between Young firms and Medium aged firms.

Results – size effect

Secondly we look on firms' size effect (in term of number of employees) on its capacity to handle risks. Here we suppose bigger firms to be more skilled in terms of risk managing. In our analysis 38 firms have less than 10 employees, 21 have more than 10 employees and less than 50 employees, 22 have more than 50 employees and up to 250 employees. We run Shapiro Wilk normality test for datasets of three possible size categories.

Shapiro Wilk normality test hypotheses:

H₀: Datasets are from normal distribution.

H₁: Datasets are not from normal distribution.

Results of Shapiro Wilk normality test are in Table 3.

Table 3 Shapiro Wilk normality test of data classified upon firms' size

	p value	W statistic	n	Average	Std. deviation
Young firms	p= 0,94	0,96	38	9,05	2,78
Medium aged firms	p= 0,91	0,97	21	9,62	2,25
Old firms	p= 0,91	0,89	22	13,45	1,75

With reference to Shapiro Wilk normality test we assume the normality of datasets, thus we run Welch t test. Here we remark again our assumption that more points firm scored out of possible 16 points, more skills it have in terms of risk management.

Welch t test hypotheses are follows:

H₀: Means of two datasets are equal.

H₁: Means of two datasets are not equal.

Table 4 Welch t test of data classified upon firms' size

	p value
Micro firms and Small firms	$p = 0,4$
Small firms and Medium firms	$p = 2,99 \times 10^{-7}$
Micro firms and Medium firms	$p = 4,58 \times 10^{-10}$

In accordance with Welch t test we can state, that there is a difference in the risk management competences between Small firms and Medium firms and between Micro firms and Medium firms. Micro firms and Small firms have the same level of risk management skills.

Results – turnover effect

Thirdly we study firms' turnover on its capacity to deal with risk. Here our hypothesis is that firms with greater turnover have more competences in risk dealing as the stake is bigger. In our analysis 35 firms have turnover less than 2 million €(small turnover), 26 firms have turnover over 2 million € up to 10 million €(medium turnover) and 20 firms have turnover over 10 million €(big turnover). Shapiro Wilk normality test for datasets of three possible turnover categories is in Table 5.

Shapiro Wilk normality test hypotheses:

H_0 : Datasets are from normal distribution.

H_1 : Datasets are not from normal distribution.

Table 5 Shapiro Wilk normality test of data classified upon turnovers' scale

	p value	W statistic	n	Average	Std. deviation
Small turnover	0,93	0,96	35	9,03	2,88
Medium turnover	0,92	0,94	26	9,62	2,04
Big turnover	0,90	0,87	20	13,8	1,44

According to Shapiro Wilk normality test our data are normally distributed, thus we run Welch t test to study differences in risk management competences of firms depending on turnover size. We do so because of our assumption which assumed that more points firm scored out of possible 16 points, more skills it have in terms of risk management.

Welch t test hypotheses are follows:

H_0 : Means of two datasets are equal.

H_1 : Means of two datasets are not equal.

Table 6 Welch t test of data classified upon firms' size

	p value
Small turnover and Medium turnover	$p = 0,36$
Medium turnover and Big turnover	$p = 0,55 \times 10^{-10}$
Small turnover and Big turnover	$p = 6,56 \times 10^{-11}$

In accordance with Welch t test results we can assume that there is no evidence in risk management competences between firms with Small turnover and Medium turnover. Contrary, there is a systematic evidence of differences between enterprises with Medium turnover and Big turnover and between enterprises with Small turnover and Big turnover.

Summary

In our analyze we focused on determinants of firms ability to deal with risk. We considered three possible determinants of risk management capacity, namely firms' age, firms' size and firms' turnover. We showed that all three attributes are significant and we observed systematic differences in risk management capacity. Our conclusion is that micro and small enterprises have same capacity to handle the risks, but medium firms have superior risk management skills.

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How Slovak Mechanical Engineers Manage a Risk

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Abstract

The goal of this paper is to show how project risk is managed in conditions of Slovak manufacturing companies. The paper is divided into three main parts. The first part is an in-depth literature search focused on risk project management. This part shows what the ideal risk management process should look like. The second part of the paper contains one case study. It describes project risk management in a Slovak mechanical engineering company Matador Automotive Dubnica nad Váhom. The third part of the paper evaluates collected information and compares theory with used practice. A list of used sources concludes the paper.

Key words

Risk, Risk management, Projects, Mechanical engineering.

Introduction

Prehistoric man realized the importance not to underestimate anything. Living in an era when human wasn't at the top of the food chain wasn't easy. If destiny was favorable he survived another day. He had understood individual can do nothing and began to associate. He started to create first organized groups, today's teams. The goal was simple – to live as long as possible. Time went by, processes improved and suddenly it was him who could control his environment and make decisions. Then he realized he isn't alone in the world. There were another nations and civilizations. They began fighting and they have been fighting until the present day. What changed is that fights today take place in the market instead of a battlefield. Competitors are companies instead of nations. Little things decide about a loss or a victory. Industry is the driving force of economy. For more than one hundred years mechanical engineering was the dominant branch of industry in both Czech Republic and Slovakia. Many things have changed in one hundred years. Where weapons had been manufactured at the beginning of the twentieth century, automotive industry is developing today. Research, development and innovations are its main pillars that go forward fast. “Innovate or die,” wrote Kierman (1998) in his book. Radim Vancura, the managing director of Kovarna VIVA (Kovarna VIVA is a prominent Czech industrial forging company. It specializes in production of closed die forgings from alloyed, micro alloyed and carbon steel.) said: “*In the sixties of the twenty century the average engine power was 13 kW, today it's 60 kW*”. The increase is more than 450% in fifty years. “*You must be prepared to react well and fast*”, he continued. “*You can have perfect Armani suit but wrong button up would destroy the impression*”, he added. Every decision is connected with risk. This paper is about projects risks and theirs management in the mechanical engineering.

Literature review and theory development

1. Historical background

Det Norske Veritas (DNV) is the leading international provider of services for managing risk. Companies' tradition dates back to the second half of the 19th century when it was established in Norway. DNV in cooperation with professors and students from Athens had been searching for the origin of the term “*risk*” and they found it may be traced back to the Antique Greece, Homers' works exactly. The original term is used in Homer's Rhapsody M of Odyssey in the part when Poseidon vexes the sea and it wrecks the ship and kills some crew members. Term “*risk*” was gradually extended to the whole world from Antique Greece. It came to English from Spain and France in eighteen century. It meant different over the centuries. At the beginning it had been the synonym for *cliff*, *stone* or *root*. During 15th - 17th centuries when voyages to explore unknown world were realized, it meant *difficulty to avoid at the sea*.

From the 16th century onwards, the term picks up also a beneficial meaning. For example in middle age Germany it was a technical term for business, with the meaning “*to dare, to undertake a business and aspire for economic success*”, features DNV.

2. The “risk” and the project

Every project is unique and every project is realized in an environment of uncertainty. Uncertainty is caused by insufficient knowledge of the environment. Uncertainty reflects into risk. Project success depends especially on an ability to manage risk.

Riskiness is one of the 6 projects fundamentals. Other ones are uniqueness, temporality, limitedness (resources (people, material), time, and money), team work, severity and complexity. Kendrick (2009) claims that all projects involve risk. There is always at least some level of uncertainty in the outcome of a project. If we want successfully accomplish our projects, deliver them on time and on budget, we have to manage risk. Merna (2007) agrees with Kendrick and adds that project with zero risk is not worth while to be realized.

There are many different ways how to define term “*risk*”. The world most important projects management authorities define risk like following:

- IPMA (published in (Doležal, Máchal, Lacko, 2009)) defines risks and opportunities in a following way: Risk and opportunities management is an ongoing process taking place during all phases of the project life cycle, from initial idea to project close-out. At project close-out the lessons learnt in risk and opportunity management throughout the project are an important contribution to the success of future projects. The project manager is responsible for keeping himself and all project team members working proactively, alert to risks and opportunities, committed to the risk management process, for involving interested parties in that process and, when needed, for getting appropriate experts as consultants to support project risk management.
- ISO 31000:2009 (ISO 31000 was published as a standard on the 13th of November 2009, and it provides a standard on the implementation of risk management) risk is defined as the *effect of uncertainty on objectives (whether positive or negative)*.
- PRINCE2TM (PRojects IN Controlled Environments) is a project management method. It covers the management, control and organisation of a project. "PRINCE2" refers to the second major version of this method and is a registered trademark of the Office of Government Commerce, an independent office of Her Majesty's Treasury of the United Kingdom.): *risk is an uncertain event or set of events that, should they occur, will have an effect on the achievement of objectives. It consists of a combination of the probability of a perceived threat (opportunity of occurring), and the magnitude of its impact on objectives, where: Threat is used to describe an uncertain event that could have a negative impact on objectives and opportunity is used to describe an uncertain event that could have a favorable impact on objectives.*
- Another definition we can find in PMI's (Project Management Institute) PMBOK Guide (2009): *An uncertain event or condition that, if it occurs, has a positive or negative effect on project's objectives.*
- ISO 10006 (Quality management systems – Guidelines for quality management in projects): The term risk is used in this International Standard in the same sense as uncertainty, i.e. having both negative and positive aspects.

Previous definitions are not same but for all of them risk can has both positive and negative effect. It is really important to be aware of it because it is not common people feel positive side of risk. Risk can be good. Without risk, there would be no reward (DNV, 2010). Aguila (2010) described term “*risk*” the best: “*Risk is the fuel that feeds growth and the spark that permits creativity to flourish*”.

3. Project risk management

All projects involve risk. Project risk is greater (Portny, 2007): the longer your projects lasts; the longer the time between preparing your project plan and starting the work; the less experience you, your team members, or your organization may have with similar projects, the newer your projects` technology. Verzuich (2008) claims that all project management is risk management. Every technique in project is really a risk management technique.

Risk management is the (Verzuch, 2007, p. 95) systematic management of uncertainty to increase the likelihood of meeting projects objectives. The key word is systematic, because the more disciplined the approach, the more we are able to control and reduce the risks.

The goal of project risk management (Wiedeman, 1992, p. 3) is: To move uncertainty away from risk towards opportunity. The question is how to do it? Portny (2007, p. 150) advises to follow these five steps: (1) Identify risks - Determine which aspects of your plan or project environment may change. (2) Assess their potential effect on your project - Assess what will happen if those aspects don't work out the way you envision. (3) Develop plan for mitigating the effect of the risks – Decide how you can protect your project from the consequences of risks. (4) Monitor the status of your projects risks throughout performance – Determine whether existing risks are still present, whether the likelihood of these risks is increasing or decreasing, and whether new risks are arising. (5) Inform key audiences – Explain the status and potential effect of all project risks - from the initial to the project's completion.

People often share information about project risk an ineffective way or not at all. As a result, their projects suffer from unnecessary problems and setbacks that proper communication may have avoided. Communicate about project risks early and often (Portny, 2007, p. 164).

There are so many useful methods, techniques and tools which can be use during the risk project management process. Some of them are qualitative (Delphi, Brainstorming, Assumptions analysis, HAZOP, Checklists,...), some of them are quantitative (Decision trees, Monte Carlo simulation, Sensitivity analysis,...), other one are more complex (RIPRAN, ATOM,...). There are different ways to manage risk in projects. Some projects needs elementary techniques, other ones need sophisticated methodology. It's important, that the one we choose is suitable for the particular project.

The benefits of risk management are the benefits of better decisions; fewer surprises, improved planning, performance and effectiveness and improved relationships with stakeholders (DNV, 2010). Project risk management (Nokes, 2007) cannot eliminate all the risk for a project, but it can ensure the project's exposure to risk operates at an acceptable level. Some of the risk factors are beyond control; therefore planning to implement a series of actions should be conducted prior to an unwanted event occurring.

4. Specifics of technical projects

Technical projects are highly varied Kendrick (2009, p.1). These projects have unique aspects and objectives that significantly differ from previous work and the environment for technical projects evolves quickly. Compared to other type of projects, there can be much more difference between one project and the next. In addition, technical projects are usually “lean,” challenged to work with inadequate funding, staff and equipment. To make matters worse, there is a pervasive expectation that however fast last project may have been; the next one should be even quicker. The number and severity of risks in these technical projects continues to grow. To avoid a project doomed to failure, you must consistently use the best practices available.

Good project practices come from experience. Experience, unfortunately, generally comes from unsuccessful practices and poor project management. We tend to learn what not to do, all too often, by doing it and then suffering the consequences. Experience can be an invaluable resource, even when it is not your own. (Kendrick, 2009, p. 2)

Case study

Data collection was realized during the Jun and July 2011. Four companies were addressed; finally two of them took part in the research. First company is from Slovakia – Matador Automotive Dubnica nad Vahom, and is presented in this paper, second one from Czech Republic – MESIT ronex. Both companies are from the mechanical engineering field. The main research tool was both personal interviews and email questionnaire. Research was realized in support of companies' project managers. The following case study represents research results in Slovakia.

1. Matador Automotive Dubnica nad Vahom, Slovakia

Matador Automotive Dubnica nad Vahom is a medium sized mechanical engineering company. It is focused on designing and manufacturing of automation equipment and manufacturing of technological equipment and machine parts as well as custom manufacturing based on customer's documentation. Customers are mainly car producing companies from European Union, among the most important ones VW, Continental, VDL, Salvagnini, Mediso, Krones, Glunz&Jensen, FMC, Cnim or Audi Hungaria.

Matador Automotive realizes on average 250 projects per year with total turnover around 13 million Euros. Their projects deal mainly with custom manufacturing that makes up 60 – 65% and realization of own projects makes 35 - 40 %. Average project duration is 4 months. Sporadically, there are some projects with longer duration, like manufacturing of an assembly line which takes 10 months.

All projects in Matador Automotive are managed according to current internal guidelines. Risk management is a part of project management and is realized during the whole project's lifecycle.

The primary source of knowledge is practical experience from many projects, mostly the ones just mentioned. Project manager Rastislav Strapko also confirms this fact: "90% of all I know about risk project management I know from practice, remaining 10% is theory. What is the best way to manage risk? "The best way to avoid risk is to identify it on time, a correct assessment of the probability of occurrence and the level of impact and preparing measures that reduce or eliminate impact on other parts of the project. Past experience and knowledge from similar projects which were realized may also be of some help", continued Strapko.

There are many areas where and when problems can arise. Rastislav Strapko continued: "The best prevention of problems is a meticulous preparation where all project team members are engaged. The quality of preparation depends on time we have and that is proportional to the overall project duration".

Regular team meetings, audit days and operative meetings (if needed) are realized continuously during the whole project duration. The D++ Dimenze information system is a useful risk management tool. Besides other things it enables monitoring of project duration by visualization in form of a modified Gantt chart. "No tool may influence the result to such extent as proficiency of the team members and their own interest on a successful finalization of the project", finished Strapko.

2. Robotization of cuts feeding the FAGOR press

It was an innovation project realized for a subsidiary company in Vrable. The main goal of the project was automating feeding of cut metal plates to be pressed into the back of the Samsung television cases on the 2 500 ton press FAGOR. The feeding of metal plates inside the press was managed by the press on its own. The project was supposed to deliver 2 pieces of loading station, one KUKA robot and one gripper (responsible for taking metal plates away and loading them on a conveyor). Operation of all these components must be synchronized with working pace of the press. The key activities were manufacturing, purchase, customer installation, resurgence and delivery for using. The project team had 6 members. The project was really incentive in terms of benefits. The customer's goal was mainly automation of the whole process which would save money needed for salaries of loading operators. Matador, the project performer, would extend portfolio of its activities and gain a lot of knowledge from new area. For any successful suppliers the door to future cooperation would be open. Project was one of the more difficult ones. It was expected from the beginning that the robot and the gripper will not be delivered on time because time needed for their manufacturing and deliverance from the moment of finalization of construction documentation exceeds the term of delivery of the completed equipment to customer. Problem was solved by ordering needed components before final construction documents had been completed. The project team had risked and succeeded. A shorter delivery time of the KUKA robot was negotiated; too Organization units which cooperated on project (construction, technical preparation of manufacturing, logistic, manufacturing) also had a large share on problem elimination: "If there is a chance to realize a similar project again we will proceed likewise. The big advantage is that the large piece of work connected with construction and technical preparation of manufacturing will be prepared", project manager Rastislav Strapko referred. It was confirmed again that the success depends mostly on expertise and interest of the people involved.

Conclusion and future research

The requirement for risk management is very actual in present mechanical engineering companies, but lots of staff in such companies does not have the suitable knowledge to master the risk management. Some of the risk in mechanical engineering companies must be managed on the base of current legislative rules. It concerns about ČSN EN 1050, that regarded risk according to the dangerous, that can occur with the use of machines, than it concerns about the direction issued by European parliament and European board EU 2006/42/ES and finally it concerns about risk management according to the OHSAS 18001:1999 or ISO 27 000.

Most of Czech and Slovak mechanical engineering companies manage such risk; those are ordered through high cited prescriptions. But they do not manage the explicit risk, for example business risk.

Almost any Czech or Slovak company does not indicate calculated risk value of their order sheet besides such data as price and profit.

In Czech and Slovak mechanical engineering companies we can find lots of other lacks. For example the ignoring of risk management at all or the wrong analyze of risk or the risk analyze is provided by nonqualified persons or managers. These consequences into the wrong risk analyze, that is not beneficial for the project. The risk or project managers or other staff doing the risk analyze of particular project mostly have no experience in the risk management and they do not perceive the possible lacks, so the result of the risk analyze is very underestimated and unrepresentative list of possible risk, those threaten the project. Then the project seems to be without problems. But we can see the opposite access as well. The project team is working on confused and very long list of various risk and situations, those are not clearly specific. These risk are not classified according to the importance and such risk analyze does not have the description of measures, how to react on these threatens. This is detailed analyze of insignificant risk and it can cover very important risk, that can occur. In most Czech and Slovak companies the management of project risk is not linked on the complex risk analyze, so the isolated project risk management is not felt well by other employee and it cannot bring the critical competitive advantage.

High cited lacks follows from the general depreciation of risk engineering knowledge and from the one sided orientation exclusively on the solution of technical problems of projects. The recommendations resulting from the praxis of successful mechanical engineering companies consist in the impact on the implementation of project risk management provided by the professionals, who are aware of the application of risk engineering in project management. And this project risk management system must be linked with the complex risk management system in company.

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3. Marketing and Innovations

A Bundle of Hotel Brands - New Strategy for the Application of Branding in Hotel Industry

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Extract

Proper assessment of the impact and value of individual brands is imperative for any business entity of any market. If it is possible to realize increased profits and acquire the conditions for potential placements and expanding its offerings. The high price of the hotel industry to create new brands and expanding range of the basic bid, entails the creation of additional brands. Whether they are private, virtual, global corporate or their complexes allow the optimization of costs, increase the speed of turnaround and return on investment. This bundle of brands is becoming strategic focus hotel company in the market.

Preface

In service industries, especially in pharmaceutical, in tourism and hotel, in trade and telecommunications, investment in brands, has its own market justification. Practice proves that it is more cost effective creating and launching a new offers within the existing borders, than to be created new and a completely innovative brand. Tourist and hotel guests are constantly looking for new experiences, a more favorable offers, and above all else interesting destinations. For this reason, their sense of loyalty to a particular hotel brand is constantly in conflict with the desire for new experiences. In this sense, can be analyzed research conducted by Osman, Hemmington and Bowie. They separated the hotels brands on the softer and tougher, depending on the realized degree of loyalty (Osman, Hemmington, Bowie, 2009: 239 - 250). On the other side, absolute loyalty to guests in the hotel industry is very difficult to obtain. The reason for this lies in the fact that customer loyalty programmes is directed primarily toward their behavior and attitudes (See more: Julander, Magi, Jonsson, and Lindqvist, 1997: 301-310). Curiosity, as a natural human trait is a strong enough reason for finding and getting to know other options and offers.

Conditioned by these specificities, image of a hotel brand with an overall identity characteristics is prepared in the early stages of hotel offer. This Image is formed to be the stimulating effect on future consumers in more planes. Through standardization of hotel categories and product, the guests are achieving sense of loyalty to the appropriate hotel. This is a very delicate activity whose primary objective clearly creating and positioning the hotel product in the market on the one side, and with the establishment of a hotel brand identity in the minds of existing and potential consumers, on the other. Consequently, the perception of brand image of the hotel is recognized as a way of expressing hotel company at market. In this respect it should be considered a basic range of hotel offers, presented through a combination and tangle of hotel brands.

However, these trends have another dimension who is primarily reflected in the growth of costs. Besides the expenses of creating, marketing and maintenance of new brands, experiences in hotel industry proves a certain degree of confusion in the target of market segments. Due to the desire for greater profits are not rare cases uncritical placement of individual bids. Especially if they did not make an attractive novelty or innovation. Mostly it is only mimicry at the current events and market vagaries. However, the dynamics of the total cost, application and adaptation of appropriate strategic options and setting new business goals cause the necessity of finding an adequate balance to regulated the relationship of these categories

A bundle of hotel brands

Combination and tangle of brands is an attempt to optimize the total number of brands (softer & tougher) which are available to the individual market entity in relation to costs and speed turnaround and return on investment. Vranešević states that combination includes the following dimensions (Adapted from: Vranešević, 2007: 91):

- The assortment of brands that allows a balance between the needs, desires and expectations of guests on one side and demands associated with adequate economy of operations through the bundle of other brands. Only the proper line, adjusted, and focused the beam range of brands, guarantees a positive financial result. Many authors assortment of brands equating with merchandising concept. It identifies at all the activities required when presenting the tangle of brands to end users (see more: Lovreta,

Petkovic, 2010: 113-129.). The assortment of brands is expressed through the breadth, depth, quality, or a combination thereof.

- Portfolio brand implies a set of different brands that are owned by a single market entity. Kotler discusses the portfolio through a maximum market coverage and at the same time minimizing overlapping of brands. In this way it is possible to avoid the negative effects of the competitiveness of these categories which can be defined by the concept of cannibalism (see more: Kotler, Keller, 2006: 387). Portfolio brand has a width, length, depth, pace and consistency.
- Brand architecture is always linked to specific business strategy. It is aimed at determining the mutual relations of hierarchy and in the mix. It is identified with the dominant brand and his relationships and communications with the environment. Establishing strategic brand architecture is an integral part of corporate strategy that raises the overall market competitiveness. In this respect Aaker suggests the existence of a whole spectrum of brand architecture (Kotler, Pfoertsch, 2007: 92). On that way it is possible to present clear business strategy, using the maximum utilization of available benefits through optimizing marketing investments and facilitate the selection of investments.

All dimensions have their own positions. They shall enter into relationships that should positively affect financial performance. The combination, or tangle of brands it can be subsumed under a single business strategy. If it succeeds, or if it brings profit, then the hotel company trying to strengthen and expand, in order to multiply the positive effects. However, the shutdown of certain offers which did not justify market expectations, goes along the process of dying brands. Hanson in his research showing that frequent changes of hotel brands do not contribute any significant financial effects (Hanson, Matilla, O'Neill, and Kim, 2009.). For this reason, the concept of the combination (bundle) of brands is analyzed like brand management of the hotel companies. According to Kotler, there are the following approaches to management entanglements of brands (Kotler, 2005: 566):

- Multibrand strategy refers to the individual brands. Usually there is a unique offering that increases with supportive, combat or premium brands (IHG).
- Range branding strategy involves the use of different brands for a single bid or the entire line, group or family of products, services, or combinations thereof. The existence of a bundle of brands are subordinate to corporate brand (Hyatt).
- Corporate branding is applied with market leaders where there is a universal corporate brand that dominates and represents the basic offer (Marriott).
- The combination of corporate and multiple brands - company and individual branding strategy has a number of forms and models of application that are formed depending on the set of projections and targets to be achieved (Accor).

The choice of strategy is a process which follows a number of causal factors. At the decision certainly affects and vision and market position of hoteliers in the future. Given that each of these options has advantages and disadvantages, it is necessary first to determine priorities. For example, with a single brand is more easily managed and sold corporate image, quality or projected. On the other hand, he is susceptible to misuse or copying and all his attributes can be easily used against him. In this sense *Holverson and Revaz*, in his study indicate the practical implications of market positioning of European hoteliers (see more: *Holverson, Revaz*, 2006: 398 - 413). Also, the existence of a number of brands, allows each of them to support and protect corporate image. But this implies a more complex structure of the managing and higher costs. Therefore, the existence of a complex tangle of hotel brands is a request which must be approached very carefully, especially in terms of global hyper competition.

Dimensions of the bundle of hotel brands

In the hotel industry multiple corporate brand of hotel chains and groups are created a unique brand portfolio. Under the portfolio is involved a complex relationship offers, products and services and markets and consumers to whom it is intended (adapted from: Čačić, 2010: 65). Thus, complexes of brands in the hotel industry are identified with maximizing the value of all other categories within the unique brand portfolio through:

- The width of Portfolio maze of hotel brands. This is the total number of offers subject which develops hotel. They are mostly homogenous group brands that are designed to meet the same target groups as in the case of Serbian hoteliers who operate under the umbrella brand Best Western.
- The depth of the portfolio of hotel brands bundles. It is a dimension that is focused on a number of brands that provide equivalent hotel products. For example, facilities that operate under the Global Hotel Alliance grouping have a unique offer for their guests (Guest Programs). It consists of four

specialized hotel brands (Kempinski Hotels & Resorts - Europe, Pan Pacific Hotels & Resorts - Pacific, Rydges Hotels & Resorts - Australia, Wyndham Hotels & Resorts - North America). Although each of these brands is also a individual strong brand, in unique bundle they managed are strengthen their positions they occupy in certain destinations and they reached top quality at the global level. By mutual agreement, hotel market is divided the market segments, so that the bundle of brands is widened its portfolio to more than one hundred fifty destinations across the globe. Over time, the depth of the portfolio was rated as shallow. The analysis of profitability, the total market share and its dynamics, they are developed a program Privileges for Advocates who has contributed significantly to a better business.

- The length of the portfolio of hotel brands bundles. This is the total number of brands, which takes in the breadth and depth of the relationship portfolio. The practice of the business of the hotel brands are proving that have the status of strategic business units. In that way they became a separate market forms. Thus they create their own under portfolio within the existing bundles of hotel brands. The above-mentioned member of the Global Hotel Alliance, the chain Wyndham Hotels & Resorts as an imperative of their business reflects the increased distribution and brand building initiatives through the acquisition, agreement in multiple planes, development of individual programs, the implementation of a franchise and strengthen e-commerce. Thus the focus has shifted to individual brands and their organizational structure. It allows to created a unique experience and combining offerings that will enhance the basic product of the hotel (The Room that performs, In room dining, Wedings, Meetings, Women on their way, Pool Concierge, Hotel at home) and a private hotel brand (Golden door bath care collection).
- Consistency bundles hotel brand portfolios. It represents all the possible forms of integration in existing frameworks. Kempinski Hotels & Resorts achieves various forms of business cooperation in order to consolidated and improved its offer. Cooperation with Swiss International Air Lines is not only focused on the integration of booking systems. It is also focused on towards the internationalization of business through the creation of a unique Swiss Travel Club. Including companies American Express, Sixt car and BMW Golf Cup International was contributed creating a unique consistency bundles hotel brand portfolios.
- The dynamics of portfolio bundles hotel brand. These are all ways and opportunities that could help change the already mentioned dimensions. It is the number of new releases of the closure of existing brands as a kind of optimization portfolio mix. His pace and scope is conditional on factors such as demand, competition, or stages in the life cycle of hotel brands. Rakita and Mitrovic believe that for a portfolio can be said to be optimal if its not possible to increase the profitability of changes in the existing dimensions (Rakita, Mitrovic, 2007: 149). Although authors suggest this is only a theoretical principle, practices, particularly in the business of international hotel chains and groups, suggests that it is very difficult to find the ideal optimized portfolio mix. As a rule there is always a certain size where it is possible improvements and enhancements.

Structure bundles of hotel brands

Complexes of hotel brands are the immutable givens. Elaborated it in detail in the available literature. The challenge is to be determined concentrate in the each tangle of hotel brands and their individual business orientation. There are many factors that influence to create a diverse structure of tangles in order to be created a clear vision and goal. That is what makes the emergence of flexible virtual market players who have less jagged organizational structure. On the other hand, continuity in raising the educational level of hotel guests impose far-reaching consequences for all hoteliers. They are daily exposed to the impact of thousands of commercial proposals. It is therefore necessary to consider the comparative relation and related hotel brands operating in the bundle:

1. Corporate hotel brands provide the opportunity to the individual offers that can be identified with the whole hotel company or corporation. This process is much more than promises or creating the perception of the guests. Most of them often leaving the concept of a superior offer and crossing to the model spread of the corporate umbrella. On that influenced new creative economy and offers a highly dynamic market as the basis of international competitiveness. So it is not enough to have a strong hotel brand. It is necessary to win the appropriate market position because a corporate branding requires a holistic approach to marketing. Aggregate bundles are composed of a number of related and unrelated variety and types of corporate brands, depending on the structural complexity and market orientation (Adapted from: Balmer, Gray, 2003: 972-997):

- Family connection in terms of related activities or industries such as hotel chain Hilton in United Kingdom and USA.
- The division of functions and values oriented towards the realization of unique offerings such as hotel chains Hilton Hotel Corporation and Hilton International.
- Surrogates in terms of contractual arrangements such as hotel groups which mainly practiced through IHC franchise.
- Superiority, respectively, leadership in the market such as Marriott.
- Multi-effects with the use of multiple substrates ownership. Extended Stay Hotels practiced by management agreements with various facilities for the accommodation.
- Association of disparate market players such as the projected goal of the consortium group Utell.

Today the management of the corporate brands like Marriott or IHC Group is not just one bid. Her market value encompasses a comprehensive portfolio the companies with all reported hotel brands. The following chart outlines the basic settings in the bundle in relation to the market pricing segment (See more: Smiljanić, Sedlarević, Svorcan, 2011).

Chart 1 Overview of the leading corporate hotel brands



Source: web.efzg.hr

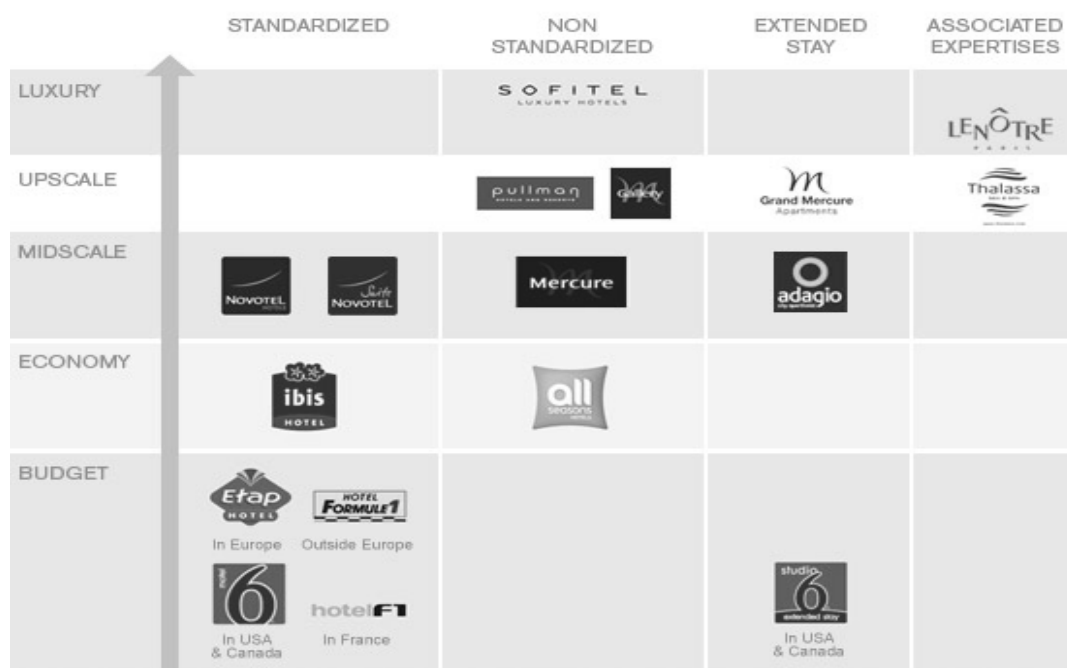
Splice lets that we can see the vision, values, character, position and image of hotel companies in different dimensions.

2. Private hotel brands exist in the market for many years. However, the processes of globalization they were kicked out them to the fore in a package with other marketing categories only in the third spiral of globalization (Svorcan, 2011: 137). Thorough knowledge of the composition, quality, workmanship and design detailed specifications related to the hotel textiles illustrate the penetration of private brands in the hotel business. Although these materials represent a significant expenditure for each of hoteliers, while they represent an ideal basis for the formation of tangle of private labels in the function of strengthening the unified brand hotels. Management of Queen's Hotel in Bridge of Allan in Scotland, in collaboration with a number of experts have designed by over eighty different uniforms for his twenty-five employees! In addition to the known geographic origin of materials, to the details be taken into account of the harmonization and integration of work uniform with the interior and exterior and the location of the place of hotel costs (Miladinovic Svorcan, 2008.). Apart from trade-sales program, bundles of hotel brands also appear as forms of specialized services. Starwood has launched a special line called W hotels in order to successfully defend by the invasion of boutique hotel (Svorcan, 2011: 145-147).

3. Global brands carry the benefits of achieving extraordinary economies of scale. This is a direct consequence of the large savings in production, transportation or promotion goods and services. The chain reaction is closing through the fact that a strong and successful brand easily and quickly gain the trust of the target market segments. Nelson said that modern time are good for to mark the creation of customized brand. Under this term may be considered all bids aimed at global consumers as individuals who have their peculiar needs and expectations (Nilsson, 2002):

4. So Accor is successfully implemented by using a bundle of global brands on the already established position hotels brands in domestic markets. So it often happens that the corporate brand is equated with the global. However, the title of globality is still linked to the internationalization and globalization of corporate operations. Adaptability of Acoor bundle in some markets and the degree of transformation to the local features, without compromising the unique image and brand profiles, is an ability to adapt and direct, largely determines the global strategy to achieve business success..

Chart 2 Portfolio bundle hotel group Accor for 2010



Source: www.accor.com

Presented a chart indicating clear differentiation of individual brands and brands in the global mix. Perhaps it should be noted the actual Thalassa sea & spa offer that includes a series of additional facilities (fitness, harmony, slimness, health, coaching tonic, detox) and creations in the form of a Club within the Mercure brand that offers a unique experience inspired by French cuisine through the concept of Slow Food.

5. Virtual hotel brands which are initiated by new medias, allow the creation of a homogeneous space and a comprehensive distribution and flow of data, information, and various forms of cooperation and connection of new modalities for all forms of commercial varieties. Time constant in terms of realization of the right things at certain times with uniform intensity and duration allowed the emergence of a completely innovative business mixes. By creating a unique corporate website was established by the kind of service centers that promote the objectives and operations. In addition to traditional brokerage and sales functions, is activated the innovative model of mutual virtual presentation. Networks individuals and informal groups. This allows to identify and focus their desires, appetites or expectations. Creating a bundle of online hotel brand or brands go in two directions:

- Direction, which follows the current trends and expectations of the development of virtual bundle of hospitality with which the company seeks to create a unique and universal offer of using the corporate address, respectively, it uniting the CRS and GDS through external and internal networks.
- Direction that is focused on the adaptation of existing business models through the introduction of the latest technical and technological achievements in order to maximally automate the business, improved management and made direct contact with the guest.

The unification of these two directions can be displayed through the project guestroom 2010. The project was created under the auspices company Hospitality Financial and Technology Professionals in collaboration with IBM. This project is intended primarily to investors which should take into account the requirements and demands of hotel guests aimed to the virtuality hotel product (Svorcan, 2011: 149). Some solutions are quite simple (natural light in the bathroom) while the other are represented a real challenge (large windows without curtains to be ensured privacy and intimacy).

Conclusion

Mixing brands is a proven strategy option in the hotel market positioning. However, the parallel existence of a large number of diverse and at the same time a similars offers imposes the necessity of clear demarcation. That is the reason why further research of this issue shall provide for clear break down the the mutual relations of strategic branding. What place is occupied by individual hotel brands within a single bundle, especially in the business of leading international hotel chains and groups. The study of available literature and appreciation of the practical experience of hotel (particularly between European) points to the necessity of a clear theoretical definition of these business models and their adaptation to the particularities of the hotel business. Since is product of hotel basis of creating of hotel brand, regardless of whether it is a private, virtual, global, corporate or their bundle, he must be determinants of branding, particularly in those economies that which pass through the painful transition process.

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Promotion Mix as a Presentation Tool for Organic Food in Poland

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Abstract

The study provides information about organic food and promotional activities to popularise organic food products. It explains the nature and importance of promotion mix. Characterises the main instruments of promotion. In the further part the market of organic commodities in Poland is shown. Describes the tools used in the promotion of organic food in the Polish market. The final part of the paper includes a summary of the presented content.

Introduction

Emerging trends in diet, among other things, focus on organic food. The increase in consumer interest in organic food products forces food producers to adapt food production to the needs and preferences of consumers looking for organic items in grocery stores.

Promotion of fashion for a healthy lifestyle is noticeable in television, radio, newspapers or the Internet. Experts in the field of nutrition induce and encourage consumers to buy and eat organic food. Any kind of health pro-social organisations promote environmentally friendly products and environmentally friendly lifestyle. The activities in this field are dictated by concern for the health of consumers and their families and care for the environment.

Despite the more frequent occurrence of environmental issues in the media, many people have limited knowledge about what really is organic food and how it affects human health and the environment. For this purpose, a tool with which food businesses can bring the essence of organic food is the promotion mix. Promotion, as part of the marketing mix, offers many possibilities to present organic food to consumers and its beneficial impact on the functioning of the body.

The essence and meaning of promotion mix

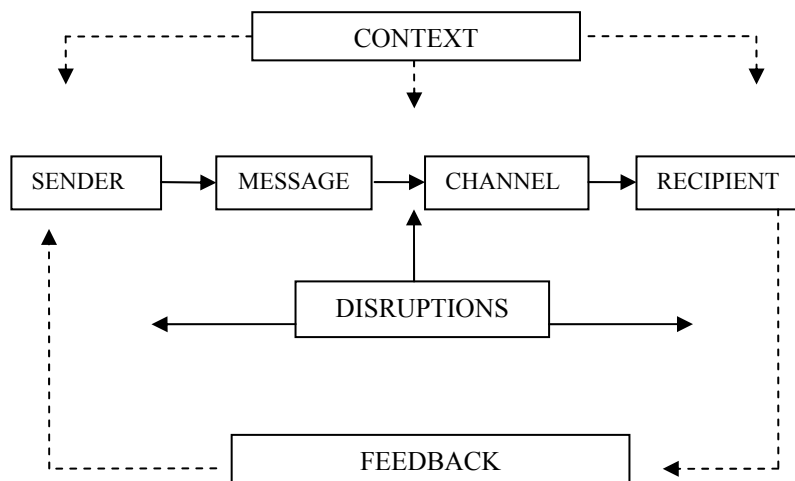
The literature on marketing contains many definitions of promotion. This term comes from the Latin *promotio* meaning support, promotion and *promoveo*, meaning accelerate, expand. This term may be limited to the activation of sales or defined as "a set of activities and means by which a company provides information about the product to the market, (...), shapes the needs of buyers, stimulates and directs the demand and decreases its price flexibility." (Daszkowska, 2001, 40) G. Stonehouse citing W. J. Keegan sees the promotion as "activities involving all forms of marketing communications designed to influence the behaviour of customers or potential customers, targeted promotion, including the following communications forms: advertising, personal selling, advertising sales, advertising literature, information actions and verbal recommendations." (Stonehouse, 2001, 218)

According to A. Gwiazda promotion is "the process of stimulating demand for products and services produced by the company. International corporations use for this purpose mainly advertising and personal selling. Public relations and direct sales support are also used depending on the specific product or service and target market." (Gwiazda, 1998, 121)

A lot of attention is devoted to promotion in the books of P. Kotler. This term means "combination of four tools: advertising, personal selling, sales promotion and public relations used by companies to achieve marketing goals." (Kotler, 2002, 824)

Promotional activities are primarily aimed at stimulating demand, while the function of promotion is to provide information on the product. They aim to persuade consumers to buy a particular product or service. They should arouse interest in the new product or the recall of its existence in the market, as well as highlight its advantages. In fact, promotion is "any form of communication between companies and potential customers." (Sutherland, Canwell, 2008, 205) The element of marketing communication are presented in a graphic way in the picture 1.

Picture 1 Elements of the marketing communication process



Source: J. W. Wiktor: *Promocja w strukturze marketingu- mix* (in:) *Podstawy marketingu*, J. Altkorn (red.), Instytut Marketingu, Cracow 2006, p. 272

Stages of marketing communication include six basic elements: (Wiktor, 2006, 271)

- Participants of communication – sender and the recipient,
- message,
- channel of message transmission,
- disruptions,
- feedback and communication context.

Promotion, as a component of the marketing mix provides information and convince buyer to purchase the product. Sometimes the promotion is defined as public consultation. It is designed to drag the attention, interest and desire to have a product, which is expressed by its purchase.

Promotion should create in a customer consciousness a positive image of the product and manufacturer. Promotional activities may use different methods, and also take different forms. It is important that the impact of the promotion is continuous and consistent, so that the customer can have a lasting, positive image of the product and the company. (Urban, 2008, 148)

Instruments of promotion mix

Trough promotional activities there is a contact between the company and the prospective buyer. Promotion is a way of marketing communication, which is run by *advertising, direct marketing, personal selling, sales promotion and public relations*. These elements of promotion form a complex promotion-mix composition, also referred to as system of promotion or integrated marketing communication system.”(Wiktor, 2006, 276)

One of the main elements of the promotion mix is, the above mentioned, *advertisement*. A lot of advertising space in his literary achievements devotes P. Kotler. According to the author advertising is "any paid form of impersonal presentations promoting ideas, goods and services by identified sender.” (Kotler, 2002, 863) Advertising is a paid, impersonal form of communication through the mass media. It is carried out by companies and other entities which are associated with a given message. This refers to the communication of product, services, institutions and ideas. Advertising gives you a high success rate of impact on audiences. However, often this message irritates the recipient. (Grzegorzcyk, 2010, 28)Advertisement aims at: (Wiktor, 2006, 287-288)

- creating needs,
- identifying and reminding usability of the product,
- developing preferences and providing a set of arguments in favour of the brand,
- creating a positive image of the sender of advertisement.

The main purpose of advertising products, including organic food is to create awareness of brand products. In this type of advertisements exhibited are characteristics of products, its use and reliability, and everything what points to the advantage of products over the competition. Analysing the ad, we should indicate the form of advertising. There are mainly press, television, radio, mail and extern advertisement.

The second instrument next to the advertisement is *direct marketing*. The essence of this instrument is the direct reach with the products or services to the purchaser. According to most definitions of direct marketing, in this form of marketing, information about products and services is passed directly to the consumer - the client, with no additional distribution channels. According to P. Kotler it consists on the "direct messages sent to a carefully selected, individual customers, often in an individual, interactive touch in order to obtain a direct response (reply)." (Kotler, 2002, 1037) J. Russell i R. Lane believe that the "name (direct marketing) is used when the seller and the customer are dealing directly with each other, and not through a retailer or through the media." (Russell, Lane, 2000, 388)

Considering the direct marketing it can be stated that it includes classical and modern instruments which have the impact on the market. Classical instruments are primarily marketing mail, catalogues, telemarketing, direct sales via television, radio, newspapers and magazines, fairs, exhibitions and vending machines. The modern instruments of influencing the market through direct marketing are the unconventional forms of email marketing, electronic catalogues, new solutions for telemarketing and interactive kiosks. (Pabian, 2005, 210-211)

Another element of the promotion mix is *personal selling*. This instrument of promotion mix, is "a process of monitoring and selling goods and services or to promote the idea through a form of direct communication. Personal selling is a group of techniques and tools serving realisation of the sales process using the element of direct contact of the seller with the buyer." (Grzegorzcyk, 2010, 36) According to T. Kramer "personal selling may manifest itself as a seller advice in a retail store or an incentive to purchase goods at home or it can also lead only to define the preferences of potential customers. Most important in this case is personal contact between seller and prospective purchaser (...)" (Kramer, 2000, 178) The personal sale is implemented in several stages, each of which is a separate communication tool. These stages include: (Grzegorzcyk, 2010, 37)

- identifying potential buyers,
- initial approach to examine the attitudes and the specific needs of the potential client, preparing the ground for negotiations,
- approach and presentation in the face to face form,
- response to objections, arguments prepared on the basis of the findings from the initial approach, which includes elements of improvisation,
- closing a sale and its aftermath: sale, after sales contacts, warranty, service.

Promotion of sales, is part of the promotion mix elements. It is also called a supporting promotion. Means the use of various incentives for the purchase of goods through making a product more attractive. Applied for a limited time in the place of selling. Conducted within the framework of sales promotion activities should give customers the feeling that they are dealing with a unique opportunity. Often, sales promotion is associated with occasional holidays (e.g. Christmas). Sales promotion is "applied both to consumers and dealers." (Kramer, 2000, 172) In providing customers with information concerning the product, sales promotion uses product samples, tastings, initial offers, trade shows. To attract a client to purchase a product techniques such as discounts, coupons and bonuses are used. A very important function of promotion is creating consumer loyalty for which different means are used, like: trademarks, containers for reuse, contests and lotteries, loyalty cards. (Grzegorzcyk, 2010, 34)

Considering promotion mix components, it cannot be forgotten about the actions in the field of public relations, which are also included in the promotion mix. "Public relations are an instrument of the promotion system, which aim is to create, sustain and expand the public's trust and positive image of the company. This includes all activities aimed at promoting and / or protection of the company image or product, or in other words, the impact on the feelings, opinions or beliefs of shareholders customers, suppliers, employees and other target groups. They constitute an important part of marketing and public relations, linking the company with the environment. Their goal is to create favourable, positive attitudes of public opinion towards the company." (Wiktor, 2006, 277) It should be kept in mind that the success of companies in the market depends not only on relationships with customers. The positive relationships with employees, suppliers, distributors, government bodies and journalists should also be created. It is often recognised that "public relations is a group of tools used for free presentation of person or organization to its surroundings or its parts. However, the issue of payment for use of the centre used to transfer the

message is not clear. Most of the tools of PR gets little control over the content, form and place of publication. With few exceptions, the PR does not allow for personal interaction in the target audience.” (Grzegorzczak, 2010, 28-29)

Polish market of organic products

Taking organic food into consideration, one should explain the nature and importance of organic products. Organic product is a "product that meets certain requirements consistent with the protection of the environment - from obtaining raw materials through processing to labelling. It's a product that is produced in equilibrium with the environment and its impact on the environment is estimated on the base of raw material input, manufacture, consumption and the way of disposal.” (Witek, 2007, 329) In other words, organic product produced in accordance with the cleaner production concepts, holding a certificate of organizations and institutions authorized to issue such a certificate such as the Polish Centre for Testing and Certification, offered to the consumer with adequate information about the pro-environmental properties. (Witek, 2007, 329-330) From a group of organic products we can distinguished organic food. Organic food include wholesome products made from raw materials from crops and organic farming. They are manufactured on the base of cereals, vegetables, fruits, herbs, eggs, meat, milk, honey and other raw materials. It is a food that contains no pesticides, synthetic fertilizers, growth hormones, antibiotics, artificial flavours, flavour enhancers, colourings and sweeteners.

Organic food production methods are designed to care for the health of the community and the environment. The production of organic foods also means a return to long-forgotten flavours such as spelt and amaranth. Laboratory studies show that organic food, compared with a conventional, has more important components for the health, such as macro - and microelements and vitamins. At the same time it is much less polluted, e.g. with plant protection products (their content is never zero, because the whole environment is contaminated). Many consumers also notes the differences in taste, of course, in favour of organic products. The taste of organic food is a natural (www.ekoprodukt.pl)

The concept of organic food has been defined for the first time in 1924 by Austrian philosopher Rudolf Steiner, emphasising that good crop yields can be achieved by working with the forces of nature.”(Runowski, 2003, 313) Organic farming is an agricultural system that provides fresh, flavourful food, produced with respect for the natural life cycle. The organic products market in Poland is constantly evolving. The area of organic farming and the number of households that meet the requirements of organic farms and processing plants is increasing.

Tab 1 Cultivated area, the number of organic farms and processing plants in Poland in 2005 and 2010

	2005	2010
Area of cultivation	167 740 ha	524074,92 ha
Number of farms	7183	20 626
Plants	99	264

Source: <http://www.minrol.gov.pl>

In the period 2003 - 2010 the area of ecological arable lands increased 8.5-times and is now around 2.8% of the total area used for agriculture in Poland. The average size of organic farms now exceeds 25 hectares, with the national average of about 10 ha for the conventional farms. (www.minrol.gov.pl) The volume of sales of organic products in Poland is also constantly increasing. According to Euromonitor in 2010 Poles spent on the purchase of packaged organic products 58.9 million of Euro or approximately 250 million PLN. (www.biokurier.pl) Polish consumers have access to organic breakfast products, cereals and all kinds of cakes. More and more companies decide to produce organic food. Also increasing is the number of shops selling organic products. In 2010 there were approximately 400. In addition, the purchase can be made using online shops that are becoming more popular.

Instruments of promotion used in sales of organic food

Leading discussion on the promotion of organic food products in Poland it can be concluded that the actions of this range are not fully professionally performed by organic producers on the Polish market. The most commonly used tool for promoting sales of organic food is personal sales. Despite the growth of number of buyers interested in environmental articles, consumer knowledge about this kind of food is still

not satisfactory. The main feature of personal sales is the possibility of direct, personal contact (face to face) with a potential client. Personal selling provides an opportunity to meet with the consumer and provide all necessary information. However, the condition for increasing sales is creating awareness among customers and personal contact with the seller, who, in a professional manner, will provide knowledge about organic food and its properties.

In addition to personal sales used in the promotion of organic food, organic products companies communicate to potential buyers via the Internet. This form of promotion is characterised by low costs and is very popular among companies. Sales of organic products through an online store allows you to reach a large group of consumers. Selling through an online store is a great convenience for customers who prefer shopping from home, or have difficulty reaching the shops where you can buy organic food. Internet plays a growing role in shaping the image of organic companies. Organizations that do not have own website can have problems in creating the image among customers and it will be difficult to promote their brand of organic products to potential customers.

Another form of organic food promotion on the Polish market is advertising in social media such as radio and television. A characteristic feature of these messages is that they encourage the purchase of organic products not pointing to a specific manufacturer of that food, not mentioning a specific brand of product. These types of advertisement are intended to draw public attention to organic food and promote healthy eating at the same time. This type of advertising is not commercial in nature. Media offer also programs showing healthy way of eating, involving experts in nutrition. Press, especially concerning industry devoted to issues of food market, we can also find articles encouraging to purchase and the consumption of organic food products.

Conclusion

Healthy eating is becoming increasingly popular among consumers of food products. Buyers are looking for more articles that come from, so called, clean production without the use of preservatives, adjuvants, dyes or other chemical additives. This situation forces the food producers to adjust their offer of products to the needs of a growing number of consumers looking for organic food products. A noticeable trend constitute a good chance of winning a significant number of customers looking for organic products. The development of these sectors of the economy, which several years ago had no chance of occurrence in the Polish context is also possible. One of such sector is the organic farming. Consumers are being increasingly encouraged to choose those products that are safe and healthy.

The use of the emerging opportunity for the company will not be possible without the development and implementation of professional activities related to the promotion mix. Promotion is a form of contact of the company with the surrounding. Improperly implemented policy of promotion can contribute to lack of interest of consumers in specific products of a specific organisation.

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An Innovative Business as a Result of Globalization and Application of Innovation in Business Management

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Abstract

Nowadays, an innovation and application of innovative practices in managing a business is a need which should be addressed by managers. Some innovative approaches are helping us to move closer to the effective management, thus their implementation is a necessity. This article aims to clarify the concept of innovation, innovative business and its contribution in the process of globalization in the business management.

Through theoretical knowledge we will get closer to an example of an innovative management company in terms that are created in Slovakia.

Key words

Innovation, Innovation business, Globalization, Organizational Innovation.

The article is part of the research GAMA/11/6.

Introduction

Today, companies should implement innovative approaches to be successful. Innovations are basic for business development and play a key role in the economy. Innovation should represent something new for the company; the innovations should offer solution to problems and should move the business forward.

Innovative approaches in tourism are a key for the survival of companies that operate in this sector and offer services. Tourism companies should upgrade these services and take the potential client.

For example a successful tourism business, which operates in Slovakia and uses innovative approaches, can maintain a high standard with minimal costs.

1 An innovative business as a result of globalization

Firms, with rapid globalization, have to continuously innovate for competitive advantage. The main emphasis in the modern global world is put on creativity and an innovation, and on their role played by enterprises or organizations. We can conclude that companies which operate in conditions of globalization will be successful, if they are constantly producing knowledge workers and their way will lead to the creation of innovative businesses. The innovation process is a key to an understanding of the economics development, and that the business enterprise is an organization that is central to the innovation process. Globalization is a high-priority concern for just about every organization.

Authors Peters and Waterman (in Franková, 2011) in their major studies have identified an innovative company, as a business that is changing together with the external environment. The innovative business is innovating as a cultural whole. Authors Peters and Waterman describe eight attributes that characterize a status of successful innovative enterprises, which we present in short. They are:

- *PARTIALITY FOR ACTION;*
- *CUSTOMER ORIENTATION (close contact with the customers);*
- *INTERNAL AUTONOMY AND ENTERPRISE (innovative business educates the many innovators, supports creativity in each of them supports experiments and also tolerates a lot of mistakes);*
- *VALUATION OF EMPLOYEES (staff members are considered as source of quality and productivity, an innovative company values their employees, in each of them sees a source of creative ideas);*
- *EMPHASIS ON THE BASIC ORGANIZATIONAL;*
- *BUSINESS IN THE FAMOUS AREA, WHO KNOWS;*
- *SIMPLE ORGANIZATIONAL STRUCTURE (basic forms, systems are simple, the managers at the top level has few members);*
- *FREE ALSO FIXED MANAGEMENT (innovative company is also centralized and decentralized, an autonomous transfers on the level workshop or on the level development teams).*

The development and Human Resources Management becomes in innovative business by strategic issue. Strategic oriented development as described Stýblo (2010, p. 117) "needs, so managers from all levels of management and staff take a personal responsibility for a personnel matters.

Innovative companies will always seek to manage their human resources effectively as to create and market new products and services. When firms develop innovation activities, such as introduce new product, new process and/or new administrative practices, they need innovative and creative employees, who are flexible, risk taking, and tolerant of uncertainty and ambiguity. These employees are highly recognized in manufacturing industries because they will enable firms to compete on the basic of market responsiveness, as well as product and process quality.

1.1 Organization Innovation

Organizational innovation has been broadly defined as an adoption of a new idea or behavior to the adopting organization. Since innovation is conceived as a means of changing an organization, either as a response to changes in the external environment or as a preemptive action to influence the environment. Damanpour (1996, in Ling, 2010) viewed innovation as encompassing a range of types, including new products or services, new organizational members.

A review of the literature indicates that organizational innovation can be divided into two distinctive types:

1. *Technical and technological innovation,*
2. *Administrative innovation.*

However, Chuang (2005, in Ling, 2010) has further categorized technical or technological innovation into secondary dimension: *product innovation and process innovation*, while administrative innovation remains distinct from the other two. Since organizations adopt innovations continuously over time, it would be more accurate to depict innovations as comprising of multiple facets.

Product innovation also knows as product development, is a systematic work process, drawing upon existing knowledge gained from researches and practical experiences directed towards the production of new materials, products and devices, including prototypes (Hage – Hollingsworth, 2005, in Ling, 2010).

Process innovation is defined as developing a new or substantially improved production process through new equipment or reengineering of operational process. Generally, administrative innovation refers to performance derived from the changes in organizational structure and administrative process, reward and information system and it encompasses basic work activities within the organization that is directly related to management (Chimhanzi – Stewart, 2005, in Ling, 2010).

OECD Oslo Manual defines another two types of innovations that include a wide range of changes in the activities of companies: organizational innovation and marketing innovation.

Organizational innovation - innovations of this type represent the implementation of new or significant changes in corporate structure. (www.ef.umb.sk)

Marketing innovation is the introduction of new or significantly improved product design (packaging) or sales methods, to increase the attractiveness of products and services or to enter new markets. (www.ef.umb.sk)

1.2 The company growing through innovation

Many companies grow through innovation. As innovations become more radical, they may entail new, sometimes disruptive, technology (Christianson, 1997, in Mohrman, 2007) and may demand new business models to deliver new kinds of value to existing or new customers. Novel ideas are likely to emerge from individuals or teams on the periphery of the mainstream in an organization – often those most closely and recently linked to outside knowledge. Novel solutions require the combination of knowledge from multiple sources within and outside the organization.

For a company to compete and grow based on a steady of incremental and radical innovation, it must have an “ambidextrous” design (Tushman – O’Reilly, 1999, in Mohrman, 2007) – one that is able to manage its existing business for effective performance, while simultaneously managing continuous and sometimes radical innovative activities. This is a complex organization to design, because there is a continuous tendency to bring resources close to the revenue stream – often at the expense of the fledgling business – and a tendency to seek uniformity to achieve economies of scale.

Mohrman (2007) describes, that many companies, also grow through international expansion. Globalization decisions are closely connected to talent availability.

1.3 Innovations in tourism industry and example of innovative tourism company in Slovakia

Innovation in the tourism industry relies as much on co-operation and networks as in other service industries. Co-operation among policy makers and entrepreneurs is also one of the key factors for the constant growth of the tourism industry. While the business sector plays the main role in establishing networks, governments are responsible for the development of infrastructure that enables better co-operation and supports market networks. (www.oecd.org)

Tourism entrepreneurs have realized that innovation is becoming a key element to survive and compete in a dynamic and radically changing environment. As for policy decision makers, the aim is to encourage all partners (e.g. regions, municipalities and the business community) to co-operate more proactively. So far, it appears that co-operation in tourism is not sufficient, notably in small and medium enterprises. For governments, this means that an innovative tourism policy has to promote coherence and synergy. (www.oecd.org)

One of positive example of an innovative enterprise in the tourism industry area is AquaCity Poprad which offers spa and wellness treatments. This place is situated in the east part of Slovakia in the city Poprad and it offers more than wellness services, as well, it offers accommodation services, cuisine and another additional services.

What makes AquaCity so unique is that it uses freely available natural energy to heat and power its hotels, water park, spa, restaurant, bars, fitness and conference centers, saving money by using green energy, at the same time as conserving the environment. Guests can minimize their carbon footprint, while still enjoying the highest standards of service. (www.aquacityresort.com)

Summary

At the time of global economic crisis and high level of globalization, companies have to fight hard to survive in the market. Innovation and innovative approaches offer a solution to survive in a competitive environment. Innovation brings something new to the company, contributing to its development. Enterprises using innovations have a great chance to become market leaders and a broad range of clients.

The company has a choice of how innovative processes to decide. It can upgrade your product, process, but the company may decide also to organizations or marketing innovation.

Innovative approaches are needed in tourism. This sector may grow a profitable use of innovation. An example of an innovative enterprise of tourism in Slovakia is AquaCity Poprad.

* The article is part of the research GAMA/11/6.

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Selected Factors of Consumer Behaviour in Slovakia

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Abstract

The presented paper deals with selected factors of consumer behaviour in Slovakia. The aim of this paper is to present the current situation in the management of financial resources in Slovak households, the current situation in the area of expenditures and savings of Slovak consumers. The amount of expenditures and savings then also determines the consumer behaviour of the country's population. In this article we present the outcomes of mostly secondary sources, as well as partial outcomes of the realized primary research regarding management of financial resources in Slovak households in recent years.

Key words

Slovak consumer, Expenditures, Savings, Saving money, Spending

Introduction

As the consumer and his consumer behaviour are changing constantly, the issue of consumer and consumer behaviour is always up-to-date and any new knowledge in this area is always useful, even necessary; whether in terms of enrichment or updating, advancement of the existing theoretical knowledge and understanding, or in terms of an unavoidable need for practical and current information for the activities of business entities.

Consumer behaviour, which ultimately results in a certain purchase decision, is subject to different influences (Bačík, Fedorko, 2011). These are examined by several scientific disciplines, but also by various companies operating in consumer markets. This is evidenced by a number of studies carried out either by the firms themselves, or by companies dealing with market research.

In terms of the marketing theory, factors influencing consumer behaviour are divided into several groups. The theoretical basis is the model of consumer behaviour, in which they enter into the process of purchasing decisions and thus affect the final purchase decision. These are cultural, social, personal and psychological factors. In the presented paper we will address only some of the factors of consumer behaviour of Slovak consumers, in particular factors belonging to the group of personal factors. In addition to the above mentioned factors, the final purchase decision is affected also by the consumer's amount of income and its redistribution. From this perspective it is important to monitor for what items of expenditure the consumer spends the largest part of his income, whether he saves up any money, what amount of money he saves up, whether saving is regular or irregular, whether he has got or has not got any debts, what are his opinions on spending and saving, and finally, how much income will he have for consumption and how he will redistribute these funds for the purchase of individual products.

Tools for data collection

The aim of this paper is to present the current situation in the management of financial resources in Slovak households, the current situation in the area of consumption and savings of Slovak consumers. In the article we offer outcomes of a number of surveys carried out in Slovakia, eventually marginally in comparison with other European countries, mainly acquired from secondary sources and supplemented by partial outcomes of the realized primary survey, which we realized in 2012.

The sample of the primary research consisted of 131 respondents aged 18-62 years (mean age = 26.0, SD = 10.07), including 102 women and 29 men. The survey sample was selected on occasional choice. We used our prepared "Questionnaire identifying the profile of the consumer", in which we investigated the consumer behaviour of the respondents.

The results were processed in the statistical program SPSS 20. We used descriptive statistics, method of comparison and Pearson's correlation coefficient.

Results and discussion

In terms of examination of the Slovak consumer and factors of his consumer behaviour, it is advisable not only for theorists but also for business entities to monitor how the Slovak consumer redistributes his funds. Whether he saves money, how much income he saves, whether he lives in debt, and finally, how much of his income remains for consumption and how he spends these resources. In this section of the paper we present concrete outcomes from several secondary and primary sources regarding the issue in question.

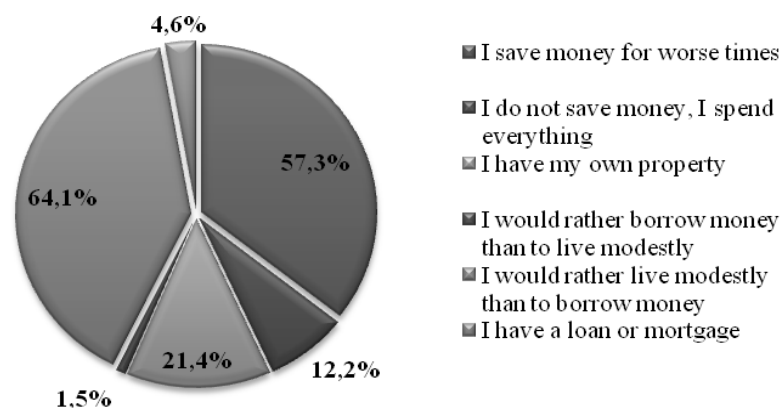
According to a survey carried out in 2011 by the agency Factum Invenio, more than two-thirds of the respondents are aware of their monthly budget and one third of Slovak households do not monitor their income, while 7% of households live in debt. The aim of the survey was to identify the financial habits of Slovak households in the area of financial planning, the ratio between income and expenditure, savings and access to credit.

The research also showed that:

- the lower the income and education of the respondent, the less he was aware of his financial resources (28%)
- 7% of Slovak households are in debt, 60% of the respondents still have some money left from their monthly income after paying all of their expenses and 25% of the households manage a balanced budget,
- 75% of Slovaks save money, although irregularly, 31% of Slovak households save money regularly. These are especially economically active people with higher education and higher incomes. Approximately 21% of people - mostly with lower education and lower incomes - do not save up.
- the largest part of expenditures is spent on necessary expenses related to housing (rent, water, gas, electricity, eventually mortgage or loan, especially in case of younger age groups).
- the majority of Slovaks does not spend money for hobbies, alcohol, cigarettes, going to cafes or restaurants, or they spend not more than 5% of their income. People under 44 years, with higher income and education, living in western Slovakia spend the most money for hobbies. For their leisure time activities they put aside up to 20% of their income.
- Slovaks are the least going into debt due to holiday, entertainment and gifts. A part of Slovaks are willing to fall into debt due to reconstruction or buying a flat, eventually because of medical treatment. Up to one fifth reject loans.

If we wanted to compare some of the presented outputs with partial outputs of the primary survey conducted in 2012 (sample of 131 respondents), we would observe similar outcomes (Figure 1). The majority of respondents reported that they save money for worse times (57.3%) and 64.10% of the respondents would rather live modestly than borrow money.

Figure 1 Management of finances by the Slovak consumer



Source: own survey

According to the results of another international survey by TNS NIPO (2012), Slovaks are less satisfied with the amount of their savings in comparison with other European countries, despite of the fact that the statistics recorded an increase in savings of the Slovak households during the last period. The most satisfied with the height of their savings are young men, employed people and students. Unlike other European countries, the most negatively affected by the current economic situation are Slovaks in older age.

Similarly, according to the international survey of the ING Bank (2012), Slovaks perceive their savings more negatively than shown in the statistics. According to the National Bank of Slovakia, in 2009 the Slovak population had approximately 38.1 billion Euros on deposits, last year they had savings in the amount of nearly 38.6 billion Euros. The current economic situation affects more negatively people in older age, seniors (unlike in other European countries), women and unemployed people. The highest level of satisfaction with the amount of savings was expressed by men, students and younger respondents (36% of respondents aged 25-34 years), which is in accordance with the above mentioned outcomes of the survey by the company TNS NIPO (2012).

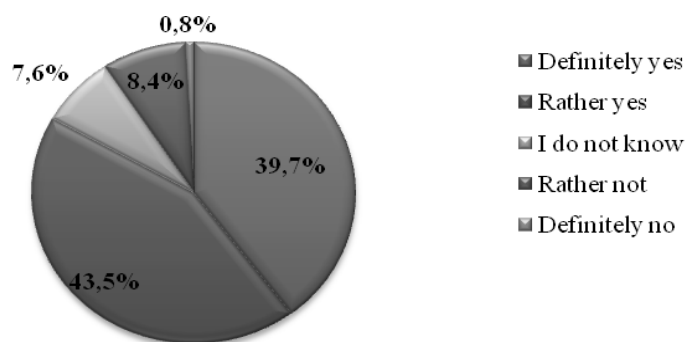
Creating a financial reserve for future needs is considered necessary by 39% of young people in Slovakia aged 15-25 years. Up to 31% save finances for travelling and getting to know foreign countries, 30% save up for education, including courses, and up to 29% save money for branded clothes, footwear and electronics. Own housing and its equipment is the motivation for saving for 26% of respondents (online survey GfK Young, Monitor from the year 2009).

According to TNS NIPO (2012), only 11% of Slovaks do not save finances at all. But they prefer current accounts to investing into shares funds, bearer debentures or purchase of shares. Also up to 43% of households save at home in form of cash, while up to 26% would prefer over a third of their savings in this form, which defrauds them of the possibility of valorisation of their funds. Similar results were brought by the international survey realized by the ING Bank (2012). Up to 78% of Slovaks save on current accounts, only 12% invest in shares funds, bearer debentures or shares.

We believe that this fact associated with a feeling of distrust towards these forms of savings results from the typical conservatism of the Slovak society manifested in several aspects and also from uncertainty in connection with the economic situation in the country and the world economic crisis. This fact of course assumes a negative impact on consumption, as consumers are likely to be and probably will be more careful in spending on consumption and will try to save more. According to Múčka (2009), Slovak households consumed more than one percent less in the first quarter of the year, which again confirms the above findings.

The impact of the global financial crisis on purchasing behaviour (Rovňák, Vravec, 2012) from the perspective of the respondents was confirmed also in the above mentioned primary survey. The outputs are shown in Figure 2.

Figure 2 The impact of the global financial crisis on purchasing behaviour



Source: own survey

The above mentioned is also related to the fact that 65% of Slovaks aged 45-54 years prefer credibility and stability of financial institutions when choosing savings products. In case of the younger age group the situation is different. For 8% of Slovaks aged 25-34 years is the interest rate the key factor in choosing a savings product. According to these results, the younger generation is willing to accept a certain level of risk at a higher interest rate, while the older generation is more careful and prefers greater certainty in connection with finances.

In the primary survey we also investigated the relationship between the age and consumer behaviour of the respondents we interviewed. A statistically significant relation was observed with help of the Pearson's correlation coefficients in Table 1.

Table 1 The relationship between age and consumer behaviour of respondents

	I have my own property	I have a loan, mortgage	I spend money on the household	I spend money for interests and hobbies	I spend money on work and career	I spend the most money on food and soft drinks
AGE	,670**	,242**	,505**	-,387**	,413**	,505**

Source: own survey

The primary research showed that with increasing age of the respondents they acquire their own property; they own a house, apartment or car. Increasing age is also related to an increase in loan or mortgage. Regarding the question of spending financial resources, older respondents spend finances mainly on household and activities related to their work and career. In contrast, younger respondents prefer their personal interests, hobbies and leisure activities. The relationship between age and spending money was recorded also in the type of product on which they spend the most money per month. Older respondents spend money mostly on food and soft drinks. The motive for buying in case of older respondents (303 **) is quality, in case of younger respondents it is the brand (-,218 *).

When speaking about the motives of saving, the most important reason for making savings for Slovaks (65%), but also for other Europeans, is creating a financial reserve for unexpected expenses. The difference between the Slovak saver and savers in another European country is in the motives that are on the second place. In case of Slovak households it is paying regular expenses, for other Europeans it is buying a holiday or an expensive product. Similar results of investigating the motives of saving were recorded also in the international survey conducted by the ING Bank in 2012.

While in other countries the gross domestic product is growing at a grater rate compared to prices in the shops, in Slovakia the opposite is true. "The prices in Slovakia are growing at an enormous rate compared to the standard of living. The country reaches 62% of the German gross domestic product, but more than 70% of the German price level. Slovakia has yet a record-high unemployment and lower average monthly gross wage then in the Czech Republic. For this reason, the Slovak consumers will remain careful and household consumption will rather stagnate (Prokop, 2012)."

According to another survey conducted by IMAS (2011), which only confirms the above facts, saving is currently more important for Slovaks than in the past. More than half of the respondents save up a certain amount of money regularly. They are also interested in irregular saving. Almost three quarters of the respondents said that they save immediately when they have some money left.

According to Valachyová (2012) the proportion of savings from the disposable income in Slovakia has been rising since 2008. Despite the crisis Slovaks have been saving a large part of their income. While in mid-2008 they saved less than 4% of their disposable income, in the middle of this year it was 6.5%. After counting in the saving in pension pillars, in the middle of this year the amount of savings was 8.8%. Also according to this survey, more than a third of the respondents reported that they save money at home in cash.

The most important motive for saving is to be financially secure in a case of need. This motive was indicated by 90% of the respondents. Approximately 70% of Slovaks save money for bigger purchases or for the future. More than half of the respondents save for the retirement age, eventually for the possibility to retire.

Looking ahead, more than half of the Slovaks assumes to be saving the same amount of money like today. More than 25% of respondents plan to save less, which is related to the expected increase in living costs, but the same amount of income. As a reason the respondents also reported inflation and uncertain economic situation. The decline in consumption is also shown in the following Table 2. It represents expenditure items of Slovak households in which consumption decreased in 2009 compared to 2008 and supplements information on annual variation in spending.

Table 2 Expenditure of Slovak households on individual items of expenditure and the annual variation in spending

Expenditure items	expenditure per month (in Euro)	annual variation
food, soft drinks	65,71	-7,80%
housing, water, energy	62,25	-1,90%
transport	23,39	-7,40%
recreation, culture	20,63	-10,20%
post, telecommunications	16,88	3%
clothing, footwear	16,8	-12%
hotels, cafes, restaurants	15,64	-4,80%
furniture, home maintenance	13,7	-11,80%
health service	8,43	-3%
alcohol, tobacco	8,09	-2,20%
education	1,45	-4,60%

Source: ŠÚ SR SLOVSTAT, 2009

According to Table 2, Slovak consumers reduced their consumption of all the items in 2009 compared to 2008. The most pronounced decrease in consumption was detected in the over-year decline in spending on the items clothing, shoes, furniture and maintenance of the house and also expenditure on recreation and culture.

Summary

The presented survey outcomes dealing with financial management in Slovak households confirm an increase in savings of Slovak consumers and a decrease in consumption expenditures. This is mainly related to concerns of the Slovak consumers arising from the global economic crisis, which was confirmed in the primary survey, and from economic insecurity in the country. It may be presumed that this negative trend will continue in near future. The high unemployment rate, relatively low incomes compared to other European countries, lower living standards in different regions strengthen this fact even more and the consumer will be more careful about his spending. If there was a significant decrease in consumption of the population in the country, it could have a significantly negative impact on the Slovak economy and lead to its decline. Threatened could be especially some of the service sectors and manufacture for the domestic market, which would again increase unemployment in the country, etc. This problem is now affecting not only Slovakia but also other countries and not only Slovak economists but economists all over the world are dealing with its solution.

*GAMA/11/5 Identification of the consumer profile in a selected region of the Slovak Republic

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Business Angel – the Innovative Method of MSP Financing and the Possibility to Be Misrepresented for its Aboriginal Owner Also

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Abstract

The article deals with the continuing research of innovative forms of financing in small and middle size companies segment. It describes the situations when the usage the Venture capital is suitable and when it is not. Also it describes the barriers of the usage this capital in bigger volume, especially the barriers which stop the cooperation with the business angels. It focuses to the hidden barrier of the business angel cooperation, concretely the possibility to be misrepresented for its aboriginal owner. It shows the trends of the usage of the venture capital in SR and in the SVE countries and it compares their results with the usage of it in high developed economy countries.

Key words

Venture capital, Private equity, Fond of Venture Capital, pre-seed financing, seed financing, start-up financing, expansion financing, replacement capital financing, Business Angel.

The Introduction In To Theme – The Problem Definition

The theme goal is to describe the results of the continuing research of the innovative form of financing in small and middle size companies for purpose of the business angel topic as the innovative form of target MSP financing and the possibility to be misrepresented for its aboriginal owner also.

The problematic of business activity financing is still expanding. The businessmen demand for the available finances for the development and adhesion their business activities increase and increase the demand for the access to them. It not enough to have easy access to finance sources in globalized competitive market, it is necessary to know how effectively use these sources.

There are more than 23 million small and middle sized companies in European Union, which are generated almost 57% added value and they create about 90 million local job opportunities. They create more than 99,8% of all companies in that area. They are a centre core of European Union economy and a key part of European industry. They are the main source of business skills and innovations, they contribute to industrial and social cohesion of European countries, they can flexibly adapt their activities portfolio up to the changed market demands. Their ability to create, develop, apply or adapt the new technologies is unique. The strategic interest of small and middle sized companies is recognizable mainly in time of economy amplitudes (7).

The financing of small and middle size companies has its own specifications. These companies have often market inadequacies and handicap emplacement in comparison with big companies, which can use advantages implicit in concentration of the economic processes. The small and middle sized companies are often fighting with the financing problems. They create the heterogeneous group of many different characteristics on the other side. Their diversity has different financing needs also and the financing opportunities referring to this (9).

The requirement of flexible, adequate and efficient finances verifies in some ways the venture capital and private equity.

The venture capital and the private equity is priority connected with redbrick companies financing with high innovative and venture potential, outgoing form the specific knowledge of their owners or key employers (11, 14). We shift to this group a “Business Angel” capital enters also.

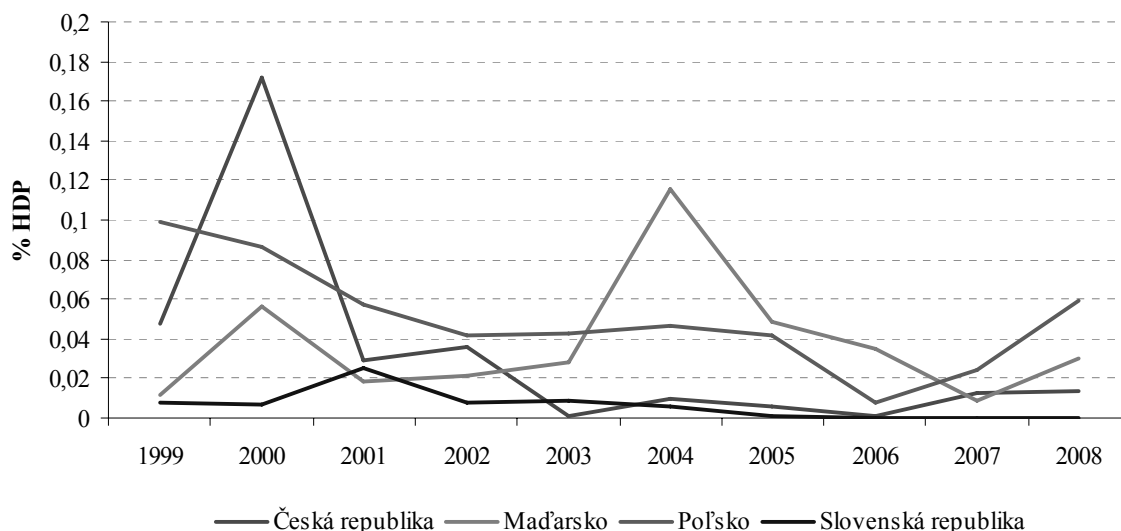
Business Angel – The Innovative Method of MSP Financing And The Possibility To Be Misrepresented For Its Aboriginal Owner Also

“The Business Angels” are usually important personal entities which would like to invest part of their abundant finances in to the new business activities. They are mostly high motivated entrepreneurs with large – scale experiences with their own companies management.

They enter by their capital into the MSPs by the same way like the institutional investors do. They take part in its management and they set its strategy. The strategy pursuance they realize by MSP’s business plan pursuance in practice.

The venture capital and the private equity enter, the same way like the business angel capital enter does, it can be realized in its different evolution fazes. The statistics data the share of the country GDP of venture capital and private equity in the MSP's financing in their individual evolution fazes in V4 conditions, ergo in Slovakia (Slovenská republika), Poland (Poľsko), Czech Republic (Česká republika) and in Hungary (Maďarsko), illustrates the graph 1.

Graph 1 The share of the country GDP (HDP) of venture capital and private equity faze MSP financing (GDP (HDP) v current prices)



Source: The adaptation under The European Innovation Scoreboard 2008 data [17]

The business angel's capital enter into the MSP in Slovak conditions meets the barriers which stop the begging of such cooperation and evolution of such innovating prospectus financing.

The most of these barriers have been described by the personhoods working in the venture capital and in the private equity industry and we take such of them which are concerning almost on the business angels:

- the apprehension of company loss control, alias the sale of it to the strategic business partner,
- unrealistic entrepreneur's expectations as far as the European Union grand
- company's management unreadiness for the cooperation with potential investor
- the apprehension the entrepreneur of the next business partner enter inside the company (the investor) and of the sharing the decision – making and the company profits (11)

As far as the cooperation agreement between the target MSP owner and the business angel, the both business sides are connected with motive of their cooperation and it is the common prospectus realization and they have an ambition to realize it by entering the actives from one and from another side. The result of this application in practice is the profit which it is divided after the prospectus realization with the both sides accordance the agreement key which is based in the cooperation agreement in the beginning of the process.

As far as the business angel's capital enter, we say about agreed form of capital investment his abundant finances when he is prepared to undergo relatively high risk but he also is prepared to receive relatively high evaluation of his investment, incomparably higher than the traditional loan financing forms from the banks offers. This undergo risk of possible invested capital loss tries the business angel to eliminate by the control and influence the management process of the target MSP. It goes mostly by himself active enter or by his personal adding in to the target MSP's management.

The most save position for the business angel is the property sharing in the target MSP after his capital entering when he controls the two thirds of it, from the business – law point of view. The less save his position is when he controls more than a half of its property. The minority share of the property stands in aboriginal owner hands. It is genuine that this agreement the business angel and the aboriginal MSP owner make because the target MSP is situated in the position when it has no more own sources to continue its

activities and the institutions deal with the traditional money loan methods, like banks, they are not agreeable do the undergoing of such a risk without their active taking part in target MSP activities. But this is not their subject they are handling with.

Here becomes the business angel role. He choose such capital sharing in company property, if he is interesting in the target MSP prospectus, so that he controls the business plan filling. He capital enters into target MSP, set up the business plan strategy to achieve the positive results according the agreement with its aboriginal owner and he actively takes part in the company management. The business plan strategy is getting to top and the business angel raise the profit from his invested venture capital enter.

We return back to the motives which are motivated the business angel and aboriginal MSP's owner to make such the agreement and why they make that agreement. He has enough abundant capital to realize the idea in his own MSP. He can buy new technologies and establish his new MSP or he can buy the aboriginal MSP and he can make the acquisition of it. In spite of it he decides to realize the capital enter just about a part of its property.

The business angel needs the standard level personal occupation in the MSP to realize the interesting prospectus and, ideally, he needs the MSP with some market share position in target segment which he can get it with his capital entering in to the target MSP. He get all of it with the aboriginal MSP's owner cooperation. Plumbless it is the fact about the target MSP's assets valuation for the business angel offer of his capital enter. The price specified for the MSP's property share purchasing in time when the aboriginal owner is situated in the position to take the conditions of the business angel or to end the MSP's activity it would be probably much lower than in case the target MSP would have enough finances. In that situation the costs of the business angel capital enter would be much higher, maybe it would be impossible for the business capital enter. The next advantage of such cooperation is that the business angel pays for the good personal occupied target MSP only part of its value, not the whole one, according the elevation of his capital enter. But he gets the whole controllership upon the target MSP. The business angel buys the part of the target MSP, he controls and he actively manages the whole target MSP with the aboriginal owner cooperation and without any constrains.

It seems that the cooperation with the business angel is bilaterally advantageous. The aboriginal owner of the target MSP is getting the finance sources for his prospectus, which he would had to stop in other case, and the business angel is getting the control upon the standard personal and expertly occupied MSP eventually with the own market share.

The venture capital and the private equity literature (9, 10) writes that the business angel capital enter has embodied the exit in the agreement between the aboriginal target MSP's owner and the business angel from the beginning – it means the way how the business angel role in the MSP will finish and the business angel leave the target MSP in the future.

The aboriginal target MSP's owner can continue with his prospectus with the business angel cooperation, the same prospectus he began to realize independently. Nay, he get the business angel's advantageous besides his capital enter, which he is helpful to give him also.

The aboriginal owner of target MSP have been situated in the position when he had no more possibilities to chose just to cooperate with the business angel or to close the business activity, as we have been mentioned in the beginning of the article. Also, the business angel have been situated in the position when he make acquisition of the whole company and he start to solve its personal occupation and start to get its market position with it or he makes the agreement with the target MSP's aboriginal owner and he get averaged personally occupied eventually with some market position and history and he pay for it agreed part of its cost of acquisition by his capital enter.

We could allege that the business angel is more skilled and more successful and according this he is not co-equal partner in business to the aboriginal target MSP owner and with the possibility to command the target and before his MSP, as we compare the power of the aboriginal owner with the power of the business angel who is represented with the accumulated sum of his capital, with the risk's allocation by the diversification of his abundant capital in to the investments, with the power of the connection base of his business partners and social connections and with the ability to analyze and to evaluate the market information and to bring the innovative solutions of the operative and the strategic purposes of the business activities.

The progress and the trend of the target MSP is fully under control of the business angel in spite of the common planed business strategy and its modification is not up to the strong-hold of the agreement between the aboriginal MSP's owner and the business angel but it is up to the strong-hold of the business angel's holding.

Conclusion

It can come into being the situation in the target MSP's evolution the aboriginal target MSP owner would not agreed and he would not make the cooperation agreement with the business angel if we abstract from the business purposes and aims mentioned in the agreement between the aboriginal owner and the business angel and we stay only with the statement that the aboriginal MSP's owner has brought the original idea with its certain stadium of the evolution with some qualified and in-tuned personally occupied company team with the market share position which it absorbed the business angel's attention who disposes with professional team which is able to analyze the market information and to bring the effective solutions for the set company strategy and he is the successful businessman the high quality connections in the business and in the society as well and we add to this some kind of aboriginal MSP's owner naivety and belief to his aboriginal business idea which it was the base of the target MSP's prospectus and we accept that it could be not presented all the business angel's plans by him, in the cooperation agreement in the beginning, to the aboriginal MSP's owner who has no more under control the target MSP's future evolution after the business angel capital enter.

Finally, it can be the position where the aboriginal MSP's owner can evaluate it like his misrepresentation and it can brake better or the faster usage of this innovative method of financing in MSP company segment.

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National and Country Branding and Tools of Measuring – Nation Brand Index and Country Brand Index

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Abstract

Nations become far more cognizant of the value of their brand as an asset. Understanding valuation helps countries better understand the investments they make in their image. It's nothing new for nations to care about image, but the past ten years represent a turning point in the methods states use to manage their reputations. New metrics (Nation Brands Index or Country Brand Index) attempt to quantify the strength of national brands, and the field has seen a veritable explosion of literature on which branding techniques work and which don't. This article talks about meaning "nation branding", about measuring the strength of a nation's brand, how to improve the brand ratings and what to rise of nation branding mean for foreign policy.

Key words

National branding, Country branding, Nation Brand Index, Country Brand Index

Introduction

It's nothing new for nations to care about image, but the past 15 years represent a turning point in the methods states use to manage their reputations. In many cases, governments now hire public relations firms and apply brand management theory—formerly the domain of corporate communications departments and business-school seminars. New metrics attempt to quantify the strength of national brands, and the field has seen a veritable explosion of literature on which branding techniques work and which don't.

Nation branding is a field of theory and practice which aims to measure, build and manage the reputation of countries (closely related to place branding). Some approaches applied, such as an increasing importance on the symbolic value of products, have led countries to emphasise their distinctive characteristics. The branding and image of a nation-state „and the successful transference of this image to its exports - is just as important as what they actually produce and sell." (True, 2006, p. 74) This is also referred to as country-of-origin effect. Nation branding is still a developing field in which scholars continue their search for a unified theoretical framework. Many governments have resource dedicated to Nation Branding. Their aim is to improve their country's standing, as the image and reputation of a nation can dramatically influence its success in attracting tourism receipts and investment capital; in exports; in attracting a talented and creative workforce and in its cultural and political influence in the world.

National Branding and Country Branding

A nation generally refers to a large group of people of the same race and language (Longman, 1995) while a country means an area of land occupied by a nation. The concept of nation brand or country equity refers to the nation as a whole; it describes the country's intangible assets without any explicit links with a product. Product-country image is a subset of the country image (Kleppe, 2002). Other terms such as national identity and cultural stereotypes have little direct implication in branding or marketing because they have a clear focus on the culture and people of a nation.

There is no single definition about nation branding. To some it is simply another term for country of origin effect or place marketing (Kotler, 2002). To others it refers to a consistent and all-embracing national brand strategy which determines the most realistic, most competitive and most compelling strategic vision for the country, and ensures that this vision is supported, reinforced, and enriched by every act of communication between the country and the rest of the world (Anholt, 1998).

Dinnie (2008) has stated that country branding is an exciting and complex but controversial phenomenon; it is exciting because there is currently little theory but a significant amount of real-world activity. It is complex because it encompasses multiple levels, dimensions, and disciplines beyond conventional branding. And, as a highly politicized activity that generates conflicting viewpoints and opinions, it can be controversial. Country brand can also be influenced in the short- or long term by major events.

Fetscherin (2009, p. 467-468) offer the following definition: „a country brand belongs to the public domain; it is complex and includes multiple levels, components, and disciplines. It entails the collective involvement of the many stakeholders it must appeal to. It concerns a country's whole image, covering political, economic, social, environmental, historical, and cultural aspects. The main objectives of country branding are to stimulate exports, attract tourism, investments, and immigration, and create positive international perceptions and attitudes.“

Measuring of National Brand and Country Brand

We can describe the two most high profile existing measures which assess a national/country brand both come from private sources rather than the academic literature: the Anholt GfK Roper nation brand index (NBI) and the country brand index from FutureBrand consultancy.

Although these indexes are useful and widely used for many country branding projects worldwide, they are limited by their use of proprietary methodologies in terms of specific questions asked as well as aggregation and statistical method used. Moreover they are based on subjective perception survey data.

Nation Brand Index

Since 1996, when Simon Anholt coined the term 'nation branding' and gave birth to this important new field, he has been working with governments to help them plan the policies, strategies, investments and innovations which lead their country towards an improved profile and reputation. Anholt developed the Nation Brands Index (NBI) in 2005 as a way to measure the image and reputation of the world's nations, and to track their profiles as they rise or fall.

Now, through a partnership with this renowned government advisor and author, GfK Roper Public Affairs & Media provides an expanded Nation Brands Index, the only analytical ranking of the world's nation brands.

This unique collaboration combines the heritage and authority of GfK Roper's three-quarters of a century of experience in public affairs research with the expertise of Simon Anholt to offer a unique barometer of global opinion. The Anholt-GfK Roper Nation Brands Index is a cost-effective and comprehensive system for measuring and managing national reputation around the world. This powerful tool will help you to understand, measure and, ultimately, build a strong national image and identity for the government, organizations, regions, and businesses you represent.

The Anholt-GfK Roper Nation Brands Index measures the power and quality of each country's 'brand image' by combining the following six dimensions:

- Exports – Determines the public's image of products and services from each country and the extent to which consumers proactively seek or avoid products from each country-of-origin.
- Governance – Measures public opinion regarding the level of national government competency and fairness and describes individuals' beliefs about each country's government, as well as its perceived commitment to global issues such as democracy, justice, poverty and the environment.
- Culture and Heritage – Reveals global perceptions of each nation's heritage and appreciation for its contemporary culture, including film, music, art, sport and literature.
- People – Measures the population's reputation for competence, education, openness and friendliness and other qualities, as well as perceived levels of potential hostility and discrimination.
- Tourism – Captures the level of interest in visiting a country and the draw of natural and man-made tourist attractions.
- Investment and Immigration – Determines the power to attract people to live, work or study in each country and reveals how people perceive a country's economic and social situation. (http://www.gfkamerica.com/practice_areas/roper_pam/nbi_index/index.en.html)

Picture: Nation Brand Hexagon



Source: http://www.gfkamerica.com/practice_areas/roper_pam/nbi_index/index.en.html

The NBI gauges the perceptions of citizens in developed and developing countries that play important and diverse roles in shaping global foreign policy as well as the flow of business, cultural, and tourism activities around the world. Nations (50 countries) measured in each wave of the survey include:

- North America: Canada, US
- Western Europe: Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, the Netherlands, Norway, Scotland, Spain, Sweden, Switzerland, UK
- Central/Eastern Europe: Czech Republic, Estonia, Hungary, Lithuania, Poland, Romania, Russia, Turkey
- Asia Pacific: Australia, China, India, Indonesia, Japan, Malaysia, New Zealand, Singapore, South Korea, Taiwan, Thailand
- Latin America: Argentina, Brazil, Chile, Cuba, Ecuador, Mexico, Peru
- Middle East/Africa: Egypt, Iran, Nigeria, Saudi Arabia, South Africa, United Arab Emirates

Table 1 Anholt-GfK Roper Nation Brands Index in years 2010 and 2011

Anholt-GfK Roper Nation Brands IndexSM		
Overall Brand Ranking		
(Top 10 of 50 Nations)		
	2011	2010
1	United States	United States
2	Germany	Germany
3	United Kingdom	France
4	France	United Kingdom
5	Japan	Japan
6	Canada	Canada
7	Italy	Italy
8	Australia	Switzerland
9	Switzerland	Australia
10	Sweden	Sweden

Source: 2011 and 2010 Anholt-GfK Roper Nation Brands Index

Country Brand Index

Country Brand Index measures value system, quality of life, good for business, heritage and culture and tourism. A strong country brand is more than the sum of its attributes: in total, it must make people's lives better. From progressive politics to a sense of openness and freedom of speech, a country that is geared around its people and their needs will always score highly. From this comes a strong emotional connection with a ripple effect, encouraging others around the world to visit, do business, learn and build lives in a place.

Like any brand, a country brand must be consistent across many touchpoints, from advertising and public relations to political representatives, cultural ambassadors, tourists, companies and indigenous products. These features, in addition to a strong point of view, role on the world stage and concerted effort to drive progress, tourism, immigration, exchange and partnership make the difference between nation states and genuine country brands.

Table 2 List of Country Brand Index in year 2011

1. CA Canada	0	30. PT Portugal	▼ 1	59. VN Vietnam	▲ 4	88. MZ Mozambique	▲ 7
2. CH Switzerland	▲ 3	31. BR Brazil	▲ 10	60. HU Hungary	▲ 6	89. CO Colombia	▼ 4
3. NZ New Zealand	0	32. AR Argentina	▲ 1	61. NP Nepal	▼ 2	90. HN Honduras	N/A
4. JP Japan	▲ 2	33. BE Belgium	▲ 1	62. MA Morocco	▼ 2	91. GH Ghana	▼ 13
5. AU Australia	▼ 3	34. CL Chile	▲ 6	63. LB Lebanon	▲ 8	92. SY Syria	▼ 5
6. US United States	▼ 2	35. ZA South Africa	▼ 4	64. JM Jamaica	▼ 2	93. SD Sudan	▲ 8
7. SE Sweden	▲ 3	36. BB Barbados	▼ 4	65. CN China	▼ 9	94. BH Bahrain	▼ 14
8. FI Finland	0	37. NA Namibia	▼ 1	66. EE Estonia	▲ 23	95. ET Ethiopia	▲ 1
9. FR France	▼ 2	38. CZ Czech Republic	▲ 5	67. PA Panama	0	96. BO Bolivia	N/A
10. IT Italy	▲ 2	39. LC St. Lucia	▼ 4	68. TZ Tanzania	▲ 5	97. RS Serbia	▼ 13
11. DE Germany	0	40. HR Croatia	▲ 9	69. SA Saudi Arabia	0	98. TN Tunisia	▼ 15
12. NO Norway	▲ 1	41. BS Bahamas	▼ 4	70. BG Bulgaria	▲ 6	99. UG Uganda	▼ 8
13. GB United Kingdom	▼ 4	42. KR South Korea	▲ 2	71. JO Jordan	▲ 4	100. NI Nicaragua	▼ 2
14. ES Spain	0	43. MY Malaysia	▼ 1	72. QA Qatar	▼ 2	101. RO Romania	▼ 9
15. DK Denmark	▲ 4	44. PE Peru	▲ 3	73. AL Albania	▼ 12	102. RW Rwanda	▼ 9
16. SG Singapore	▼ 1	45. FJ Fiji	▼ 6	74. SK Slovakia	▲ 5	103. CG Congo	▲ 4
17. AT Austria	▲ 3	46. CY Cyprus	▼ 1	75. EC Ecuador	▼ 1	104. SN Senegal	▼ 1
18. MV Maldives	▼ 2	47. MX Mexico	▲ 1	76. ID Indonesia	▼ 4	105. UA Ukraine	▼ 6
19. IS Iceland	▲ 5	48. TR Turkey	▲ 7	77. KE Kenya	▼ 9	106. PY Paraguay	N/A
20. IE Ireland	▼ 3	49. BZ Belize	▼ 3	78. PH Philippines	▼ 13	107. BD Bangladesh	▼ 5
21. BM Bermuda	▼ 3	50. UY Uruguay	▲ 3	79. PL Poland	▲ 3	108. NG Nigeria	▼ 2
22. MU Mauritius	▼ 1	51. MT Malta	▲ 13	80. LA Laos	▲ 8	109. SV El Salvador	▼ 4
23. NL Netherlands	▲ 2	52. SI Slovenia	▲ 2	81. GT Guatemala	▲ 5	110. LY Libya	▼ 6
24. CR Costa Rica	▲ 3	53. BW Botswana	▼ 2	82. RU Russia	▼ 1	111. IR Iran	▼ 2
25. AE United Arab Emirates	▲ 3	54. TT Trinidad & Tobago	▼ 2	83. KH Cambodia	▲ 7	112. ZW Zimbabwe	▼ 2
26. TH Thailand	0	55. DO Dominican Republic	▼ 17	84. VE Venezuela	▼ 7	113. PK Pakistan	▼ 5
27. GR Greece	▼ 5	56. CU Cuba	▼ 6	85. DZ Algeria	▲ 15		
28. IL Israel	▲ 2	57. EG Egypt	▲ 1	86. SL Sierra Leone	▲ 8		
29. IN India	▼ 6	58. OM Oman	▼ 1	87. CM Cameroon	▲ 10		

Source: http://www.futurebrand.com/wpcontent/uploads/2011/11/2011_2012_FB_CBI_ENG.pdf

The CBI is not a predictive tool, but a benchmark for success and an indicator of what combination of elements effectively support strong country brands. According document The Futurebrand 2011-2012 Country Brand Index will be in 2012 for growth in several nations and regions following:

- The United Kingdom should look to leverage the London Olympics to help its overall score.
- Presidential elections in the United States will undoubtedly impact political confidence and create new opportunities for media coverage.
- The European Football Cup in Poland and Ukraine should offer a unique chance for both nations to highlight their respective cultures, histories and tourism appeal.
- The nations of the Middle East and North Africa that have recently changed their governments and harnessed the power of their citizenry may now have the challenge of transferring that energy and openness into investment and tourism.
- Asia Pacific will continue to grow regionally as infrastructure of travel and tourism expands to meet increased regional demand.
- Similarly, Latin America will benefit from developments in infrastructure and inter-regional tourism, signaling growth and popularity.
- In Europe the challenges of the economic crisis will continue to influence confidence and appeal for business and consumers. In parallel, the political infrastructure and values of the European Community will be tested across a number of nations that may see declining brand strength scores in the index if they fail to respond to new challenges.

http://www.futurebrand.com/wpcontent/uploads/2011/11/2011_2012_FB_CBI_ENG.pdf

The NBI and CBI indexes use different approaches, methodologies, and data to look at the same phenomena. The NBI measures the perception of people about a country while the newly developed CBI measures how the country performs. Each has its strengths and weaknesses and one should probably consider both indexes for accurate insight into a country's brand. Countries could then attempt to strengthen the country brand by taking appropriate actions. Despite of these different key factors from indexes we can compare the final results of 10 top countries in the following table.

Table 3 10 top countries - comparison of NBI and CBI in year 2011

	Nation Brand Index in year 2011	Country Brand Index in year 2011
1.	United States	Canada
2.	Germany	Switzerland
3.	United Kingdom	New Zealand
4.	France	Japan
5.	Japan	Australia
6.	Canada	United States
7.	Italy	Sweden
8.	Australia	Finland
9.	Switzerland	France
10.	Sweden	Italy

Source: www.futurebrand.com , Anholt-GfK Roper Nation Brands Index

Summary

In any case we can agree with Fetscherin (2009) that combining both indexes might help countries assess their country brand, how people perceive it, and how well it performs in terms of exports, tourism, investment, and immigration. A combined index might help identify any perception-actuality gap. A country's effort to build and manage its brand is framed by the behavior of its domestic stakeholders and factors such as trade promotion, industry associations, and national policies as well as the behavior of indigenous stakeholders when dealing with the outside world. If a country wants to modify its country brand, it must change what it does and what it makes, and how it performs.

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Spa Industry in the Conditions of Eastern Slovakia

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Abstract

The spa industry has shown us robust growth in sales volume and in the number of facilities. This growth is driven by baby-boomers who want a place where they can get spa treatments that improve their physical and mental well-being, and which offers rest, relaxation, exercise and pampering.

Spas are providing a myriad of opportunities for improving the mind and body. Despite the growth currently taking place in the spa industry, there are still challenges to consider.

The main aim of the article is to describe the present situation of spa industry in conditions of Eastern Slovakia - their marketing strategies, marketing tools and best practices.

Key words

SPA tourism, wellness, balneo-tourism, SPA industry

Introduction

Spa tourism is one of the oldest types of tourism developed since antiquity, which evolved continuously and developed complex and various forms throughout different historical periods under the influence of political and economic systems, on the one hand, and of changes in the social options and tourists' interests regarding this type of tourism, on the other hand. As a constantly important part of tourism activity, spa tourism gained in time new variables, determined by the dynamic of leisure industry and by the evolution of consumers' behaviour paradigm (Erdeli, Dinca, Gheorghilas, Surugiu, 2011).

According to Georgiev and Vasileva (2010) fast developing processes of segmentation and fragmentation have resulted in establishment of separate categories and subcategories of health tourism such as SPA, Wellness and Balneo-oriented tourism. Their wide popularization across the world and customer satisfaction is a precondition for their differentiation as independent industries going beyond the scope of tourism.

Some authors consider the idea that SPA definition originates from the Latin acronym (Sanus Per Aqua that is Health through water). According to other sources, SPA is the name of a town in Belgium, which became popular during Roman times for its baths. The definition, given by the International SPA Association (2004, p.1) claims that SPA is an „*entity devoted to enhance overall wellbeing through a variety of professional services that encourage the renewal of mind, body and spirit*”.

According to Mueller and Kaufmann (2001) the SPA experience contributes to a “wellness” feeling. Both authors think that it constitutes a „*state of health featuring the harmony of body, mind and spirit, with self responsibility, physical fitness/beauty care, healthy nutrition/diet, relaxation/meditation, mental activity/education, and environmental sensitivity/social contacts as fundamental elements*” of this type of experience. Definitions about SPA content are given by professional SPA associations around the world.

According to Smith and Puczko (2008, p.6) Spa tourism is type of tourism, that „*focused on the effect of relaxation and curative influence on the human body, achieved by the means of water-based procedures, such as mineral waters, thermal pools, vapor-baths and saunas. The emphasis is placed upon the healing properties, leading to recovery and renewal of the body.*”

European Spas Association (ESPA, <http://www.espa-ehv.eu/>) describes meaning of SPA tourism as „*the essential framework of the spa industry is based mainly on the use of natural resources (including a healthy climate) with an important contribution from medical care and a comprehensive approach to therapeutic stays*”.

It is generally agreed, in the scientific literature, that the existence of health and spa resorts is at least „*in part related to the availability of suitable natural resources including mineral springs or attractive amenity landscapes or climate*” (Hudson, 2003).

The **Wellness** concept is also a subject of lots of interpretations and various understandings.

According to Mayers, Sweeny and Witmer (2005, p. XXX, cited by Smith and Kelly) wellness is a „*way of life oriented toward optimal health and well-being in which the body, mind and spirit are integrated by the individual to live more fully within the human and natural community*”.

Smith and Kelly (2006, p. 2) adopt the following concept of wellness – „*a healthy balance of the mind-body and spirit that results in an overall feeling of wellbeing*”.

Many of the authors have identified the main market for wellness tourism as being 'baby boomers' (aged late 30s to mid-50s) and predominantly female. There may be some need in the future to encourage younger people and men to partake of the flourishing wellness tourism sector, especially given the worrying statistics on young male depression (Mullholland, 2005). However, the way in which wellness centers are promoted and the activities contained therein may have to change somewhat for this to be possible (Monteson and Singer, 2004).

Balneotourism is developed as balneological and therapeutic practices, implemented away from the permanent place of living of individuals. Balneology is considered as "*a branch of medicine that deals with treatment of diseases through mineral water and therapies based on its utilization on individuals*" (in: Georgiev and Vasileva, 2010, p. 902).

From tourism viewpoint subject of observation are various specialized establishments providing balneo, spa and wellness tourism services.

Spa tourism is aimed at people looking for re-energizing, body and mind-refreshing treatments and stress-reduction.

Wellness target group of consumers includes people, seeking long-term health optimization, improvement of their quality of living, aiming to balanced and harmonious self –knowledge of their physical and emotional life.

Balneotourism is appropriate for unhealthy people experiencing health problems and diseases or ones, who need prevention of prospective illnesses.

1.1 Main present trends in SPA industry

SPA industry has been growing for several years already. This trend relates not only to the former European Union countries, but to all global world. Langvinienė and Sekliuckienė (2009, p. 75) describe several of trends:

1. *Changes in the global economy.*

This situation relates to change to the worse in purchasing power of buyers, decreasing capabilities of suppliers to provide products and services at competitive prices, etc.

2. *Changes in buyers and (or) customers profile.*

This situation relates to changing characteristics of visitors of SPA centres. As earlier the main groups of SPA centers visitors were families, couples, nowadays more and more single men or women are coming. Particular programmes are provided for mothers with children (child care, etc.), also educating visitors, who are coming for health improvement programmes.

3. *Modernizing and innovations of SPA processes.*

This relates to new technologies, opportunities to implement online reservation system, customers' relationship management program, etc.

4. *Changes in resort wellness SPA service conception.*

It relates firstly to the term of SPA. Customers suspect that they will get not only water procedures. After that, it relates to specialization: medical (med SPA) and wellness SPA. Mixed med-wellness becomes to be more popular in order to meet the requirements of various groups of customers.

1.2 Tourism in Slovakia and SPA industry

Tourism is undoubtedly one of the fastest developing and most promising industries of the Slovak national economy. The position of Slovakia in the heart of Europe at the intersection of trade routes, its cultural and historical wealth and the favourable climatic conditions all create the potential for development of the tourism industry in our country.

The tourism potential of Slovakia is vast, covering almost all key forms and types of tourism. According to the Regionalisation of Tourism in the Slovak Republic, northern Slovakia has features suited to mountain activities and winter hiking while southern Slovakia offers waterside holidays and the opportunity to take advantage of thermal waters. Throughout most of Slovakia there is a wealth of cultural, historical and natural attractions which may be utilised for tourism.

In addition, a great deal of accommodation, catering and supplementary service capacity already exists in Slovakia. On the other hand, what is on offer does not match our possibilities and potential. Slovakia's historic towns and numerous mountain ski resorts are its most popular tourist destinations. The demographic makeup of visitors shows that the Slovak Republic is a target country for middle class and less demanding visitors for whom price is a critical factor (www.sario.sk).

Slovak SPA, aquaparks and thermal swimming pools are undergoing profound changes in order to adapt to new global trends. Apart from classic treatments more and more popular are short term wellness or fitness stays for managers and families. According to Hanigovská, Pixová and Verčimáková (2009) there are more than 1284 thermal and mineral springs however only some of them are used for healing therapy and some of them are not longer exist. 19 SPAs are operating on the basis of balneological or mixed therapy and 6 are climatic however more than a half of it is over 50 years.

1.3 Spa industry in Eastern Slovakia

The secondary research was performed during the months of March to June 2012. This research was focused on the findings of the actual state of spas in the Prešov region in Eastern Slovakia.

Based on the research in the Prešov region there are 14 active spa facilities and 23 vanished spa facilities. Prešov region has 13 districts, each district has been analyzed separately.

Bardejov district

Active spa

Bardejov spa

The first mention of Bardejov spa is from 1247. With its composition it belongs among the most important spa in Europe.

Vanished spa

Cigel'ka

The village Cigel'ka used to be a spa place which disappeared after World War II.

Humenné district

Active spa

District Humenné does not have currently active spa.

Vanished spa

The vanished spa could not be found in district Humenné.

Kežmarok district

Active spa

District Kežmarok does not have currently active spa.

Vanished spa

Kežmarok - Ľubica

Since 1714 it is known the usage of therapeutic sulfur springs which were based of Ľubica Spa. Spa closed down in 1952 because of the creation of a military training area.

Spišská Belá - Belianske spa

Belianske spa arisen as sulfur springs baths. Rheumatic and skin diseases were treated here. After the Second World War the spa was disappeared.

Mlynčeky

Village Mlynčeky as a spa were already known in 1896. After the Second World War the spa object served as a pioneer camp.

Levoča district

Active spa

District Levoča does not have currently active spa.

Vanished spa

Sivá Brada

The first written record dates from 1549. The construction of the spa was supported by Kapitula (Spiš episcopate) in the 18th century. In the socialist era baths were disappeared. Currently, buildings and land are in private ownership (Spišský Jerusalem, 2011)

Baldovce

By the 20th century the spa were working. On the present the filling plant of mineral water operates in the village.

Levoča spa

The climatic spa of local importance arose in the mid of the 19th century. In recent years the buildings served as school in the countryside, now are decaying.

Medzilaborce district

Active spa

District Medzilaborce does not have currently active spa.

Vanished spa

The vanished spa could not be found in district Medzilaborce.

Poprad district

Active spa

Horný Smokovec

The climatic spa Horný Smokovec were put into operation in 1928. They were very modern and luxuriously furnished. The patients with tuberculosis disease were treated here. After the war in 1948 the sanatorium was nationalized and in 1997 was returned to heirs of original owners. Currently it is the highest-lying climatic spas in Slovakia for children and adolescents.

Nový Smokovec

Spas Nový Smokovec are the most famous climatic spas in Slovakia. They are located in the Tatras National Park, at the foot of Slavkovský peak. Basement of spas in the Smokovec area was laid in 1797 by Earl Csaky. In 1876 Dr. Nicholas Szontagh opened a new modern climatic spa in Nový Smokovec.

Dolný Smokovec

Šrobar Institute of Child Tuberculosis and Respiratory Diseases

Construction of the Šrobar Institute began in 1882. In 1920 the State Šrobar Medical Institute arised - the first 25 children with tuberculosis were admitted. In 2000 the Institute acquired the legal status of highly specialized Institute and in 2004 was transformed from a public facility for non-profit organization.

Lučivná

Spa Lučivná was founded in 1872 by landowner of the village Lučivná Donath IV. Várady - Szakmáry. Coniferous forests and considerable elevation of 816 m above sea level beneficially affect the climate of visitors suffering from lung ailments. In 1964 there was established a natural health spa for treatment of respiratory diseases in pediatric patients.

Tatranská Polianka Spa - Dr. Guhr Sanatorium

History of hospital began in 1881, since 1902 it was led by Michal Guhr Jr. Since 1903 the bathhouse with its present name Limba (with central heating) has stood. In 1948 the sanatorium was nationalized. After World War II Dr. Guhr Sanatorium was renamed to Walker professional medical institute of tuberculosis

and respiratory diseases. The original name - Dr. Guhr Sanatorium - it received at the 13th November 2003 during the transformation of state contributory organization for non-profit organization providing community services.

Tatranská Kotlina Sanatorium

Tatranská Kotlina Sanatorium is situated in the village Tatranská Kotlina, which was arised at the foot of the Belianske Tatras as a result of the discovery of the cave in 1881. Already in 1891 Tatranská Kotlina was classified as natural spa. In 2003 the transformation of the Professional Institute of Respiratory Diseases Clinic was accomplished into the non-profit organization Tatranská Kotlina Sanatorium.

Health treatment facility Tatrasan

In 1915, manufacturer Peter Hubka ordered the project of modern large Sanatory. Construction began on the 1st March 1917, but also because of the war the building was completely finished and fitted up in 1925 and began the medical work under the name Palace Sanatorium. In 1948 the Institute was nationalized. In 2003 the Institute was privatized and became the property of TATRASAN Ltd. as a private health facility with the same medical classification, ie. specialized medical institution of respiratory diseases.

Spa Gánovce (AquaSpa)

Gánovce spa belonged among the oldest spas in Slovakia. Spa mineral water springs are mentioned for the first time in 1549. After 1948, the Gánovce spa was nationalized. Since 1992 they started to decay. In 2010 the reconstruction began and now Gánovce spa is available to the public.

The climatic spa Tatranské zruby

The settlement was founded in 1923 as a rustic camp for mountain troops of the Czechoslovak army. After the Second World War, Tatranské Zruby became the Military Sanatorium. In 1967 there was built a large modern Recreation Centre in hotel-style. (Daniel Kollar - Dajama 1998).

Highly specialized institute for pulmonary diseases Nová Polianka

The construction dates back to 1946. The ceremonial opening took place on the 1st april 1956. Highly specialized institute for pulmonary diseases (current name) with its equipments and full-service belongs in the most modern professional institutes in Slovakia.

Vyšné Hágy spa

Landowner František Máriássy built in Vyšné Hágy a wooden house in the Swiss style in 1890. After one year the bathhouse was added to the cottage. The first patients began to heal in - at that time the largest tuberculosis hospital in central Europe - after the 1st june 1941.

Vanished spa

Poprad - Kvetnica

Effective climate conditions predetermined Kvetnica to the construction of climatic spa. Tuberculosis and respiratory diseases were treated here until 2008 when the Sanatorium was ceased. Cancer was also treated here in recent years.

Vydrník

In 1840 episcopate established baths with inn in Vydrník. Spa disappeared in the first half of 20th century.

Tatranská Lomnica

The Tatranská Lomnica area was bought by Ugrian state in 1892. In this year the first public baths in the High Tatras were created. In 1893 hotel Lomnica was built, at the time the largest in the High Tatras, and later a striking house with spa and hydrotherapy pool was built.

Starý Smokovec

In the years 1833 -1867 Jan Juraj Rainer was a tenant of Smokovec, who crucially contributed to the development of this site. The main function of the settlement in this period was hydrotherapy based on the smokovec mineral water.

Climatic spa Štrbské Pleso

The emergence of spa Štrbské Pleso dates back to 1877 when, thanks to the founder of Štrbské Pleso Earl Joseph Szentiványi, the first treatment and balneology procedures were started providing. In 1885 Štrbské Pleso was declared spa town.

Tatranské Matliare

During the First World War the military sanatorium for tuberculosis was set up in makeshift wooden huts in Tatranské Matliare. After the Second World War, Tatranské Matliare were under military administration. Since 2010 the climatic spa Tatranské Matliare moved into Tatranské Zruby.

Prešov district

Active spa

District Prešov does not have currently active spa.

Vanished spa

Prešov - Cemjata

History of Cemjata baths begins in the 16th century. In early of the 19th century they remarked the highest growth. In 1955 it was the final decision that Cemjata will belong exclusively to pensioners.

Malý Šariš

In the 18th century iron water with high content of carbon dioxide was used for treating rheumatic, stomach and skin diseases in the village.

Išľa spa (Prešov)

Earl Haller from Prešov built a bathhouse and inn. Bathhouse was equipped with baths. In 1838 spa facilities were expanded, ornamental trees were planted there and park with paths were established. Spa began to acquire its popularity. However, spa always had only local significance, but 20 years ago spa was still operating.

Sol'ná Baňa (Prešov - Solivar)

Spa has been part of the place where salt was mined. Because of emergency conditions the salt house Ferdinand and spas finished their operation in 1925.

Lipovce

In 1794 owner G. Splényi built a small building with spa bathtubs. Water from the spring was evaluated as very rich in iron, and was compared with Bardejov mineral water. Mineral water has a lack of higher temperature, but in spite of this lack, Lipovce became an important spa in the first half of the 19th century. The popularity of spas gradually declined, but the popularity of table water Salvator apparently risen. In the late of the 19th century Lipovce is described only as a place of splendid table water with bottling plant. In the 20th century, but especially after World War II, the large-scale bottling plant was built in Lipovce.

Sabinov district

Active spa

District Sabinov does not have currently active spa.

Vanished spa

Švabľovka

History of spas in Sabinov dates back to the late 15th century. Basis of spas was the original sulfurous bath or sulfuric spring water, which still exists. Spa in Sabinov had only minor local significance and it was attended mostly by Sabinov people and surrounding aristocracy. After World War II the effort existed to restore the spa, but it failed.

Snina district

Active spa

District Snina does not have currently active spa.

Vanished spa

The vanished spa could not be found in district Snina.

Stará Ľubovňa district

Active spa

Vyšné Ružbachy

Vyšné Ružbachy have abundant mineral springs. "Golden Age" for Ružbachy occurred in the 16th century. In the 19th century the spa became the property of Baron von Jony, which began with the rebuilding. Another spa owners developed the spas and these gradually began to change in one of the most modern spas in Slovakia in the early of the 20th century. Plans for expansion of spa owners, however, the Second World War and nationalization defeated. Spa buildings are primarily derived from the years 1920 - 1940 and are accompanied by objects from the 1975 - 1997.

Červený Kláštor (Smerdžonka)

Červený Kláštor spa, before Smerdžonka, located 1 km from the monastery in Červený Kláštor village. The spa village arised near to a cold sulfur spring water in about 1820. Spa went through many changes and reconstructions, especially after the wars which badly damaged the spa. Spa was closed in 50s years of the 20th century. The construction of the spa house started in 2010 and spa in Červený Kláštor re-opened the gates for the general public in early 2012.

Vanished spa

Hniezdne

Spa arised in the village from the sulfur springs in the 19th century After 1928 the spa was destroyed by fire and through the Second World War turned into rubble.

Ľubovnianske kúpele

Spa history is not very rich despite the fact that local population has always been treated for stomach problems from the mineral water sources. In 1870, Alfred Probstner put into operation the 13 residential buildings, which until World War II served for the accommodation of visitors.

Stropkov district

Active spa

District Stropkov does not have currently active spa.

Vanished spa

The vanished spa could not be found in district Stropkov.

Svidník district

Active spa

District Svidník does not have currently active spa.

Vanished spa

Village Šarišský Štiavnik

Spa was built at the two mineral springs in the 18th century. Spa had only local significance. In 1944 the spa was very damaged and disappeared, the rest of the spa facility was destroyed by fire in 1955. After the fire the spa reconstruction started, but the realized drill holes showed low yield sources. Spa had not completely vanished, but there was created a rehabilitation facility and sanatorium for children for after-jaundice disease.

Vranov nad Topľou district

Active spa

District Vranov nad Topľou does not have currently active spa.

Vanished spa

Village Hlinné

In the 19th century a small spa was established, where the rheumatic diseases were treated. Later, after the fire, the spa was abandoned and not restored. After the Czechoslovak Republic spa was completely shattered, trees worked out and the surrounding soil parceled out.

Summary

The spa industry has shown the robust growth in sales volume and in the number of facilities. In Slovakia, there are dozens of spas that have disappeared. For some, the reconstruction can become full spa facilities and thus contribute to an increased importance of tourism in Slovakia.

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Price as a Part of Competitive Advantage of Retails in the Slovak Republic

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Abstract

The paper deals with price and marketing pricing strategies of retail chain stores from regional managers' point of view in the Prešov region. The aim of this paper is to highlight the perception of the impact of economic recession from regional managers' point of view in surveyed retail chain stores. To determine the most used marketing pricing strategies has been used analysis of variance ANOVA. The research results show that the economic recession has affected the price and pricing policy in retail chain stores only slightly.

Key words

Price, competition, Marketing, retail, Marketing pricing strategies.

Introduction

Pricing and its increasing or decreasing is currently confronted with the state of the economy, but also the expansion of trade over the Internet. Pricing is becoming an integral part of daily management of sales and marketing chains worldwide.

Price is the only one element of the marketing mix, which is a source of income. Other elements produce only costs. It is also one of the most flexible elements of the marketing mix. In contrast to the properties of the products and commitments to the distributor is it possible to change it rapidly. Price decisions do not accept isolation. They always have to be in accordance with the micro environment and macro environment business (Cibáková, Bartáková, 2007).

According to Foret (2003, p. 123) the price presents in marketing term "amount of money, the volume of products or services that the buyer is willing to give the seller as consideration for the right to use a particular product or service."

The price for the consumer is the sum of funds, which must give up getting a different value in exchange - the product needed. Pricing is a key decision for the producer (seller) (Kita et al., 2010).

Theoretical basis of pricing and pricing policy in marketing

The company has to re-set the price when it launches a new product on the market, when introduces already launched product to a new distribution channel or new territory, and when gets an offer from a new customer (Kita et al., 2005).

Today, companies have to face a constant change in the prices of its competitors. The strategy often depends on whether the firm produces homogeneous or heterogeneous products. Market leadership can companies gain especially in the way of providing lower prices than its competitors (Kotler et al., 2009).

The price plays an important role in trading strategy. Prices vary according to the objectives, company priorities and other situational factors such as the intensity of competition and economic conditions and therefore they can address different objectives. Legal and ethical issues related to prices play in selecting pricing strategies a crucial issue (Cravens, Piercy, 2009).

According to Jedlicka (2003, p. 266) it is necessary to understand, which crucial roles carry the price on the market and from that derive a target orientation of price strategy as broader and fuller understanding than a price which forms only particular item. The price serves on the market as:

- **Communicator** between supply and demand (between consumer and entrepreneur), to reflect the economic positions of both sides of market communication
- **Quantifier** to determine the amount of a particular exchange value of the goods in the chosen monetary or non-monetary unit in order to facilitate business relationships on the market,
- **Qualifier** to determine the overall utility of the product (compared to the other comparable products), while respecting the other quality parameters (trade, fashion, etc.) that are incorporated in the expressed price level.

Today, organizations approach pricing in various ways. The owner is pricing in small enterprises. Manager of division or product lines is usually pricing in bigger enterprises. But even in these cases, top management sets out the general objectives and principles of pricing policy (Bartáková et al., 2007).

When pricing policy is creating, the company must consider many factors. Six steps of pricing objectives/pricing methods (Kotler - Keller, 2007):

Selecting the pricing objective

1. Determining the method demand
2. Estimating costs
3. Analyzing competitors costs, prices, offers
4. Selecting a pricing method
5. Selecting the final price

Materials and methods

The survey aims to identify price and marketing pricing strategies in retail chain stores in the Prešov region. The basic group consisted of all retail chain stores in the Prešov region, located in district towns. The sample was obtained by selection of easy accessibility. Total of 185 retail chain stores were interviewed. The survey was conducted during 2011. Enquiry was used to obtain the primary data. Regional managers of retail chain stores were enquired in the total number of 107 respondents. Structure of respondents by age and regional managers' gender presents Table 1.

Table 1 The sample structure of the regional managers in retail chain stores by age and gender.

	Frequency	Percent	Valid Percent	Cumulative Percent
18-29 years	11	10,3	10,3	13
30-39 years	36	33,6	33,6	43,9
40-49 years	41	38,3	38,3	82,2
50-59 years	19	17,8	17,8	100,0
male	41	38,3	38,3	38,3
female	66	61,7	61,7	100,0
Σ	107	100	100	x

Source: own processing

The sample consists of 107 retail chain stores. Most numerous in the sample have the district towns Prešov (24, 22.40%), Poprad (18, 16.80%) and Bardejov (16, 15.00%). 84.10% (90) retail chain stores in the Prešov region comprising a sample of max. 25 employees. 15.00% (16) chain stores of the surveyed branches employ 26 to 49 employees and 0.90% (1) chain store employs 50 to 249 employees. Table 2 shows the distribution of the sample according to the location of the retail chain store as well as the number of employees working in retail chain stores.

Table 2 The sample structure of surveyed retail chain stores according to the location.

	Frequency	Percent	Valid Percent	CumulativePercent
Bardejov	16	15,00	15,00	15,00
Humenné	8	7,50	7,50	22,40
Kežmarok	4	3,70	3,70	26,20
Levoča	4	3,70	3,70	29,90
Medzilaborce	4	3,70	3,70	33,60
Poprad	18	16,80	16,80	50,50
Prešov	24	22,40	22,40	72,90
Sabinov	3	2,80	2,80	75,70
Snina	6	5,60	5,60	81,30
Stará Ľubovňa	4	3,70	3,70	85,00
Stropkov	5	4,70	4,70	89,70
Svidník	5	4,70	4,70	94,40
Vranov n/T.	6	5,60	5,60	100,00
1 - 25 ee	90	84,10	84,10	84,10
26 - 49 ee	16	15,00	15,00	99,10
50 - 249 ee	1	0,90	0,90	100,00
Σ	107	100	100	x

Source: own processing

Results and discussion

Impact of economic recession on the retail chain stores in the Prešov region

The next examined question under examination, which should read as follows: *"In your opinion – Has the global financial crisis affected your retail chain in the selection of marketing pricing strategies?"*

Respondents should comment on the five-point Likert scale, where

1 - definitely yes, 2 - rather yes, 3 - I do not know, 4 - rather not, 5 - definitely not.

Their view was expressed by a figure identified that best fit their opinion. Configuration of responses is presented in Table 3.

Table 3 Impact of the crisis in the selection of marketing pricing strategies

		N	%	Valid %	Cumulative %
Valid	1	27	25,2	25,2	25,2
	2	52	48,6	48,6	73,8
	3	3	2,8	2,8	76,6
	4	24	22,4	22,4	99,1
	5	1	,9	,9	100,0
	Σ	107	100,0	100,0	

Source: own processing

Nearly half of respondents 52 (48.6%) and 27 (25.2%) assessed that the financial crisis has affected the selection of marketing pricing strategies. 24 (22.4%) and 1 (0.9%) of respondents are inclined to claim that the financial crisis had no impact in the selection of marketing pricing strategies and 3 (2.8%) respondents could not assess whether the financial crisis had an impact in the selection of marketing pricing strategies within their retail stores.

Table 4 Development of the Slovak business environment after the resolution of crisis symptoms

		N	%	Valid %	Cumulative %
Valid	1	3	2,8	2,8	2,8
	2	43	40,2	40,2	43,0
	3	5	4,7	4,7	47,7
	4	50	46,7	46,7	94,4
	5	6	5,6	5,6	100,0
	Σ	107	100,0	100,0	

Source: own processing

Based on the results, which are processed in Table 4, we can say that according to respondents, i.e. 50 respondents (46.7%); 6 (5.6%) Slovak business environment is still not developing favourably after the crisis. Conversely 43 (40.2%) and 3 (2.8%) respondents had the opposite view, according to which the Slovak business environment began to resolve slowly and favourably after the crisis.

The question *"What factors are currently limiting your retail growth"* respondents had to express themselves by choosing one of the offered options, i.e. A - F, which are processed in Table 5.

Table 5 Factors limiting retail growth

		N	%	Valid %	Cumulative %
Valid	low demand	38	35,5	35,5	35,5
	competition	48	44,9	44,9	80,4
	legislation	4	3,7	3,7	84,1
	high operating costs	8	7,5	7,5	91,6
	none	9	8,4	8,4	100,0
	Σ	107	100,0	100,0	

Source: own processing

48 (44.9%) of respondents are inclined to the possibility that their retail growth is most affected by competition, according to 38 (35.5%) of respondents is low demand the other limiting factor in order, 9 (8.4%) of respondents stated that no factors restrict their retail growth. High operating costs have an impact on retail growth, according to eight (7.5%) respondents and 4 (3.7%) of respondents state legislation as a factor that limits their retail growth.

Pricing and marketing pricing strategies

The aim of the next question: “*How do you react to price changes of your competitors*” was to find out how the surveyed retail chain stores react to price changes of their competitors. Respondents could choose one of our options from A - F (offered options are listed in Table 3). Evaluation of responses to this question shows Table 6.

Table 6 Responding to competitors' price changes

		N	%	Valid %	Cumulative %
Valid	maintain the current price	11	10,3	10,3	10,3
	increase/decrease price	27	25,2	25,2	35,5
	maintain price and increase perceived quality	28	26,2	26,2	61,7
	increase price and improve quality	1	,9	,9	62,6
	intensify promotion	40	37,4	37,4	100,0
	Σ	107	100,0	100,0	

Source: own processing

Most respondents (40, 37.4%) evaluated, that their reaction to price changes of competitors is to intensify promotion, 28 (26.2%) maintain price and increase perceived quality, 27 (25.2%) decrease / increase prices of their products, 11 (10.3%) maintain the current price and 1 (0.9%) increase price and improve quality.

Marketing pricing strategies (S1 - S13) were initiated as the subject of the survey:

- Skimming (creaming) strategy (S1)
- Penetration pricing strategy (S2)
- Premium pricing strategy (S3)
- Main competition pricing strategy (S4)
- High price / quality pricing strategy (S5)
- Promotional pricing strategy (S6)
- Geographical pricing strategy (S7)
- Price matching guarantees (PMG, S8)
- Everyday low pricing (ECLP, S9)
- Cost-plus pricing strategy (S10)
- Real-time pricing by competition strategy (S11)
- Price discrimination strategy (S12) and
- Discount pricing strategy (S13).

Regional managers of retail chain stores have responded to closed questions. It was used 5-point Likert-type scale (1 - strongly agree to 5 - strongly disagree). The obtained raw data were then processed in a statistical programme. There were used selected statistical methods (e.g. analysis of variance ANOVA).

Marketing managers of retail chain stores ranked promotional pricing strategy (S6, 1.710, Table 7) among the most frequently used marketing pricing strategies. Main competition pricing strategy (S4, 2.168) was identified by respondents as the second most common marketing pricing strategy and discount pricing strategy took the third place (S13, 2.178). The least used marketing pricing strategies were premium pricing strategy (S3, 3.477) and skimming strategy (S1, 3.131) based on respondents' answers in the surveyed locality (in the Prešov region).

Table 7 Examined marketing pricing strategies

	N_i	Average	Min.	Max.	Std. Dev.
S1	107	3,131	1,000	5,000	1,237
S2	107	3,000	1,000	5,000	1,197
S3	107	3,477	1,000	5,000	1,022
S4	107	2,168	1,000	4,000	1,023
S5	107	2,850	1,000	5,000	1,164
S6	107	1,710	1,000	4,000	0,813
S7	107	2,841	1,000	5,000	1,074
S8	107	2,654	1,000	5,000	1,229
S9	107	2,720	1,000	5,000	1,180
S10	107	2,841	1,000	5,000	0,837
S11	107	2,336	1,000	4,000	1,081
S12	107	2,879	1,000	5,000	1,187
S13	107	2,178	1,000	5,000	0,989

Source: own processing

Promotional pricing strategy is the most stressed in sales area of flooring, carpets, floor coverings, garden tools and electronics, at least toy retailers. When creating marketing pricing strategies, retail chain stores with an assortment of food and drugstores are based on marketing pricing strategies of major competitor and on the contrary, electronics retail chain stores are not based on the main competitor pricing strategies. Retail chains focused on selling floors, carpets and floor coverings are using the most discount pricing strategy, compared with stores with other range of goods.

Based on the results we can conclude that skimming strategy is in the average most used marketing pricing strategy across retail chain stores focused on assortment of food, the least utilized is in retail chain stores with general merchandise. Penetration pricing strategy is most often used in retail chain stores with general merchandise and at least is used in retail chain stores focused on electronics.

Premium pricing strategy is in the average mostly used in groceries and the least used in retail chain stores with electronics. Based on premium pricing strategy S3 firm sets higher prices for their new products, which wants to maintain throughout their life cycle. Everyday low pricing strategy S9, where long-term prices are set at a low level, company is not using price promotion and sale events too often. It is based on the fact, that long-term constant prices represent confidence for the customer.

Price matching guarantees strategy is at an average most used in the food and drug stores, but on average is at least used in assortment of food, furnishings and carpets. Strategy of price adjustments and price discounts is used the most in a large extent of electronics retail chain stores and is utilized at least by grocery retail chain stores.

We used analysis of variance (ANOVA) for repeated measurements to determine the use of various marketing pricing strategies. The result is in the following table.

Table 8 Analysis of variance (ANOVA) using marketing pricing strategies

Source of variance	Sum of squares	df	Mean square	F	p
Model	10117,122	1	10117,122	4807,050	0,000
Error	223,092	106	2,105		

Source: own processing

Because the value of $P < 0,05$, so **we accept** the alternative hypothesis. The measured difference in responses to individual questions is on the chosen level of significance large enough to be merely coincidental. The difference of means in the questions is statistically significant.

Summary

Price is currently the concept, which plays an important role not only in marketing pricing strategies of retail chains, but also for firms and companies dealing with trade, which operate on domestic and foreign market. There resonates a question of the need for change in connection with the obtained results to determinate marketing pricing strategies in retail chain stores depending on the offered assortment by retail chain stores in the Prešov region. It is mainly based on the customary assumption of finding, that the

uniformity of marketing pricing strategies determination is not sufficient and competitive enough in retail chain stores operating in the Prešov region.

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An Analytical View of Using of On-Line Media in Communication of Universities with Selected Target Groups

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Abstract

The article deals with e-communication of universities with target groups. It focuses primarily on communicating with managers and staff of libraries, managers of businesses and students via the Internet with an emphasis on on-line media (websites, social networks, blogs, e-mail newsletter and the like). The survey examines the views of selected target groups on using the mentioned means of e-communication. The article also provides some proposals for more effective e-communication with selected publics.

Key words

E-communication, On-line media, Universities, Target groups

Introduction

Implementation of marketing principles in the management of education institutions in accordance with the Lisbon strategy is the current phenomenon that is nowadays getting media attention and scientific reflection. Defining and redefining the target groups of different types of education institutions, identifying and satisfaction of customer needs is becoming a priority for managers and management of the education institution.

Dialogue with the target groups help to increase the competitiveness. To this process significantly contributes: marketing communications – both internal (with students) and external (with potential students, representatives of business, media, public and government, etc.) and promoting the processual pedagogical approaches in context of teaching disciplines. From the modern tools and resources in e-communications are very important online social media.

In addition to well-prepared web content presentation use universities and their faculties on-line tools like social networking, micro-blogging service, photo sharing service and, not least, the video portal and other type of their propagation. They promote the marketing mix elements. These instruments and classical tools promote all elements of university marketing mix.

The importance of implementation of social media tools in our country underlines a fact that more than 1.8 million of Slovaks are active on Facebook of which more than 50% is in age group 16-25 years (Facebook Statistics by country, 2011). The importance of communication in an e-marketing confirm outputs of foreign researchers or teams as well as publications published in The McKinsey Quarterly (2010), Marketing Matters (2009), Marketing Thought Leaders (2011), Society for New Communications Research (2008). Specifically, the research is focused on the perceived value of new communication channels in the Internet. The research is focused on the effects and implications of new media for public relations (Carrabis, 2008), the potential of social networks for the development of e-business (Zeisser, 2010), the image building in the digital age (Pekala, 2009), etc.

Material and methods

The survey in this article was aimed at new media, their positives and negatives within the framework of communication tools with selected target groups of the universities and their faculties with an emphasis on selected target groups of Faculty of Management, University of Presov in Presov. These three main target groups were selected: (1) managers and staff of libraries, (2) managers of businesses and (3) university students.

The survey was conducted in selected regions (Kosice region, Presov region and others). During a one month period in 2011 participants in a questionnaire answered questions. The description of research sample is in Table 1.

Table 1 Description of research sample

	Libraries		Businesses		Students	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
woman	29	0.625	13	40.625	35	6.515
man	3	9.375	19	59.375	97	3.485
KE	18	56.250	5	15.625	42	1.818
PO	14	43.750	27	84.375	77	8.333
others	0	0.000	0	0.000	13	.848
Σ	32	100.000	32	100.000	132	00.000

Source: own processing

The research was carried out on research sample of:

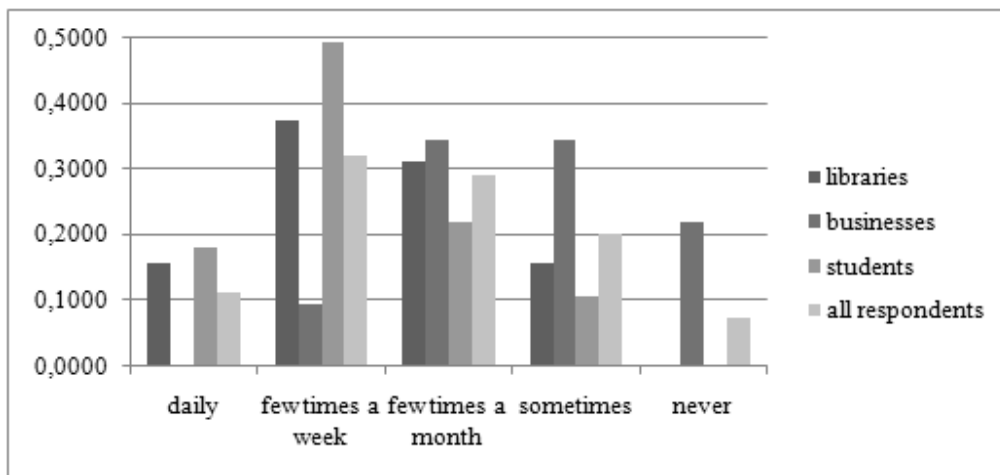
- *managers and staff of libraries*; the research sample consisted of 32 library;
- *managers of businesses*; the research sample consisted of 32 business;
- *students of the 1st degree of university education*; the research sample consisted of 132 students.

The participants were managers and staff of libraries (90.625% woman, 9.375% man) from Kosice region (56.250%) and Presov region (43.750%) and of managers of businesses (40.625% woman, 59.375% man) from Kosice region (15.625%) and Presov region (84.375%). The research sample of students consists of 132 respondents (26.515% woman, 73.485% man). They come from Kosice region (31.818%), Presov region (58.333%) and others (9.848%).

Results and discussion

The using a websites of the universities was generally observed in five different time frequencies (daily, few times a week, few times a month, sometimes, never). The websites of universities are used by respondent in different intensity.

Graph 1 The frequency of use of the universities' websites

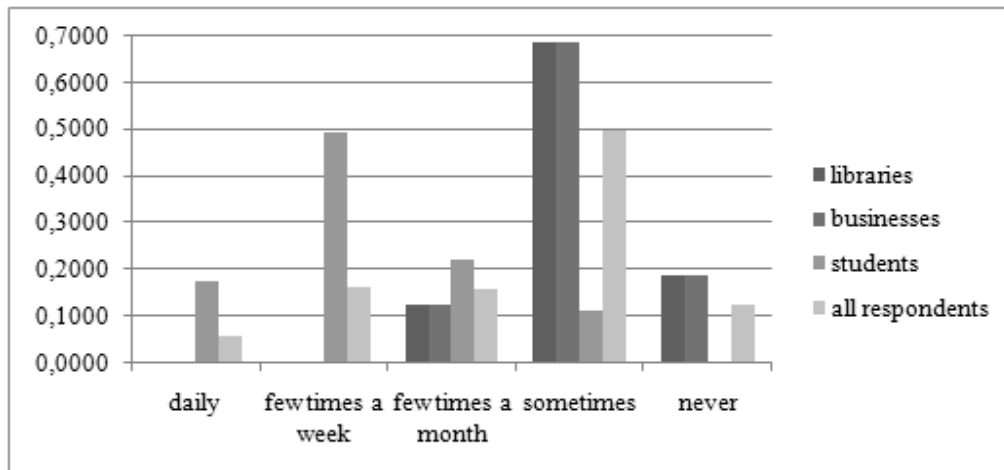


Source: own processing

Data in Graph 1 show that the websites of universities are daily used by students and libraries. Libraries and students did not even once choose the answer “never” and businesses, in contrast, did not choose the answer “daily”. All targets groups (libraries, businesses, students) visit websites of universities also in others time intervals (few times a week, few times a month and sometimes).

Graph 2 shows the results of using the website of the Faculty of Management. The item “website is used never” was marked by respondents – libraries and business and on the other hand “website is used daily” and “website is used few times a week” was chosen only by respondents – students. The mean of answers of all respondents is shown in the Graph 2.

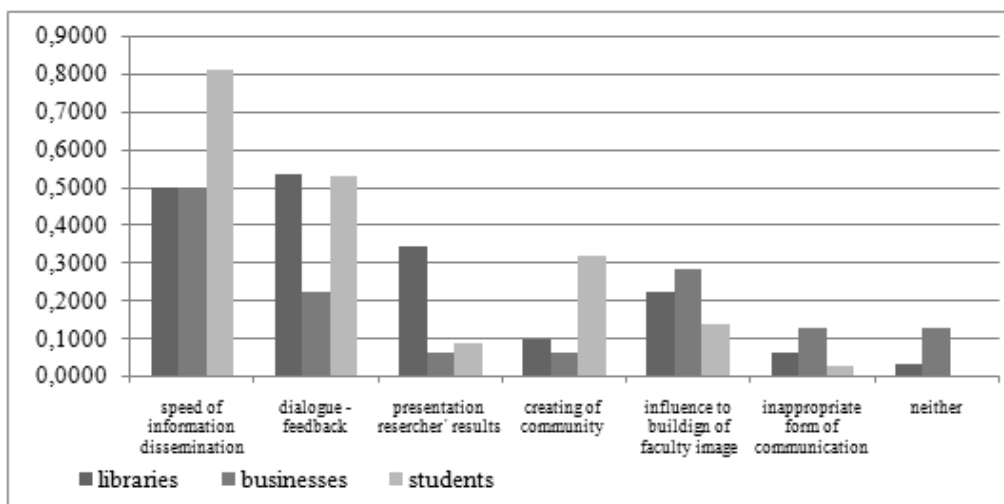
Graph 2 The frequency of use of the Faculty of Management's website



Source: own processing

The survey questions were focused also on concerning the use of new social media as a channel for communication with target groups of universities and their faculties. Graph 3 presents the positives and Graph 4 the negatives.

Graph 3 Social media and university – positives

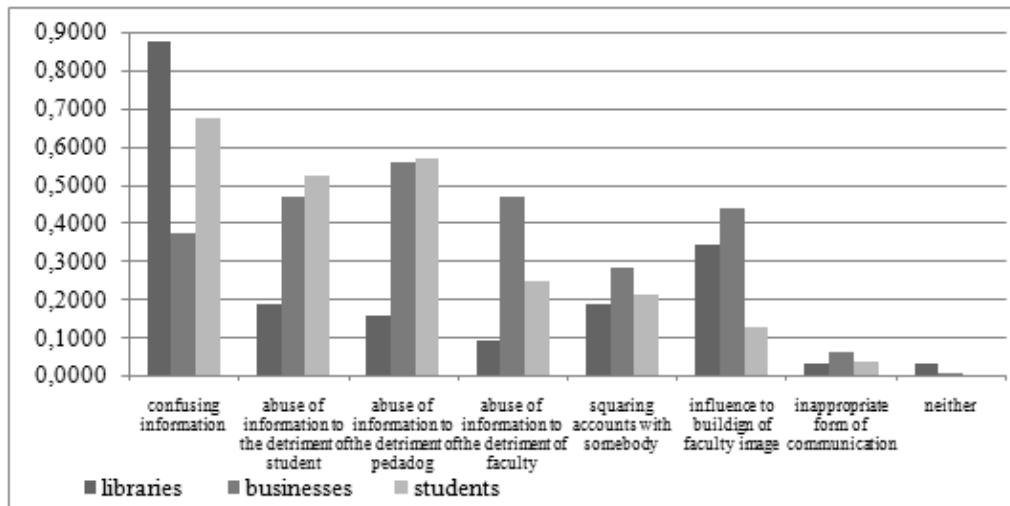


Source: own processing

Based on the results of the research it can be concluded that students consider the most positive the “speed of information dissemination”. According to libraries and students social media create a space for dialogue and feedback. The libraries appreciated a space for presentation of the research results and the students appreciated creating of community. The social media can assist in building of image of the faculty.

The libraries indicate among the negatives of social media used by “confusing information” and influence of social media to building image of faculty. The different opinion about these negatives was presented by students. There are no big differences between the answers of different target groups.

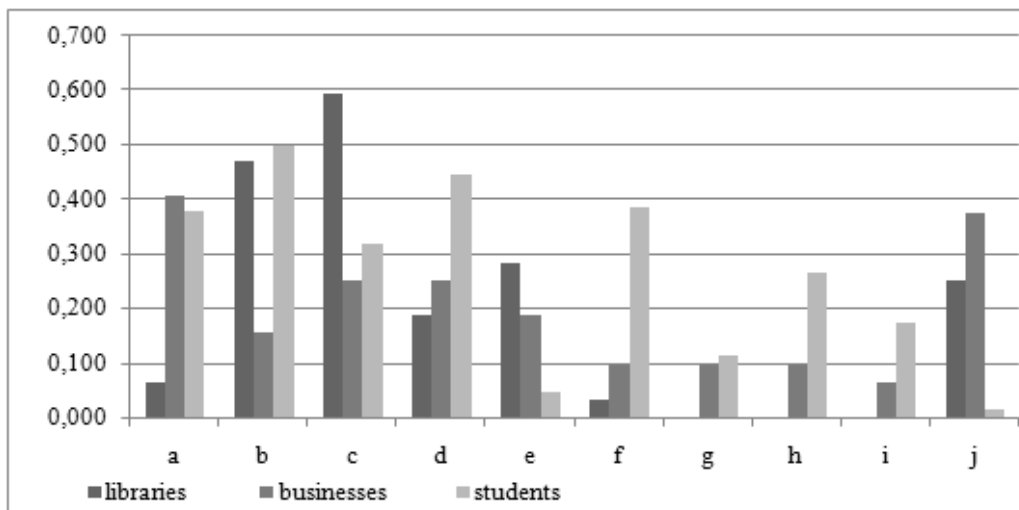
Graph 4 Social media and university – negatives



Source: own processing

Graph 5 shows what would selected target groups appreciate on the website of the Faculty of Management and what are their specific expectations. Managers and staff of libraries would appreciate a description of the cooperation with private sector organizations (c), cooperation with public sector organizations (b) and academic staff profiles (e). Managers of businesses value on the website most profile of absolvent – how can asserts itself and succeed in practice (a). Students would appreciate information about cooperation with public sector organizations (b), useful links to external sources of learning materials – online library and databases, interesting scientific articles, interesting information from practice (d), actualities and the academic year schedule (f).

Graph 5 Expectations of selected target groups on Faculty of Management website



Source: own processing

Another items (section dedicated to students' success (g); frequently asked questions (FAQ; h); link (interconnection) to popular social networks such as Facebook, Twitter, YouTube, LinkedIn (i); other (j) was marked rarely.

The survey results can be summarized as follows:

- the websites of universities are used by *managers and staff of libraries* few times a week or few times a month. These respondents use website of the Faculty of Management only sometimes. As the benefits of using online media for communication with target groups of universities they consider: (1) the possibility of dialogue – feedback, (2) the rate of relevant information about the study, (3) the creation of a space for presentation of the university teachers' work (e.g. results of surveys and researches).

Respondents perceive as risk and negative option: (1) the dissemination of confusing information and (2) information misuse to the detriment of the university. Managers and staff of libraries would appreciate on the website of the Faculty of Management the information about cooperation with private sector organizations, public sector organizations and academic staff profiles;

- the websites of universities are used by *managers of businesses* few times a month or sometimes and the website of Faculty of Management the use only sometimes. They see two main positives of using on-line social media: (1) disseminating relevant information about the study *and* (2) *building positive image of the faculty*. *Managers perceive more* negatives concerning the using new social media in communication of universities and their faculties with target groups. They perceive: (1) the possibility of information misuse to the detriment of the university, (2) the possibility of information misuse against student and squaring accounts with somebody, (3) the goodwill damage of the faculty. Survey also shows that using of online social media is in the opinion of managers inappropriate for communication with target groups of universities (Graphs 3, 4). They would on Faculty of Management website appreciate: (1) the profile of absolvent – how can asserts itself and succeed in practice, (2) the information about cooperation with private sector organizations and useful links to external sources of learning materials and (3) academic staff profiles;
- the websites of universities are used by *students* few times a week. Faculty of Management website is used by them few times a week, too. As the benefits of using online media (*Facebook, LinkedIn, YouTube, blog, newsletter, etc.*) for communication with target groups of universities they consider: (1) the rate of relevant information about the study, (2) the possibility of dialogue – feedback *and* (3) *creating of community*. As risk and negative option respondents perceive: (1) dissemination of confusing information, (2) the possibility of information misuse to the detriment of the university *and* (3) the possibility of information misuse against student. Students would welcome information about cooperation with public sector organizations, useful links to external sources of learning materials – open the library and online databases, interesting scientific articles, interesting information from practice, calendar of events, the current academic year.

Interesting is that:

1. managers consider the communication of university with target groups through new on-line social media as inappropriate;
2. all respondents would on the website of Faculty of Management appreciate information about faculty cooperation with private sector organizations and public sector organizations;
3. access to popular social networks (Facebook, Twitter, YouTube, LinkedIn) on the website of the Faculty of Management (i) chose minimum respondents. Managers and staff of libraries did not select this option at all.

Although the survey sample was small, we hope that our recommendations can improve the communication of the University of Presov in Presov, Faculty of Management with selected target groups through online media. They can serve as a basis for further surveys and researches in the field of e-communication of the universities with target groups.

Conclusion

Managers and staff of libraries, managers of businesses and university students can be considered universities' stakeholders. They are entities that directly or indirectly affect, and are directly and indirectly affected by the action of the university. Libraries fulfill primarily an educational role. Their managers and employees interact with university students, university professors, managers, the media and government officials and local government. They help to develop the knowledge and skills and personal, social and labor competences of the target groups. Managers of businesses form tangible and intangible value to society. They provide employment and development of the regions. They often collaborate with universities in education processes or on the projects and offer jobs for graduates. The demand and supply of businesses affect the activities of universities.

E-communication with selected groups is therefore beneficial and helpful and through its modern forms including online media is now becoming commonplace. As part of sustaining competitiveness it should also use e-communications equipment that would increase interest in on-line information provided by universities, increase website attendance and help universities to meet the needs and expectations of their target segments.

Therefore, we recommend on the website of the Faculty of Management to create section for partner institutions (organizations, businesses, ect.) with relevant and actual information about faculty's cooperation with private sector organizations and public sector organizations. This section may contain a list of partner organizations, contacts, banners with advertising, brands and logos of partner institutions and information about discounts and benefits for partners or university's graduates. Within a framework of joint marketing may partner subjects promote the University and Faculty of Management – its personalities, study programs and activities – on their own websites.

It is important for universities/faculties to invent and discover what makes sense for its unique e-communication situation with selected target groups. There are two primary insights. First, a powerful way for a brand to be useful in the virtual world is to confer social importance on its users – target groups of universities. Second, “virtual items” are critical to stimulating social interactions that may in turn generate word of mouth (for a more detailed account see Zeisser, 2010). To confer social importance of selected target publics and to stimulate social interactions with them through on-line media – it is the only way for universities for future.

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E-business and Its Application in Conditions of Slovak Market

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Abstract

Aim of this article is highlighting possibilities in effective utilization of Information and Communication Technologies for supporting entrepreneurship (e-business) for Small and Medium enterprises. The core research carried on for duration of twelve months covered analysis and following presentation of possibilities of practical utilization of e-business applications. Furthermore research was oriented towards innovative forms of marketing communication in Real Corporation conducting business in Slovakian market. Analyzing data on collected findings can add value towards gaining a significant competitive advantage in form of better understanding of real facts influencing entrepreneurship in principle. This can lead consequently to positive influence on corporate effectiveness in the environment of Small and Medium enterprises.

Key words

Marketing, E-Business, Internet

Definitions of e-business and e-commerce

Talking about e-commerce, we talk about electronic commerce as a whole, thus buying through information and communication technologies (Dora, Pollák, 2010). This way of shopping allows customers to purchase products or services without the need for physically travelling (commuting) or being physically present in a brick-and-mortar store (Batic, Fedorko, 2011). Purchasing a product by phone can, of course, too be considered a purchase without being physically present in a given store. E-commerce goes even further, reducing the effort on the so-called "clicking" your mouse button on the "ORDER" icon on the Internet.). Several authors (Dora, Pollák, 2010, Kotler, 2007, Delina, Vajda, 2006, Blažková, 2005) further argue that the difference between e-business and e-commerce is as follows: E-commerce is part of e-business as such, while e-business is a broad portfolio of activities associated with the business. It is basically carrying out business transaction, or realizing any processes related to business or business management with the use of ICT. E-commerce focuses mainly on activities related to trading, namely purchasing, selling or providing support via customer service centres over the Internet.

Selected types of e-business models - B2C

This model of connection within e-business is, in general, often a direct connection of companies, firms or organizations with their customers. Integration of ICT strategy and strategy for the business itself is essential within this model. By this, taking advantage of all the benefits that the B2C model offers to organizations can be ultimately be achieved. According to Deli and Vajda (2006) the most important benefits include the opportunity to carry out business (depending on whether it is e-business, or directly e-commerce) internationally within the global market, shortening the time required on reactions in the process of provider-customer communication, and, last but not least, a more precise targeting on target customers through a more thorough segmentation of customer markets. The world's top players on the B2C market include the Internet giant Amazon.com and its global subsidiaries such as Amazon.co.uk, Amazon.ca etc. Finally, the B2C market is in recent years also greatly influenced by the American company Apple via its iTunes interface.

The actual e-commerce (sales and purchases) as an integral part of e-business through the B2C model involves strategies and processes, but also actual solutions, allowing mutual organization-customer connection. This connection offers a wide range of benefits not only for customers in the form of increased comfort, but also for organizations in the form of valuable information, which are suitable for subsequent analysis.

The essence of this article is to present selected possibilities of utilising these information.

Objectives and methods

The very issue of the possibility of effective use of ICT to support business is extensive. ICT help businesses in different forms. For the purposes of this analysis we set the main objective to point out how it is possible to use the selected e-business applications within the real business environment of SMEs operating in the Slovak market. This objective can be decomposed as follows: Based on the information from mutual organization-organization B2B connection (in this case, publisher and distributor) within e-business applications, the objective was then to show benefits of this connection for the organization itself on a specific example.

Characteristics of the research object: The research object is a real company (hereinafter referred to as "organization") from the SMEs environment operating on the Slovak market. The research subject is the use of selected e-business applications within this organization and within selected specific product. For the purposes of the analysis the specific product is a monograph entitled Marketing & e-Business. In this case, the selected organization was the publisher of the above monograph.

The main objective will be subjected to statistical testing as follows:

Based on the sales data of the monograph obtained from the EDI interface within publisher-distributor e-business communication, and the data from the analytic interface for websites - Google Analytics - we will attempt to determine the effect of the sales of monograph on traffic of the supporting website, which provides "bonus" content to customers within authorisation zone. The supporting website www.iuniverzita.sk also offered information on the monograph for potential customers. (It should be noted that this analysis is only one of many that can be examined within the B2C connection based on the collected primary information.)

Within this objective the following statistical hypothesis H0 was set: There is no statistically significant correlation between the sales of the monograph and the total traffic of the supported (promotional) website.

In contrast, the following alternative hypothesis H1 was set: There is a statistically significant correlation between the sales of the monograph and the total traffic of the supported (promotional) website.

Research sample: The research sample consisted of potential as well as real customers of the given organization. Taking the nature of the product into consideration, i.e. monograph dealing with modern marketing in the Internet environment, the basic set - "segment" – can be specified as follows:

- People in productive age
- People using the Internet (Internet visitors, users)
- People with secondary and higher education
- People employed or interested in ICT and marketing in general
- In general, people speaking Slovak

Within the analysis 105 units of the given monograph sold (the number can be interpreted as the number of actual customers) and 330 supporting website (www.iuniverzita.sk) visitors (this figure may be interpreted as a "sample", i.e. the number of actual and potential customers, i.e. users of the supporting website) were dealt with.

The main scientific methods within the research were analysis and synthesis. Statistical programs Statistica by Statsoft and Matematica 6.0 were used for the results assessment, while MS Excel, part of the MS Office 2007 Suite, was used for research results processing.

Due to the nature of the research as well as the sample size and number of observations, nonparametric tests were chosen as statistical methods. More specifically, Spearman's rank correlation coefficient.

Evaluation and discussion

Based on the sales data of the monograph obtained from the EDI interface within publisher-distributor e-business communication, and the data from the analytic interface for websites - Google Analytics - we carried out analysis of the effect of the sales of the monograph on traffic of the supporting website, which provided "bonus" content to customers within authorisation zone. The supporting website www.iuniverzita.sk also offered information on the monograph for potential customers.

The following two statistical hypotheses were set out in connection with our objective:

Hypothesis H0. There is no statistically significant correlation between the sales of the monograph and the total traffic of the supported (promotional) website. We also set out an alternative hypothesis H1: There is a statistically significant correlation between the sales of the monograph and the total traffic of the supported (promotional) website

The effect of sales on traffic

To verify statistical hypotheses a nonparametric test, namely the Spearman's coefficient was used. In the first step sequence tables for dependent and independent variables were created.

Table 1 Sequence table no.1

Period	Rx	Ry	d=Rx-Ry	d^2
1.12. 2010 - 31.12. 2010	8.0	1.0	7.00	49.00
1.1. 2011 - 31.1. 2011	11.0	8.0	3.00	9.00
1.2. 2011 - 28.2. 2011	8.0	11.0	-3.00	9.00
1.3. 2011 - 31.3. 2011	10.0	7.0	3.00	9.00
1.4. 2011 - 30.4. 2011	5.0	9.5	-4.50	20.25
1.5. 2011 - 31.5. 2011	8.0	9.5	-1.50	2.25
1.6. 2011 - 30.6. 2011	3.5	3.5	0.00	0.00
1.7. 2011 - 31.7. 2011	2.0	5.0	-3.00	9.00
1.8. 2011 - 31.8. 2011	6.0	2.0	4.00	16.00
1.9. 2011 - 30.9. 2011	1.0	3.5	-2.50	6.25
1.10. 2011 - 31.10. 2011	3.5	6.0	-2.50	6.25
				136

Source:our own data

Calculation:

$$r_s = \frac{\frac{1}{6}(n^3 - n) - \sum_{i=1}^n d_i^2 - T_x - T_y}{\sqrt{\left[\frac{1}{6}(n^3 - n - 2T_x)\right] \left[\frac{1}{6}(n^3 - n - 2T_y)\right]}}$$

$r_s = 0.197203$

$$t = r_s \sqrt{\frac{(n-2)}{(1-r_s^2)}}$$

$t = 0.603458$

$$t_{0.995}(n-2) = t_{0.995}(9) = \underline{3.25}$$

Since $0.603458 < 3.25 = t_{0.995}(9)$ we do not reject H_0 at significance level of $\alpha = 0.01$, thus we can conclude that there is no statistically significant correlation between the sales of monograph and the total traffic of the supporting (promotional) website.

At the same time, the alternative hypothesis H_1 (the significance level of $\alpha = 0.01$) there is a statistically significant correlation between the sales of the monograph and the total traffic of the supported (promotional) website cannot be confirmed.

We noted a weak positive correlation on the significance level of $\alpha = 0.01$ between those variables, but this is not a statistically significant correlation.

Table 2 Verification of the calculations of the Spearman's coefficient using the program STATISTICA

Dvojice proměnných	Spearmanovy korelace ChD vynechány párově Označ. korelace jsou významné na hl. p < ,01000			
	Počet plat.	Spearman R	t(N-2)	p-hodn.
Predaj & návštěvnost	11	0,371833	1,201660	0,260160

Source: our own data

The program STATISTICA did not take corrections for the repeated values into consideration during calculation and therefore, the rs and t values differ slightly. In principle, it does not affect the confirmation or refutation of H0 and H1 hypotheses at the significance level of $\alpha = 0.01$ as the t is sharply lower in both cases than the critical value included in tables.

Although, based on data from B2B and B2C interface, we failed to confirm the validity of the alternative hypothesis H1 and that fact, that there is a statistically significant correlation between the sales of monograph and the total traffic of the supporting (promotional) website, we have identified and then showed the real benefits of selected e-business applications, in this case EDI (as a B2B communication channel) and the supporting website (as a B2C communication channel) for this specific case, in terms of acquiring valuable information for subsequent analysis in order to gain a competitive advantage.

Summary

It is possible to argue that ability of a company to attract and then retain customers is dependent on the ability to create innovative products and services. Differentiate from the competition is often crucial in terms of the very survival of companies on the market. Nowadays, it is nothing unusual to import almost any product from countries benefiting from significant savings. Efficiency is a significant competitive advantage with regard to local competitors in the battle for customer. Being more effective than a competitor is not only matter of low prices of inputs, but also the matter of responsible management of other non-financial resources, such as time. Efficient use of resources based on more effective and transparent communication processes is just one of the benefits of using e-business applications and ICT in general. Mutual interactive connection of communicating parties also brings benefits in terms of providing important information needed for effective business, even in real time. Analysis of these information may provide a significant competitive advantage in terms of better understanding of factors affecting business. This can have a positive impact on the effectiveness of SMEs, as such.

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New Emerging Data Mining Approaches in Marketing and Education

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Abstract

Data mining silently penetrated into our daily life. Especially targeted marketing activities are driven by models that select the best prospects to address. The offerings of the tourism activities are selected by predictive models that rely on historical activities of a client, on his social status or, for example, on his behavior on the web. Except for these common customer views the new emerging approaches can be combined with standard methods to increase the accuracy of the targeting. Social networks become a valuable source of still rarely used information. Firstly, the unstructured texts of blog messages can be transferred to structured data by text mining techniques. Secondly, the fellowship social structure can be revealed from the messaging to provide information how the client is influenced or controls the others. In our article we describe contemporary data and text mining support of marketing and we pay special attention to the way how data mining is presented to students of humanities.

Key words

data mining, data-mining templates, text-mining, multi-source data, social networks, SaaS

Introduction

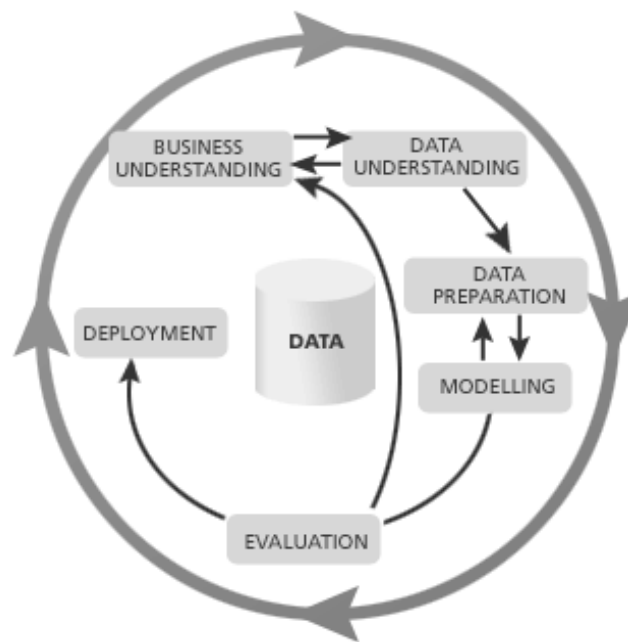
The foundations of data mining can be traced to the end of the previous century. The first conference about Knowledge Data Discovery (KDD) took place in 1989. The first commercial applications of data mining are the marketing ones. The best known supervised data mining task is the optimization of retention campaigns often simplified as the development of a churn model. Even though we can often hear that the progress in data mining area is motivated by exponential growth of electronically stored data, the true reason is the competitive environment where targeting of the right customer is an essential issue.

The portfolio of data mining tasks is growing permanently and, in spite of the fact that marketing has exploited data mining for a long time, there are currently several emerging data mining approaches that can help to even better target the customers. These approaches take advantage of the new sources of information like social networking services and combine the information drawn from different sources. In the beginning of the paper we remind the standard methodology of data mining and then we pay attention to three emerging areas: analysis of text data, analysis of social networks and resolving the problems with combination of data sources. At the end we pay attention to the way how students can exploit the marketing data mining know-how and modern computational resources.

Proven methodology

The variability of data mining tasks across all domains caused the introduction of data mining methodology CRISP-DM in 1999. The methodology divides the data mining project to six phases: Business Understanding, Data Understanding, Data Preparation, Modeling, Evaluation and Deployment. The quality of CRISP-DM is proven by the fact that the methodology is applicable to new tasks and new sources of information. For example, when a new data source becomes available, usually the only Data Preparation phase is modified, the other five phases remain almost unchanged.

Figure 1 Six phases of CRISP-DM methodology



Source: HÁVA, Ondřej Data mining okolo nás

www.acrea.cz/files/marketing/profcomputing_042008.pdf

The illustrations of the utilization of data mining and CRISP-DM can be found as case studies which are provided by commercial data mining vendors. For example, IBM offers a case study about a well-known car rental company Avis. There are many competitive car rentals on the market but, due the data mining targeting, Avis is able to attract its customers sooner and offer them reasonable conditions. In addition, their targeting costs were dropped by 50% after the deployment of data mining solutions. The case study is downloadable from www.acrea.cz.

While the goals of marketing data mining tasks persist (acquire, growth, retain), the approaches to achieve them change. Beside new sources of valuable data, from the (semi)automated preparation of data we can leverage combination of predictive models or automation of deployment of predictive models. All these changes can be described within the CRISP-DM methodology. Namely, the three examples represent changes in the phases of Data Preparation, Modeling and Deployment respectively.

New approaches

There are many ways how to improve any data mining solution. One can gain the most if the improvement takes place in one of the first stages of CRISP-DM, viz. Data Understanding or Data Preparation. On the other hand, the improper operation in the early stages cannot be corrected in the later stages, viz. Modeling or even Deployment. Even though many new data mining contributions relate to Modeling phase, we mention emerging approaches that influence Data Understanding and Data Preparation phases and seem to be promising especially in the marketing area.

Entity analysis

Due to many heterogeneous sources of data available in electronic format, it is often difficult to merge the correct customer records together in Data Preparation phase. Not all sources provide universal and unique person identifier; customers are often described by text data that were filled into some forms. Hence the identification by the customer name only is far from perfect. Additionally, short texts like title, name or address can include mistakes, or authors may use different formats.

The new algorithms for data cleaning and similarity measurement must be employed to resolve this problem. Some of them must be supported by special lists or dictionaries which make the task domain and language dependent. Although data cleaning and merging is a rather hard and complex job, the resultant correctly merged data offers errorless information to be mined while solving marketing tasks.

Text mining

Certain valuable information about customers is hidden in free texts. The volume of available electronic texts is much higher than the volume of structured database data. The goal of text mining is to extract important information from text, to transform it to some structure (i.e. to derive reasonable features) and to join it with database data. Hence using the means of text mining marketer can significantly broaden the customer attributes.

Due to the richness and ambiguity of spoken and written natural languages, the extraction of attributes from the text need not be straightforward. There are many particular steps in the pipelines of text mining software and many of them require huge computational resources. In addition, language dependent dictionaries and algorithms are necessary to resolve the ambiguity. The reason for such complicated processing is to extract the main topics contained in a text or to classify a text to predefined categories. Sentiment analysis is an emerging example of text mining task and is appreciated in marketing. Sentiment analysis allows to classify each customer statement as positive or negative.

Text mining enables to obtain information about customer that is not available in structured data sources. Especially attitudes, feelings or desires extracted from a text are valued most when targeting customers.

Social network analysis

Customer attributes are influenced by the community that surrounds them. The intensity how customers are influenced or how they influence the others may be an important indicator of their future behavior. Modern approaches can leverage valuable information from social networks.

Social network in marketing consists of customers and their relations. Social network analysis (SNA) studies especially these relations and we transform the position of customers in the network to their attributes. Occasionally we can also study the relations among customers and products, or alternatively other entities can be added into the social network.

Probably the most deployed application of SNA in marketing is targeting of customers in retention campaigns. The act of churn is usually significantly influenced by family or friends of a particular customer, thus the churn potential is spread or diffuses through the network. SNA can mark the most endangered customers.

Know-how transfer

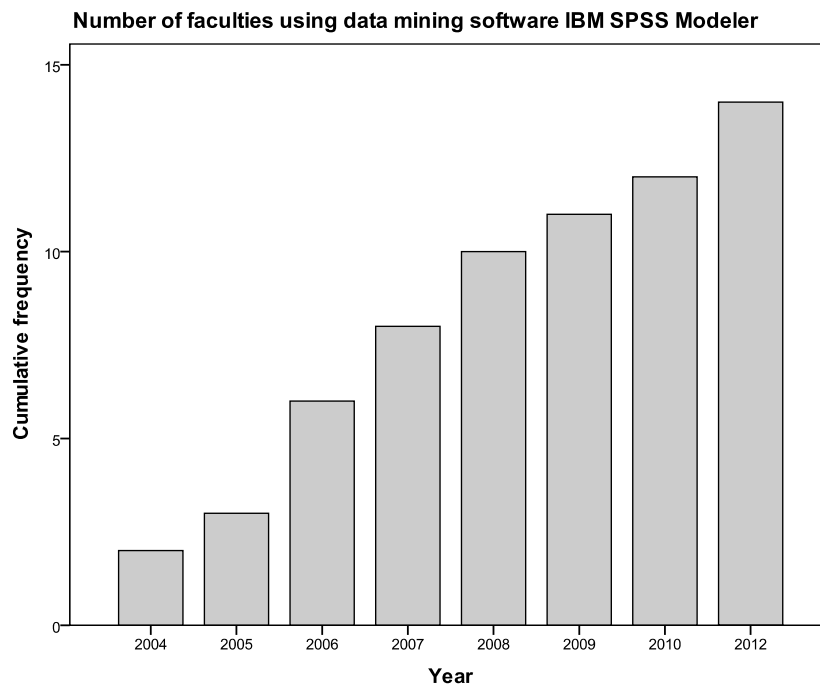
The new approaches similar to the above mentioned ones can be expected in the future as well. Due to the specificity of data sources and their transformations, the best practices are continuously formed for each domain. Years ago data mining could be taught regardless of the task and domain. Contemporary data mining solutions in marketing are not constituted by predictive models only but they include special treatments of specific data sources. Thus, teachers of data mining lessons should present the domain specific solutions to students instead of a universal description of data mining models.

The practical training on almost real data is important for students as well. It cannot be achieved without specific data mining software and powerful hardware. The infrastructure should enable students to modify the process in all CRISP-DM stages from Business Understanding to Deployment.

Achieving the above mentioned training requirements is rather difficult. Firstly, the domain know-how is held by domain experts and teachers cannot learn all. Secondly, the implementation of solutions that are suitable for training is time and resource consuming and requires regular maintenance.

Thus, sharing of all training resources is the right solution. We recommend to deploy special templates that describe the current state of art in solutions of marketing tasks. Some of them are already available and are distributed with data mining software. The distribution of the templates can be combined with e-learning approaches to arrange a know-how transfer between the domain experts and the students. The templates should be supplemented by shared computational resources where the specific solution is already implemented. The suitable solution is a data mining software provided as a cloud computing resource. Data mining software in such solution should be already connected to all data sources and the processes from the templates should be implemented in it.

Figure 2 The number of faculties in the Czech Republic that use data mining software IBM SPSS Modeler for education and research



Source: Háva Ondřej

Let us illustrate the educational needs on the spread of leading data mining software on universities in the Czech Republic. The boom of data mining education started in around 2005 and the number of universities that teach data mining is still growing. Data mining is introduced as an integral subject of many curriculums including management and marketing. The Faculty of Economics and Administration, University of Pardubice, is an example of an early adopter (since 2005), while, for example, the Faculty of Economics, Technical University of Liberec, is developing its data mining programs currently. The software IBM SPSS Modeler (formerly SPSS Clementine) is often provided together with templates of data mining processes. For example, the templates for analytical Customer Relationship Management (aCRM) are available to users. The templates include description of the solution, customizable implementation in software and almost real data. Together with standard ways of sharing know-how some universities have made available their software and data mining lessons as free videos that attract additional students and teachers.

Conclusions

Data mining processes in marketing are not fixed and they continuously evolve. Currently, an adoption of procedures that process new data sources is an emerging issue. We illustrated this trend on utilizing the text data from social networking services such as Facebook or Twitter, and combining them with other sources.

To keep all users informed about the innovations and about the standard solutions of marketing tasks it is necessary to build centralized sources of know-how where specific templates and computational resources are available. The means to achieve such target should include e-learning and cloud computing.

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Destination Management Organization and Creating the Quality of Tourist Product of a Region

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Abstract

In the era of increasing competitiveness on a tourism market and the continuing battle for customers between particular tourist regions of the world, Europe, and the country, there is constant search for methods and ways to achieve a competitive advantage in a given market takes place. Many entrepreneurs also come to the conclusion that the mere price competition and the use of the latest methods of promotion are not sufficient. The present tourist is more and more educated and demanding. He expects that the services, which he pays for, fully satisfy his requirements. Therefore, in tourism the quality of provided services is becoming increasingly important. The article presents the activities which can be taken by the Destination Management Organization (DMO) to shape effectively the quality of the tourism product of the whole region.

Key words

Quality, Destination Management Organization, Tourist product.

Introduction

Regional tourism product has a very complex character. Many institutions have an influence on its formation. Therefore, attention to ensure proper quality standards of tourism services is perceived by individual entrepreneurs and by the governments of tourist regions as one of the chief assets which can help to achieve the competitive advantage on the tourist market. However, recognizing the complexity of the problems associated with the process of creating the tourism product of the region and ensuring its proper quality, entrepreneurs and the authorities of tourist regions look for a corresponding institution which could tackle these tasks. Such an institution seems to be the DMO assumed to coordinate the activities of local governments and a local tourism industry to develop tourism in the region. UNWTO defines the Destination Management Organization as an entity which integrates local authorities, enterprises and other organizations involved in the development of tourism and/or enables to create partnerships around a shared developmental vision. The ultimate objective of the DMO is the development and promotion of a tourist region by coordinating and carrying out certain key activities such as finance, strategic planning, marketing, decision making and the development of regional tourism products¹. Shaping the regional tourism product can be also such a goal.

Tourism product of a region

In the literature there are many definitions of a tourist product. In general, Ph. Kotler² defines a product as anything which can be on the market, gain attention, be acquired, used or consumed, satisfying one's desire or need³. The tourism product of a region, therefore, can consist of various elements which, related appropriately to each other, form a package of material goods and services which meet the expectations and needs of the tourist, for which he is willing to pay the required price. In practice, we rarely deal with the provision of all services related to a given tourism product by a single entrepreneur. The most often particular components of the tourism product are created by separate entrepreneurs, for example hoteliers, restaurateurs, managers of ski lifts, transport companies, etc. All of them, providing services connected with a comprehensive tourism product, generally care for their own interests often forgetting about general-regional interests. The appropriate combination of selected elements in one product by one tourist

¹ *Survey on destination governance. Evaluation report*, Destination Management Programme, Madrid 2010.

² Kotler P.: *Marketing. Analiza, planowanie, wdrażanie, kontrola*. Warsaw: Gebethner & Ska 1994, p.400.

³ More on the issue of the elements of a regional tourist product in the article by P. Gryszel, D. Jaremen, A. Rapacz, *Opportunities for social tourism development by managing the process of tourist product creation* published in the publication and by P. Gryszel, *Działania Lokalnej Organizacji Turystycznej na rzecz kształtowania jakości produktu turystycznego regionu*. in: *Kształtowanie jakości produktu turystycznego regionu z zachowaniem rozwoju zrównoważonego*. Instytut Turystyki, Warsaw 2004.

enterprise is not always possible because it is not the owner, often for economic reasons, of all desired components of the product. The particular entrepreneurs - owners of the individual components of the product often treat each other as competitors, which does not allow them to create a comprehensive tourist offer.

The quality of the tourism product of a region

In practice and theory there are many definitions of quality. The concept is used every day usually with the meaning of luxury goods and services, that is of "high quality". It may be low, acceptable, appropriate, high. All definitions of quality take the economic - marketing shape and relate to the customer's requirements, e.g. Ph. Kotler argues that quality is the sum of characteristics of a product or service which decides about the ability of a given product to meet specific needs⁴. UNWTO provides the following definition of quality: "Quality is the fulfilment, at a fixed and accepted price, of all legitimate demands and expectations of the customer, with simultaneous respecting the quality requirements for safety, hygiene and availability of tourist services, and the harmony of human and natural environment"⁵. However, following Daria E. Jaremen quality of a tourist product of a region, due to its complexity, can be defined as a set of characteristics/features of the tourism product of a region which decide about its ability to meet the identified and suspected (expected) needs and expectations of tourists appearing in connection with their stay in a given area for tourism purposes. It can be assumed that quality means a certain defined grade of compatibility between expectations and perceived by tourists features and elements of the tourism product offered by a given region⁶. The client expects such a tourism product of a region (a service provided to him) which:

- will meet his needs, providing satisfaction and contentment,
- will not cause problems,
- will be provide at a convenient time and place,
- whose price will correspond to the value it presents⁷.

Analyzing the problems of the quality of a tourist product of a region, two main dimensions of quality, so called technical and functional quality cannot be forgotten.

The technical quality is everything which the customer receives in the process of providing services. It depends on the qualifications and skills of the personnel providing services, and the material resources used in the service process. Elements of the tourist product of a region affecting the technical quality of the product include among others:

- accommodation and catering base (standard, the level of provided services),
- tourist attractions of the region, including the condition of the natural environment, their development and access for tourists,
- tourist attractions of the region, including the organization of mass events, folklore,
- transport infrastructure, availability of the region and internal transport development, marking tourist attractions, journey time,
- the level of tourists' safety,
- a system of tourism information and promotion and a system of reservation and distribution of services,
- weather conditions,
- aesthetics of the surroundings and a community infrastructure,
- the level of prices,
- qualifications of tourist personnel,
- the image of a region.

The functional quality is determined by how the customer is served. This is a way in which he is treated by the personnel of tourist enterprises, the inhabitants of the region. This quality is shaped during a direct contact with a tourist when the service is provided, but also it is shaped by tourists themselves, their behaviour and opinions. Its level is significantly influenced by hospitality of the inhabitants of the region,

⁴ Kotler Ph.: *Marketing... publ. quat.*, 49.

⁵ Kachniewska M.: *Zarządzanie jakością usług turystycznych*. Warsaw: Difin 2002, p. 59.

⁶ Jaremen D.E.: *Jakość produktu turystycznego regionu*. In: *Turystyka w strategii rozwoju miast i gmin Ziemi Kłodzkiej*. Collective work edited by L. Koćwin. Wrocław: Wyższa Szkoła Zarządzania „Edukacja” 2004, p.61.

⁷ Wąsowicz E.: *Produkt turystyczny i jego jakość*. In: *Markowe produkty turystyczne*. Collective work edited by A. Panasiuk. Szczecin-Niechorze: Fundacja na rzecz Uniwersytetu Szczecińskiego 2004, p. 173.

the attitude towards tourists, commercialization of everyday life and treating the tourist only as a potential customer.

DMO tasks for the good of the shaping the quality of the tourism product of a region

Taking into consideration the complexity of the tourism product of a region, thus a large number of elements evaluated by tourists and affecting its quality, it appears that shaping the quality of a tourism product of a region is not an easy task. The quality of a regional product is affected by both the economic subjects and local authorities, and residents and tourists visiting a given region. Therefore, it is necessary to find an appropriate institution which could affect the high level of the quality of the tourist product of a region. The DMO, focusing in its ranks both representatives of the tourism industry and local government units, can be such a successful institution. Caring for the development of a region through the development of tourism and regional tourism products, the DMO can play a significant role in the process of shaping the quality of these products. The DMO activities for the good of shaping and improving the quality of the regional tourism product include:

- 1. Improvement of tourism personnel.** Activity in this area will consist organizing professional courses and training on various subjects. This training should be directed to the employees of tourism enterprises who have a direct contact with tourists visiting the region and employees of paratourist enterprises. An important activity of the DMO should be also education of the inhabitants of the region, whose aim is to make people aware that the local hospitality should be the basis for achieving success in the market, and the inconveniences of living in a tourist region caused by an increased tourist traffic can be compensated, as a result of the use of the tourist multiplier, by increased incomes of all residents of the region.
- 2. Activities for the development of tourism infrastructure in the region.** Through a wide range of promotional activities, the DMO can encourage potential investors to be interested in the region. Through proper actions it may also influence the local authorities in order to create favourable conditions for investments. Infrastructure meeting all the safety requirements and corresponding with binding norms and standards should be created. New investments should lead to the improvement of tourist development of the region and have a positive impact on the sense of comfort of tourists visiting the region.
- 3. Conducting publishing activity.** It should refer to, among others, preparation of promotional materials about the region, development of a catalogue of tourist offers (so called a product catalogue) and its current updating, cooperation with regional and national publishing houses in editing and issuing maps, book guides and tourist sources.
- 4. Cooperation with the mass media.** The subject of the cooperation should be ongoing transmission of news releases, organizing press conferences, study tours for journalists and tour operators. These actions should be aimed at creating a positive image of the region in the eyes of potential visitors and tourists visiting the region.
- 5. Organization and co-organization of mass events in the region.** In this regard, the DMO can play a role of a coordinator in organizing major mass events in the region. Organization of mass events raises the attractiveness of the regional tourism product, and thus it has a positive influence on its quality.
- 6. Setting the calendars of tourist events.** This concerns the coordination of activities at the arrangement of the calendar for events in the region, so that there is not too much competition between particular tourist enterprises, so that major events are not organized at the same time, and so that the organization of events actually contributes to the extension of the tourist season.
- 7. Participation in the regional tourist information system.** The DMO involvement in the functioning of regional and national tourist information system increases the availability of the regional tourism product, and significantly affects its positive image in the eyes of tourists. Involvement of the DMO in the tourist information system should consist of:
 - conducting a regional tourist information centre,
 - conducting a local tourist information bank,
 - coordinating the flow of information between the points of tourist information,
 - conducting online information service,
 - creating a system of labelling tourist attractions facilitating significantly getting around the region, thus resulting in the improvement of the perceived quality of the regional tourism product.

8. Creation of a trade mark promoting the region and administrating it. The DMO should order to announce a contest to develop a promotional logo of the region. All products signed with such a logo would be perceived as branded products, thus as high-quality products.

9. Inspiring, help to create, develop and promote regional tourist products. Thanks to a wide training - promotion activity the DMO can significantly influence creating local tourist offers. The DMO may also deal with the development of concepts and marking out thematic tourist routes in the region.

10. Initiating tourism market research, participation in statistical and marketing surveys. One of the main tasks of the DMO should be constant monitoring the tourism market through independent carrying out research of the tourist market (mainly geography of arrivals, tourist preferences, meeting their expectations). The results of the research should be used to improve the quality of providing services, thus to improve the quality of the regional tourism product.

Summary

Taking into consideration the importance of a regional tourism product, it should be noted that creating its quality is not an easy and fast task. In the process of creating a regional tourism product there are involved a significant number of subjects, not always directly related to a given product, and the shape of the regional tourism product is influenced by many elements not always having an economic nature. Efforts to raise the quality of a regional tourism product should be based on five pillars:

- system activity,
- cooperation and partnership,
- continuous improvement,
- leadership,
- past experience⁸.

The institution which can take on the implementation of these activities is the DMO.

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⁸ Jaremen D.E.: *Jakość ...*, publ. quat., p. 65.

Opportunities for Social Tourism Development by Managing the Process of Tourist Product Creation

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Abstract

Social tourism represents the type of civic activity which combines goals from the domains of both tourism and social policy. People participating in it are the individuals who, due to e.g. economic, health or social reasons, find it difficult to take advantage of the forms characteristic for commercial tourism. Financial and organizational support is necessary for them in order to facilitate their basic right for resting and travelling. The objective of the hereby paper is to discuss selected management tools to be implemented in the process of creating basic components underlying a tourist product, which are of significant importance for the activities of people with disabilities who represent an important segment of social tourism in Poland.

Key words

Social tourism, Tourist product, Product management, People with disabilities.

Introduction

Socio-economic development in Europe in the second half of the 20th century and at the beginning of the 21st century, political transformations and technological progress represent factors which have exerted crucial impact on travelling opportunities for the recent 20 years. In this period an ongoing increase in the number of tourist trips was observed, however, on the other hand certain stabilization of tourist traffic among the European Union member countries was also noticed. Data provided by Eurostat and the Eurobarometer, published by the European Commission, indicate that in 2008 almost 67% of the European inhabitants actually travelled, but only 58% of them made holiday trips (spending four nights away from home)¹. Therefore the above information indicate that about 40% of the European citizens do not leave their place of residence for holiday, even though the situation in this matter is highly diversified in particular countries. While in Sweden it is as many as over 85% of its citizens who leave for holidays, in Bulgaria, Romania and the Baltic countries (Estonia, Lithuania and Latvia) this indicator presents the level of only 20%. What is more, in all EU member states there are still numerous groups of citizens excluded from tourism. This is the reason of the growing interest in the European Union member countries, as well as the European Commission, in the development of social tourism and the suggested new approach towards the problem expressed by the slogan “tourism for everybody”.

According to data provided by the Central Statistical Office the number of senior citizens in Polish society keeps growing and in 2030 it will reach the level of about 24%, which means that almost every fourth Pole will be 65 years old or more. In cities the population of seniors will be larger than in rural areas. In recent decades Europe experiences the ongoing tendency of its societies aging. In the European countries every seventh citizen is over 65 years of age, while the number of people in the age group 0-19 is significantly decreasing. The decline in birth rate has also been observed, which is accompanied by the lengthening life expectancy and therefore the relative weight of dependent social groups, i.e. children, teenagers and senior citizens, is clearly moving towards the latter. The problem of aging population became so significant that WHO prepared A Policy Framework: Active Aging in Madrid in 2002².

On the other hand, according to Central Statistical Office data, the number of people with disabilities in Poland exceeded the level of 4.2 million in 2009, which represents over 12% of the society. More than every third disabled person had a medical certificate of moderate disability and the remaining group of about 30% had such certificate stating their major or slight disability. The most frequently quoted reasons for disability were: cardiovascular diseases, locomotive organs disorders and neurological problems. Relatively lower percentage share of patients with eyesight and hearing disabilities or suffering from mental illnesses as well as mentally handicapped ones in the group of people with disabilities refers,

¹ Ch. E. Bélanger, Social Tourism in Europe, NET-StaR-Network for Social Tourism and Regeneration, London, March 30th 2011, www.westminster.ac.uk

² *Działania na rzecz rozwoju turystyki społecznej w Polsce [Activities for social tourism development in Poland].* The Report by the Ministry of Sport and Tourism. Warsaw 2010.

however, to thousands of individuals experiencing reduced functioning efficiency in their everyday life and therefore also requiring specific attitude in the process of their education, at the job market and in everyday life and also in practising tourism³.

The question arises whether Polish travel companies are prepared for such market changes? Are they capable of preparing such tourist offer which could match the expectations and requirements of the above market segments and can they manage such product efficiently? Presenting answers to the above questions constitutes the leading objective of the hereby paper.

The concept of social tourism

The concept of social tourism is not a clear notion and becomes often associated with social tourism. International Bureau of Social Tourism (Bureau International du Tourisme Social –BITS) defines social tourism as all kinds of concepts and phenomena related to participation in tourism by low income social groups, which is possible as the result of applying clearly defined social tools. In the new approach to defining social tourism it is specified as relations and phenomena referring to the participation of both residents and tourists, the unprivileged social groups and these individuals who, for any other reason, are not capable of participating in tourism and advantages resulting from such participation⁴. On the other hand, the European Commission defines social tourism as activities organized in some countries by associations, cooperatives and trade unions focused on ensuring travelling opportunities for as extensive group of people as it is possible and mainly for those who constitute the least privileged social groups⁵. In line with BITS classification the major beneficiaries of the above form of tourism are as follows:

- young people,
- families with children,
- people with disabilities and health problems,
- senior citizens.

Regional tourist product vs. social tourism

Tourism destination product is characterized by a complex nature. It consists of the following components:

- initial (basic) offer of a destination which exerts influence on motivations and determines the choice of the destination (trip) – usually represented by natural and anthropologic advantages,
- supplementary (additional) offer of a destination which creates conditions of the visit and enables taking advantage of the primary offer in a region – frequently defined as tourist and semi-tourist infrastructure,
- destination availability which should be understood as financial outlays, speed and comfort of reaching the destination by visitors,
- destination image having strong impact on the selection of tourist region by visitors, as well as the image of services organization in the region,
- adequate price which for visitors is the sum of money spent on accessing the destination, accommodation, food and other services and depends on the season, type of purchased services, currency exchange rate, distance from the destination, means of transport and the region itself.

Regional tourist product may therefore cover diversified components adequately related with each other and presenting the package of material goods and services meeting due expectations and fulfilling the needs expressed by a tourist. In practice we rarely deal with rendering all services related to a given tourist product by just one entrepreneur. Most frequently particular elements of a tourist product are created by separate entrepreneurs, e.g. hoteliers, restaurateurs, ski lifts owners, transport companies, etc. All of them, by providing services related to the complex tourist product, usually take care of their own interests and frequently forget about general regional ones. Proper combination of selected components into one product by one tourist enterprise is also rarely possible since such enterprise is not the owner, for

³ www.niepelnosprawni.gov.pl

⁴ *International Social Tourism Organisation Statues*, ISTO 2010, http://www.bits-int.org/files/d9fcc3bbbf5399879828d1b3792a43b0_1309767114.pdf, downloaded on 17.05.2012.

⁵ *Działania na rzecz rozwoju turystyki społecznej w Polsce [Activities for social tourism development in Poland]*. The Report by the Ministry of Sport and Tourism. Warsaw 2010.

economic reasons, of all the desirable elements which make up an overall product⁶. Creating regional product of social tourism requires the cooperation of many entities which should be interested in adjusting both the existing infrastructure and their offer to the needs of a certain group of tourists.

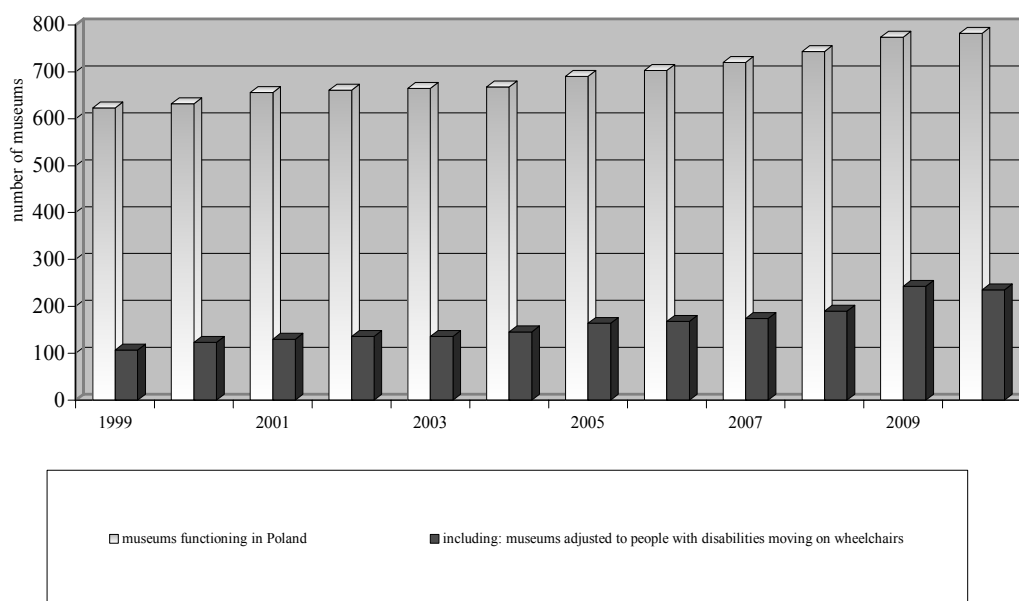
Complex adjustment of infrastructure to the needs of senior citizens, to people with disabilities and health problems, who represent participants of social tourism, requires adjusting to their needs mainly the following factors:

- hotel establishments,
- food provision facilities,
- sightseeing facilities,
- mass communication,
- public utility facilities including, among others, car parks, toilets, tourist information centres,
- tourist trails.

Not all facilities may, obviously, be adjusted to the needs of people with disabilities or to senior citizens. Many tourist attractions represent relics of the past and historical buildings the adjustment of which is not possible for conservation reasons. Besides not all natural sites may be arranged and maintained in line with social tourism expectations. Therefore it is of great importance, as part of proper social tourism product management, to provide adequate information, to all individuals interested, in the form of brochures, leaflets or guide-books prepared specifically to meet this particular objective. Well trained personnel for the purposes of social tourism and prepared to serve such clients also represents the crucial component in tourist product management.

The adjustment of tourist facilities to the needs of social tourism is reported in the form of statistical data about hotels' accessibility for the disabled (table 1) and also Polish museums to the needs of people moving on wheelchairs (picture 1).

Picture 1 Museums in Poland adjusted to people with disabilities moving on wheelchairs in the period of 1999-2012



Source: Kultura 2009, Central Statistical Office, Kultura 2010, Central Statistical Office

⁶ Gryszel P., *Działania Lokalnej Organizacji Turystycznej na rzecz kształtowania jakości produktu turystycznego regionu* [The activities of Local Tourist Organization focused on establishing regional tourist product quality. W: Kształtowanie jakości produktu turystycznego regionu z zachowaniem rozwoju zrównoważonego. Instytut Turystyki [In: Establishing the quality of regional tourist product in line with sustainable development. The Institute of Tourism], Warsaw 2004, pp. 163-172.

Table 1 Accommodation facilities for people with disabilities in Poland in 2009

Facilities	entrance ramps	automatically opened doors	lifts adjusted for the disabled	rooms/bathrooms adjusted for the disabled
Number of facilities: 6992				
Total, including:	1806	677	925	1813
hotels	856	459	602	980
motels	53	8	3	38
guesthouses	76	12	16	79
other hotel establishments	173	27	57	131
remaining collective tourist accommodation establishments	1158	506	678	1228
hostels accommodating group trips	8	2	7	
mountain hostels	7	1	1	5
youth hostels	13	x	2	4
hostels for students	47	3	11	37
holiday centres	157	37	47	146
holiday camp centres	15	1	x	15
training and rest centres	122	31	44	108
creative work houses	3	2	1	3
tourist bungalows sites	23	1	x	27
campsites	26	x	x	36
camping grounds	3	x	x	6
spa establishments	105	70	102	101
other unclassified	119	22	36	89

Source: "Turystyka w 2009 r." ["Tourism in 2009, Central Statistical Office, Warsaw 2010]

Another example of tourist infrastructure complex adjustment to the needs of social tourism are the activities carried out by national parks. E.g. Karkonoski National Park adjusted two tourist mountain trails and Ecological Education Centre for access and moving around on wheelchairs, while Wigierski National Park adjusted 82 km of tourist trails for the needs of people with disabilities. An example of activities focused on social tourism undertaken by self-government administration may also be the guidebook entitled *Świętokrzyskie without barriers. A guidebook for people with disabilities* published by the Marshal's Office of Świętokrzyskie Region. A similar guidebook was also issued for the disabled in Lower Silesia region.

Final remarks

People with disabilities as well as senior citizens despite numerous barriers constitute a significant group of social tourism recipients in our country. Poland is still an example of a country which does not fully realise all the advantages, mainly the social ones, resulting from this form of tourism development. The adjustment of tourism infrastructure to the needs of people with disabilities and senior citizens keeps improving. Changing attitudes, presented by tourism oriented entrepreneurs as well as national and local authorities, are noticeable and also far reaching transformations in different spheres, referring to the specific needs of this particular group, are observed. They are included in development plans and implemented step by step. The needs of the discussed social groups become more and more often noticed by tourism market and therefore met more effectively.

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Corporate Social Responsibility and the Czech Tourism Industry

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Abstract

This paper deals with the subject of Corporate Social Responsibility (CSR) with particular reference to the tourism sector in the Czech Republic. The paper provides an overview of CSR including the definition of CSR, CSR initiatives and characteristics of CSR in the Czech Republic. The paper also contains the author's own survey oriented on travel agencies and accommodation operators in the Czech Republic in connection to CSR.

Introduction

We can agree that CSR has started to attract considerable attention in the tourism industry which is a fast growing industry and a valuable sector, contributing significantly to the world, regional and local economy by the economic, environmental and social activities. But unfortunately, yet most companies in this sector are still in the early stages of assessing and addressing their sustainability impact.

In this paper the author defines CSR and explores its scope in the tourism industry in the Czech Republic.

Corporate Social Responsibility – A definition

Before we begin to discuss CSR in the Czech Republic, and in tourism, we should start by defining of corporate social responsibility. Different organizations, economists or management theorists have framed different definitions – although there is considerable common ground between them. We can also state that there is no uniform definition. This is due to the fact, that the CSR has no specific boundary and is based on volunteering.

Common ground between CSR concept and definitions is widely acknowledged and evident from the representative definitions given below.

The World Business Council for Sustainable Development (WBCSD)¹ in its publication Making Good Business Sense by Lord Holme and Richard Watts, used the following definition: „Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.“

Business for Social Responsibility (BSR)² uses the following definition: „Corporate Social Responsibility means operating a business in a manner that meets or exceeds the ethical, legal, commercial and public expectations that society has of business. CSR is seen by leadership companies as more than a collection of discrete practices or occasional gestures, or initiatives motivated by marketing, public relations or other business benefits.“ [9]

In October 2011 the European Commission published a new policy on corporate social responsibility. The EC has previously defined Corporate Social Responsibility as „a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis“. [17] Now the Commission puts forward a new definition of CSR as „the responsibility of enterprises for their impacts on society.“ [10]

For companies seeking a formal approach to CSR, especially large companies, authoritative guidance is provided by internationally recognised principles and guidelines, in particular the recently updated OECD Guidelines for Multinational Enterprises, the ten principles of the United Nations Global Compact, the ILO Tri-partite Declaration of Principles Concerning Multinational Enterprises and Social Policy, and the United Nations Guiding Principles on Business and Human Rights. This core set of internationally recognised principles and guidelines represents an evolving and recently strengthened global framework for CSR. European policy to promote CSR should CSR be made fully consistent with this framework.

Previous initiatives have tended to focus on “corporate social responsibility”, while ISO 26000 Guidance Standard on Social Responsibility provides social responsibility guidance not only for business

¹ The WBCSD is a CEO-led organization of forward-thinking companies that galvanizes the global business community to create a sustainable future for business, society and the environment.

² BSR is a non-profit organization, its mission is to work with business to create a just and sustainable world.

organizations, but also for public sector organizations of all types. ISO 26000 contains voluntary guidance, not requirements, and therefore is not for use as a certification standard like ISO 9001:2008 and ISO 14001:2004.

Corporate Social Responsibility – Multinational Corporations vs. Small and Medium-sized Enterprises

The spotlight of the CSR debate has largely been focused on large multinational corporations (MNCs). As we mentioned above practical CSR initiatives are designed primarily for large firms that have the human and financial resources to implement the required procedures in their business operations. Comparing little, however, is known about CSR in small and medium sized enterprises (SMEs)³, despite the fact that in both developed and developing countries SMEs provide more than half of employment and thus contribute a significant share to the overall economy.

We can state that small businesses are typically not less responsible than large enterprises. They may not know and use the term CSR, but their close relations with employees, the local community and business partners often mean they have a naturally responsible approach to business.

CSR in SMEs is less formal and more intuitive than in larger enterprises, but that does not make it less valuable.

In 2002 research was conducted within the EU, which showed that 50% of European SMEs have already engaged in activities that fall within the CSR concept. This is particularly the donation to the field of culture, sports and charitable projects. Their approach is characterized by its location, frequency and minimal or no links with the business strategy. Research has also demonstrated a lack of awareness of CSR and the potential benefits of this policy are also not known by the SMEs.

Corporate Social Responsibility and tourism

As we pointed out earlier, tourism has a significant environmental, social and economic impact. So it is hardly surprising that the concept of CSR should have been brought to bear, especially in the context of sustainable or environmentally responsible tourism.

Each company, one it has acknowledged its responsibilities, must decide what it can do. For this purpose it has its disposal all the traditional tools of CSR: codes of conduct and best practice, ecolabels and awards, ethical, social and environmental management systems, environmental performance indicators, staff training policies, transparency and truthfulness in reporting to customers, social responsibility and sustainability reports etc. A growing number of companies have adopted measures such as these and made them an integral part of their strategy and day-to-day activity.

The tourism industry has developed a range of CSR initiatives. We can mention for example the International Hotel Environment Initiative (IHEI) and the Tour Operators' Initiative for Sustainable Tourism Development (TOI). The Initiatives have the full support of the World Tourism Organization (UNWTO), the United Nations Environment Programme (UNEP) and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

In tourism, the concept of CSR is mainly bound up with the idea of sustainable tourism and the growing movement for "fair trade" in tourism. The definition of CSR has many similar elements to sustainable tourism in that both focus on how stakeholders should be identified and engaged and that initiatives should be measured to determine their impact on others. Whereas CSR relates to a company's obligation to be accountable to all of its stakeholders in all its operations and activities with the aim of achieving sustainable development not only in the economical dimension but also in the social and environmental dimension, sustainable tourism was first seen mainly from an environmental perspective and has only recently incorporated social and community aspects.

Corporate Social Responsibility in the tourism industry of the Czech Republic

The promotion of CSR in the Czech Republic is aided by the country's cooperation with international organizations, especially ILO and OECD.

In 1996 a National Contact Point (NCP) for the Implementation of the OECD Directive for Supranational Companies was established and the Sustainable Development Council of the Czech Government was established by Government Resolution no.778, of 30 July 2003. In March 2007 the Ministry of Labour and Social Affairs created a new website on CSR, to inform users about the concept of

³ We follow the broad EU definition of an SME as having fewer than 250 employees.

CSR in the European Union. The website also provides references to different projects and activities concerning the promotion of CSR. An eco-labeling system has existed in the Czech Republic since April 1994. Especially since 2000, the government has been supporting the development of the production, sale and use of environmentally friendly products/services.

If we deal with CSR in the Czech Republic we must not forget the Business Leaders Forum (BLF) which is a platform for CSR managers operating in the leading Czech and international firms and was founded in 1992. BLF carried out some CSR research in connection to firms operating in the Czech Republic.

There are two categories of services where eco-labels are awarded in the Czech republic: tourist accommodation services and camp site accommodation services. In the Czech Republic 7 hotels and pensions and 1 camp have been awarded the eco-label by the end of 2011.

The area of CSR in tourism industry in the Czech Republic has not been explored in detail. There is little research about CSR overall, but no one concerning with tourism industry. We can find very easy information about CSR in connection with Multinational Corporations but it is very difficult to find them in connection with SMEs. For this reason, we tried to map the situation in the tourism industry in the Czech Republic by questionnaire research and case studies regarding SMEs.

Research was carried out on the website server vypInto.cz between May 25, 2012 and June, 13, 2012, The entire survey was anonymous. Complete results of the research are publicly available at: <http://corporate-social-responsibil.vypInto.cz/> and <http://23932.vypInto.cz/>.

Purpose of the research was especially to answer the following questions:

Q1: Did companies encounter with the concept of CSR?

Q2: How important is it for companies to behave responsibly and ethically towards employees, the environment and the community in which it operates?

Q3: What concrete CSR activities do companies most often carry out?

Q4: What do companies motivate most to implement CSR in the Czech business environment?

To the questionnaire responded a total of 25 travel agencies and 72 accommodation operators. The main results of the survey are as follows:

Table 1 Question 1 and Question 2 – results (in %)

Operator	Q1		Q2			
	Yes	No	very important	important	Slightly important	Unimportant
Travel Agencies	48,0	52,0	68,00	32,00		
Accommodation operators	12,5	87,5	50,00	34,72	12,50	2,78

Source: own processing on questionnaire research

The results presented in Table no. 1 show that the most of the analyzed service providers have not encountered with the concept of CSR, but they carry out the CSR activities (Table no.2) in frame of their business (which corresponds to the above-mentioned statement). And also the most of them agree with the statement that it is important for companies to behave responsibly and ethically towards employees, the environment and the community in which it operates.

Table 2 Question 3 – results (in %)

Q3	Travel Agencies	Accommodation operators
Staff training	81,82	33,33
Environmental policy	45,45	61,11
Sponsorship	45,45	50,00
Cooperation with NGOs / charity foundations	36,36	38,89

Source: own processing on questionnaire research

The most of Travel Agencies carries out staff training and the most of Accommodation operators in frame of CSR focuses on the environmental policy. These results correspond with the research carried out by BLF in the Czech Republic in 2008.

Table 3 Question 4 – results (in %)

Q4	Travel Agencies	Accommodation operators
Ethical-moral reasons	70,00	42,11
Efforts to increase employee satisfaction	60,00	36,84
Efforts to attract and keep high-quality employees	50,00	36,84
Efforts to increase customer loyalty	50,00	42,11
Keep pace with competitors and market requirements	50,00	21,05
Efforts to improve relations with public administration	-	5,26
A part of company PR / Marketing	20,00	15,79
Efforts to gain a comparative advantage	40,00	15,79

Source: own processing on questionnaire research

Ethical-moral reasons motivate service providers most to implement CSR activities in the Czech business environment. Efforts to increase employee satisfaction motivate significantly Travel Agencies and efforts to increase customer loyalty motivate accommodation operators. These results also correspond with the research carried out by BLF.

Case studies were created by e-mail communication with owners / directors of the collective accommodation establishments (SMEs) and the example is given below.

Hotel Moravia – Lasákův Mlýn, Boskovice, <http://www.hotelmoravia.cz/>

Hotel manager Mr. Jaromír Jurka sees the biggest obstacles in implementing CSR activities in the Czech Republic in the fact that CSR activities lead to increased business costs and the related view that tourism companies currently are mainly interested in the economic situation, everything else is secondary. We can say that the hotel manager confirms that SMEs do not know the concept of CSR, but intuitively use it. Although, in his words, he has not encountered with the concept of CSR, but in relation to the corporate strategy the hotel carried out specific CSR activities.

CSR of Hotel Moravia is reflected in many areas of life business - from staff training, environmental policy of the company to the regular meetings (brainstorming) to improve the organization and business strategy, and to improve interpersonal relationships in the workplace. It follows that the main focus of corporate strategy in this respect is particularly care for employees but also for customers, as delivered by Mr. Jurka.

Summary

To summarise, Corporate Social Responsibility is a business approach that contributes to sustainable development by delivering economic, social and environmental benefits for all stakeholders.

The general conclusion from hospitality and tourism review in connection to CSR is that behaving in a socially responsible manner has received increased attention over the past decade by hospitality and tourism organisations and associations. But, while these are important steps, they are not enough. The response of the travel & tourism industry is still piecemeal and change is relatively slow. One reason for this is the highly fragmented nature of the industry, the great majority of which consists of independent small and medium sized businesses scattered across the globe, often running on fragile operating margins.

The most of SMEs in the tourism industry in the Czech Republic have not encountered with the concept of CSR, but they carry out the CSR activities, such as staff training, environmental policy, sponsorship and Cooperation with NGOs / charity foundations.

SMEs in tourism industry see the biggest obstacle in implementing CSR activities in the Czech republic in increasing costs and in excessive bureaucracy in promoting CSR activities which resulted from the e-mail communication with owners / directors of the collective accommodation establishments.

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New Trends of Controlling in Companies of Tourism

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Abstract

Controlling – economic management - is extremely important management tool for managers of hotel and restaurant businesses. Economic management – controlling – expresses a complex function of management, coordination of planning, control and information security. Coordination in this context means a system of corporate planning, control and information security, useful for needs of management in company of tourist traffic. The goal of the control measures is to maintain the direction of the company in accordance with the approved business strategy and keep it in the proper course for further development and growth. The secret of successful businesses is that they concentrate on unsatisfied market needs and automatically fill the market gap. To discover a market opportunity and use it for the benefit of themselves and others is the purpose of business activities in tourism.

Key words

Controlling, Financial controlling, Cost controlling, Tourism

Importance and role of controlling in the companies of tourism

Controlling - economic management – is an increasingly important management tool for managers of hotel and restaurant companies. **Economic management - controlling** - expresses a complex function of management, coordination of planning, control and information security. Coordination in this context means a system of corporate planning, control and information security usable for the needs of company's management (F. Freiberg, 1997). **It is a system** of rules that helps to achieve business objectives, avoids surprises and „list a red light“ on time when hazard, which requires appropriate action, appears. Controlling serves to maintain the desired state, it is a project that allows a comparison to the actual plan at regular intervals to determine whether there are any interventions necessary in the management by which a desirable state can be reached and kept (R. Mann, E. Mayer, 1996).

In hotel companies and service companies, the role of controlling is compounded by the fact that any causes which give rise to non-execution of planned sales and products turned out, leave the position that is no table to change at that period of time. The critical factor of sales and products turned out in hotel service is execution time. If sales are non-executed in that period of time, they will remain permanently indispensable. Unsold housing capacities cannot be replaced or caught up in the future. They are loss with consequences on economic results of the hotel (Sládek, Valentová 2006).

The secret of successful companies, companies of tourism included, is that they focus on unsatisfied market needs and automatically fill the market gap. To discover a market opportunity and exploit it for the benefit of themselves and others is the purpose of business activities in tourism. Controlling position is also important in the process of preparing a business plan and has an important place in the process of business strategy. It is therefore logical that controlling will focus on activities associated with the implementation, as well as the objectives formed in marketing strategy in the company of tourism. This is also reflected in the description of the functions of the controlling company.

To work in controlling and fulfilling the above functions, information is needed. This information is divided according to areas of economic management. The most important source of information, however, include: balance sheet, income statement, budget costs, pricing, analysis of the evolution of liquidity, analysis of narrow spaces in the company of tourism, indicators for all units of the activities and products turned out, daily management reports of that company, the indicators of marketing strategy, plans, projections, marketing analysis of the strengths and weaknesses and other information sources

Model of application of controlling in the company of tourism

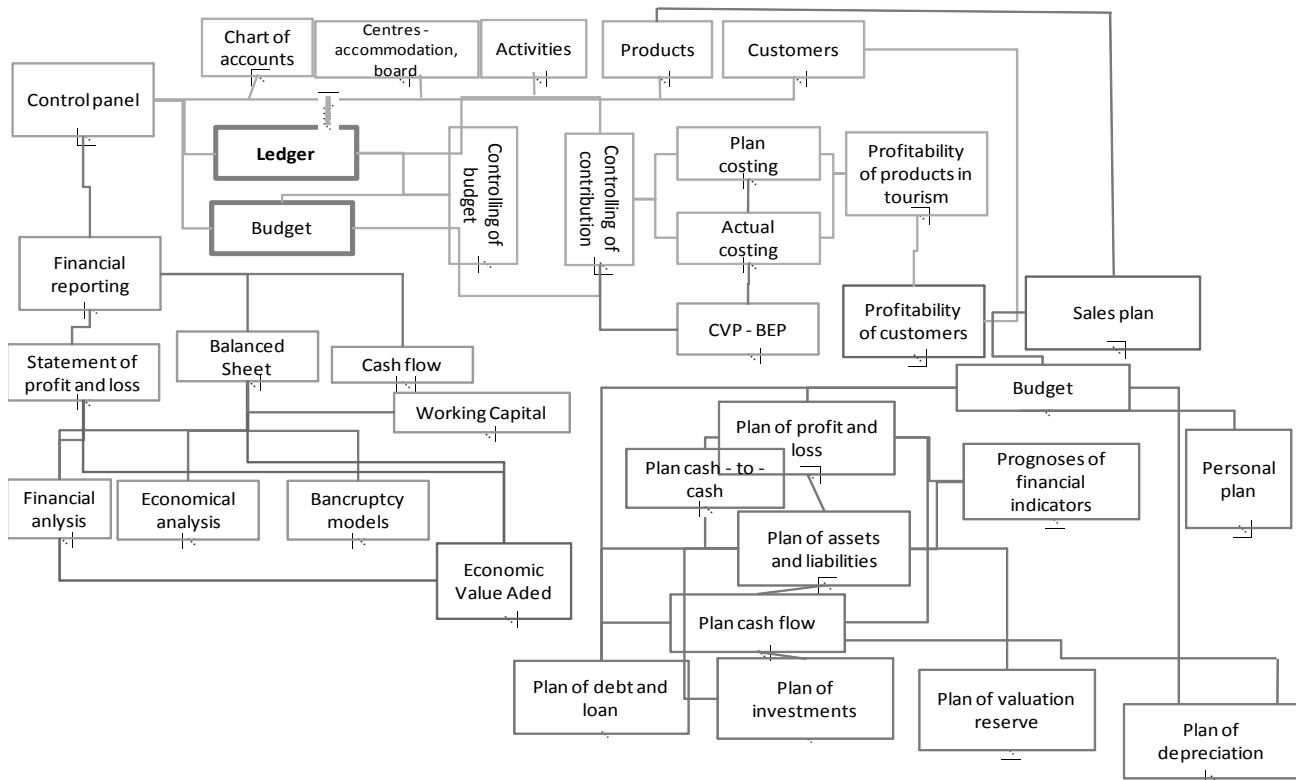
The following diagram shows the model of application of controlling in the company of tourism. As seen in this model, basic input information is information about the products, such as

accommodation, catering and other services, information centers, chart of accounts for the needs of cost controlling, in the case of the introduction process of controlling the appropriate structure of processes is needed and as it has been written, a database both for financial controlling in the form of balance sheet, income statement and cost controlling in the form of the main book, especially accounting and value according to the accounts of classes.

The main outputs of controlling can be divided into outputs in the financial controlling, which are dominated by computing, and analyzing the financial situation in the company of tourism, and we are primarily interested in liquidity, stability, profitability and indebtedness in the company of tourism. The second area are cost controlling outputs and within them analysis of the company and its centers on the basis of achieved contribution to cover the payment, analysis of marginal profitability, analysis of abnormalities and other cost analysis.

The last and not least important issue is strategic controlling in the company of tourism, which has recently been built on the principles of the Balanced Scorecard. The strategic controlling and its linking with a system of measurement and performance management is a new direction in controlling systems. Modern measurements and indicators get to the fore in the form of calculating the value of the company, which is based on the principles of the present value. Such indicators are for example Economic Value Added (EVA), Market Value Added (MVA), Free Cash Flow, Cash - to - Cash and many more that find their application in the companies of tourism. And last but not least, the calculation of financial risks begins to implement in these systems and thereby a modern controlling "Dynamic value-oriented controlling and Dynamic Scorecard" is being built.

Picture 1 Model of the application of controlling into the system of management in the companies of tourism



Source: own processing

Financial controlling in the company of tourism

The basic sources of financial information for financial controlling in the company of tourism are financial statements.

To assess the market value of the company of tourism, however, we need some additional information such as:

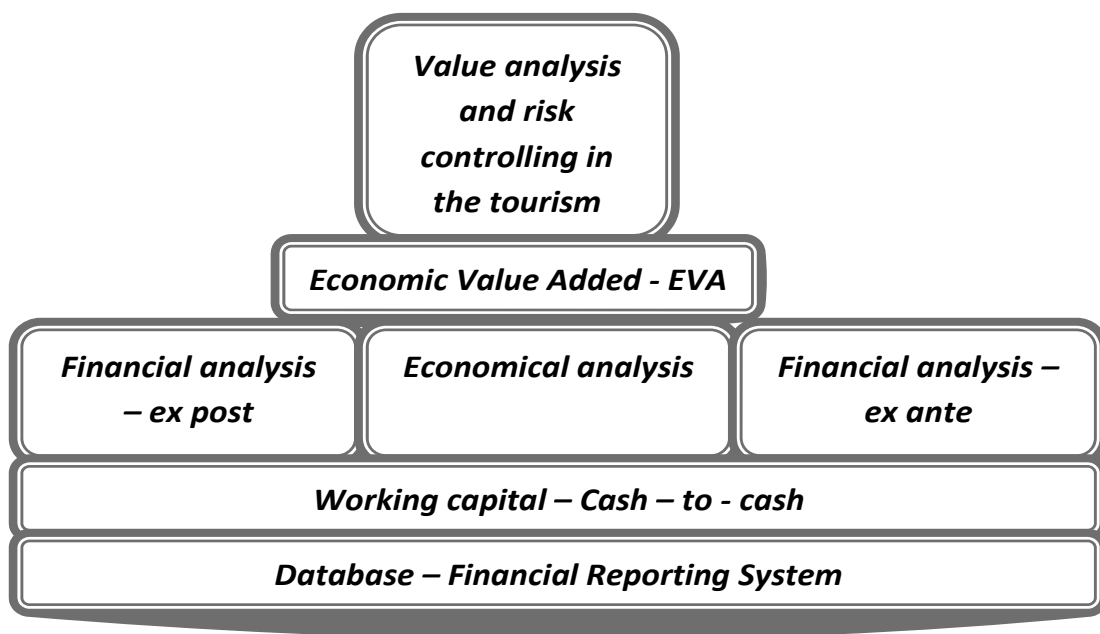
- The number of issued shares
- Nominal and market value of shares
- Dividends, etc.

In formulating the objectives of the financial controlling in the company of tourism it is important to consider individual steps or stages in the life cycle of tourism facility. There are different goals at different stages of the life cycle. Individual stages within financial controlling are shown in the following picture number 2. Within facilities of that sector there are following financial indicators applied:

- ☐ liquidity indicators
- ☐ stability indicator
- ☐ debt ratios
- ☐ activity indicators
- ☐ profitability indicators
- ☐ indicators of market value of the company
- ☐ indicators with the application of „cash flow“

It can be said that a special group of indicators are indicators of hotel and companies of tourism stability.

Picture 2 Structure of financial controlling



Source: own processing

Cost controlling in the company of tourism

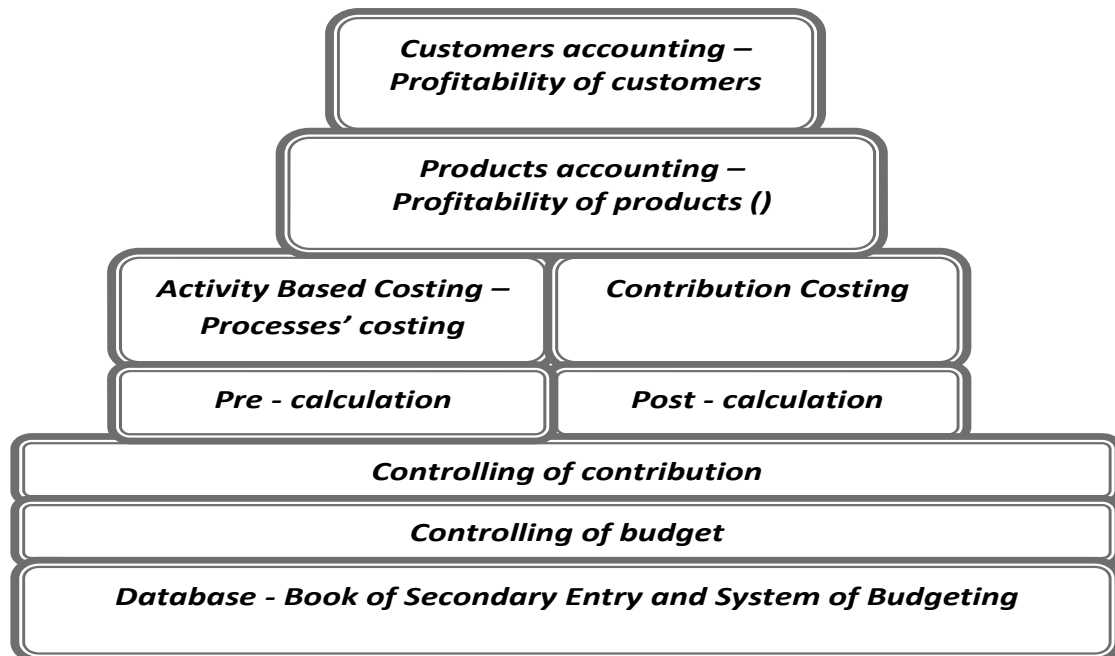
Cost controlling of tourism works especially with the costs and the cost structure analysis, analysis of the development of cost trends, as well as analysis of costs of buildings, which are hotels, individual facilities, services, accommodation services, food services and other products. As for the decisive costs that are necessary for the continuous organization of operations in the company of tourism, there are these costs considered: material consumption, energy costs, consumption of goods, the costs of wages and social insurance, the costs of promotion and marketing, administrative costs and overhead, depreciation, financial costs.

Controlling needs much more detailed breakdown of costs for management. It recommends planning the costs for months and breaking down by individual centres, such as catering, accommodation and other services.

It was found that material costs are at 40 %, 24 % of personal, and general 20 % and the remaining 16 % is the profit according to the survey. However, the accommodation facility is dominated by personnel costs and catering centres is dominated by material costs.

Division of costs depending on the content of services to fixed and variable is also very important. The acceptable ratios of fixed and variable costs in the hotel are considered at the ratio: 50-70 % to 50-30% (Sládek, Valentová, 2006).

Picture 3 Structure of cost controlling



Source: own processing

Fixed costs play an important role as a result of maintaining standby state in the company of tourism. The most important control value of cost controlling in the company of tourism is a contribution to cover the payment of its fixed costs and fixed costs of individual facilities.

Strategic controlling on the basis of BSC

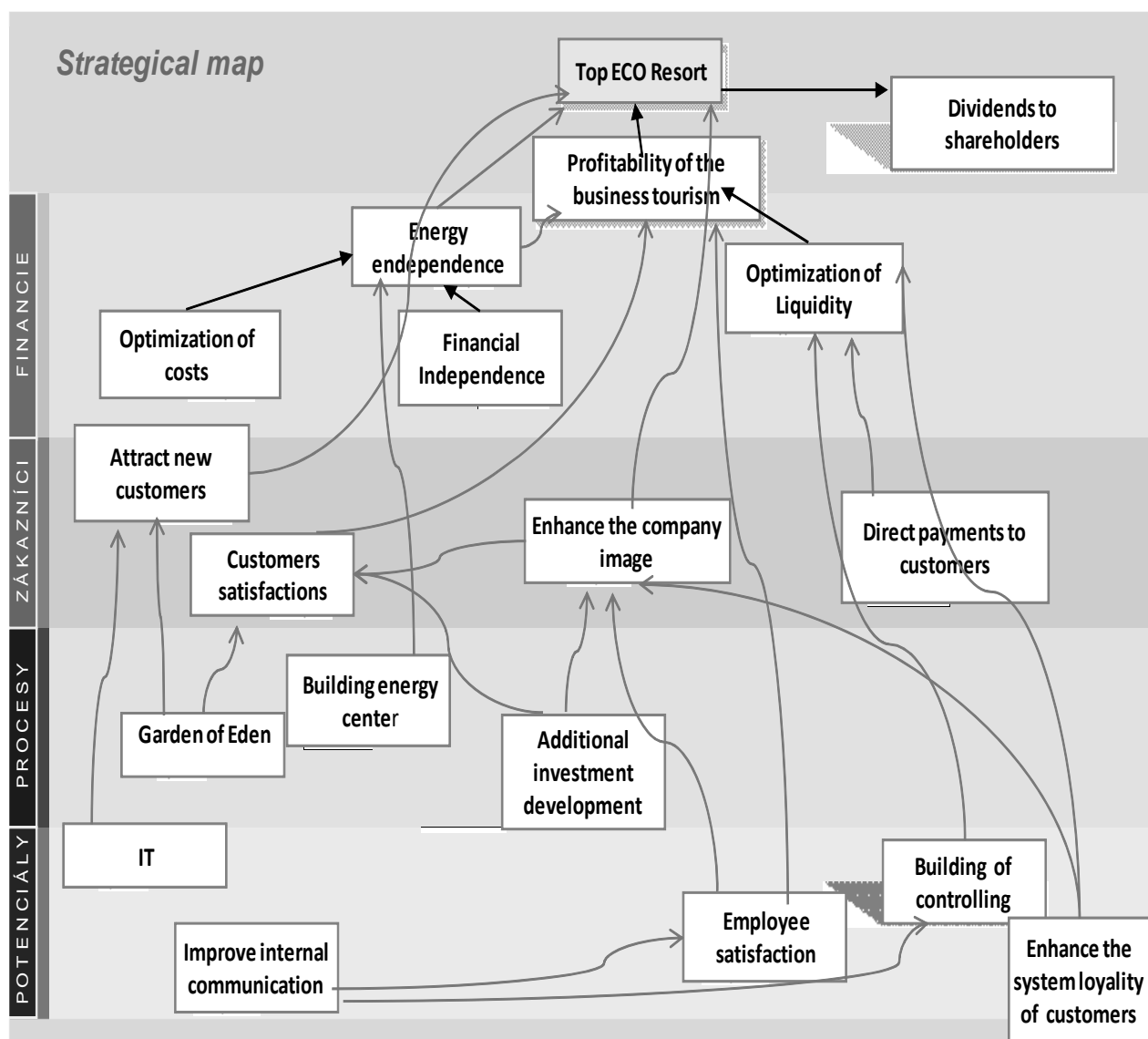
The Balanced Scorecard system has been recently enforced in the strategic management of companies as well as in strategic controlling of companies. Balanced Scorecard is a method that can be applied in the companies of tourism, and individual goals must be set within the four perspectives of BSC system. There are these perspectives: financial, customer, internal processes and potentials. The financial perspective sets financial goals, while top financial goal is the value of the tourism facility. This value is expressed by indicator EVA.

The second perspective is the customer perspective, which focuses on managing customer value, while this perspective pursues such objectives as customer satisfaction in the company of tourism, its stability, loyalty, but also profitability.

The third perspective is the perspective of internal processes within which the role of optimization of key processes, the efficiency of the operating cycle as well as the issue of innovation and development processes, in this case, the companies of tourism, are solved.

The last perspective is the perspective of potentials or learning of growth in which goals pursued to employee satisfaction, their motivation, loyalty, qualification level, performance and productivity. A practical example of application of strategically management BSC map for the company of tourism is shown in the picture number 4.

Picture 4 Strategically map of management in the company of tourism



Source: own processing

Summary

Controlling has got an enormous importance in management of tourism companies as well as plenty of benefits. In the area of financial controlling it is mostly management of financial resources needed to ensure the existence of the facility and in the area of cost controlling it is management of height of the contribution to cover the payment to ensure fixed costs of the company and its cover. It is strategically movement in the company of tourism within strategically controlling with regard to internal and also external influences of the environment.

And probably the greatest benefit flows from the strategically controlling which proposes and solves the future direction of the company of tourism.

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Concept of Sports Tourism

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Abstract

The concept of sport related tourism has become more prominent in the last few years both as an academic field of study and as an increasingly popular tourism product. The purpose of this paper is to review and critique concept of sport tourism, and to suggest a future research direction. Disparities in the definition of sport tourism are addressed and some of the difficulties, which scholars have faced in establishing a standardized definition, are outlined. The conclusion from this review is that at a research level, more multi-disciplinary research is needed, particularly research which builds upon existing knowledge bases in both sport and tourism respectively.

Key words

Multi-discipline, Field of study, Participation, Policy, Integration

Base concepts

First publication relating to sports tourism was published by Anthony in (1966). In the twenty years following that publication, other commentaries on the way in which sport and tourism might relate to each other have appeared sporadically. Debates over core concepts have included discussions of the way in which the field is described (sporttourism, sport-tourism, sports tourism), the categorisation of sports tourism (usually by the nature of participation on a particular trip) and its nature, and the relationship of sports tourism with tourism and with sport. It is probably fair to say that the majority of scholars publishing in the sports tourism area have a background in tourism, and this undoubtedly affects the way in which they approach sports tourism.

When analyzing sport and tourism connection, we focus on understanding tourism and the tourism industry. Tourism is the world's largest industry and is composed of many segments, including transportation, accommodation, attractions, and the government and nongovernment agencies responsible for planning, setting policy, and marketing. A tourist is defined as a leisure traveller on a voluntary, temporary, relatively long trip in pursuit of novelty and change. Contrary, sports tourism is defined as travel to participate in sport (active sports tourism), to watch sport (event sports tourism), or to venerate something or somebody associated with a sport (nostalgia sports tourism) (Weed, 2009).

Weed and Bull (2004) suggest focusing on the interaction between the features of sport and tourism as the unique element, suggesting that sports tourism is a social, economic and cultural phenomenon arising from the unique interaction of activity, people and places. This according the authors establishes sports tourism as related to but more than the sum of sport and tourism.

Early attempts to understand the nature of sports tourism and to categorize it tended to retain a separate view of sport and of tourism, with sports tourism most often being view as a sport on holiday (c.f. De Knop, 1990) or sport away from home. Jackson and Glyptis (1992) did attempt a broader perspective, suggesting that tourism might also have a role in generating sport participation, but the focus remained on the effect of tourism on sport, or the effect of sport on tourism, which implied a continued emphasis on two separate spheres of activity that might, in some cases, impact upon each other. This is in part derived from suggestions in Glyptis (1982) earlier work that two types of sports tourism participation might be identified namely participation in sport that takes place as the primary purpose of the trip, and sports participation that is incidental to other trip purposes. Weed (2008) suggested that there are trips where sport is dominant, and trips where tourism is dominant. Glyptis (1982) also noted that sports activities may be participative or non-participative (spectators), which is described in much work that followed as active and passive participation. Gibson (1998). Weed and Bull (2004) suggest that there are five types of sports tourism, tourism with sports content, sports participation tourism, sports training, sports events and luxury sports tourism, and that these types may be multi- or single-sport, may be active or passive, and may involve instruction, elite sport and/or a corporate element.

Many sports spectators consider themselves to be much more than passive participants, although they are not actively taking part in the sport itself. Such spectators feel that they are interacting with the active participants and, as such, might be described as experiencing the sport vicariously through such participation. As visits to sports attractions and museums become more widespread, such vicarious

involvement may also be a part of sports participation tourism, where the participation is the imagined (Gammon, Kurtzman, 2002) have suggested that sports tourism might usefully be understood by examining trip purpose, and that there are trips where sport is dominant, and trips where tourism is dominant. Gammon, (2004) have attempted to separate out sports tourists (for whom sport is the primary purpose of the trip) and tourism sportists (for whom tourism is the primary purpose).

Weed and Bull (2004) have argued, the nature of sports tourism is as a synergistic phenomenon that is more than the simple combination of sport and tourism. As such, it requires an understanding of both sport and tourism, but it needs to be addressed and understood in a way that does not retreat to definitions of sport and of tourism and that allows its synergistic elements to be understood. This is in contrary something that was rarely a part of some of the early reviews. Often we can see two separate areas of research, with many studies taking either a sports perspective or a touristic perspective as their starting point. Weed (2008) argues that the primacy of the sport or the tourism element in many sports tourism experiences cannot be established and that, in fact, for many experiences separate and distinguishable sport and tourism elements may not be present.

Development plan of the discipline

Weed (2001) in his review argued that research into the relationship between sport and tourism was too narrowly focused on sports holidays and that there was a need to consider the wider policy implications. Health tourism seems to have largely developed into a body of work in spa tourism or, more recently, in wellness tourism (Smith, Kelly, 2006), but an indication of the fuzzy boundaries that exist between areas such as these is that some authors characterize spa tourism as falling within sports tourism (Hinch, Higham 2011). However, we can conclude, that it is probably event tourism and adventure tourism that are the most widely researched areas that obviously overlap with sports tourism. Ritchie et al (2004) in their work went so far as to suggest that sports tourism is sport event tourism and that it is focused on competitive sport rather than recreational activities. While aspects of their argument, such as the importance of event sports tourism within sports tourism, are obviously valid, the existence of the golf and the ski tourism industries clearly undermines it. In fact, it is these industries that are most often quoted by reviewers to reinforce the point that sports tourism is not synonymous with sport event tourism. Rather, sports tourism is multi-faceted.

Weed (2009) and his systematic review shows that it is in relation to behavioural research that there is the greatest overlap between sports tourism and adventure tourism, with research self-identified as falling into the latter area generally tending to be more theoretically robust. Weed (2009) shows that, after event impacts, the behaviours of sports tourists participating in outdoor and adventurous activities are the next most researched areas in sports tourism. (Hinch, Higham 2011) supporting the view that the majority of research on sport tourists behaviors tends to focus on the description of the behavior rather than on the explanation of the behavior. In that context we should not neglect perceptions and experiences of local residents and communities of sports tourism products and developments. All of the reviews explicitly note that the study of sports tourism must be multi-disciplinary because sports tourism is multi-faceted (Chalip, 2001).

Undoubtedly, sports tourism is a multi-disciplinary area of study and as research matures further it may be that particular specialisms develop. (Gibson, 2002) draw upon existing frameworks in leisure, sport and tourism studies as well as other pertinent disciplines. At this point is worth making distinction between subject areas (such as sport, tourism, leisure, etc.) and disciplines (such as economics, psychology, geography, etc.). Weed (2008), in particular, urges researchers to read around parent disciplines (e.g. psychology) rather than limit their reading to their own subject area (e.g. sport psychology).

Management of sports tourism in time to come

Such views suggest that the key issue for sports tourism is the way it is managed, either for future growth and to secure benefits, respectively bring down potential negative aspects of sports tourism development. Sustainable development approaches may offer the best route to long-term growth future, in which the potential benefits of sports tourism must be planned for and strategically leveraged. The objective is to identify strategies and tactics that can be implemented prior to and during an event in order to generate desired outcomes. In that respect Weed (2009) calling for greater theorization in sports tourism research author suggests that the source of such theorization should be the frameworks and concepts that have been applied and developed in related subjects (i.e. leisure, sport, tourism, etc.). In

particular, Gibson (2002) suggests that leisure time and its understanding can help to grasp sports tourism and its motivation in more depth. Weed (2006) suggests that the sources of theorisation for sports tourism might best come from disciplines such as (psychology, sociology, geography, anthropology political science).

Sports tourism as a discipline assumes a unified view that the term 'sport tourism' is the most appropriate one to describe the field. The use of sports tourism is derived from a heterogeneous view of sports tourism, rather than one that is linked to the homogenizing concept of sport, and that sports tourism is a unique area of study derived from the interaction of activity people and place and by this means. Sports tourism is derived from a heterogeneous view of sports tourism, rather than one that is derived from a heterogeneous view of sports tourism, rather than one that is linked to the homogenizing concept of sport. And in that respect sports tourism is a unique area of study derived from the interaction of activity people and place and depend on the social institution of sport to characterize the area would be somewhat incongruous (Wedd, Bull, 2004). The fundamental difference here would appear to be between sports tourism as one among other forms of tourism and sports tourism as a unique area of study (Wedd, Bull, 2004) related to but more than the sum of sport and tourism. The first is a view that see sports tourism as a tourism activity that subordinates sport, whereas the second is a view that sees sports tourism as an activity in its own right, related but not

subordinate to sport and tourism. The first is, as noted above, that Gibson (2002) suggests turning to work in tourism, sport and leisure to source theoretical frameworks and perspectives. Whereas Weed (2008) suggests turning to disciplines such as geography and social psychology using the theory of planned behavior from social psychology as opposed to a view of sports tourism as a trip behavior that might interact with more general tourist behaviors (shopping, eating, drinking). Each of these foundational differences has important implications for the way in which the study of sports tourism will develop, and it thus appears that there are likely to be futures for sports tourism research, rather than a future.

In the past, such challenges have been related to the conceptualization of the area, or even of its existence as a serious area of study. Weed (2009) claim that as with many new areas of academic interest, those writing and researching in the area have been accused of clumsily diluting two already established disciplines in order to profit from professional precedence and thus committing the indefensible crime of academic triviality. Further, he suggests that sports tourism suffers from too great on management perspectives and that the desire to draw from and please user organizations means that sports tourism has lacked any sustained critical edge. Hinch and Higham (2011) believes that the study of sports tourism would benefit from the attention of a group of theorists so call "attacking" foundational management ideas based on assumption that sports tourism is a good thing that could be made better through efficient management and clear understanding of contributing groups. Even though is a little unfair to suggest that the study of sports tourism lacks any critical edge, Dimeo's challenge and critiques should not be ignored or dismissed.

Conclusion

The first is that a unified view of sports tourism may be unattainable. As a greater volume of work in sports tourism develops, it is inevitable that competing perspectives will emerge. We can say that the existence of contested ideas is a healthy think, because it brings a range of alternative perspectives to bear on the issues researchers in the field face, none of which will be dominant or hegemonic. From our perspective, we should focus on combining different views in one coherent entry that will consider diverse in some instances contradictory views on the presented issues. We can conclude that the maturity of the field includes strong conceptualization of the field, the underpinning of empirical work by appropriate theory, the robust, appropriate and transparent application of methods and methodology and a clear community of scholars with a sustained interest in the area, served by and supporting a credible academic journal and wider body of knowledge. To a certain extent, the development of maturity is related to recognition of the need for multiple perspectives. Further a field in which researchers do not recognize and respond to external critiques and challenges will most likely fall into the paradigm-trap of becoming self-referential.

We have to be clear about what is being researched and how does it compare to other research, drawing theoretical perspectives from disciplinary and subject point of view. At this time, we do not know exact nature and extent of economic impacts in general rather, than of specific parts of specific events. We do not know why sports tourists do the things they do also how improvements to destination image impact

upon traveler numbers to a destination and their related economic, social, cultural and environmental impact. And finally, we do not understand dynamics of processes by which residents perceptions of benefits or inconvenience change over time. All these and other questions has to be evaluated work out in systematic way. At the very end we can conclude that sports tourism is now the fastest growing segment of the tourism industry and as such deserve appropriate attention from professional community at large.

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Spider Analysis as a Method of Comparison Selected Hotel Facility

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Abstract

Financial analysis is a fundamental resource for assessing financial - economic processes in the enterprise and creates conditions for financial decisions for the future. It acts as a feedback information about which areas of the business objectives been achieved and, conversely, areas where the company is lagging behind expectations. The manager of an undertaking is important to quick and correct decisions based on the development of financial indicators in the time that it may facilitate the spider analysis. The paper is devoted to the issue of spider analysis and its application to selected business and tourism could also be an important tool for comparison with competitors or business indicators at the branch level.

Key words

Financial analysis, Financial ratios, Spider diagram, The annual mean

Introduction

Financial analysis is an important part of financial management, because it provides a link between reality and the expected result of management decisions. The purpose of the analysis is to evaluate the financial health of the company and find out the causes which affect it.

Financial analysis has two time levels:

1. **EX POST** - assesses the financial situation at present by comparison with results from previous years,
2. **EX ANTE** - uses financial analysis to predict the future development of business and to prepare input data for financial planning.

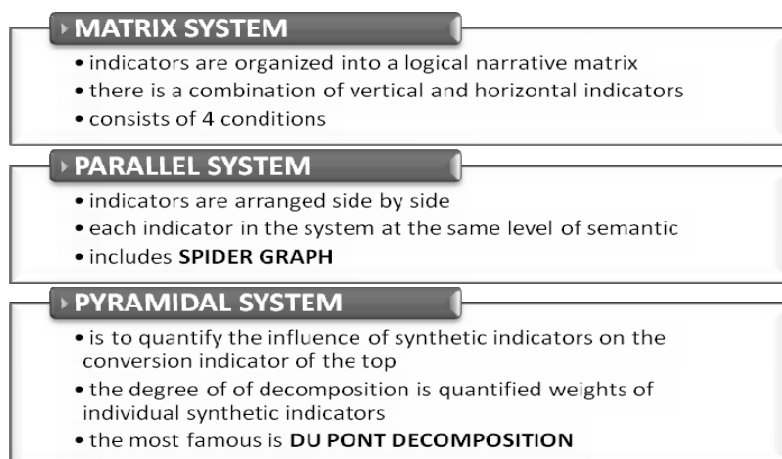
EX POST FINANCIAL ANALYSIS focuses on the financial position, in which based on past data of the enterprise. Sources of information include the financial statements, including balance sheet, income statement, cash flow statement and notes. Indicators included in this group can be divided into absolute, differential and proportional.

EX ANTE FINANCIAL ANALYSIS (analysis of early warning, forecasting analysis of financial situation) based on the evaluation and interpretation of results obtained in the present and anticipates the development of financial - economic situation of the company. The aim of these models is time to recognize the situation in the company and thus prevent potential problems.

Financial analysis indicators

Financial analysis is an important basis for effective financial decision making and is based on differential and ratio analysis indicators. Among the indicators, there are different logical connections and relationships. If we select some indicators with regard to the proper mathematical and logical layout, we create a set of indicators.

Figure 1 Distribution of indicators



Source: prepared by Jenčová, 2011b, p. 117-148

Parallel system of indicators

"In a parallel system are indicators or their groups arranged side by side (parallel). Each indicator (or set of indicators) in the system is the same semantic level. Parallel sets of indicators can be constructed a lot and they may have different numbers of indicators and actual indicators, which are formed. A parallel system of indicators is a good starting point to:

- finding relationships between indicators,
- an overall assessment of the financial situation of enterprise by multicriterial evaluation when each indicator parallel system may be one of the criteria (this procedure is used in financial standing and bankruptcy models),
- graphic design parameters and compare them in the form of spider graph. "(Kotulič et al., 2007, p. 90 -91)

The financial analysis focuses not only on the calculation of indicators and indicator systems, but in practice is an important supporter and their graphical representation. We use different types of charts like bar, line, pie, area, stock market, superficial, annular and radar.

Graphical analysis - spider graph

Recently, Spider graph is becoming very popular. Kotulič et al. (2007) refers to as a spider graph as radar or star graph. It is a suitable tool for assessing multiple parameters in the same time.

The number and selection of indicators can be arbitrary, but rational and depends on the requirements analyst. As an example, the combination of indicators - profitability, liquidity, activity and debt that are represented in each quadrant of the 3 indicators. The overall graph contains 12 indicators.

Synek et al. (2011) spider graph is created 16 financial ratios and can be used to:

- quickly and clearly evaluation the position a selected company by a group of indicators relative to average of sector,
- comparison with the best the company in the sector or branch,
- the company comparison with competitors.

Comparison of the calculation method indicators

Kotulič et al. (2007, p. 91) indicate the following values of the conversion process before the application of indicators to graph:

- "We set the sample values of all indicators entering the graph, which can be, for example average in the sector or when we compare at the time, then we can use the planned values or values of a (base) year. These values represent 100 %.
- Each value of indicators is converted to a percentage of the sample value. Conversion algorithm depends on it, if the indicator, of higher value is better or indicator, which of lower value is better. Special attention should be given to the analysis of the graph optimum indicators. The optimum conversion indicators must be determined that the character of indicators, will have a minimum or maximum. When interpreting the graph, however, we must take into account the quantitative character of the indicator.
- The parameters minimum (lower value is better) the following applies: $\text{calculated value} = (\text{sample value}) / (\text{conversion value}) \cdot 100 \%$
- For maximum parameters (the higher the better), the opposite is true.

Jenčová (2011a, p. 102) defines adaptation of indicators in spider graph as follows: "Standard for the design industry is set to 1, the standardized form of the company analysis is the ratio of the advantage ratios for medium-sized business sector values".

Comparison of the selection of indicators in different quadrants

Next part of this paper is devoted to the comparison of the selection of indicators in the quadrants.

Table 1 Comparison indicators according to quadrants

QUADRANTS	INDICATORS		
	Jenčová (2011a, s. 103)	Kotulič et al. (2007, s. 92)	Synek et al. (2011, s. 370)
PROFITABILITY	of the equity of the total assets of the sales of the total capital	of the equity of the total assets of the sales	of the equity of the total assets of the sales of the operating activities
LIQUIDITY	current ratio quick ratio	current ratio quick ratio cash ratio	cash flow / total debt cash ratio quick ratio current ratio
ACTIVITY	inventory turnover repayment period of receivables repayment period liabilities total asset turnover	stock turnover repayment period of receivables repayment period liabilities	fixed assets / equity total asset turnover repayment period of receivables inventory turnover
DEBT	total dept financial gearing interest coverage	total dept credit debt cover long-term assets long-term capital	total dept/equity equity/fixed assets repayment period liabilities equity/total assets

Source: prepared according to the authors at the top table

Interpretation of indicators in the spider graph

"Larger area in the graph covers the company (the curve of the company is lying further the center of graph), than better the financial situation of a company makes." (Jenčová, 2011b, p. 150)

"The basis of graph are concentric circles, the first of the center reflects the averages of sector, that is 100 % of the indicators, the other 200 % etc. The graph is divided into four quadrants. In each quadrant of the four rays which runs out from the center of graph. There are applied values of the indicators assessed company. The neighboring values indicated on the individual rays are combined to yield the final spider graph. Usually at first sight graph gives an idea of the reporting enterprise: if they exceed the average values of the apex of the circle (circle of 100 %), is an undertaking above average, if 100% of the circle closer to the center, is below average in the business." (Synek et al. 2011, p. 369)

"Interpretation of the graph is relatively easy and in some cases a short look is sufficient to enable an analyst to conclude whether it is above the average enterprise (most points are above 100 %, - the surface of star, which consists of interconnected points, is larger than 100 % of the stars) or below average business (less space). We can read the results of the company from graph – if results are above average, average or below average. In one graph we also can analyzed two or more enterprises, allowing them relatively quickly compare and determine not only the fact that enterprise is better, but also in which areas." (Kotulič et al., 2007, p. 92)

Advantages and disadvantages of spidergraph

According Jenčová (2011b) the advantage is an illustrative view of the financial position of the company with regard to industry or other criterion value and the disadvantage is that the space of spiderweb does not provide any economic interpretation and evaluation of financial situation we do not need a more detailed analysis of the causes of its development and examining the relationship between indicators of parallel systems.

Kotulič et al. (2007) again points to the disadvantage of the readability of multiple entities or time points. It argues that the graph could not expect to statement about relations between indicators and not their more thorough analysis. Graph provides basically globalizing view.

Application of spider analysis

The aim of the article is to analyze the use of Spider Analysis in business of tourism and in the terms of:

1. comparison of financial indicators - liquidity, activity, debt, profitability and performance for the period of 2007-2010,
2. comparison with the values of the sector according to the statistical classification of economic activities (SK NACE).

SECTION I - ACCOMMODATION AND FOOD SERVICES

- **DIVISION 55 - ACCOMMODATION,**
- **GROUP 551- HOTEL AND SIMILAR ACCOMMODATION.**

Selected hotel (****) provides the following services:

- the hotel offers 60 rooms with the total capacity of 101 beds (single, double rooms and standard suites - standard, VIP, business)
- catering (at the restaurant and the winter garden),
- wellness center (fitness center, massage, sauna, jacuzzi, beauty salon, solarium),
- cafe, lobby bar, night bar,
- congress hall with small hall and boarding room,
- symposiums, congresses, conferences but also birthday parties, prom nights, wedding parties and other social and cultural events can be hold there.

Selection of indicators

Financial ratios for application spider analyzes were selected according to average values of the financial indicators by economic activities that are provided by SCB - Slovak Credit Bureau, l. l. c.

Table 2 Financial Indicators for the analysis of spider

QUADRANTS	INDICATORS
LIQUIDITY	current ratio (L3)quick ratio (L2)
ACTIVITY	inventory turnover (A1) repayment period of receivables (A2) repayment period of short – term receivables (A3) repayment period liabilities (A4)repayment period of short – term liabilities (A5) total asset turnover (A6)
QUADRANTS	INDICATORS
DEBT	total dept assets (D1) financial gearing (D2) long-term debt assets (D3) interest coverage (D4)
PROFITABILITY	profitability of the equity (P1) profitability of the total assets gross (P2) profitability of the operating sales (P3) the share of value added in sales (P4) the share EBITDA and sales (P5)

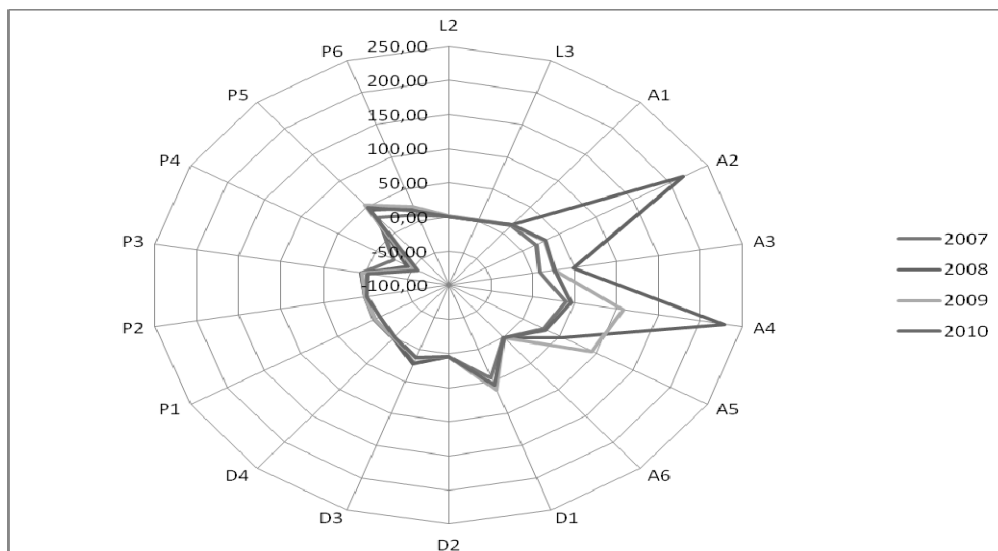
Source: prepared according to average values of the financial indicators

Comparison of selected indicators of hotel

The first partial of this aim was the application of Spider graph into 4 groups the financial indicators, where liquidity is represented by 2 indicators, the activity of 6 indicators, debt of 4 indicators and profitability is represented by 6 indicators.

The theoretical definition we mentioned the same number of indicators for each group of financial indicators, our spider graph has information value, but we lost the division of quadrants - a group of indicators and the interpretation of graph will serve only for comparison of individual indicators separately in time from 2007 to 2010 years but not clearly readable interpretation of the indicators for the group.

Figure 1 Spide graph of the hotel fo the period of 2007 to 2010



Source: own processing of accounts the hotel

The spider graph (Figure 1) we find that the development of indicators monitored in four years saw negative increase in indicator of the repayment period of receivables (A2) in 2008 and was extended the repayment period liabilities (A4) in the same year and for the enterprise is again a positive development. In 2009, we see also increase in the indicators of repayment period liabilities (A4) and of repayment period of short – term liabilities (A4), but not as much as in 2008. We can see major changes in the spider graph immediately, without any further numeric expression.

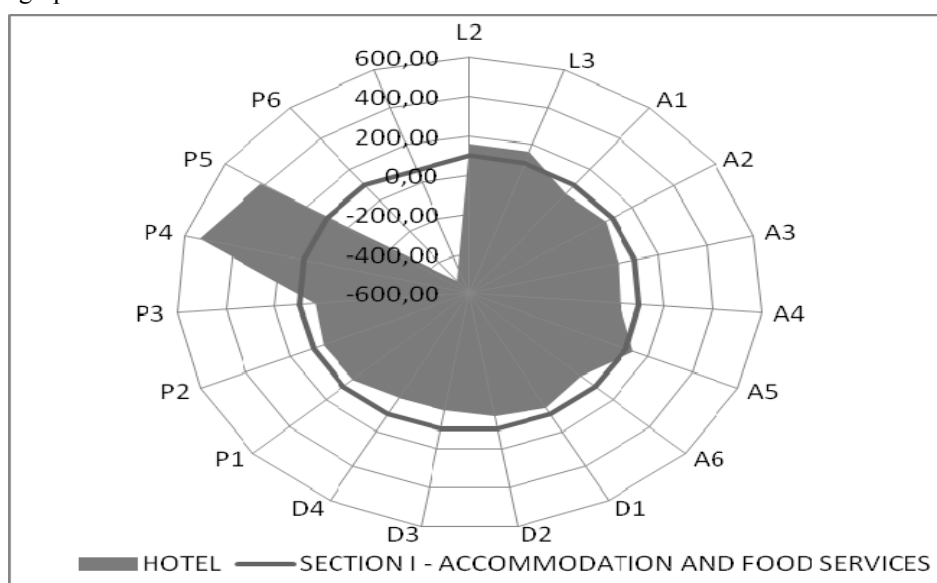
Comparison of selected indicators with hotel industry

In the following application spider graph there was used the value of financial indicators for the hotel in 2010 and the following graphs, we compared them:

- FIGURE 2 - indicators of the hotel and section I - accommodation and hospitality services,
- FIGURE 3 - indicators of the hotel and division 55 - accommodation,
- FIGURE 4 - indicators of the hotel and group 551 - hotel and similar accommodation.

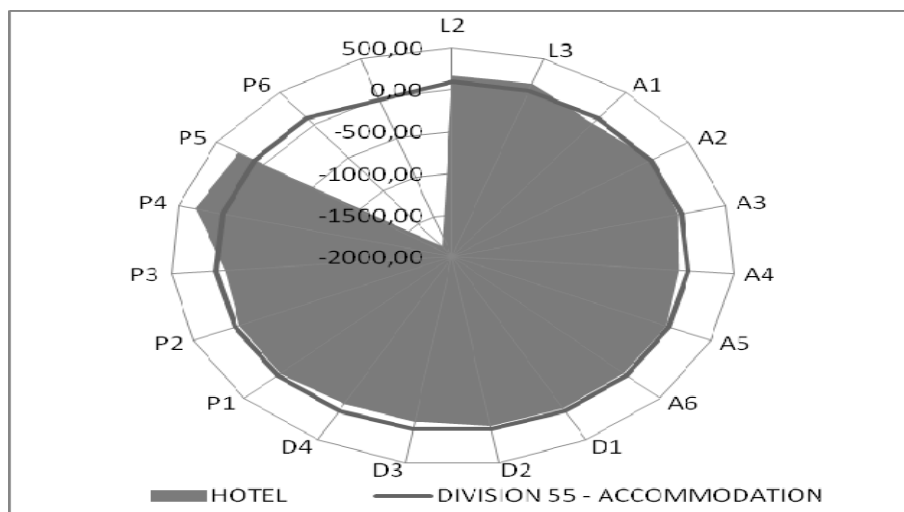
The indicators of the hotel are expressed as space and line is the expression of 100 % of the sections (divisions or groups).

Figure 2 Spidergraph of the hotel and SECTION I in 2010



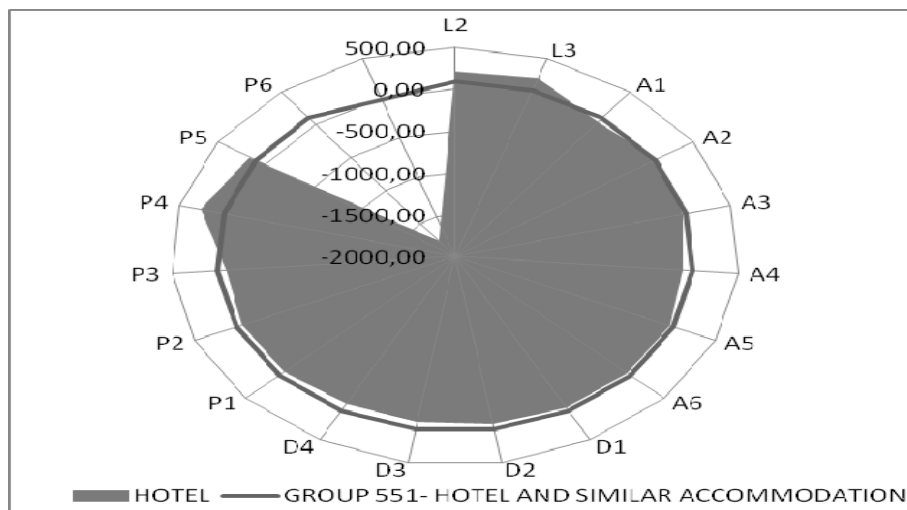
Source: own processing of accounts the hotel and according to data from the company SCB – Slovak Credit Bureau, l. l. c.

Figure 3 Spider graph of the hotel and DIVISION 55 in 2010



Source: own processing of accounts the hotel and according to data from the company SCB – Slovak Credit Bureau, l. l. c.

Figure 4 Spidergraph of the hotel and GROUP 551 in 2010



Source: own processing of accounts the hotel and according to data from the company SCB – Slovak Credit Bureau, l. l. c.

Looking at the previous graphs we can conclude:

- in the **FIGURE 2** we can see that the hotel achieves average values for the parameters **L2, L3, A5** and a big jump from average to achieved the section of accommodation indicators **P4** and **P5**, highly negative, we can assess the development of the indicator **P6** compared to the section,
- in the **FIGURE 3** and **4** we can see a very similar trend indicators selected hotel as compared to those for the respective division and group, again slightly above average hotel values achieved for the parameters **L2, L3** and slightly higher than the average achieved hotel for the parameters **P4** and **P5**, the worst results again reached an indicator **P6**.

Conclusion

Spider graph can be considered as a very simple and quickly graphical tool for comparison of selected financial indicators selected hotel business for a period of time - comparison of normal and the previous periods. When comparing by area of section, dimensions or groups tend to selection the comparison group, which has a view of assessing the development of indicators, chosen closest to any of the selected hotel facilities, therefore a comparison can be considered as the most acceptable and the most real.

In conclusion, we recommend that graphical methods for practical application for the hotel's facilities for its simplicity and the speed How to uncover the positive or negative the development of selected financial indicators in a specific time dimension and compared to those in the section, division or sector.

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Agritourism and Its Importance in European Countries

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Abstract

Agritourism in present represents popular way how go come back to the natural surrounding and keep the contact with it. Its importance increases with up warding number of urban inhabitants. This article deals about agrotourism and its meaning in Scandinavian country Norway. It is based on field research in this field of tourism industry.

Key words

Agritourism. Tourists. Norwegian agritourism.

Rural tourism with its part called agritourism, represents nowadays long tradition kind of tourism which started its real meaning in the second half 20th century in Alpine countries.

Agrotourism began to develop in order to improve the lives of farmers, particularly in mountainous areas and in areas of emerging economies. The introduction of such recreational entertainment helped to sustain the local population in the region, prevent depopulation of the countryside and on the other hand helped in preserving the architectural heritage as well as to bring additional revenue into agriculture (Otepka, Habán, 2006).

As the founders' countries can be considered Germany, France, Italy, Great Britain, Austria... The other European countries were influenced by many different factors. This caused its no or very slow development in sphere of agritourism (the combination of rural potential- agricultural activities and tourism service providing).

Especially in Eastern countries in Europe, there appeared strong influence of regime. Socialistic period was supporting national agriculture. The majority of the state's land was cultivated and provided working opportunities for local inhabitants. This was one of the reasons why people weren't abandoning rural environment as it is well spread almost in every country. This „city moving” trend grows thanks' to declining condition of agriculture. The countries stop to be self sufficient in home production and this creates expansion of all kinds products import. Even the industry in urban areas has developed the city life, it also bring many inconvenient with it. „Pro urban” movement of rural areas inhabitants created in last decades no interest of contact with nature through living in it, breeding animals, planting field crops, gardening or producing own home made products. Agricultural activities stop to be popular as well as education in this field. The current interest of young people increases more in human sciences as law, management, marketing and so on. Active work is no more attractive. The society has changed a lot and by its globalisation efforts it makes the „common life” easier by just consumption style of living. Just entering to the shop and obtain any product that customer needs.

With the deepening of the lack of contact with the natural environment, the interest increases in agrotourism activities. „The increasing popularity of agrotourism caused that more and more entrepreneurs, not related to agriculture, and providing accommodation facilities in rural area, began to use the term „agrotourism” in their marketing policy or formally operate under that very tricky name” (Kubal, Mika 2012). This is very common situation in the countries as for instance Slovakia, Poland, Czech Republic and so on.

Rural tourism in each of the countries in Europe helps to maintain employment in villages and rural areas. Rural residents can particularly find their jobs in basic and supplementary services. To improve the economic and employment development in rural surrounding, different European countries introduce, within their capabilities, eg. organic farming and processing and marketing of agricultural products directly from the farmer's courtyard.

The E.U. policies that support agritourism are linked to efforts to market high-value foods based on a region's historical, cultural, and social traditions. These efforts include geographical indications, which are protected within the European Union against production in any other region or country, regional products, which are protected by a national government against production in any other part of that country, and local products, which are linked to a local area's culture and history. E.U. member-states have followed suit by enacting complementary national policies to encourage agritourism as a method of revitalizing

rural areas by increasing farm income, creating new jobs in rural communities, adding value to agricultural products, and diversifying the country's tourism sector (Clemens).

Agritourism and its development in European countries

The article deals about current situation of agritourism sphere in chosen North European country- Norway. The main aim is to point to its importance, subscribe its development until present and show the difference of the state strategy interests and whole concepts of agritourism service providing. The proceeding was based on combined method of author's field research and secondary data evaluating.

NORWEGIAN agritourism

Every year many tourists travel to northern Europe countries to find solitude, peace and unspoiled nature. In Scandinavian countries they usually appreciate the scenery, meadows and pastures with high aesthetic value and biologic diversity (www.ruraltourisminternational.org).

By field research, chosen country is a Scandinavian one- Norway. Mountainous terrain has around 36% above 600 metres. 25% of the Norwegian area has rural character. Only 3% is arable and 95% represent outlying. In Norway there are several options for tourism industry, where to be accommodated (for instance in national parks), connected with the protection of cultural heritage, with the presentation of old architecture and the possibility of seeing the old farming technologies.

Even small population of 4,7 million inhabitants and spacious area 328 000 square kilometres Norway faces decrease of agricultural activities and starts to create new idea based on moving into an issue and discourse of farm diversification and rural entrepreneurship as well as whole agriculture's multifunctionality.

The global changes can be seen also in Norwegian present situation. Up to the statistics, in interval from 2 to 4000 farms closes down annually. This is the reason why to start create new concepts how to bring the life again to the countryside. In the past, the situation was more positive. Around year 1950 in Norway existed approximately 200 000 farms. Nowadays this number fell down to app. 49 000 in the year 2009. Approximately 10% of the farms in the country are in addition dedicated to production and tourism activities.

Agriculture was giving opportunities for the employment although the climate conditions aren't convenient for the crops planting. In eastern Norway, mostly corn is planted and in western and northern parts dominates farms engaged in rearing of sheep, cattle, pigs, dedicated to the production of milk and fruit growing. In present, agriculture and forestry gives the opportunity for the employment to 4% (in total employment) and 20-25% in many rural areas.

The farming in the country is very similar to the other European countries. It is mostly done in small numbers. Majority of the farms is small-scale farming with average size app.19 ha, which is marginal in international comparison. Even the farmer rent out the agricultural land the income from agricultural activities is relatively low. That forces them to search for another source of income to support their work in rural areas.

Centre of rural research points to that since 1990 there existed a strong political rhetoric for diversification commercialisation of outfield resources, rural tourism as well as cultural landscape management and agriculture's multifunctional role, which was recently focused to local food, green care and so on.

Norwegian statistics (ssb.no) show the evidence of farming activities. The average Norwegian farm income in 2006 was NOK 144,700, which in Euro represented 18,000 €. The average farm household income was NOK 3-400,000 and in Euro 37-50,000 €. 68% of farm families report that less than 50% of household income comes from the farm (Vik and Rye 2006). 60% of farms have diversified into additional activities related to the farm.

In rural tourism as additional services usually offer hiking, canoeing, wildlife watching, trout fishing, sauna, participation in farm work or stay in traditional fishing „small rooms”.

Picture 1 Trout fishing on fjord



Source: author's photo

There also exist Norwegian rural tourism and farm food association. It has around 900 members. These members have higher turnover than non-member businesses. The survey made by them on 1700 showed the results, that 10% had at least one of following activities: accommodation, serving food, various experience/recreation activities.

Another organisation interested in agricultural work is Norwegian Farmers and Smallholders Association. Membership in NBS is open to all farmers, without regard to the size of the holding or the production. NBS will promote a development of the society leading to social and economical equality. Solidarity and equality should be basic principles in agriculture as well as in the society in general. It has about 7000 members, 280 local organizations, 18 county organizations. Central administration serving the different levels in the whole organization is in Oslo.

The most common for the tourists is to rent cabins for accommodation, which is about 7,5% and only 2% of farms have also developed other tourist activities. Farms, in addition to their farming lease cabs to net income from tourism for about 15% of total income, but farms, with more developed tourism are about 50% of income from tourism.

Picture 2 Accommodation cabin in Norway



Source: author's photo

CASE STUDY

Agritourism farm „GARD” is located in northern Norway, close to the Polar circle. It borders with Sweden in few meters and it's close to the second largest natural lake in the country.

Picture 3 Agritourism farm



Source: author's photo

The main aim of the farm is to breed animals especially goat. From them the farm annually produces 30 tonnes of goat cheese, cottage cheese, brown geese (as typical sweet caramel kind) butter and various meat products as sausages, paste. Homemade products are sold on the farm and high percentage is distributed to the regional shops and public establishment as schools for instance.

The second and untypical activity is fish production. Home breeding of fish assures the highest quality of fish meat. Ecological way established special basins with fresh natural water produces also high numbers of home made products as the products what tourists search for.

Accept the main agricultural work farm provides accommodation in special house just for the agritourism tourists. It also provides whole mentioned home-made meals and products and gives the opportunity for the part time employment and volunteers, who try to observe nature and the processes in it. Field study brings them the most valuable information.

Conclusion

Agritourism bring us the way, how to be joined with the nature through its activities. It is important to keep the traditional way of living in the rural space. Norwegian agritourism is strongly linked to the real-traditional agriculture. It represents good example how agritourism can support regional development and nature protection in harmony and ecological way.

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The Importance of Social Media in Tourism

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Abstract

The tourism industry was one of the industries, which has been hit by global crisis. Statistical indicators show a growing interest in tourism activities. But experts warn that the crisis is still not resolved. The first part of the article analyzes the impact of global crisis on tourism. The second part of the article shows new opportunities for tourism, by which tourism is able to focus on the client. The aim of article is to highlight growing importance of social networking application in tourism. Article monitors importance of social networks for the needs of tourism from various perspectives and provides specific practical examples.

Key words

Tourism, Crisis, Social net

Tourism in those days

Tourism is one of the largest industries in the world. According to WTO, foreign income from tourism will rank fourth in the fuel, chemical and car industry. The importance of tourism is still for many developing countries. Here tourism is a major source of foreign exchange earnings, creating needed jobs and opportunities for economic development. „The contribution of tourism is particularly valuable to economic development in underdeveloped areas. Tourism is one of the key instruments of regional development thank to the low import and investment activities“ (Talarovičová, 2009, s. 494). From 1950 to 2009, the number of foreign tourists has increased from 25 to 880 million. This is the power of the tourist industry. UNWTO estimates for 2020 growth of international arrivals to 1.6 trillion euros. This will be 1.2 billion in the internal and € 378 million in long-term road (www.unwto.org).

The European Union is still the market leader in destinations. There were recorded 370 million international tourist arrivals, of which 7.6 million were from countries such as Brazil, Russia, India and China in 2008 year. Total revenues amounted to 266 billion euros, of which 75 billion came from outside the EU. European tourists are one of the largest groups of travelers to third countries (COM, 2010).

The first months of the year 2012 show that international tourism shows a steady growth despite the challenging economic conditions. During the first two months of the year 2012, an estimated number foreign tourist increased 5.7% compared with the same time period of the year 2011 (www.unwto.org). It is also anticipated one billion arrivals in 2012 (see scheme “Global Overview”). It will be spend 1 trillion USD on tourism. The main segment will be the middle class in emerging markets - such as Asia (WMT, 2011).

Crisis influence on tourism

We can say that the current crisis in the worlds is the worst in 75 years. „The global crisis in financial market has caused, and still is causing a variety of economic, social and political effects in all countries“ (Šenková, 2010, s. 657). The crisis has also penetrated into the tourism industry. Europeans adapt their behavior to circumstances, and result was in the preference of closer destinations. Tourist activity in Europe fell by about 5.6% in 2009 year. It should be noted that the eastern and northern Europe, reported to 8% decline in tourists. Despite the optimistic outlook of the UNWTO since 2010, suggest that the recovery of tourism in Europe will be slower than in other parts of the world. (COM, 2010).

„In addition to the economic crisis, tourism is constantly confronted with global and local problems that disturb tourism operation“ (Matušíková, 2011, s. 7).

According to the UNWTO Tourism has the potential to play a key role in reviving the economy. State has to include tourism in the center of its stimulus packages. It should covers the demand-

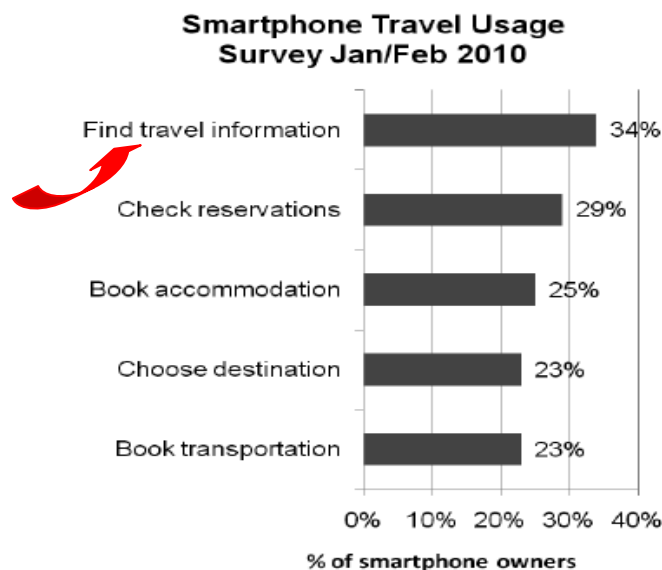
oriented measures such as strengthening sales support, fiscal incentives, improvement of access to credit resources, and building infrastructure and so on. UNWTO recommends:

- Quick response with an emphasis on diversity of tourist destinations,
- Greater cooperation between enterprises operating in tourism,
- Innovation in product development, marketing, distribution, regional and national policy,
- Raise awareness - a flexible system of data collection and analysis (Media in, 2009).

New trend in tourism – social media

Web and social networks have become the main flow of information and a range of tourism enterprises use them. Why social media make all crazy? Number of users of social networking aged 35 to 54 years is growing every year.

One study of global trends by WTM "Global Trends Report 2010" is the loss of dominance of Google. Smartphone manufacturers are going to attack Google dominant position in the field of tourism in social network. Facebook is also interesting in the leading position.



Source: compete.com

Products like the iPhone caused a revolution in tourism. An important trend in the travel and tourism is an increase booking through social networks and applications such as Facebook for iPhone. About 92% of users in Europe would use the iPhone till 2014. It is expected that about 50% of European travelers will use to find information about travel market or make reservations with assistance

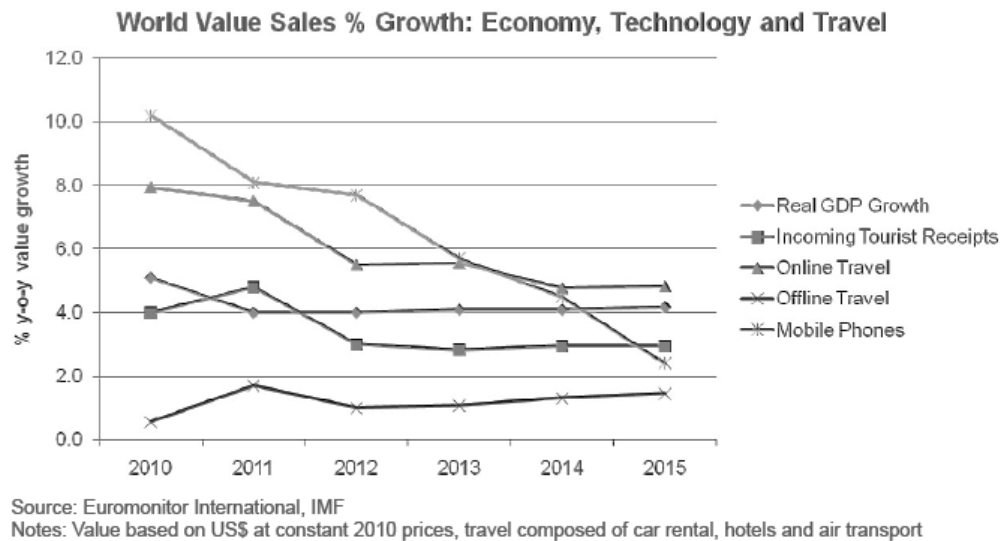
Source: WTM, 2010, p.21 smartphone till 2015 (WTM, 2010).

Tourism enterprises can use free Google Analytics. It is service to better target the advertising segment, create an enhanced website and below.

Management may choose modules on www.google.com in a part analytics:

- Analytics intelligence,
- Advanced segmentation,
- Flexible customization
- E-commerce tracking
- Goals
- Mobile tracking
- Data export API
- Advance analysis tools

Global Overview – Online travel star performer



We can see (scheme up) there is an assumption that 9 out of 10 consumers of tourism services, will own a mobile phone, smartphone or have access to social networks till 2015. These elements are the key to creating brand loyalty (WMT, 2011).

Cay studies – tourism and social media in practice

Official Facebook web site of Australian tourism, launched in 2008 ([www.facebook.com / SeeAustralia](http://www.facebook.com/SeeAustralia)), quickly gained millions of fans. Director of Tourism Australia A. McEvoy argues that social networks (Facebook) allow people to share their traveler experiences and tips. Facebook site contains thousands of videos and photos from tourists. This is a very effective way of promotion. Half a million Australians are fans and of other countries have a large representation of Americans (75,000), Italians (48,000), British (36,000), Germans (27,000), French (25,000) and Swiss (18 000). Fifty percent are women (Facebookovská stránka, 2010).

Increasing trend in online games caught the famous hotel chain Marriott. Marriott launched a game called "My Marriott hotel" in June 2011. The goal is to try making day-to-day manager at the Marriott Hotel meets. Management also used the Facebook online game for marketing purposes. (Szabadkaiová, 2012).

The survey of Sheraton hotel chain shows the increasing importance of social media. The survey was conducted on 4,204 people from Britain, USA and China by StudyLogic Company. The survey indicates that 60% of respondents in the travel and tourism use social networks to maintain contact with family and friends. Up to 39% of respondents would your life without social media could not have even imagined! Up to 64% of respondents use social networks to plan their holidays. The dominant group consists of respondents aged 25 to 34 years - 76%. Facebook is the most popular social network, which receives 75% of respondents (Prieskum Sheratonu, 2010).

Significant market, heavily influenced by social media, is Russian tourists. International market research company MASM in cooperation with professor D. Buhalisom from Bournemouth University and J. Fotis, elaborated a study for this segment. MASM interviewed 329 Russian tourists how to use social media before you purchase their vacation. Cyprus was one of the leading countries that Russians wanted to visit. Social media like Facebook, Twitter, Wikitravel, TripAdvisor, etc. play a strong role in tourism. Up to 73% of those surveyed before viewed by the various social networks. Cyprus, according to another survey ranked ninth place in the ranking of countries which are planning to visit Russia. Actually, however, Cyprus fell to 23 the position. Russians prefer Turkey, Egypt, Ukraine and other destinations. Cyprus does not use its potential to attract Russian tourists. There are obstacles such as obtaining visas lengthy distance. But there are countries like Austria and Italy, which are ranking highly ranked real visits from Cyprus. Professor Buhalis noted that social media marketing to create a kind of challenge. Cyprus has a huge potential in Russia. It depends only on Cyprus how this potential will use (Sociálne média, 2010).

Summary

Article highlights the importance of tourism as a global phenomenon. It also points out that despite the dynamic development of economic and social significance was not spared from the global crisis. However, there are new possibilities. One of the dynamically developing directions is the penetration of social networks in tourism environmental. Today they are an integral part of each level. Key studies show, the networks opportunities offered are still unused.

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Spa Management: Necessary Needs of this Sector

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Abstract

Spa tourism as a form of a tourism is developing and gaining prominence in Slovakia. The development of the spa tourism has increased as its clients prefer healthy life and taking care of a body and spirit. Spa management should take into account a wider range of requirements that are directed to it by a demand and adjust supply to the new trend. The management of a spa differs from management of other tourism spheres. The management of this sector takes into account the specific characteristics that are typical for this industry. This article focuses on some aspects that distinguish the spa management from other types of management. At the same time, the article emphasizes the need to participate in the new spa trends, innovative principles and intellectual capital for further development of the spa.

Key words

Spa, Spa management

The article is part of the research GAMA/11/6.

Introduction

Slovakia is among those countries which have rich resources for the development of spa tourism and wellness tourism.

Natural healing water, peloids emanation and favorable climate contributed to the development of spa tourism in the past. Today, natural healing promotes a dynamic development of spa and wellness tourism.

In the past, especially ill people visited spas. Now comes to the fore a healthy lifestyle, and therefore resorts should respond to the needs of their customers and adapt their offer to meet demand, which was currently on the market.

Definition of spa tourism

Today we pay attention to the spa. Because people live in constant stress, under constant pressure, one is exposed to harmful substances and breathing dirty air. Spa brings us rest, gain new power, mental balance and a positive spirit in our lives.

The spa industry has recently emerged as a global phenomenon through a convergence of industries, traditions and therapeutic practices. [1]

Spa tourism is a health-preventive and therapeutic activity under a professional supervision. Condition for the development of spa tourism is the existence of natural curative sources, such as natural healing waters, emanations, peloid and climate, that affects the focus of a spa treatment. [2]

The development of spas in Europe and Slovakia was based on interest of people in natural mineral springs, which differed from the usual sources mainly its appearance, taste and temperature. [3]

Spa management

Spa business has its differences that must be taken to remember when managing spas.

Spa management has its own specifics which are introduced below:

- high initial investment to the spa,
- seasonality of spa (full season and low season),
- big size of spa resorts (accommodation zones, food sections, place of procedures, colonnades, parks etc.),
- high share of labor intensity, the competence and specialization of staff (management of spa, health personnel, technical personnel, accommodation and catering section),
- high operation costs (gas, water, electricity)
- high direct and indirect cost,
- cooperation with organizations at their location,
- cooperation with insurances,
- specialist services,
- another unique specificities.

These factors influence the development of business and their mismanagement can lead to a deepening crisis in the spa business. At the time of global economic crisis, our efforts in the spa business should not focus on reducing the impact of the crisis, but finding the way how to use crisis for our benefit.

Every crisis is an opportunity. Smart leaders understand that in the midst of crisis, there is opportunity. Don't be afraid to seize the moment. Yes, there is risk involved, but that is true with every opportunity. [5]

Intellectual capital of spa

Effective managers are required not only to run the financial and business side of the spa but also to lead and manage the spa team. There is a growing trend to engage managers with specific customer service and business education in order to focus on making the spa a profitable business. [1]

Another specific responsibilities of spa's manager:

- carry out daily tasks and functions,
- develop and update spa event statistics,
- manage and lead the spa staff,
- manage current investments in the spa business,
- promote spa business in domestic and foreign clients,
- setting price for self-paying clients and insurance companies,
- another specific responsibilities.

In times of crisis, a manager should anticipate the risks that threaten the spa. The manager should try to convert threats to opportunities that will benefit in accord of the spa.

During the crisis, the manager should reduce costs. It is a complex process due to the high cost of energy in the spa. However, there are ways to cut costs without layoffs. The spa would be using alternative energy sources and the manager should organize congresses, conferences and other events for a broad clientele in the low season. The spa should be geared also to healthy people and offer to them one and more days resting and relaxing stays.

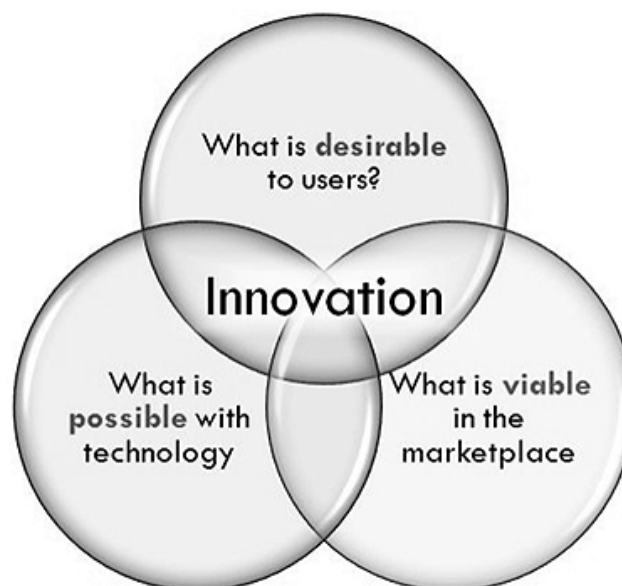
Spa trends in new millennium and innovative principles

Innovative company is a business that is changing together with the external environment. The innovative company is innovating as a cultural whole. [4]

In creating innovative products, we must answer three basic questions (see Fig. 1):

- What is desirable to users?
- What is possible with technology?
- What is viable in the marketplace?

Fig. 1 www.guerrillaonline.com [7]



Spa businesses has to adapt their offering the latest market requirements and trends.

Nowadays, spa began to reach out to medical professionals to provide services that customers had started to demand but for which they were not licensed. In turn, medical professionals took note of the vibrant spa industry which was beginning to lure away clients. Consumers liked the synergistic combination of a medical professionals expertise and a caring, nurturing atmosphere. [1]

Spa businesses would be in addition to conventional treatments such as physiotherapy, rehabilitation, electrotherapy, thermotherapy, dietotherapy, water treatment, magnetic therapy, climatotherapy etc. also offer new forms of treatments such as Yoga, Thai Massage, Ayurvedic medicine and others.

Spa should offer more treatments for seniors who require special care, as physiotherapy, osteoporosis, and so on. Seniors also need greater comfort of accommodation, dietary meals, social contacts.

Other trend of the 21st century included Halotherapy. Halotherapy are salt caves and salt rooms, a healing tradition that involves basking in a salt cave. The technique claims to benefit the skin and cure respiratory illnesses, such as asthma. [6]

Today we all feel the lack of time. We do not have time to linger at the spa 3 to 4 weeks. Because of this, the working-age people prefer one-week stays, weekend breaks and another short stays in spas.

The rise of Internet helped spread the spa gospel internationally. Spas developed websites, online booking became the norm. [1]

One of trend of new millennium included a rising concern about organic, green or sustainable issues resulting in the development of the eco-spa. [1]

Summary

Spa tourism is a sector of the third millennium and constantly evolving. The management of the spa business is a difficult process in which we should take into account certain specific features.

At the time of global economic crisis, a successful spa manager should use the specifics and find a way to take advantage of bad times to advancing the spa.

Spa business can become the market leader through innovation and create innovative products. The company creates innovative products by taking into account market trends and market research. Trends in spa have changed in recent years and indicate which direction to go spa tourism.

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History of Guided Activities in High Tatras as Beginnings of Tourism Development in Slovakia

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Abstract

With the first leaders or mountain guides in Tatra nature we already meet in the second half of the 17th century. In 1873 the Hungaro-Carpathian Association was established and the association started to organize and systemize all tour guides in High Tatras. In the 19th century was also built a railway which brought lot of visitors to the Tatra mountains. In this period almost every ascent could be practicable only with a professional guide. Change of the political system after World War II brought the disappearance of this profession. In 1991 was founded the National Association of Mountain Guides in Slovakia, which later in 1996 became a member of the International Association of Mountain Guides Associations (UIAGM).

The first visitors

Tatra mountains have always attracted people. The first steps here brought prehistoric Neanderthals, later were Tatra mountains visited by the Celts. The first traces of prehistoric mining activities shows a significant discovery - copper axe (Novotná, 1973). Dense forests or vice versa long Tatra valleys gradually attracted woodcutters, shepherds, herbalists, hunters, researchers, smugglers and bandits. But with the first leaders or guides in Tatra nature we meet in the second half of the 17th century (Nováková, 2008). In addition to the guides there were sometimes hired also porters, who wore a visitors baggage. This was an interesting financial incentives. It often happened that during the hike in the mountain a guide managed to collect medicinal plants or to hunt chamois.

Conditions during the 19th century began to be much busier in the Tatras. It was caused by the railway connection between the Slovak city of Košice in the east and the Czech city of Bohumín in the west and also by the creation of new settlements between lake Štrbské pleso and Tatra valley. High Tatras are thus becoming more affordable for many people, what is also reflected in growth of the number of visitors and in building development.

The first guides

Period between the turn of the 18th and 19th century and the first half of the 19th century is characterized by an increase of scientific interest in High Tatras. To the region of High Tatras arrived a lot of scholars from United Kingdom, Germany or even Sweden. Many of them were guided with a Slovak evangelical pastor Thomas Mauksch, who except his job in church worked as a biologist and as a guide as well.

Extraordinary good experiences had tourists with guides from the nearest Tatra villages, for example with a teacher Jakub Lux from Stará Lesná, also with a teacher Ján Still from Nová Lesná, with a miller Martin Spitzkopf Urban, with shepherds Ján Ruman Driečny and his son from Štôla. It was nowise exceptional, that this job started to do also the best "experts" in the forest - poachers. The most famous of them was Jonek Lysý from Javorina. There were many well-known poacher dynasties at the Polish side of the Tatra Mountains too: Gasienic family, Siczko family, Tatar family, Walov family.

Many of these guides were the very first persons who reached absolute peaks of the Tatra mountains. People assume Ján Still from Nová Lesná as the first person on the highest Tatra peak - Gerlach in year 1834. On this hike he was accompanied with his brother-in-law Gellhof, then with Martin Urban Spitzkopf and other two unknown hunters of chamois. This climb is not registered in any type of document, because in that time no association or periodical in Tatra region or even in Spiš region existed. So nobody and nothing can register this action. Ján Still was a popular mountain guide not only for his rich experience. He could speak except Slovak and German also Hungarian. Ján Still was not only a mountain guide. He was a good mentor too and he managed to raise the coming generation of mountain guides as well. To his best followers belong Samuel and Martin Horvay Spitzkopf from Nová Lesná, who were focused on the highest Tatra peak.

When he was seventy years old he made a bold and famed first-climb on Prostredný štít together with doctor Edmund Viliam Téry from Banská Štiavnica and director of spas in Starý Smokovec Mr. Schwarz. Ján Still guided his clients on the top of the Lomnický štít totally ninety-nine times. By the occasion of his fifty-year anniversary in teaching service in 1882, Austrian Emperor Franz Joseph Ist awarded him with a Silver Cross for his lifetime merit.

Another famous person in Tatra region was a man called Jonek Lysý. But he was more notorious by judges from Kežmarok than by tourists whose he often accompanied. The poacher, with his real name Ján Buc, belonged to the renowned poachers of chamois and marmots in the Tatra mountains in the 19th century. At that time, all products made from chamois and marmots had very diverse utilization not only for ordinary people, but for specialists – pharmacists as well. Even then, pharmacists had a very good income so they could well afford to pay for marmot lard. This was an excellent motivation for Jonek Lysý. The court held in 1862 in Kežmarok where Jonek Lysý reportedly admitted that he caught in the Tatra forests over three hundred chamois and marmots and in some valleys they were apparently completely wiped out. All catches that he was able to catch using his firearms or meshes, he distributed by his sons.

Poaching of Tatra guides, ultimately it was not uncommon in the past. There are many claims that almost all guides were hunting illegally.

Hungaro-Carpathian Association and the guides

In 1873 Hungaro-Carpathian Association was created aiming to promote High Tatras. The Association wanted to get advantage from scientific conferences, publishing of tourist and specialized press, construction of nature trails and log cabins. The second plenary session of the Hungaro-Carpathian Association in 1874 approved the first Statutes of Tatra guide services. Mountain guides and porters had to pass several testings, courses and trainings verifying their orientation skills. Their job wasn't easy at all. The Statutes of the Association required the guide to carry the client's baggage weighing up to 8 kg free of charge. He could have asked for 2 more pennies for each extra kilogram. When the luggage weighed more than 15 kilograms, the guide had to hire a porter who, unlike the guide, had to take care of his alimentation and accommodation during the hike by himself.

During the Austro-Hungarian period, the climbs to Tatra peaks were, with only few exceptions, realised exclusively with the mountain guides. In that period, there were water-resistant tins with miniature chronicles containing the dates and names on every important peak.

Ján Breuer, Ján Hunsdorfer, Pavol Čižák and Ján Franz sr. belonged among the most prominent mountain guides from the pre-war period. Most of them managed as the very first people to reach the top of many Tatra peaks. Most of the records were broken by Ján Franz.

Mountain guide Ján Hunsdorfer accompanied several times Karol Englisch, an Austrian lawyer of Polish origin along with his wife Antonia. He sometimes guided them along a path which he already visited with other clients and he declared it to be the first-climb (for double fare). It also happens that in the fog he guided them only close to the peak. Because of these situations, many Englisch contemporaries accused him of making the climbs up. Later independent detailed analyses proved that all of his first-climbs belong by rights to him. Karol Englisch did also the first winter climb to Kriváň. After World War I, when the closure of all pre-war associations was ordered, the organization of Mountain guide service was taken over by the association of Czechoslovak tourists.

The Second World War period

The most significant mountain guide from the later period before the World War II was Štefan Zamkovský. Originally instructed as photographer he performed many important climbs and between 1929 and 1938 he accomplished several extremely difficult first-climbs. In 1936 he became renter of the Téry's log cabin but later he and his wife decided to build their own cabin in the astuary of Malá Studená dolina. During the World War II many persecuted politic refugees, partisans but also Jewish families found their shelter here. Polish mountaineer, skier and participants on the winter olympics in Sankt Moritz (1928), Stanislaw Motyka, was one of them.

Private dentist, Zoltán Brüll was another mountain guide. He was also a friend of Štefan Zamkovský. After the establishment of Slovak State, he had to abandon his former profession and he moved to High Tatras where he began to work as a porter in cabin of Štefan Zamkovský. He was later interned to forced labor camp, from where he escaped and joined partisans who hid in the area of Kôprova dolina and created a division "High Tatras". On 7th Novembre 1944 anniversary of Great Octobre Socialist

Revolution he realized his last Tatra climb, when in spite of German occupation, he hoisted the red flag on Kriváň. As a doctor-humanist, he healed a captured German soldier Gerald Schacht who escaped and brought with him his German unit. Zoltán Brüll died in bunker on the Kriváň together with the wounded he was treating.

Mountain guides today

Changing the political system after World War II brought about the disappearance of mountain guide profession. All guiding services within preventive activities performed till 1989 workers of mountainous rescue.

The only active "relics" from the classic era of mountain guiding remained Ján Počúvaj, who was compared with his peers as a less popular guide but he was an active guide till his last years of his life.

Legislative steps after 1989 allowed to revive the profession of mountain guides once again. In 1991 was founded the National Association of Mountain Guides of Slovak republic, which later in 1996 became a member of the International Association of Mountain Guides Associations (UIAGM).

Nowadays the National Association of Mountain Guides of Slovak republic unites 58 mountain guides. All candidates for this job have to attend three years long training and after it they have to pass through strict and difficult exams which take place in Alps during six days. A successful graduate of final examinations get a certificate of proficiency in mountain guiding, which entitles him to practise a business of mountain guide around the world. He also becomes a member of the National Association of Mountain Guides of Slovak republic and of the International Union of Mountain Guides UIAGM based in Switzerland too.

Conclusion

Profession of mountain guides in High Tatras is an inseparable part of tourism in that region for many years. There are many popular Tatra peaks which are allowed to reach only for tourist accompanied by a certificated guide. Just these guides enable to their clients new, unique and remarkable view at the beauty of Tatra nature, which leaves many unforgettable experiences and helps to develop tourism in a whole country too.

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Spatial Aspects of Experience Management in the Hotel Industry and Intensity of Guest Satisfaction

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Abstract

The paper considers spatial-psychological aspects of hotel management, that is, how guests experience hotel building – exterior, and individual areas inside the building – interior. In this context, the following key questions are first analysed: sensory appropriation of hotel space, aesthetic experience, marking and demarcation of space, and reconstruction of intimate sphere. The second part is devoted to the phenomenon of “atmosphere” in a hotel: atmosphere in a lodging facility (surroundings or milieu, social factors, the shaping of space), guest perception and their subjective reaction (psychological, affective, cognitive, and behavioural). In conclusion, it is stated that atmosphere is one of the key, though the least tangible, factors of overall quality of the hotel product. As such, it is the focal point of interest of hotel designers and managers, especially owing to its crucial role in guest satisfaction intensity.

Key words

Hotel, management, Space, Atmosphere, Experience, Satisfaction

Introduction

In special literature, hotel management is most often studied from the economic and organizational point of view, and more rarely from the spatial-psychological and socio-cultural point of view. This practically means that hotel analysis is rather one-sided and deprived of multidisciplinary approach that is the basis of a comprehensive study. It is not just a matter of some academic aspiration for multidisciplinary, interdisciplinary, and holistic research, nor is it a matter of the need to place the hotel industry, at all costs, in the centre of attention of the humanities. It is a matter of the necessity of market orientation, which places the requirements of target market segments in the centre of attention. When we deal with guest wishes and requirements, we cannot do either without applied psychology or without social and cultural context of the hotel or without culture of guests staying in it. Namely, every hotel is a “global stage” on which different cultures come face-to-face: local cultures (local inhabitants and employees), imported cultures of hotel guests coming from different countries (that can be mutually complementary, indifferent or conflicting), as well as their specific tourist culture (that also varies, but can be a kind of common denominator and communication channel). All these cultures interact under the hotel roof, but as none of them is completely coherent and homogeneous, complex relations inside each of them appear in the process of communication with other cultures.

However, the hotel is a cultural product, no matter whether it is a national hotel designed in the traditional local style or whether it belongs to some multinational hotel chain that embodies oasis of the Western consumer culture in the third world. Naturally, there may be numerous combinations between these extremes. Namely, traditional local hotels may integrate state-of-the-art technological achievements of the developed world (air-conditioning, cable and satellite TV, wireless Internet, electronic devices, smart keys, etc). Similarly, international hotel chains, in hotels situated in different places, may integrate elements of local culture (the use of certain elements of traditional crafts and art in the decoration of a lobby, restaurant and rooms), and thus differentiate their highly standardized product. Taking into account all mentioned above, the subject matter of the paper is management of experience connected with the hotel building as well as visible behaviour and invisible psychological guest reactions to the given atmosphere.

Space-relevant experiences of hotel guests

Space, both macro and micro, is seldom neutral in value. It affects a person's spirits, emotions, a range of experiences and behaviour in a certain place. Interpersonal communication is also conditioned by the nature of space, and thus it does not follow the pattern of a simple binary relation ‘man – man’, but it

always follows the formula 'man – space – man'. Keeping that in mind, we can state that overall quality of space, and respectively, management of atmosphere and ambience in a given space, is one of the key factors of hotel attractiveness.

Sensory appropriation of space

Sensory aspect of a hotel embraces sensations that are perceived through all senses, causing pleasant experiences. Watching, or observing, a hotel building is the first, minimal, and the most frequent form of hotel appropriation. Each guest who has a sound sense of sight may "appropriate" hotel by looking at its shape, size, construction style, colour, materials and immediate surroundings in which it is located. For most tourists, the idea of a hotel attractiveness or repulsiveness begins to form when they see its picture in the media (virtual internet presentations, brochures, photographs), and continues on location when they face the building's architecture and its immediate surroundings. For those who just pass the hotel, the only possible form of appropriation is, actually, visual experience. Namely, hotels are an integral part of tourist places and regions, and in this context, they are an object of sightseeing. Sights, or pictures of a hotel that quickly pass before tourist's eyes are "thin" and "one-layered", thus the tourists quickly absorb them with their eyes. Then a saturation point is reached, when they are fed up with the seen sights and look for new ones, endlessly. Tourist and hotel guests are constantly searching for new sights and new architectural shapes of tourist attractions and hotels. However, there are tourists who have a need to watch a certain sight (coasts, mountain tops, city landscape) for a long time, as if wishing to absorb it with their eyes, to take it home in their consciousness in order to keep it for the rest of their life. In this case, of special value are wide panoramic views from the terrace or from a hotel guestroom, which provide a powerful sensation of control and domination over space, and through this, "appropriation" of space.

The rest senses do not play such an important role in the perception of hotel and its surroundings, which however does not mean that these senses are insignificant and can be neglected. Namely, a complete experience of hotel exterior and interior presupposes the use of other senses. The sense of hearing registers the acoustic aspect of space – sounds, voices, noises, murmur, speech, music. The sense of smell absorbs pleasant aromas of food, flowers, perfumes or deodorant, or, on the contrary, a pungent smell of disinfectants, the odour of mould or staleness. The sense of touch registers the tactile aspect of space, by touching different objects (the cloth of armchairs, bedspread, door handles, glass, etc) with the fingers. The sense of taste registers sensory characteristics of food and beverages consumed in the restaurant (salty, sweet, sour, spicy, hot, and their combinations and variations). Thus, space appropriation can be performed by using only one sense, or by simultaneous use of several or all senses. The latter case is rare, as dominant are always those senses that are relevant to the character of the hotel product and to the tourist attraction of which it is part. The rest of the senses are pushed into the background or even excluded, so as not to interfere with the intensity of enjoyment in the stimulus registered by the appropriate primary sense (listening to classical music, or lying in the sun with closed eyes, for example).

Finally, there are guests that long for complete physical merging with space. This is a longing for, so to say, physiological combining with the surroundings in which the body is located, plunging the body into physical space, in its material substance. Guests do not just look at the hotel from outside (aesthetic distance), but they come into its interior. They penetrate its innermost parts, long to become its part, long to sense its smells, sounds, tastes. However, it is not just entering space, when the body is physically placed in some closed space, but it is also placing certain fragments of space into the body. In the first case, we deal with "placing oneself in space", and in the second – "placing space in oneself". In the hotel industry, it is manifested through placing in oneself (consuming) food and beverages, that is, through sensory properties of gastronomic specialities, tasting vintage wines, and other alcoholic and non-alcoholic beverages.

Aesthetic experience of space

The tendency to introduce aesthetics into all domains of life including tourism is becoming more and more obvious nowadays. In this way, both essential changes in the structure of aesthetic objects and formation of a certain "mass aesthetics of tourism" take place, which also affects the hotel industry. Aesthetic aspects of the hotel make it possible to satisfy aesthetic needs of guests, that is, to realize aesthetic experience through beautifully shaped factors of the hotel product which represent aesthetic objects (from architecture of the hotel building, to tools and uniform of the hotel staff, and finally, to aesthetic appearance and presentation of food). When we speak about the hotel industry, a question naturally arises: are there any universal criteria on the basis of which it is possible to determine aesthetic

value of individual hotels, or, in other words, is it possible to define or establish a definite hotel aesthetics? The practice of the post-modern hotel industry (theme hotels in Las Vegas, for example), however, shows that the *interesting* is the key category of that mass aesthetics, and that its value is determined on the basis of various qualities of the *interesting* (even the aesthetically lowest category of the *interesting* is not outside the range of values). Overemphasizing the *interesting*, at the expense of other value components, does not mean that we automatically move to kitsch and schund, that is, complete devaluation of the quality. It only means a categorical reduction of overall value. Thus, the *interesting* is not just an element of kitsch, but also a value component of art, the categorical value of which is lower as compared with, say, spiritual, intellectual or philosophical components. However, some authors suggest a larger number of principles of hotel aesthetics. By using Kolnai's aesthetics of the *interesting* (Kolnai, 1968), it is possible to formulate the following key principles of aesthetic shaping of a hotel: the unusual, surprising, eccentric, mysterious, mystical, puzzling, dynamic and lively, varied, and finally, original, unique, and authentic. Some other authors (Rošin 1977) single out the following most important principles: the intimate, spacious, defined (or delimited) by and connected with nature. The list of authors dealing with similar problems is rather long, but the general conclusion made on the basis of comparative analysis is that it is very difficult or even impossible to formulate universal, omnipresent and lasting principles of hotel aesthetics. This can be explained by the fact that as soon as some principles are formulated, individual successful examples from practice, built on altogether different principles, refute them. That is why it is always necessary to keep in mind that hotel aesthetics is dynamic, relative and ephemeral.

Reconstruction of intimate sphere

Every tourist starts from home, leaving behind their own "Pascal room", which is a safe shelter and private centre of the world – *axis mundi*. From the psychological point of view, it is the safest place on earth. The farther tourists get from home, the less secure and the more frightened they feel, as they lose the familiar space framework and social support that provide a feeling of security. Consequently, when tourists find themselves in an unfamiliar country or place, they have a need to reconstruct, in some way, their permanent residence, i.e., their private space (house, apartment, room, intimate nook) by placing around personal belongings that bind them with the home they left behind (in this case the objects satisfy the need of the tourist for security and shelter). They arrange or throw around the room their clothes, newspapers, magazines, books, cosmetics, etc. to make an impersonal space of a hotel room warmer and more intimate. It is a kind of silent language of homesickness. Planting oneself into an alien space by bringing familiar personal belongings into it, i.e., by filling the space in with private meanings, is an indicator of anchoring oneself into a given space, or, in other words, of personalization and appropriation of space in order to overcome the fear of the unfamiliar.

Hotels, especially those that belong to well-known international chains (Accor, Hilton, Inter-Continental, Holiday Inn, and others) provide tourists with some kind of "protective membrane" amidst unfamiliar threatening surrounding. They try to create such conditions in each of their hotels that guests "feel at home", as they are fully aware of the guest's need to transfer and reconstruct a part of familiar intimate space (intimate sphere) somewhere far away from home, that is, to create, in threatening surroundings, some kind of support point, safe shelter, oasis of security. That is why they attach great importance to such key factor as guestroom interior: guestrooms should not be uniform, impersonal and cold. On the contrary, their furnishings, décor, lighting, colours and other elements should irradiate warmth and create an intimate atmosphere that would remind the guest of home. In this context, electronic media to which guests are so accustomed in their daily life play a very important role. Nowadays, a television set (cable and satellite programs) and a computer (the Internet) have become the main two focal points around which members of the family get together. They are also the main source of entertainment, as people spend most of their free time using these media. Having this in mind, we cannot imagine a reconstruction of intimate sphere without a television set, which became a standard piece of equipment in all hotels. Now it is time for computers and the Internet to become an integral part of hotel equipment (computer as a means of multimedia entertainment). Namely, a television set and a computer (laptop) enable a homesick guest to come back virtually to their country, city, house, room, which they temporarily left, every evening, at the end of their strenuous tourist activities. The electronic media deliver pictures of home, news, favourite films to the hotel room, which makes the room more intimate and similar to the one thousands of kilometres away.

The influence of atmosphere on intensity of experience and satisfaction

In special literature devoted to management and marketing of service industries, atmosphere is most often considered in connection with guests. At the same time it is stressed that atmosphere is capable of changing consumer attitudes and behaviour. According to Bittner (1992) atmosphere is more important for service organizations than for manufacturing ones which produce material goods. The facts that services are produced and consumed simultaneously and that it all takes place in a physical space of the company itself, lead to the conclusion that guests will be exposed to the atmosphere of the “manufacture place” and that in this way the atmosphere itself will be an important factor of guest satisfaction.

Empirical research (Troy and Heide, 1987) confirmed that atmosphere is one of the most important variables that explain satisfaction intensity of hotel guests irrespective of geographic position, guest nationality and hotel type. Atmosphere is often a more important factor than material product. In individual cases atmosphere is a primary product. The latest research shows that guests regard restaurant atmosphere as the most important individual positive characteristic of a certain hospitality operation and they attach more importance to it than to food (Kokko, 2005). Consequently, creating attractive atmosphere has become a major concern of hotel and restaurant managers and interior designers all over the world. The aim is not just to satisfy, but to even exceed expectations of target guest groups. That is why it is necessary to clearly define the notion of atmosphere in the hotel industry, and generally, in the hospitality industry. Atmosphere in a hospitality facility is created by a combination of physical (tangible) factors and social (intangible) factors. Physical factors include permanent elements, such as, location, architecture and design, and temporary elements, that can be referred to as atmospheric. Social factors relevant to atmosphere embrace interaction between staff and staff, between staff and guests, and between guests and guests. Proceeding from these, a group of Norwegian authors (Heide, M., Kristi, L., Gronhauug, G., 2005) identified three basic characteristics of atmosphere and their respective dimensions.

Surroundings or milieu

Ambience factors embrace background conditions of the milieu (temperature, smells, music, and lighting). These are familiar factors in the hospitality business. Thus, for example, it is a fact that tempo of Muzak may influence guest turnover and overall revenue. Lighting is also an important atmospheric factor. Generally, bright light encourages lively atmosphere and social contacts, while dimmed light creates a romantic frame of mind. Numerous researches also show that smells have a great influence on guest decision-making in a restaurant (appetizing aromas of gastronomic specialties). Optimal air temperature is also important, as unless it is appropriate, it may spoil an otherwise pleasant atmosphere (a cold or too warm air has a negative influence on experience). Finally, the quality of air is an important ambience factor. An otherwise pleasant atmosphere in a hospitality facility may be repulsive to a non-smoker if the air is full of smoke that makes normal breathing impossible. However, the authors' statement related to cigarette smoke is relative, as nowadays smokers are “endangered species”, and in the West it is more and more difficult to find a restaurant where smoking is allowed. That is why, for passionate smokers, restaurants, or even small separate room where smoking is allowed in an otherwise non-smoking zone, are “top value”, and they appeal to that category of guests.

Social factors represent a “human component” of milieu. Empirical research shows that numerous social elements influence perception of atmosphere. Interpersonal communication in a hotel is not limited to interaction only between guests and employees, but also includes relations between guests. In other words, even the best service performed by the staff is vain if the rest of the guests are aggressive and intrusive. Satisfaction decreases if a tourist perceives that the milieu is false or affected. On the contrary, authentic milieu provides satisfaction for the guest, as what they expect fully agrees with what they actually find in the hotel. In this context, a very significant role belongs to communication skills of hotel employees, namely, their ability for successful social communication with guests in order to improve atmosphere. Hotel employees should be competent, which means that they must know the product they sell very well.

Design factors include functional and aesthetic elements, such as architecture, style, form. Project creators and managers may influence and control numerous design factors that are important for atmosphere. An example of this is artistic shaping of décor elements, to which much attention is devoted in special literature dealing with consumer behaviour. Bitner (1992) differentiates shaping space and functionality, on the one hand, and signs, symbols and objects, on the other. Shaping space refers to furnishing, arrangement, the size and form of equipment and furniture, while functionality refers to the

ability of these objects to fulfil their main purpose and achieve aims (to perform the function for the sake of which they are created). Researches point out potentially negative effects of bad space shaping and dysfunctional equipment on atmosphere. That is why hotel chains use, in their new hotels, recognizable features that enable guests to use all areas, equipment and devices in a customary familiar way.

Symbols and objects have the function of an explicit or implicit sign that sends a message about the place to the consumer. Signs placed in the exterior or in the interior of a building are an example of explicit communicators, while artwork, floor covers and personal objects displayed in space carry symbolical meaning and create the total aesthetic impression. World-class hotels designed for guests who wish to enjoy luxury have appropriate “atmospherized” and stylized interior design that suggests luxury together with a high degree of finesse and sophistication. The same refers to restaurants. Thus, for example, one configuration of elements in design is attributed to a “fast food” restaurant, while another configuration shape is attributed to a gourmet restaurant.

How guests perceive surroundings

In order to understand psychological influence of atmosphere, it is necessary to analyse numerous ways in which guests perceive surroundings. Atmosphere must be experienced through senses. The main senses for experiencing atmosphere are: the sense of sight, hearing, smell, and touch. The fifth sense – the sense of taste – does not directly deal with atmosphere. We can see, hear, smell, and touch atmosphere, but we cannot taste it. However, definite elements of atmosphere may activate associations of remembered tastes (the smell of food activates memory of its taste).

An insufficient number of researches is devoted to the study of ways of perceiving atmosphere in hotels. The question naturally arises here: can we create planned and expected atmosphere by combining various factors for improving atmosphere? In this context, Bitner (1992) emphasizes that people perceive surroundings holistically. That means that the total configuration of appearance, sound, smell and feeling may determine way of perceiving atmosphere. In other words, in order to create appropriate atmosphere the hotel has to arrange its ambience, social and design factors in a consistent way. It is probable that inappropriate elements will carry more weight than appropriate ones. Thus, for example, the use of cheap wallpaper may destroy an atmosphere created by otherwise luxury features, while an impolite waiter or waitress may be detrimental to a friendly restaurant atmosphere.

Bitner’s holistic approach is contrary to the principle of “selective attention”, in accordance with which the guest first perceives those elements (partial products) in a hotel which he needs most at a given moment (a hungry guest will first see food, while a thirsty person will see refreshing beverages, etc.). If we keep that in mind, we can conclude that guest attention is not comprehensive but partial, that is, it is narrowly focused on those factors that are able to satisfy immediate needs (need hierarchy at a given moment). However, as the hotel product should simultaneously satisfy needs of various types of guest, it is necessary that all constituent elements of the hotel product possess the highest degree of quality, despite the fact that rare are the guests that would use all the components of the total hotel product at a time. Consequently, Bitner’s holistic approach has significance in this context.

Psychological reaction of guest

The third and last characteristic of atmosphere is that it generates an appropriate reaction of guests. In other words, it is expected that atmosphere should excite a subjective internal response. Common sense suggests that the guest’s choice of a hotel product is based on both rational and emotional elements. We can also state that perception of atmosphere brings about certain emotions, convictions, psychological sensations, which in their turn affect behaviour. That is why definition of atmosphere embraces cognitive, affective and psychological reactions of guests, as well as appropriate behaviour. Several types of cognitive response are analysed in special literature. Perceived atmosphere may influence guest convictions and attitudes that refer to other people and products in a given place, while perception of atmosphere may result in a spontaneous categorization of a hotel. For example, configuration of atmosphere elements in a certain hotel allows the guest to place the hotel, that is, to differentiate it from other hotels, and they do it automatically, on the basis of previously acquired and accumulated experience.

Perceived atmosphere may also bring about affective responses, and a considerable number of researches show that individual affective responses of guests to surroundings are in agreement with their behaviour. For example, a hotel with a pleasant atmosphere is likely to be a place where people would wish to spend time and money, while unpleasant surroundings are avoided. Also, guests experience

exciting surroundings as positive, unless excitement is combined with unpleasantness. Thus, atmosphere that evokes pleasant affective responses and is highly exciting at the same time is the best combination from guests' point of view. On the contrary, unpleasant surroundings with a high degree of excitement, as for example, overcrowded restaurants, smoke-filled discothèques, etc., are the least suitable atmosphere.

Perceived atmosphere may affect people in a purely psychological way. Too much noise may cause unpleasantness, while guest room or restaurant temperature may cause people to sweat or to shiver. Bad air quality may hamper breathing, while dazzling light may be very unpleasant and make a person unable to see. Social factors, such as overcrowded hotels or restaurants may also bring about unpleasant psychological reactions.

As in the previous case, the authors of the research base their conception on one-sided approach, namely, on "healthy life" ideology that is now dominant in the West. However, not all potential guests share this concept, no matter how sparse they may be. This means that there are people who prefer not only smoke-filled areas, but also overcrowded discothèques, cafes with very loud music and strong light effects (strobe lights, lasers, UV lights, etc.), without which they cannot enjoy themselves (younger people). Such guests feel like a fish in water, actually, this "human sea" is a kind of stimulus for them: it sets them in a good frame of mind, encourages interpersonal communication, floods them with joy of life; in a word, the state may be described as delirium or trance.

Here a question naturally arises: how does atmosphere influence guest behaviour? Space psychologists consider that individual reactions to certain places may vary and find expression in opposite forms of behaviour. In this sense, certain positive kinds of behaviour may be directed to a concrete place, such as a wish to stay, to explore, to work and to join other people. Atmosphere can also contribute to successful experience if the guest manages to realize the aim he intended to achieve in the hotel. Similarly, standardized furnishing and equipment of franchise restaurants and hotel chains make the guest's stay more relaxed and comfortable even if they stay in a definite hotel for the first time. On the contrary, overcrowded space and high temperature in a resort area may cause emotional stress and in this way endanger the guest's desire to relax. In addition to its influence on individual behaviour, atmosphere also determines the nature of social interactions. It is confirmed that physical surroundings affect behaviour of small groups, formation of friendly relations, involvement, aggression, withdrawal, as well as solidarity among guests.

In order to create an idea of positive physical surroundings in the guest's consciousness, it is necessary to understand, both theoretically and practically, the entire process of individual evaluation. Research shows that evaluation varies depending on biological, personal and socio-cultural factors, as well as on aims, expectations, and other internal and external factors. It is logical to assume that the more different are the people staying in a certain hotel, the more greatly their perceptions and reactions of the given atmosphere vary. This is especially true of hotels with predominantly international clientele, namely, guests belonging to different cultures. This practically means that each guest representing a certain culture, with the help of "filters" that the culture imposes on them, will interpret the atmosphere in which they find themselves in a different way, which may bring about affective reactions that range from delight through indifference to repulsion. That is why great hotels undertake "internal differentiation of the product", which may concern either a larger number of stylistically different restaurants that generate different atmosphere or guestrooms designed and furnished in different styles. In this way the hotel tries to satisfy, "under the same roof", various tastes of people belonging to different cultures.

Individual responses to atmosphere stimulus may also depend on situation factors. The guest's plans and aims may determine their reaction to surroundings. We may naturally expect that the guest may look for a different atmosphere depending on whether they are on holiday or on a business trip. Similarly, individual response to atmosphere may also depend on the kind of transaction. Finally, every person entering a hotel is in a specific mood (delighted, happy, depressed, lonely, indifferent, impatient), which may affect perception of surroundings, while variations in surroundings may, in their turn, bring about changes in the initial mood. Therefore, guest expectations may be regarded as a moderating factor.

Conclusion

Taking into account the above given considerations, we may conclude that atmosphere is the key element of the total hotel product quality, but at the same time it is the most abstract element, and that it strongly influences guest experience and behaviour. Atmosphere may be differentiated by intensity (peaceful and quiet or dynamic and noisy), and by type (exquisite, functional). Hotel atmosphere is a combination of tangible (physical) and intangible (psychological) factors. Physical factors include both permanent elements, such as location, architecture and design, and temporary elements, that can be described as atmospheric. Social factors

relevant to atmosphere embrace interaction between employees, between employees and guests, and between guests. The desired atmosphere can never be achieved with the help of one single factor, but one single inappropriate factor may destroy entire atmosphere. Generally, hotel atmosphere is determined by a total configuration of hotel elements, and it is dynamic by nature, which means that it changes constantly. The basic aspects essential for creating atmosphere are its being authentic and specific. Pleasant atmosphere leads to positive attributes, and they are important for intensity of guest satisfaction, return stays and word-of-mouth advertising. That means that one of the basic principles of hotel management in this sense is knowledge of human needs, which can be satisfied by means of a total hotel product. In doing so, the hotel should first perform its main functions (accommodation and board), and then satisfy the rest of social, material, and psychological needs of guests. To achieve this, architects need the help of space psychologists and other specialists, as it is necessary, first of all, to establish space-relevant needs and wishes of consumers that can be satisfied by the appropriate shaping of a hotel (psycho-marketing architecture for guests). Finally, the management's preoccupation with atmosphere, as some authors consider, may have negative effects on financial results. That happens due to enormous investment expenditure and lack of orientation towards operational aspects of business, such as functionality, logistics and occupancy.

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The Quality of Hotel Service in Theory and Practice

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Abstract

Specifics of hotel services are reflected in defining and measuring of its quality. The paper highlights that the quality of hotel services is a market category. It represents a zone of compatibility of all its components compared to customers' demands. The paper deals with the influence of individual components of hotel services on its quality. Rating the quality of hotel services includes: location characteristics, classification features, functional characteristics, structural features, technological characteristics, economic features, characteristics related to the reliability of services, features related to the standardization of services, ergonomic features, aesthetic features, transportable features, safety characteristics, environmental features. Integrated quality of hotel services in practice is demonstrated through the hotel category. Hotel category reflects the optimum balance between quality and price in customers' perceptions.

Key words

Hotel services, Hotel product, Quality, Categorization, Customer, Satisfaction

Introduction

The aim of the hotel industry is to provide accommodation service that may or may not be accompanied by food and beverage service. The hotel business reflects all the essential properties of the hospitality industry, both in the rooms division and in the food and beverage division, as well as in the sphere of services that usually accompany lodging and food services. The hotel business combines accommodation service and food and beverage service in terms of space and function and comprises the accompanying services that gravitate towards them.

A hotel establishment is a spatial and material framework for the implementation of work process in the hotel industry. A hotel establishment is not, nor can it be, any establishment that provides accommodation and food service. The use of the name "hotel" should be selective and controlled. The number and diversity of establishments in the market make it difficult to define the hotel precisely. However, a hotel service presupposes a higher level of comfort and numerous non-hospitality components, in other words, – guaranteed quality. The hotel is defined as a basic representative hospitality establishment that is designed to provide an open type accommodation to different categories of consumers, that operates on commercial principles, and that is technically-technologically, organizationally and in terms of staff adjusted to provide accommodation services, as a rule, in combination with food and beverage service and additional related services, functionally united into an integrated whole (Kosar, 2010, 63). It is the integrated whole that represents the hotel product.

The scope of the notion and the significance of the hotel service

The hotel is a representative hospitality establishment in the functioning of which all the essential properties of the working process in other hospitality establishments are reflected. The hotel service, a result of the hotel functioning, represents services of other types of hospitality establishments. In this context the hotel service may be attributed a wider meaning due to the fact that its complex structure contains a complete assortment of the hotel offer.

The complex structure of the hotel service embraces three major groups of components – spatial, technical-technological (tangible), and process-organizational (intangible). The hotel service is a complex of tangible and intangible elements that are mutually connected, both spatially and functionally, into an integrated whole, and the integrated whole is manifested as a chain of services arising from needs, wishes and requests of consumers, i.e. hotel guests (Kosar, 2002, 33).

Creators of the working process in the hotel business are trying to foresee as many needs of different potential consumers as possible, and to satisfy these needs in the hotel offer in the form of a service complex, that is, of an integrated product. Basic hospitality components of the hotel product are common to all consumers, though they may differ depending on the consumer preferences (kind of room, half board, full board, bed and breakfast). However, the hotel product is not exhausted by the realization of the hospitality components. The personalized aspect of the hotel product realization is dictated by the

individual needs of guests who choose whatever suits them most from the list of offered possibilities. Each hotel guest practically “creates” their own hotel product that represents an authentic and unique combination of different services. Thus, it is up to the guest to provide “the finishing touch”, and the process lasts as long as the guest stays in the hotel.

The notion and components of the hotel service quality

Heterogeneity and complexity of the technical-technological and organizational-staffing structure of the hotel service and the degree of its specialization reflect the level of hotel business development in a certain space. To form the hotel service means to establish consistency of quality of its individual components and to provide harmonization of the process of service realization. The hotel service quality embraces its tangible and intangible components that are spatially and functionally interconnected to form an integrated whole, together with the realization of accompanying services, on the level up to which the implementation of the services is coordinated with customer (hotel guest) demands (Kosar, Rašeta, 2005, 22).

The components of the hotel service quality (spatial, technical-technological, process-related, and organizational) as basic components of its structure cannot be considered in isolation. The choice of the most suitable location determines technical-technological essence of the hotel service, in accordance with which process organization is conceived. Mutual interconnection and interdependence of the basic components of the hotel service quality is realized in the opposite direction. Assortment of hotel services and method of their realization impose appropriate technical-technological solutions in terms of capacity, internal organization, equipment, and functional interconnection of spatial units of different purposes, which again requires the choice of appropriate location.

The influence of spatial elements of the other components of hotel service quality is ultimately manifested in the degree of synchronization location, architectural design, internal space organization, equipment and process running in the facility. The location is there for a key component of the spatial dimension of hotel service quality. In this context, the importance of the location comes in to play when assessing compliance of projected and required quality. Attractive attributes of the area where the facility is located determine the substance of the required quality based on the needs of hotel guests. The choice of a hotel is in synergistic relationship with the motive of the visit. Hotel standardization is based on this fact (coastal /maritime, lake /-resort type hotels, spa-wellness -health type hotels; mountain-wintersports-type hotels, the city- a business type hotels, etc.). The influence of location in the phase of the required quality is more concretized in the phase of projected hotel service quality. Compliance at this level of quality provides a solid basis for the synchronization on the way to total hotel service quality. The total quality of hotel service means harmonization between projected and realized quality, realized and usable quality, usable and required quality. The quality of hotel service is not a homogeneous category. On the contrary, it is a specific product of heterogeneous and complex structure which is realized placing services in different business environment from the stand point of technology and processes, mainly in the single spatial-construction units.

In order to gain as clearly as possible ideas of specificities of hotel service quality, it is necessary to look at the scope and meaning of the term "integral" and "integrated" quality. The term integral quality is derived from access to quality as a dynamic category, and to the fact that the process of quality creating is a process of continuous harmonization of technical, technological, organizational and personnel characteristics and of the customer requirements, needs and desires. Integral quality is closer conceptually defined as "aggregation" of components whose characteristics are interconnected, and which provide quality products in terms of expression of its core features, and its use value. Integral quality is the determinant of complex and heterogeneous products such as the hotel service, or hotel product.

The quality of a tourist destination can be a good example to illustrate the importance of an integrated quality. Tourist destination can be understood as a universal spatial framework for the functioning of different, mutually complementary activities that make up the tourism industry, or gravitate to it. In this context, the hotel product maybe referred to as partial (the level of the organization) and integrated (the level of the destination). Market positioning of tourist destination determines the market coverage of an integrated hotel product, or orientation to a greater or lesser number of segments and target groups. Quality of integrated hotel product represents the mutual harmonization of partial hotel products with the requirements of dominant market segments on the level of tourist destination.

In the context of the implementation globalization strategy, integrated quality of hotel product goes beyond of tourist destinations. It is about the international hotel chains, where companies-creators of

authentic hotel services (products), achieves a spatial expansion – including existing or newly constructed facilities in their own business system. This requires harmonization of attached hotel products quality with the parent company hotel products quality. In this way we achieve an integrated quality of international hotel chain, which in this context can be understood as a transitional phase towards achieving global hotel product quality. Global hotel product quality means harmonization with the requirements of global customers. The global consumer is loyal to brands that symbolize global company with global market identity. So we can talk about global manufacturers who are able to offer a hotel product that has the features of global quality.

Structural properties of the hotel service quality

A chain of services that appears with the aim of satisfying numerous and various guest needs is treated as the hotel product. The chain of services takes place in a certain space in business surroundings defined both technically-technologically and process-organizationally. Here we deal with hotel business establishments represented by the hotel, their location, architectural and construction properties, equipment, furnishing, arrangement, process organization. A hotel establishment is, therefore, a spatial, technical-technological, and process-organizational framework for the appearance of the hotel product. That is why the basic properties of the hotel product quality will be considered from the point of view of hotel establishment functioning.

Classification properties

Classification properties of the hotel product are those that determine its belonging to a certain type of lodging facilities. In accordance with the dominant development trends of socio-economical character the needs of travelers, service consumers in the hotel industry, have been differentiated. This resulted in the classification of lodging facilities. There are different kinds of lodging facilities in the accommodation sector of the hospitality industry: hotels, motels, inns, hostels, tourist apartments, tourist villages, resorts, spas, campgrounds, etc. The classification process is influenced by the following essential factors: kinds and assortment of services, manner and time period of providing service, market orientation, location, technical-technological equipment, process organization, length of stay, price. Mutual connection of the enumerated factors results in differentiation of individual kinds of lodging facilities. However, the dominant influence of a certain group of factors on the classification may change in the course of time. That means that belonging to a certain kind of lodging facilities is not a static category, but on the contrary, a dynamic category. It is not always possible to draw a distinct line between certain kinds of lodging facilities (hotels, motor hotels, motels), which imposes a flexible approach to classification and the possibility of turning from one type into another. Flexible approach to lodging facilities classification is officially adopted on the level of the World Tourism Organization (UNWTO), that is, on the level of international tourism statistics, where the capacity of lodging facilities (number of establishments and number of rooms) and occupancy rate are calculated within a wide range of establishments called “hotels and similar kinds of lodging facilities”. It is a matter of using minimum common properties as a basis for classification. The minimum concerns conditions under which accommodation service is implemented. The common minimum, connected with space, room and accompanying area equipment, as well as reception process organization, determines so called hotel type accommodation. Similarly, the expression “hotels and similar establishments” corresponds in meaning to the expression “hotel type establishments”. The group of hotel type establishments comprises hotels, motels, boarding houses, and hotel apartments according to common spatial, technical, and organizational conditions under which accommodation service is implemented. In hotel type establishments accommodation services are functionally united with food services, with the exception of hotel apartments in which facilities for independent preparation and service of food (in specially designed areas) are available to consumers.

Functional properties

Functional properties of the hotel product determine its basic purpose, or utility value. Functionality of the hotel product represents its ability to satisfy consumer needs. Basic functionality of the hotel product refers to its ability to satisfy the need for accommodation, mainly in combination with more or less complete food service. Functionality of the hotel product as a market category is considered in relation to differentiated needs of various market segments. Functionality of the hotel product, which is practically manifested as its orientation towards a concrete category of consumers, may be treated as factor of classification. It is a matter of variations within a kind, namely, of singling out specific types of

establishment. For example, evaluation criteria for hotel product functionality will be essentially different for business and resort hotels – in terms of location, assortment and methods of providing basic (hospitality) and additional (non-hospitality) services, space, equipment – on account of different needs and different stay-reasons of the guests in the above mentioned hotel types.

Spatial properties

The properties of space determine to a great extent the needs of consumers, and thereby – both classification and functional properties of the hotel product. Areas in which hotel facilities are located possess certain distinctive features that are attractive for consumers irrespective of the fact whether it is a seaside, or a lake shore, a river bank, a mountain, a spa, a city, a cultural-historic monument, a sports centre, an entertainment park, a traffic terminus, or just a stop-over place. The location with respect to the dominant attraction in a certain area determines quality of a hotel facility location. This is especially important when we deal with a micro location. If, for example, two hotels located in the city centre are compared, the hotel located in a quiet street with less traffic has a comparative advantage over a hotel located close to a central crossroads or a city thoroughfare.

Spatial properties of the hotel product quality embrace the inside of the hotel establishment as a construction unit. Here we deal with arrangement, size, and interconnection of areas and units designed for different purposes. Arrangement of space inside a hotel establishment is conditioned by its classification and functional properties. Capacity as a service-production ability of a hotel establishment is determined by capacities of areas built for specific purposes (number of rooms, number of beds, number of tables and seats in the restaurant, area of the lobby, area of storerooms and the kitchen, width of the stairway, etc). Spatial properties of the hotel product quality also include the immediate surroundings of a hotel establishment – a parking space, a swimming pool, sports grounds, children playgrounds, green areas, backyards, support buildings, etc. All areas inside the building and in its immediate surroundings should be functionally defined in order to be adequately equipped and prepared for process implementation, that is, for providing different, mutually interconnected services that make up a hotel product.

Construction properties

Construction properties of the hotel product concern the design of the building and the entire complex including immediate surroundings. Construction properties are predominantly conditioned by location. Architectural solutions should be in agreement with space surroundings. It is recommended to follow traditional building methods, which also refers to building materials (wood, stone, bricks, etc). Though construction solutions of the inside are conditioned by outside appearance of the building, there are numerous and various possibilities for shaping and designing inside areas by using different materials. The outside of a hotel establishment as a result of a certain architectural solution is a construction property of the hotel product, and as such it is liable to little change, and if any, only superficial change. The inside of the hotel, on the other hand, may be changed, with due respect for the previously calculated static constants. By this we mean a reconstruction of the building, which is usually accompanied by classification changes and thereby functional properties of the hotel product. If, for example, a youth hostel is turned into a hotel, there will be changes in size, capacity, material, etc. A reconstruction may result in changes in space arrangement inside a building.

Technological properties

Technological properties of the hotel product are attached to its spatial and construction properties. Contemporary construction solutions are marked by flexibility, which means that they facilitate relatively easy adaptations or multi-purpose use of certain areas in a hotel building. This presupposes the possibility of applying, as well as of changing, new technologies in agreement with world trends in this field. This refers, first of all, to heating, air conditioning, ventilation, production lines, but also to automation and connection of working operations in certain process units. Nowadays the application of high technologies is considered to be one of the imperatives of the hotel product quality.

Security properties

Security properties of the hotel product are connected with its technological properties. The application of high technologies makes process implementation in the hotel industry easier and faster, and increases guest and employee safety and security. Automatic door lock system with smart cards ensures a higher

level of security, so does automatic power cut after the guest has left the room. Guest rooms are equipped with safes for keeping money, jewelry and other valuable things. New technologies found application in bathrooms and toilets, where special devices ensuring automatic cutoff in water taps and in toilet flushing systems were installed. Specially designed video cameras and monitors are installed to watch movement on the premises. Fire detection system is also improved, while new fire proof textiles are introduced. Process safety is specially insisted on when it is a matter of hygiene and health safety of foodstuffs in all phases of food production.

Ecological properties

Ecological properties of the hotel product should not be neglected in the process of evaluating its quality. They are connected with its technological properties, all the more so as there is a growing orientation towards clean technologies. Environment management becomes a constituent part of business strategy of international hotel companies. Departments for environment protection are formed on the level of central or regional offices. They create the company's "green policy", the principles of which are implemented as business strategy. Programs for the introduction of ecological standards are worked out in all key areas (waste disposal, energy economy, material recycling, minimizing the use of toxic substances, air and surface water pollution control), and company control is imposed on their implementation, accompanied by appropriate education of employees. The construction of new hotel establishments is preceded by respect for ecological criteria in the choice of the site – from the point of view of the soil, surroundings, the presence of communal infrastructure, etc.

Ergonomic properties

Ergonomics as a scientific study of people and their working conditions, of adjusting machines, instruments and other equipment to the working person was introduced by K.F.H. Murrell in 1949 (Kosar, Rašeta, 2005, 44). Ergonomic features of the hotel product show the degree of adaptation of machine and equipment construction to human body or to those human organs that have an immediate contact with the product while it is used.

Ergonomic features of room equipment are of special importance for the hotel product. A hotel room is a spatial and material-technical framework for the realization of accommodation service. Service quality in the hotel industry is largely manifested through the quality of lodging facilities. That is why special attention is devoted to bed construction. The minimal dimensions of bed surface are regulated and they are considered to be elements of essential quality. Construction and technological properties are based, in agreement with modern trends, on ergonomic requirements. Flexibility of bed and mattress construction provides comfort and optimal position of spine while a person lies in bed, either sleeping or having a rest. Ergonomic requirements can be observed in designing other kinds of hotel furniture, especially chairs and tables, of table utensils, cutlery, crockery, glassware, and of bathroom equipment.

Ergonomic properties of the hotel product are especially insisted on when it is a matter of protecting the interests of guests, but hotel employees should not be neglected, either. The majority of hotel equipment and apparatus is found in the hotel kitchen, where food is prepared and cooked. It is with this equipment and apparatus that hotel employees are in constant contact, therefore fulfilling ergonomic requirements is one of the key factors of food production process quality, and thereby food quality.

Ergonomic qualities of material components of the hotel product are manifested in its construction and technological properties. However, it is possible to speak about ergonomic aspect of the process itself, or of the service in the hotel business. For example, serving the same dishes at a different time of the day affects human body in different ways. It is assumed that eating fruit in the morning or having warm tea on a hot day have positive effects on human body. Another aspect is made up of positive psychological effects on human body caused by communication: it may induce the sense of self-assurance in a guest if the hotel staff is courteous and respectful.

Transportability properties

The property of transportability refers to flexibility of construction and portable technologies. Nowadays lodging facilities are appointed in such a way as to minimize fixed equipment. Portable equipment has multi-purpose use. It ensures flexible organization of hotel areas and raises functionality of the hotel product. Transportability of hotel facilities and equipment contributes to the extension of range of services. The same area may, if need arises, be equipped and used as an auditorium, banqueting hall, conference hall, play room, etc. Transportability of facilities and equipment in food and beverage

department makes it possible to provide services outside the hotel – in the glazed garden, beside the pool, on the beech, in the park, in the woods or in other attractive places.

The functional aspect of hotel product realization is becoming more and more important, which finds its expression in adapting the product to the changeable demand requirements. Thanks to transportability of certain facilities and equipment it is possible to leave the usual areas on the premises, while the recognizable features of the hotel product quality remain unchanged (gastronomic offer, service style and manner). This is of special significance for promotion presentations at fairs and for other marketing activities that influence the formation of expected quality in the minds of potential consumers.

Standardization and unification

Standardization and unification properties of the hotel product embrace determining certain norms, or defining its spatial, construction, ergonomic and ecological properties more precisely. Here we deal with standard dimensions of space and equipment, with standards concerning kind, type and manner of installing equipment, determining norms concerning food production process, pouring drinks and making beverages. Material standards are just one aspect of hotel product standardization. Nowadays hotel product standardization is impossible without process-organizational and staffing standards. The serving dimension of the hotel business consists in an immediate contact between the hotelier and the guest. Communication with the guest is one of the key processes in the hotel business. Process standardization includes determining standards for written and oral communication. Oral communication is a significant factor of business behavior standardization. Standards as prescribed norms are a basis for the hotel product classification and categorization. A higher level of standardization is achieved by the introduction of internal corporate standards. The operation of international hotel chains demonstrates the fact that creation and consistent implementation of standards leads to the creation of a globally recognized trade mark. It is not just a matter of standardization but also of unification of product of international hotel chains. Unification of certain components of hotel product guarantees global market recognition in the process of territorial expansion. Unification of the hotel product is implemented up to a certain level, so as to preserve authenticity and to sustain ethnic-cultural and socio-psychological factors of the local surroundings. International hotel chains expand territorially thanks to a determined "packet" of hotel standards that guarantees global market recognition of the brand. The determined packet of standards is transportable and may be said to represent the so-called "unification minimum" by which the hotel product global quality is guaranteed.

Reliability

Reliability of the hotel product embraces material components guaranteed by the producer (expiration date, exploitation features, condition, the ability of maintaining good condition, etc.). Gastro product is an authentic materialized creation the original producer of which is a hotel establishment. That is why a hotel company should guarantee reliability of its own gastro products. Reliability of the hotel product also refers to the process of providing various services. Process reliability is reflected in service reservation, wake-up service, taking messages, providing information, taking care of the guest's luggage, hygiene, maintenance, etc. Reliability is achieved by determining standards and consistently maintaining them. It is in this way that consistent quality of the hotel product as an integral whole is guaranteed.

Aesthetic features

In the hotel business the principle of aesthetic relativism may be applied (Lalo, 1974), in accordance with which aesthetic rules and recipes are not prescribed, but their influence on the formation and modification of a hotel guest taste is not excluded. Aesthetic harmony of hotel product components brings about a complex aesthetic experience. The choice of a hotel location is a starting point for aesthetic considerations. A hotel location and architecture should not damage aesthetic harmony of the surroundings; on the contrary, they should enhance the intensity of aesthetic experience. The designing, construction, furnishing and equipment of a hotel requires that a professional interdisciplinary team of experts – architects, landscape engineers, interior designers, applied artists – should be engaged. Aesthetic values of a hotel product are not an end in itself. Functionality, that ensures process optimization, should not be subordinate to aesthetics. For example, a hotel lobby should be designed in such a way as to enable implementation of receptive, communicative, informative, and controlling functions. Optimization of these functions should be guaranteed, with the preservation of the main aesthetic idea of the designer.

The connection of material and non-material components of the hotel product has a special treatment in the context of aesthetic considerations. It is necessary to achieve and maintain aesthetic harmony between the style of interior design on the one hand, and of the style of service, on the other. Aesthetic aspects of service in the hotel business have not been sufficiently investigated yet. A comprehensive approach to the aesthetics of verbal and non-verbal communication between hotelier and guest is required.

Economic properties

Economic properties of the hotel product embrace indicators, connected with income and expenditure, expenses, prices, placement effects. Value for money principle is based on real evaluation of relation between offer and demand, that is, the readiness of demand to pay an appropriate sum of money for a certain quality. Competition in hotel service market is to a greater and greater extent reduced to price competition, if we take into account the fact that certain (obligatory, guaranteed, minimal) quality is provided. There is a tendency for economic optimization of the process, that is, for reducing expenditure without downgrading the established level of quality. This is the basis of price competition, which presupposes good service for a reasonable price.

Patent-legal properties

Patent-legal properties of the hotel product embrace degree of legal and patent protection, and its temporal and territorial aspects. Certain gastronomic products (house specialties), organizational-staffing models, management concepts, training and education programs, and ecological programs may be a subject of patent and legal protection. Various kinds of cooperation, the most frequent of which are franchising and management contracts, regulate transfer of registered features of the hotel product to business partners. On this basis territorial expansion of international hotel chains is mainly implemented.

Categorization as an obligatory quality of hotel service

Considerations about the quality of hotel service should include reference to the term “obligatory” quality. Obligatory quality of hotel service is the degree to which its properties express compliance with established standards - legal documents and other prescribed rules. Regulations setting out the spatial, technical, organizational and procedural features of the hotel service should inform and protect customers. On the other hand, obligatory quality protects the manufacturer too, primarily of unrealistic demands, which exceed the prescribed standards. Be filled prescribed minimum conditions for doing hospitality business, provide a minimum guaranteed quality. The minimum guaranteed quality is the basis for categorization. Categorization is the process of obligatory quality ranking based on established criteria. Category is the verified quality range. It includes the minimum requirements determined for a given rank. Belonging to a particular category guarantees adequate quality of hotel service in spatial, technical, technological, organizational, procedural and personnel terms. The quality that guarantees a certain category implies the corresponding rates. The number and diversity of criteria points to the complexity and comprehensiveness of the categorization process, whose implementation is based on the basic features of hotel industry.

Establishing hotel categorization criteria is based on a complex theoretical approach to the quality of hotel service. Categorization is achieved by using quality in practice. The structure of hotels by category illustrates the quality of hotel offer in a certain area.

Table 1 The Number of Hotels by Category in Serbia

Category	2010	2011	2012	No. of hotels (2010)	No. of hotels (2011)	No. of hotels (2012)
5*	3,6	3.9	4.1	9	10	11
4*	18,0	18.5	20.8	45	48	56
3*	35,2	33.6	33.5	88	88	90
2*	33,2	34.3	32.0	83	88	86
1*	9,6	9.6	9.7	24	26	26
Total	100	100	100	249	260	269

Source: Ministry of Economy and Regional Development, <http://www.turizam.merr.gov.rs/index.php/sr/2010-02-11-17-24-30>

According to data from the Table no.1, we conclude that the hotel offer in Serbia has moderate quality. Two starhotels occupy over 30% of the total hoteloffer in Serbia. They are almost equally represented as three-starhotels. This means that lower and middle class accommodation makes up over 65% of the total number of hotels. Observed during the three years, the structure of the Serbian hotels by categories is slightly improved.

Table 2 The Number of Hotel Rooms by Category in Serbia

Category	2011	2012	No. of rooms (2011)	No. of rooms (2012)
5*	9.9	8.1	1,452	1,953
4*	23.6	23.2	3,486	5,600
	39.8	37.7	5,895	9,096
	21.2	23.4	3,102	5,655
1*	5.6	7.6	3*	1,839
Total	100	100	2*	24,143

Source: Ministry of Economy and Regional Development, <http://www.turizam.merr.gov.rs/index.php/sr/2010-02-11-17-24-30>

High category hotels in Serbia are larger capacity from low category hotels. Therefore, the structure of hotel rooms by category is more favorable than the structure of hotels by category. For example, the share of hotel rooms with five stars twice exceeded the share of five-star hotels (8.1% to 4.1%). Similarly, the share of rooms with two stars is 10% smaller than the share of two-star hotels. However, there was equal presence of hotel rooms with four and five stars (31.3%) on one side and of hotel rooms with one and two stars (31.0%), on the other. Mid-range, three star hotels are still the most present both in number of rooms, and the number of hotels. The capacity of categorized hotels represents the quality of tourist accommodation in Serbia. It is still a small capacity, which guarantees obligatory hotel product quality, assuming compatibility with the required quality for the customer.

Conclusion

The above mentioned properties of the hotel product cannot be considered in isolation as it would lead to one-sided approach to its quality. Only a comprehensive approach to quality is possible and justified. It reflects orientation towards the customer, whose needs, wishes, and expectations are united, specified, and harmonized in their requirements. The quality of hotel service is expressed and measured by the degree of harmony with the requirements. Customers' requirements are susceptible to changes, which imposes a flexible approach to the above mentioned and considered properties of the hotel product. This demands constant checks of hotel service quality. The checks are implemented by testing customer satisfaction. A threshold of customer satisfaction is reached when their expectations are met. Constant improvement of hotel service quality is aimed at exceeding guest expectations. Consistent application of hotel categorization criteria is the premise of customer satisfaction. But it is not enough to remain at the level of obligatory quality. Hotels need to improve the quality of its services by introducing its own internal standards. These make an international hotel chain and due to which they have become world-recognized brands. Therefore, the quality of hotel service can not be separated from customer satisfaction.

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Tourism Statistics in Slovakia

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Abstract

The aim of this paper is to present and analyse statistical information on the development of tourism in Slovakia. Studying tourism statistics is of great importance when it comes to measuring the economic role of tourism industry as well as its potential for job creation. Tourism is characterised by its multidisciplinary character whose final product is created by employees from many other sectors. Analysing tourism statistics is very important for tourism policy makers as it enables them to get insight into the system, recognise its socio-economic impacts and notice trends among its visitors and tourists in advance so that sound plans could be devised. The article presents bank statistics, statistics on active tourism as well as on passive tourism in Slovakia.

Key words

Slovakia. Tourism. Statistics. Outbound tourism. Inbound tourism. Active tourism. Passive Tourism.

Bank Statistics on Tourism Development

When presenting the current state of tourism development in Slovakia, we would like to start with the Bank Statistics on Tourism Development during 2005-2011. Table 1 presents data in categories like international tourism receipts or expenditure, the share of international tourism receipts or the share of international receipts on export of services. All these indicators attempt to measure and quantify an economic significance of tourism for the state. Tourism plays an important role as an accelerating factor of state development.

Tab 1 Statistics on tourism in Slovakia 2005 – 2011

Indicator	2011	2010	2009	2008	2007	2006	2005
International Tourism Receipts (mil. €)	1744,7	1684,4	1674,5	1762,6	1472,8	1207,7	972,4
International Tourism Expenditure (mil.€)	1566,8	1470,7	1504,1	1467,3	1116,6	841,6	679,8
Balance of International Tourism (mil. €)	177,9	214	170,4	295,3	356,1	366,1	292,6
Share of International Tourism Receipts on GDP (%)	–	2,5	2,6	2,7	2,7	2,7	2,6
Share of Int.Receipts on Export of Services (%)	–	38,3	37	30,5	28,7	28	27,5
Share of Int.Receipts on Export (Goods&Services)(%)	–	3,2	3,7	3,3	3,1	3,2	3,3

Source: Ministry of Transport, Construction and Regional Development of SR, own processing

Unfortunately, we have to state that Slovakia does not use its potential fully. The revenue generated by tourism could be higher so that we could increase the international tourism share of GDP that has been relatively low for a long time.

On the basis of statistical data we would like to focus on the number of trips, holidays, overnight stays and total tourism expenditures incurred by Slovaks during the period from 2003 to 2011. The data are provided in two tables – Table 2 shows domestic trips and Table 3 presents outbound trips. Both of these tables are split into categories – long and short trips.

The Slovak Statistical Office defines a long trip as a trip for leisure or recreational purposes outside the usual environment of a respondent, where a visitor spends at least 4 nights in a row; and a short trip as a trip for leisure or recreational purposes outside the usual environment of a respondent, where he/she spends at least 1 and not more than 3 nights in a row. Average expenditure was calculated on the basis of total expenditure which included package expenditure (goods consumed during travelling and stays, presents and souvenirs etc.), expenditure on accommodation, catering or transport services and other recreational expenditure (tickets for sports and cultural events, expenses on sports facilities rental services, insurance, exchange service fees, etc.).

We would like to highlight two important dates which had a great influence on the development of the Slovak Republic and its tourism industry in the context of modern history. Since 1st May 2004 the

Slovak Republic has been the part of the European Union. The year 2008 was the last year of the previous Slovak currency – the Slovak crown (koruna) as on 1st January 2009 we adopted the official currency of the European Union - euro. As we can see from Table 2, in terms of statistics this has caused the lowest number of domestic trips during the monitored period. From the overall point of view, the numbers of long trips are decreasing whereas the number of short trips has an increasing tendency.

Tab 2 Number of short and long domestic trips overnight stays and average expenditure in SR, 2003 – 2011

Domestic trips									
	2003	2004	2005	2006	2007	2008	2009	2010	2011
No. Of trips (Long&Short)	4794381	4087787	3848099	3934480	4086140	3895448	3425775	3592967	4129847
No. Of Overnight Stays	25218800	21818273	20045125	20595879	21106753	20543129	18170987	14788969	16771835
Average expenditure (EUR)	118	139	137	137	148	164	182	141	144
LONG TRIPS									
No. Of Long trips	2840942	2553615	2307274	2416324	2403306	2272501	2066909	1512937	1797803
No. Of Overnight Stays	20861508	18464288	16678550	17131212	17497211	16805318	14932776	10275856	11912162
Average no. Of Overnight Stays	7,3	7,2	7,2	7,1	7,3	7,4	7,2	6,8	6,6
Average expenditure (EUR)	163	179	182	182	199	227	241	211	222
SHORT TRIPS									
No. Of Short trips	1953439	1534172	1540825	1518156	1682834	1622947	1358866	2080030	2332044
No. Of Overnight Stays	4357292	3353985	3366575	3464667	3609542	3737811	3238211	4513113	4859673
Average no. Of Overnight Stays	2,2	2,2	2,2	2,3	2,1	2,3	2,4	2,2	2,1
Average expenditure (EUR)	53	72	69	66	75	77	91	91	84

Source: Statistical Office of the Slovak Republic, own processing

Tab 3 Number of short and long outbound trips, overnight stays and average expenditure 2003 – 2011

Outbound trips									
	2003	2004	2005	2006	2007	2008	2009	2010	2011
No. Of trips (Long&Short)	2370857	2282268	2219095	2485403	2882668	2828948	2635822	2653835	2725144
No. Of Overnight Stays	18302612	19456278	21162413	21876830	24921195	22631535	22890233	17109823	20285178
Average expenditure (EUR)	407	468	492	508	529	504	514	483	475
LONG TRIPS									
No. Of Long trips	1964569	1954935	1892481	2138543	2482955	2380508	2280089	1862549	2057805
No. Of Overnight Stays	17395168	18732447	20472614	21084046	24006899	21664927	22078659	16063736	18821795
Average no. Of Overnight Stays	8,9	9,6	10,8	9,9	9,7	9,1	9,7	8,6	9,1
Average expenditure (EUR)	454	525	548	563	585	560	566	560	572
SHORT TRIPS									
No. Of Short trips	406288	327333	326614	346860	399713	448440	355733	491268	667339
No. Of Overnight Stays	907444	723831	689799	792784	914296	966608	811574	1046087	1463383
Average no. Of Overnight Stays	2,2	2,2	2,1	2,3	2,3	2,2	2,3	2,1	2,2
Average expenditure (EUR)	183	132	167	171	183	205	184	190	177

Source: Statistical Office of the Slovak Republic, own processing

Analysing the data presented in both tables we can see imbalance in average expenditure incurred by Slovaks during their domestic and outbound trips of both categories – short and long trips. They spend twice as much on their long outbound trips as on domestic trips. Their domestic holidays are shorter by approximately 2-3 days. The same applies to short trips in Slovakia and abroad.

Statistics on Active Tourism in Slovakia

The next section provides a more detailed account of active tourism in Slovakia. According to the Slovak Statistical Office methodology – participants in active tourism are foreign visitors using tourism services during their travelling in the Slovak Republic and they are not Slovak residents. While a participant in active foreign tourism is a person travelling for a holiday, business trips, to participate in sports events, training, courses, symposiums, to undertake stays in spas and convalescent centres, to visit friends or relatives, or to participate in church events, etc.

Slovak Statistical Office gathers data about foreign visitors to Slovakia either on the basis of information from Slovak agencies and tour operators or on the basis of evidence from accommodation establishments.

Table 4 shows the number of foreign visitors accommodated in Slovakia during the period from 2003 to 2011. The main components in the table are the greatest number of foreign residents' visits to Slovakia by country.

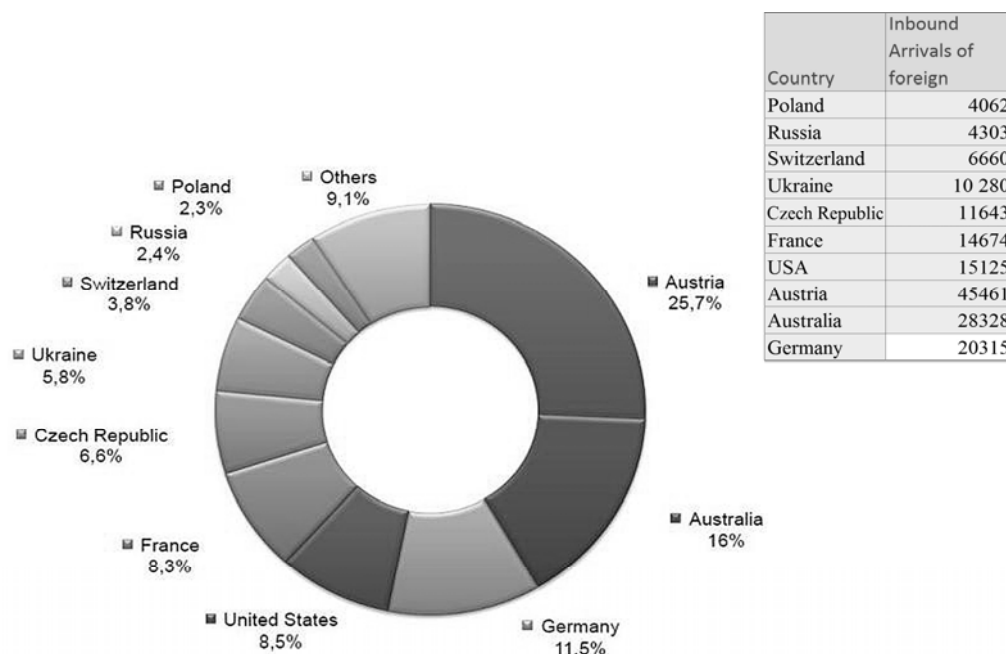
Tab 4 Visitors in accommodation establishments of tourism in SR 2003-2011

Active Tourism									
Visitors in Accomodation Establishments of Tourism									
	2003	2004	2005	2006	2007	2008	2009	2010	2011
No.of visitors in total	3373540	3244485	3428083	3583879	3777754	4082645	3381354	3392361	3571093
No.of Foreign Visitors	1386791	1401189	1514980	1611808	1684526	1766529	1298075	1326639	1460361
Czech Republic	469991	419237	424900	455381	490986	537180	425414	433321	477159
Hungary	100546	111065	121615	121981	93797	90123	56111	51324	59000
Germany	175746	188067	194158	190422	176059	164694	133989	131674	133431
Poland	215383	179078	198479	224159	243917	308437	164712	161851	172001
Austria	51365	55609	55630	60560	62661	62052	50065	51678	58983
United Kingdom	26062	34349	51720	63137	63193	66628	42315	40961	39476
Italy	37996	50201	59344	60971	58184	54772	50982	54439	51957

Source: Statistical Office of the Slovak Republic, own processing

Table 4 provides information about visitors to Slovakia. It is obvious that most frequent foreign visitors to our country come from our neighbouring countries– the Czech Republic, Hungary, Austria and Poland. However close examination of the data on the number of foreign visitors accommodated in 2011 leads to interesting findings. As it is shown in Table 5 Slovakia seems to be a popular destination for the French, Americans, Germans and Australians, too.

Tab 5 Inbound tourism organised by tour operators in the SR - Structure of non-resident visitors in 2011 in SR (by countries)



Source: Statistical Office of the Slovak Republic, own processing

Statistics on Passive Tourism in Slovakia

Tourism statistics comprises an active form of tourism, tourists travelling to our country as well as a passive form, Slovak residents travelling abroad. Graph 1 illustrates the most popular destinations of Slovaks in 2011 whereby Table 6 provides more detailed information.

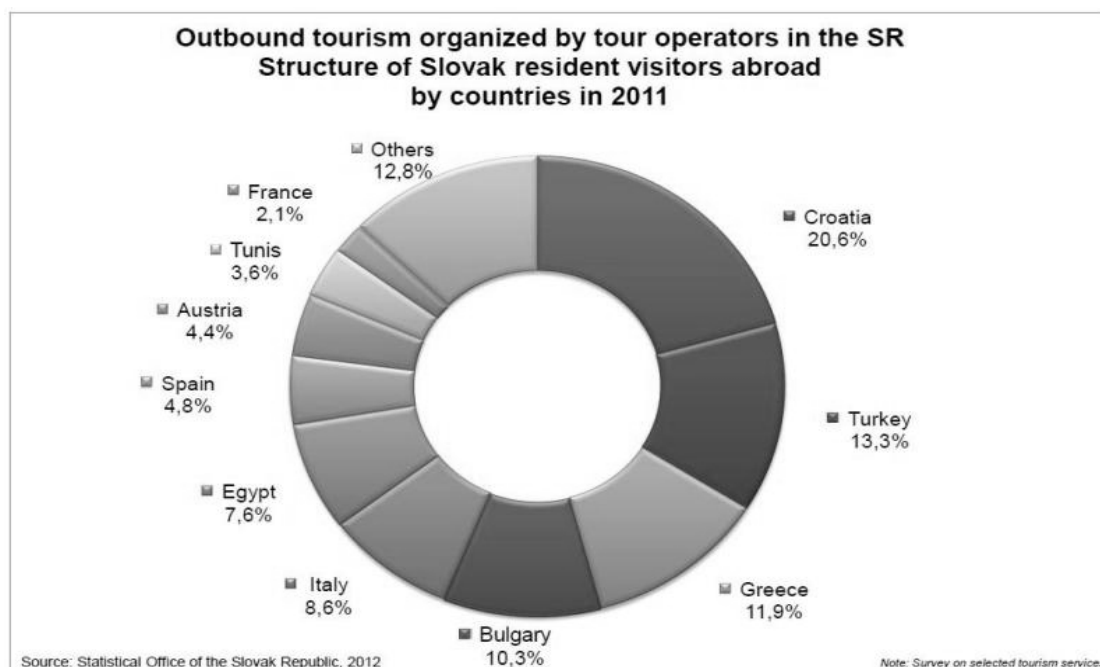
Tab 6 Outbound Tourism organised by Tour operators in the SR

Indicator	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total	394654	456295	486084	485881	578227	360461	527302	581781	618697
Bulgaria	36309	44353	45103	40686	63745	51318	45488	47516	63592
France	10256	9017	8611	11045	11431	16144	13870	12056	13070
Greece	71419	79997	92677	105686	102451	109282	79932	72923	73715
Croatia	105518	100582	99770	101928	122904	138461	111976	114731	127500
Austria	8822	11422	12621	18231	21208	24395	20417	25200	27135
Spain	15925	10004	8607	13129	20447	20408	16703	19297	29856
Italy	56985	47189	41469	42388	49040	49518	50077	55791	53121
Egypt	26183	61437	57465	42556	5989	73119	59366	74453	46942
Turkey	10145	23437	29501	22682	27173	48597	35525	55727	82465

Source: Statistical Office of the Slovak Republic, own processing

Almost all destinations mentioned in Graph 1 are typical summer destinations. It is obvious that Slovaks are keen on spending their summer holiday by the sea. For a long time Croatia has been the most popular destination for Slovaks. The great advantage is relative closeness of our countries. Greece is still very popular even though Turkey is in the second place now. Number of tourists travelling to Turkey is increasing every year mainly because of the high standard of accommodation services and great level of other services. We can see the decrease of popularity in visiting Egypt and Tunisia which were very popular during previous years. Austria seems to be the only country representing the winter tourism destination because Slovaks appreciate the high standard of ski slopes and the reasonable proportion of the price to the quality.

Graph 1 Structure of Slovak tourists travelling abroad in 2011



Source: Source: Statistical Office of the Slovak Republic

Summary

The statistical information concerning the development of tourism in Slovakia presented in this article reveals a positive development. The number of domestic trips and outbound trips as well as the number of visitors increase every year. The number of Slovak tourists is still much higher than the

number of foreign tourists coming to Slovakia. Generally it may be stated that the number is not as high as it could be or as it in reality is. Regarding the historical, natural and cultural potential of Slovakia, the number could be doubled or even tripled. Data presented in this paper show either the number of accommodated tourists or the number of tourists visiting our country using the services of tour operators or travel agencies. Individual tourists and independent travellers are not included. The government is trying to motivate the owners and the runners of accommodation establishments to register and report all tourists according to a new Act No. 91 / 2010 Coll. on the Support of Tourism by some financial benefits. The overall situation is getting better. The big success is an increasing interest of Slovak citizens in discovering their own country with some people are preferring to spend their holiday at home country instead of going to the seaside. However, we have to face some long-term problems such as the lack of functioning tourism strategy, weak support of marketing activities, non-standard entrepreneurial environment, unqualified management of many tourism enterprises, and a prevailing low quality of services. The political situation in Slovakia might also be a serious reason for stagnation as tourism has always been on the periphery of government interests.

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Application of the Cooperative Management in Slovak Tourism Industry

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Abstract

Recent changes in the Slovak tourism law had started the tourism destination management implementation in Slovakia and formation of destination management organizations at the local and regional level. The aim of the article is to identify the forms of cooperation before law changes, and examine the current situation in the period of destination management implementation.

The article also includes the approximation of current tourism organization in Slovakia and presents European best practices within the studied topic. In order to accomplish the article, objective historical progressive method to describe former situation in cooperation in Slovakia and survey method on member of destination management organizations was used.

Key words

Cooperative Management, Destination Management, Destination Management Organization, Slovak Tourism

Introduction

Tourism is a dynamic, evolving consumer-driven force and is the world's largest industry if all of its interrelated components are placed under one umbrella, travel, lodging, foodservice, and recreation. The futurist, John Naisbit, said that the global economy of the twenty-first century will be driven by three superservice industries: telecommunications, information technology, and travel and tourism. Tourism, although a mature industry, is a young profession. Careful management of tourism and travel will be necessary to avoid repercussions and negativism toward the "pesky" tourist – which is already happening to some extent in Europe, where the sheer number of tourists overwhelms attractions and facilities. There is an interdependency between the various segments of tourism, travel, lodging, foodservice, and recreation. Hotel guests need to travel in order to reach the hotel. They eat in nearby restaurants and visit attractions. Each segment is, to an extent, dependent on another business (Walker, J.R., 2002).

As a result of the above mentioned facts, cooperation and coordination of all the participating institutions (the local state authorities, the regional governments and the entrepreneurs) are absolutely inevitable assumptions for the development of tourism in a particular destination. Cooperation in tourism is of great importance in connection with the destination tourism which is a very frequent notion in contemporary Slovak and international tourism and has become in theory as well in practice, a fundamental question to be solved. It also influences the development of tourism.

Vystoupil and Šauer (2006) define the essence of the cooperative management. They state that unlike the traditional managing an enterprise the aim of which is the own prosperity to the detriment of competitors, the destination management forces the growth of associated units in a particular area through mutual cooperation. Whereby the cooperation among particular units exists even though the facilities might be competitive in the boundaries of one destination. In other words particular units of the cooperative system work on the basis of partnership but not as competitors and their common aim is to secure the long-lasting competitive ability of the destination.

Palatková (2006) emphasizes that tourism industry needs the cooperative management. She also states that the growth of competition pressure, glutted demand and the high price elasticity, spontaneous and short-term decision of clients and growing concentration of establishments in tourism industry demand new approach in promoting destinations in the market. Close cooperation of facilities in tourism industry in regions has become absolutely necessary to create a common product and to make it stable in the market instead of reciprocal competition struggle within these units and their incapability to be successful separately in the market.

Objective, material and methods of research

The aim of this article is to identify the current state of cooperation in tourism in Slovakia in connection with the application of the Act No. 91/2010 Coll. about the support of tourism in practice.

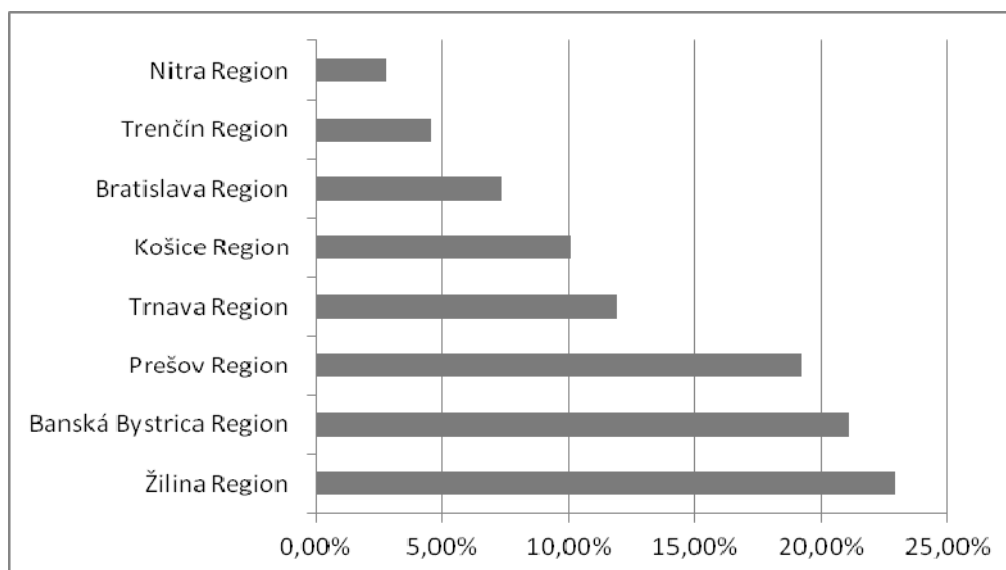
The objects of research are chosen newly-established regional destination management organization (DMO). We have analyzed their recent activities and found out in what specific fields their common cooperation had appeared during a short period of time of their existence and what aims and results of their common activities they expect. While working on this article, we used some secondary data from the available domestic and foreign special sources. We gained the primary data using the questionnaire and structured interview. The questionnaire had 18 questions of three types – closed, half-closed with a possibility of giving private answers and opened questions. The questionnaire included open questions in order to gain various answers of high affirmative value directly from employees of several facilities. 29 regional DMO with their 424 members who had been registered at the Ministry of Transport, Construction and Regional Development of the Slovak Republic up to 15. 3. 2012, i.e. up to the beginning of the survey, made up the survey sample.

Results and discussion

Tourism in Slovakia has long been distressed by many problems which make it impossible to fully use its potential and in some spheres cause the loss of competitiveness of Slovakia comparing to the neighbouring countries. The problem is its system and without the help of the state is probably insolvable. The reason of the current state is that tourism was not managed properly, the self-government local authorities did not have enough finance to pay qualified professionals on tourism that would be able to manage it as a complex and business sector pursued only their activities. Slovakia lacks a very good organization of tourism industry especially on a regional level. In spite of the existence and functioning of quite a number of associations in tourism industry, there are only a few that function well. It is the cooperation of competitors, the business sector and the self-governing local authorities that the Slovak tourism needs inevitably.

The current state of cooperation in tourism industry and implementation of the destination management in Slovakia was ascertained by a questionnaire survey. Out of the local number of 424 members of the Slovak regional DMO, 109 members filled in the questionnaires that are 25.71 % returns. The public sector represented by towns and villages made up 63.3% which was the highest representation in the questionnaire survey. The business sector – accommodation, boarding, spas, travel agencies, information offices for tourists, a transport company went the next one (33.94%). The lowest number of participants came from the non-profit sector (2.75%) represented by the social associations and an educational institution. The highest number of the members of the regional organizations participating in the survey came from Žilina Region (Figure 1).

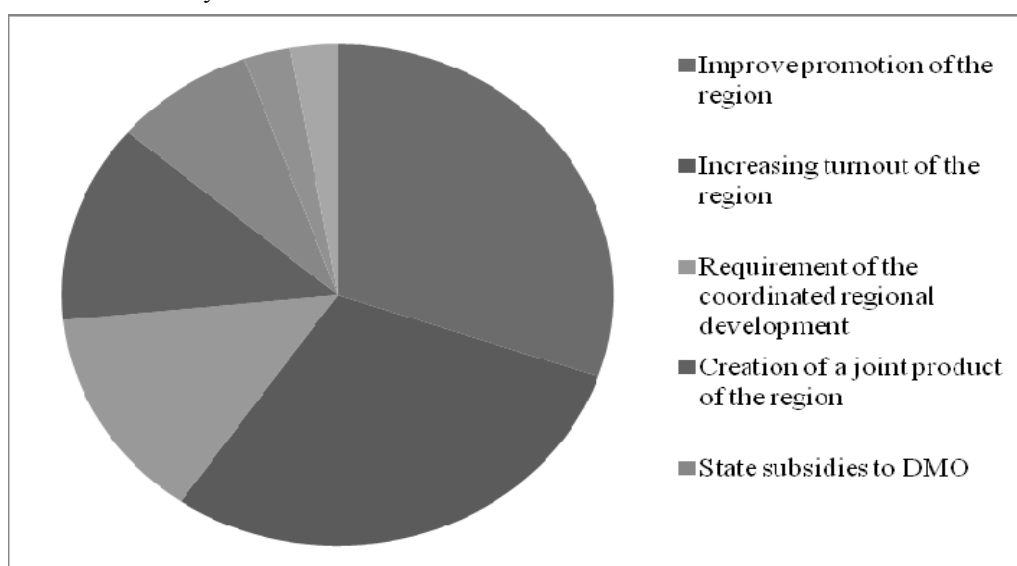
Figure 1 Seat of the Regional Destination Management Organization



Source: own processing

Within the identifying questions we wanted to know how many members DMO has. We intended to find out what kinds of trends in formation regional DMO prevail regarding the number of members – whether there are more organizations with a lower number of members or vice versa. The results of the survey were the following: 33.3% organizations participating in the survey have up to 10 members, the same percentage – 33.3% of organizations have 11 – 20 members, 14.68% associate 21 – 30 units, 7.34% have 31 – 40 units, 5.5% of organizations have 41 – 50 members and 6.42% of organization have more than 51 members. Cooperation of the members of the regional DMO has appeared up to the present time especially in the sphere of planning future activities, creating the strategy of the organization, making up a common product, market research, segmentations of the clients and presenting price strategy. The DMO paid less attention to making up the integral information system, transferring know-how and choosing convenient distribution channel of the product. 8.26% of respondents said that their cooperation had not achieved any progress yet. The question of motivation to join the regional DMO was very important information for us. The main motives are presented in the Figure 2.

Figure 2 The reasons for entry into the DMO



Source: own processing

All the respondents had unanimously indicated the presentation within one strong brand of the destination to be the most advantageous associated with the membership in the regional DMO (49.54%).

Mutual cooperation and achieving the common goals (24.77%), advancing common interests by a regional organization (11.01%) and better utilization of sources (6.42%) had been indicated as additional advantages. 32.11% of respondents stated that they had not experienced any disadvantages having been members of the DMO. 26.61% of respondents consider different opinions of the issue expressed by some members of the organization, to be the most significant disadvantage. 18.35% of the respondents defined the work associated with the DMO as a time-consuming matter; and 8.27% see the problems in communication. Some respondents expressed certain apprehension because of the lower level of autonomy, a very high charge associated with the membership, the loss of control and impossibility of independent decision-making as well as unsolved problems of financing the DMO, slow progress and administrative demands connected with the establishing the organization.

We also wanted to find out various problems and obstacles that occur in the process of establishing the regional DMO. All the members of the organizations expressed their opinion regardless having been initiators or founders of the regional DMO or invited members. 67.89% of respondents came across various sorts of problems establishing the organization; 27.52% did not experience any major problems or obstacles; 4.59% did not respond at all. Having done the proper analysis, all the answers were divided into two groups – the external problems (i.e. those connected with the outer issues and, as a rule, with higher authorities), or the internal (those which arose within the regional organization). Table 1 shows the most frequent issues.

Table 1 External and internal problems in establishing the DMO

External problems	<ul style="list-style-type: none"> - putting off passing the Act about the government's support - confused issues in the Act, legislative instability and bureaucratic delays caused by the state - apprehension before the election of 2012 associated with the change of the Act and cancellation of subsidies by the new government - a very slow process of registration of the regional DMO - absence of clear methodological rules for the founders - failure of the Ministry of Transport, Construction and Regional Development and delayed delivery of directives
Internal problems	<ul style="list-style-type: none"> - different opinions of the members of a particular organization - time-consuming preparation of documents - misunderstanding the essence of the Act - determination of the membership charge - different ideas about the public and private sectors on co-financing and determination of jurisdiction - different outlooks on the structure and size of the DMO – the kind of the organization and the number of members - mistrust in cooperation of the public and private sectors - chaos and constant changes in the number of joining members - lack of order in material, technical and financial supplies - unprofessionalism of some members - low awareness about setting the DMO, their possibilities and potential - necessity of making compromises and concessions on both sides

Source: own processing

Cooperation of the private and public sector is an inevitable assumption for creation the DMO. According to our survey this issue seems to be a problem in Slovakia. The next table shows the most frequent problems of setting the DMO from the point view of private and public sector.

Table 2 Problems of setting the regional DMO from the point of view of private and public sectors

In the public sector	In the private sector
Unwillingness of the members of the local board in approving process as a manifestation of their disagreement to establish the regional DMO	Achieving the needed number of overnight stays which is required by the law (50,000 last year)
Unwillingness of entrepreneurs to join the regional DMO, orientation on their own profit	In spite of paying taxis for accommodation, the facility was not registered at the Statistical Office of Slovakia and the number of lodging was not included
Entrepreneurs show no interest in cooperation with the private sector	The account of official lodgings did not coincide with the statement of the Statistical Office of Slovakia
Persuading and long useless discussions with the private sector	Slow resolutions of the local boards
Problematic communication with the private sector	Unwillingness of communities to cooperate and necessity to persuade them about the advantages of the DMO
	Poor information about the importance and benefits of the DMO
	Efforts to push out smaller businesses
	Higher working effort and time-consuming pretention associated with meeting of the DMO

Source: own processing

From the point of view of the future development of the DMO we were interested in the questions of their short-term and long-term goals. The answers varied and dealt with various ways of cooperation: realization of organizing activities connected with the beginning of operating an organization, than creating a product, marketing communication up to strategic aims. The Table 3 shows the answers of the respondents arranged according to similar or the same meaning.

Table 3 Short-term aims of the regional DMO

Short-term aims in the content of activities of the DMO	Short-term aims in the marketing
Starting functioning the DMO	Carrying out marketing research
Strategic planning and creation of strategies	Creation of marketing strategy and making marketing
Increasing the number of members of DMO	Carrying out common marketing
Improving cooperation and spreading the area for activities	Creation of a web-site of the DMO
Determination of the internal rules in the DMO	Propagation at the home markets
Support of all the members of the organization	Propagation at the foreign markets
Fulfilling the prepared projects and achieving the set aims	Creating the brand and logo of the destination
Unifying requirements of the membership units	Preparing printed advertising materials
Election of representatives of organization and creation of organization structure	Creation of effective marketing communication and advertising campaigns
Preparation for the coming season	Presentations of the DMO and common activities
Preparing the budget of the organization	Presentation of the destination and membership units
High activity for the benefit of members of the DMO and for native inhabitants in the destination	
Gathering information about the member organizations to make brochures and other advertising materials	
Presentation of the destination	
Preparation and participating at tourism exhibitions and fairs	

Source: own processing

Strategic aims of the regional DMO are focused on creation of the strategic documents and the conception of development of the destination increasing the number of visitors and overnight stays. It also tends to creation of the integrate information system as a complex on-line database of the information concerning natural, cultural and some other values and attractions in the area, its infrastructure and tourism centres and providers of services commonly used in tourism and about the events associate with tourism. The other long-term aims which are supposed to be achieved in the future are completion of general infrastructure and infrastructures in tourism destination (cycle paths, nature trails and also increasing the offer of products and services.

Summary

Cooperation is the key principle of the existence of destination management organizations. The cooperation of cooperative units in tourism that are involved in destination management must be based on mutual benefits and finding common interests of participating units. It is necessary to identify the areas of cooperation and defining convenient form of mutual cooperation among particular units. As for businesses, whose primary aims are making profit and satisfying individual interests the space for cooperation has been defined more clearly than in the case of public sector (Metelková, 2005). In Slovakia, the Act about support of tourism brings new possibilities in tourism for all the facilities in public, private and non-profit sectors. Slovakia has a huge potential for development of tourism. However, it has not been fully used due to unsystematic management of the tourism industry. The new legislative changes bring in possibilities for establishing the regional DMO the aim of which, as our survey proves, to create attractive destinations in the areas that have all the assumptions for development of tourism and offer complex spectrum of service for visitors.

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Significance of International Hotel Systems for the Service Potential of Hotels Working in Poland in the Period of Crisis

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Abstract

Hotel management, especially in a crisis situation requires constant monitoring and analysis of all departments of the environment in which the hotel operates. The specificity of the hospitality business and changing market conditions mean that the process is complex and requires an understanding of many important factors. These include: the organizational structure of the hotel and its performance, cooperation and communication between departments, information management, quality of service, certain standards, financial management, accurate response to consumer needs and emerging trends, use of modern technology. The increased in the world importance of global economic organizations commonly known as international hotel systems, and clear their expansion on the Polish hotel market had a significant impact in shaping utilities hotels, methods of design and construction as well as standards of technical equipment and instrumentation work, work organization and management; service standards and methods of forming cadres, methods of marketing and reservation systems. All are the key for the viability, development as well as being a leader in a such difficult period for the hotel industry as crisis is. Only a well-functioning international hospitality organizations, formulating a clear and legible strategy and having a measurable innovative and technological potential are the driving force in building the capacity of service hotels operating on the Polish territory.

Key words

international hotel systems, crisis and international hotel systems,

Theoretical aspects of international hotel systems

Studying the available literature, author has identified the following definition for the international hotel systems.

The international hotel system is the conventional name of the hotel business organization operating in the hotel industry in the transnational range (global). The international hotel systems operate in different hospitality services in the different areas of the world, take various legal forms, ownership and organizational changes and diversified names. The international system can operate as a hotel homogeneous organization or as a group (consortium) of the organization. Hotel systems are hospitality organizations in the world of economic, aimed at defending the interests of their affiliated hotels and standardize the nature of their business. Objects belonging to a hotel system is characterized by uniformity of locational conditions, and is easy to recognize, to which the system belongs to the hotel. Moreover, such objects have a unified organizational structure, operational documentation, and a uniform computer system, so that in every hotel of the system is easy to acclimatize workers. The objects from one hotel provide the same range of services and have a uniform system of service and the reception of guests. Hotels have a similar system design, the accommodation and catering. Guests visiting hotels in the system always feels familiar to them, because there are no large differences between the functioning of each affiliated hotel in the hotel's particular system.

Operating systems in the world markets must also be divided into two types: A. Independent company - holding companies, own and manage hotels other entities on the basis of franchise agreements, management agreements or lease of the object. Systems listed here are in principle several leading hotels brands. B. Voluntary association of independent hotels, taking joint action on the associated hotels primarily in marketing and accommodation booking.

Intermediate levels, between corporations (groups) hotel - independent hotels and chains (brand), which combine the objects characterized by among other things, strictly defined and enforced:

- A. equipment standards and procedures manual,
- B. principles of operation,
- C. methods of supervision and quality control services.

In practice, we can mention about the hotel associated with the international hotel system.

This applies to:

- A. hotels built by the systems and are their property;
- B. hotels constructed with the participation of IHS, whose systems are co-owners,
- C. hotels operating under the systems on the basis of contracts franchising, management contracts, leases.

By analyzing the activities of IHS can extract a number of common features of these organizations, but also noted the differences between them:

- ◆ IHS is basically a group gathering or control of specific (often variable) number of brands, companies or directly to hotels.
- ◆ Systems operate in a transnational scale.
- ◆ Systems remain competitive in the fierce confrontation, but also work together in pursuit of shared interests.
- ◆ Systems operate in different legal forms of ownership, organization and use different forms of relationships with the hotels (franchising, management, ownership, lease).
- ◆ Constant attention to maintain the stated level of service and maintaining a uniform standard under separate brands (brand in the world is synonymous with the category of object).
- ◆ The activity of the system is set to combine the interests of the system, associated hotels and guests.
- ◆ Coordination of the operation of hotels is at different levels, often moves to the level of a country or region or even city.
- ◆ The system included in the model are defined and strictly enforced:
 - standards of equipment and operating procedures,
 - operating rules,
 - methods of supervision and quality control services.
- ◆ Consolidating elements of the systems are: concentration of capital, common economic policy, marketing policy usually supported by their own electronic reservation systems with global reach.

Operating in global markets systems should be divided into two types:

- A. Independent company - holding companies, managing their own hotels and other entities on the basis of franchise agreements, management contracts or lease of the object. Systems of rules shall hotels of several brands.
- B. Voluntary association of independent hotels, taking collective action to the associated hotels primarily in marketing and booking accommodations.

Kinds of organizational structures of systems

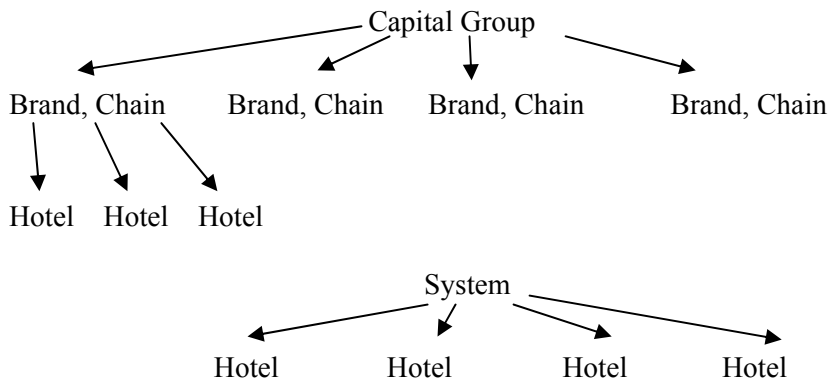
Quantitative and qualitative transformation of the tourism national and international have made the range of hotel services is becoming wider and varied. This applies mainly to the traditional hospitality, the hotels. Competition in the global market of hotel services has led to change the form of hotel operations. A result of these changes is the specialization and concentration in modern hotel industry worldwide. Convention of the phenomena in the formation of chains or hotel systems.

IHS strengthen their position on the tourist market and push into the background independent hotels. These, however, for their part increasingly take defensive actions by binding to the voluntary associations for joint marketing activities, building information systems, acquisition and reservation. This process leads to increasing the capacity of IHS.

Systems have many features in common but also differ. Differences exist, for example:

- A. The structure of hotel standards, indicating its interest in certain market segments;
- B. Within the territorial and associated local structures;
- C. In the way of relationships with the hotels in terms of forms of facilities management;
- D. In the ownership structure in terms of share of natural and legal persons in the capital of the organization.

Dominated by three levels of organizational structures but can be also two levels. At the top of the hierarchy are the holding companies or traditional business, the average level of a chain - the brand, and the level of basic hotels - concrete objects.



Systems operating in two levels structures typically associate with a similar standard hotels.

You can extract the four basic forms of legal and organizational links to specific hotels IHS:

- A) The hotels own, or owned or joint ownership of the system, constructed or purchased by the system;
- B) The hotels leased, owned by individuals or legal persons, provided the use of the system;
- C) accommodation provided in the management system;
- D) Hotels concession owned by natural or legal persons who, under franchise agreements operating under the name of the system.

The share of the system in the potential service hotels operating in the Poland

The appearance of the system for hotels in Poland. Formed before World War II in the United States of America. The key premises of the establishment and development of systems were the rapid development of tourism and the consequent demand for hotel services adapted to the diverse needs of visitors, the attractiveness of investment in tourist accommodation facilities, competition in the market of hotel services, the merger and the benefits of scale of operations.

The appearance of the hotel systems falls on seventies of last century in Poland.

The performance of the national construction of the idea of hotels according to Western standards through the involvement of foreign capital in the foreign exchange investment loans.

Cooperation with foreign systems began with the authorization by the decision of the state government Orbis for cooperation with foreign investors. It has been authorized as a monopoly for the construction of hotels in the so-called foreign exchange imports. Hotels will be designed according to world standards for the design and construction will be involved Western companies, construction materials, equipment and supplies in part will come from imports,

- A. Hotels are owned by state-owned Orbis,
- B. Selected hotels will be included in the international hotel systems covered by their network activation and reservation, hotels will be organized and operated according to the formulas of existing systems and subjected to in this regard to their supervision,
- C. Foreign currency loans will be repaid from the proceeds realized from the dollar.

In Poland, the first hotel included in the international system of the hotel began operating in 1974, it belonged to the system, Intercontinental Hotels Corporation. A year later came the Societe Internationale d'Exploitation Hoteliere Novotel. And in 1976 the Polish market has entered the Holiday Inn.

In the years 1973 - 1988 in the importation of foreign exchange was 16 hotel properties for Orbis. Ten of the sixteen hotels were included in the three international hotel systems:

- Intercontinental - Victoria hotel in Warsaw and the Forum Hotel in Warsaw and Krakow,
- Hotel - objects Gdansk, Olsztyn, Poznan, Warsaw, Krakow and Sosnowiec - of which hotel in Sosnowiec in 1994 lost the license system,
- Holiday Inn - Hotel in Krakow, who in 1995 also lost his license.

The turn of the eighties and nineties, when it appeared in Poland, international systems such as English Trusthouse Forte Hotels, U.S.: Marriott, Radisson and Sheraton, Accor and the French La Royal Meridien Hotels. This stage is characterized by the introduction of new forms of management of hotels and new investments. Implementation of forms such as joint ventures, franchising and leasing. In Poland in the

years 1974 - 2000 using national measures built 14 hotel facilities with a capacity of 3100 residential units. Hotel facilities were built on the model system for hotels. Efforts were also rendered in them that matched the level of hotel services system. An example was Polonez Hotel in Poznan, Hotels Wroclaw in Wroclaw and Hotel Neptun in Szczecin.

After 1990 the Polish market are beginning to emerge the largest international hotel systems, little-known systems and networks that do not belong to international hotel systems. Poland was evaluated as a good place for investment in hotel, as evidenced by numerous investments by foreign companies. One reason for the expansion of international hotel systems on the Polish market has been a qualitative and quantitative status of hotels in Poland. In recent years there has been privatization and re-privatization of objects, raise the standard of accommodation and the development of new technologies in the industry, such as the use of computers and the Internet.

Hotel market in Poland in a period of crises

The year 2009 in connection with the global financial markets crisis was a very difficult period for the tourism industry. In the first half of 2010. were seen the first signs of recovery in the tourism market, both in Poland and other European countries. In the first three quarters of 2010. Polish hotel base has grown by 34 categorized hotels, which offer nearly 4,000 beds in more than 2,000 rooms. Most hotels were completed two-and three-stars, while the four-star facilities attracted many rooms and beds. Currently in Poland there is a categorical 1826 hotels. The largest supply concentrated in the Małopolskie (14.5%), Wielkopolska (11.5%) and Silesia (11.4%), lowest in the Podlasie (1%). At the end of the third quarter of 2010. during the construction phase there were more than 25 objects rooms (including the Hotel Ibis, Mercure, DeSilva, etc.), most of them were put into service by the end of 2011. In the planning phase is over 70 hotel properties with a delivery date service by the end of 2012 (including B & B Hotels, Hilton, Ibis, Etap, etc.). chance of implementation is about 50% of these investments (which belong to chains or having a contract with an international operator), which is associated with problems of financing.

Table 1 Ranking of hotel groups 2008/2009

Position	Group	Hotel	Hotel	Change	Rooms	Rooms	Change
2009/2008	Name	2009	2008	Hotels	2009	2008	Rooms
1	IHG	4186	3 949	237	619 851	585 094	5,90%
2	Wyndham Worldwide	7 043	6 544	499	592 880	550 576	7,70%
3	Marriott International	3 088	2 921	167	545 705	521 201	4,70%
4	Hilton*	3166	2 967	199	540 439	498174	8,50%
5	Accor	3 982	3 871	111	478 975	461 698	3,70%
6	Choice	5 827	5 570	257	472 526	452 027	4,50%
7	Best Western	4 032	4 035	-3	305 387	308 636	-1,10%
8	Starwood Hotels	942	896	46	284 800	274 535	3,70%
9	Carlson Hospitality	1 013	971	42	151 077	148 551	1,70%
10	Global Hyatt	373	720	-347	114 343	138 503	-17,40%
	Suma	33 652	32 444	1 208	4 105 983	3 938 995	4,20%

Source: Bulletin of the studio hotel, WSHGiT No. 1/2009 (September 2009)

Table 2 Ranking of brand (chain) hotel 2008/2009.

position 2009 (2008)	brand	group	amount of hotels		change of hotels	amount of rooms		change of rooms
			2009	2008		2009	2008	
1 (1)	Best Western	Best Western	4 032	4 035	-3	305 387	308 636	-1,1%
2 (2)	Holiday Inn	Intercontinental Hotels Group	1 353	1 381	-28	249 691	256 699	-2,7%
3 (3)	Comfort Inns& Comfort Suites	Choice	2 550	2 467	83	196 689	188 596	4,3%
4 (4)	Marriott Hotels	Marriott International	531	520	11	193 230	188 544	2,5%
5 (5)	Hilton Hotels*	Hilton	519	511	8	179 290	176 523	1,6%
6 (6)	Express by Holiday Inn	Intercontinental Hotels Group	1 932	1 808	124	173 794	156 531	11,0%
7 (8)	Hampton Inn*	Hilton	1 627	1 490	137	160 872	147 326	9,2%
8 (7)	Days Inn of America, Inc.	Wyndham Hotel Group	1 880	1 883	-3	152 971	153 333	-0,2%
9 (9)	Sheraton Hotels& Resorts	Starwood	409	399	10	143 278	138 878	3,2%
10 (10)	Super 8 Motels	Wyndham Hotel Group	2 110	2 081	29	130 920	128 587	1,8%
11 (11)	Quality Inns, Hotels, Suites	Choice	1 281	1 210	71	123 042	118 386	3,9%
12 (12)	Courtyard	Marriott International	808	767	41	117 258	110 780	5,8%
13 (13)	Ramada Worldwide	Wyndham Hotel Group	897	874	23	114 986	106 978	7,5%
14 (14)	Motel 6	Accor	1 003	956	47	101 935	98 038	4,0%
15 (18)	Ibis	Accor	814	769	45	94 742	86 486	9,5%
16 (16)	Hyatt Hotels	Global Hyatt	214	213	1	94 096	92 755	1,4%
17 (19)	Crowne Plaza Hotels	Intercontinental Hotels Group	342	299	43	93 382	83 170	12,3%
18 (17)	Radisson Hotels Worldwide	Carlson Hospitality	407	397	10	89 314	87 410	2,2%
19 (15)	Mercure	Accor	690	756	-66	85 969	93 827	-8,4%
20 (21)	La Quinta Inns	La Quinta	708	633	75	74 000	69 089	7,1%

Source: Bulletin of the studio hotel, WSHGiT No. 1/2009 (September 2009)

Table 3 Top ten hotel groups in Europe (27) at Jan. 1st. 2010

	Hotels	Hotels	Change	Rooms	Rooms	Change	Change %
	2009	2008	Hotels	2009	2008	Rooms	Rooms
ACCOR	2 234	2 215	19	243 004	240 752	2 252	0,90%
BEST WESTERN	1 289	1 264	25	87 017	84 248	2 769	3,30%
IHG	554	548	6	86 084	84 646	1 438	1,70%
GROUPE DU LOUVRE	995	855	140	71 544	59 490	12 054	20,30%
NH HOTELES	353	306	47	50 777	43 695	7 082	16,20%
SOL MELIA	203	204	-1	45 960	45 082	878	1,90%
CARLSON / REZIDOR	228	218	10	44 471	42 777	1 694	4,00%
TUI	167	166	1	41 079	41 209	-130	-0,30%
HILTON WORLDWIDE	163	152	11	39 713	38 275	1 438	3,80%
WHITBREAD	579	572	7	39 142	38 695	447	1,20%

Source: Bulletin of the studio hotel, WSHGiT No. 1/2009 (September 2009)

Table 4 Five - first (major) brands (chains) in Poland, January 1, 2010.

Chain	Hotels		Rooms		Change
	2009	2010	2009	2010	Rooms
MERCURE	32	28	5 498	5 006	-8,90%
NOVOTEL	12	12	3 137	3 137	0,00%
IBIS	9	10	1 530	1 644	7,50%
QUBUS	12	13	1 232	1 339	8,70%
VIENNA INTERNATIONAL	4	5	996	1 274	27,90%

Source: Bulletin of the studio hotel, WSHGiT No. 1/2009 (September 2009)

Despite the apparent slowdown in the market hotel properties, Poland remains one of the fastest growing

the countries in Europe. The observed trends in the hotel market in Poland: increase the number of users of accommodation in hotels, the continued predominance of institutional clients, the increasing share of domestic customers in the structure of demand for hotel services, further increase in investor interest in the construction of budget hotels (not just in large cities), the increasing interest of investors in construction of hotels at airports and train stations, more efficient use of EU funds for new facilities, as well as modernization of existing, further increase in demand for conference services, and spa & wellness (expansion of facilities in hotels), problems with financing investments related to the high requirements of banks.

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Cultural Product - the Basis of a New Marketing Strategy of the Czech Republic

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Abstract

The trend of European destinations is the creation of product such as product packages of services that the client can book directly from the website of destinations, particularly at regional and local level. National Tourism Organizations cooperate with partners to create a portfolio of products that is the basis for communication campaigns. They monitor the level of sales (number of clients) and its development. The Czech Republic has no product line. In addition, the term "product" is often confused with the brochure, which presents a general offer of the place / region, often without relation to services without the cost and the location and method of booking sales. In the project "Rebranding and marketing support incoming tourism" has been defined vision and mission of the destination of the Czech Republic. The article discussed approaches to the creation of core and by-product design and product mix as a base for the strategy of placing the Czech Republic and brand strategy. The proposal to change in placement of the Czech Republic towards the changed perception of the Czech Republic as a quality and sought after destinations, is practically demonstrated by the example of the cultural tourism product.

Key words

Tourism - positioning - branding - tourism products - promotion of incoming tourism of the Czech Republic- marketing strategy

Introduction

In connection with the new EU programming period in the Czech Republic prepared the Concept of state policy for the period 2013-2020 Tourism Marketing and Tourism Concept 2013-2015. The marketing concept is part of the "rebranding and marketing support incoming tourism", which builds the project "New Presentation domestic tourism." The new marketing concept and the first incoming tourism is focused on the communication strategy and rebranding in the Czech Republic and "basic guide for marketing activities CzechTourism, and at the same time in relation to key partner agencies." [cf. 4, pg 7] It is a platform for cooperation and partnership in particular regional destination management organizations to enhance position of the Czech Republic on the selected source markets. To implement the concept was used McKinsey's 7S model for defining deployment options in relation to tourism management system in the Czech Republic with regard to CzechTourism competencies within the system of public administration.

Policy is an important tool for product marketing mix (tactical marketing) - the basis for marketing strategy and plays an important role, especially for placement on the strategy and positioning markets. The process of marketing strategy 2013 - 2015 for incoming tourism products and system design is the focus of article. The author is a member of the team of authors CzechIt o.p.s, who prepared marketing strategy for the agency CzechTourism.

Data and Methodology

Firstly will be briefly summarized the policy approach in tourism product in the literature and understanding and applying the concept of tourism product in practice in the Czech Republic. System products for the Czech Republic is based on a analysis of the potential destinations and establish the relative competitive advantages in comparison with competing destinations.

Terminology

By defining the term of product marketing terms, the number of dedicated professionals in connection with formulating the marketing mix by the end of 60 the last century. (R. Clewett, J. McCarthy, NH Borden, P. Kotler, G. Armstrong). The literature in marketing a product is defined as what can be offered in the market for attention, acquisition, for use or consumption, what has to satisfy the wishes, needs and customer problems and to help achieve company objectives. The product is article or service and is composed of three levels (layers). Destination tourism product can then be defined as everything that has players in the destination market, bids

for the visitors, buy, consume and what satisfies their wishes and needs. Destination tourism is itself a product composed of the partial products and services generated by the business, public and nonprofit sectors. [cf. 12]

In literature and in practice, the Czech Republic, the term "tourism product" is used frequently (sometimes too), but often only as a container of something few people ever suspect what hides under that cover. According to ISO 9004-2 a service (tourism product) is defined as "the result generated by activities at the interface between supplier and customer and supplier internal activities to meet customer needs." [cf. 5]

In practice, the tourism of the Czech Republic is a long-term tourism product is poorly interpreted, both in economic and legislative concepts, and especially from the perspective of marketing. The fact that the term "tourism product" is the practice of tourism in the Czech Republic has a big unknown is perhaps best underscored by the fact that CzechTourism the project Support for the creation and marketing of tourism in the region is currently preparing a manual for creating products as "an essential element of the project." [cf. 9] The result should be "clear instructions for creating regional and national products and their introduction to the market structure and processing of final products to be market competitive and innovative." [cf. 9]

Certainly there would be appropriate to ask whether a similar project is not too late, when virtually all the cohesion regions (except Prague) have supported a number of projects on processing and marketing of tourism. However, this is an issue for managers in public administration who are responsible for the development of tourism in the Czech Republic.

Tourism Product Development

In marketing, the term means a policy especially influencing the product quality and quantity of products, product mix and the related impact on strategy, positioning and brand strategy. This policy also applies to the tourism product. Specifics products in tourism require a changed approach analogous to the process of product creation (management, coordination of supply) and its various stages (service chain) and the three basic levels of the product (the core product, material product, enlarged product) Kotler expanded to five levels of understanding of the product (basic utility or usefulness, namely to use product, expected product, enlarged product, potential product). It is an important relationship and quality of the product (and related pricing policies), the interaction of individual product level and product policy holders at these levels (macro level - state, meso - and micro region - the region, area) and in particular the client view. From the perspective of the client, the value (benefit) tourism product evaluated after obtaining the initial information, despite the possibility of speed and friendliness of the reservation to arrival at destination, the course of his stay and return to place of residence. Throughout the process, apart from the physical plane of the product plays an increasingly important role in the symbolic level, with emphasis on experience.

Basis for building products marketing strategy 2013 – 2015

Product Policy based on analysis of the potential of the Czech Republic, Czech Republic destination vision, strengths defined by USP (Unique Selling Proposition) and SEP (Strategic Key success Factors) and research into the perception and positioning (CzechTourism 2003, CzechTourism 2010). System products are differentiated horizontally and vertically for each level of policy (national, regional and local). They set out key and by-products and the percentage of each product in the product portfolio of destination of the Czech Republic. Products are formulated using the product prename (ie the product before putting it on the market for communication within the company (CzechTourism).

1) Vision of the Czech Republic (2020)

Vision of the destination is built on the strengths of the Czech Republic (Prague, cultural landscapes and cultural traditions) particularly with regard to free-time tourism (leisure tourism) and corresponds with the vision of Europe according to the European Travel Commission: "Europe - a never ending journey."

CZECH - THE NEVER ENDING STORY

Attributes of vision: Safe and „soft“ destination

Reachable destination

Quality destination

Cultural destination

The most connected country in Europe

Knowledgeable and smart people

2) The main competitive advantages relevant to the creation of products

Advantages are divided into the SEP and USP, based on the SWOT analysis and a comparison with the countries of Central Europe.

USP (Unique Selling Propositions)

As the main USP were defined as follows:

- **PROXIMITY** - availability, including price (price / quality ratio) easy accessibility to the Czech Republic and various attractions in the Czech Republic - a unique concentration of history, culture, heritage and nature in one place, on a small area, in one long-term stable area.

Reason - no other country (not only from Central Europe) has such a small spot centered so many different attractions (including land) as the Czech Republic, in addition, after ten centuries in the same space. Visitors can see more than one area attractions (experience more experience) than previously thought (perception of the Czech Republic as a destination is neutral to slightly negative, in many markets is perceived Prague as a "separate" destinations, which are associated with positive associations). USP 'closeness - availability "will be communicated to visitors who know the Czech Republic, ie in Europe - close to markets and to visitors who know the Czech Republic due to previous visits.

- **PRAGUE - stable long-term "magnet" and a key attraction of the Czech Republic.** Thanks to Prague, the Czech Republic is perceived positively (especially among V4 countries). The world's a unique city. Prague as the main target destination in the Czech Republic. Prague is the basis of the offer destination, is a strong and long-term differentiation characteristic of destination.

Reason - Prague is still the main destination of foreign tourists. USP should be provided to communicate with visitors who do not know the Czech Republic, ie the more distant destinations and "first-time visitors."

- **SAFETY, SECURITY AND TOLERANCE** - the Czech Republic is in comparison with foreign cities seen as a tolerant and safe destination.

Reason - in a globalized world with an excess of terrorist threat perception of the importance of increasing levels of security. Czech Republic is a country that was not affected by any major terrorist attack and did not engage significantly in sensitive foreign policy issues. It is the countries where objectively or subjectively there is no immediate danger of attack by terrorists. At the same time the Czech Republic is tolerant of minorities.

- **CULTURE in the broadest sense and cultural landscape.** The unique cultural heritage (12 tangible and four intangible monuments listed by UNESCO), thousands of cultural and historical buildings (castles, palaces, fortresses, religious monuments, museums, galleries, etc.), hundreds of historic towns and villages.
- **NATURE, NATURAL WEALTH** of the destination. Nature (natural reserves, national parks) and natural resources primarily supporting the development of the spa. In the Czech Republic, favorable natural conditions, but with a different use for creating the product. A key competitive advantage of natural resources in the form of bath (USP). Less occupies an important position in the The Czech Republic is competition from other destinations in terms of the pursuit of sporting activities, if necessary. farm and others (Austria, Hungary) - from this perspective, it is rather SEP than USP.

SEP (Strategic Key Success Factors)

As the main SEP were defined as follows:

- **QUALITY** - in terms of price / performance ratio, a necessary change in perception towards the destination main competitors, change the inertia of supply - are still offered very similar products. The key is how to build products based on quality, and promote long-term quality as a primary requirement for all services in tourism. Quality is tied to the SEP 'price / performance ratio ".
- **ACCESS** to destinations like the center of Europe, the line between East and West, good road access from abroad.
- **SPORTS** in relation to specific markets (Slovakia, Poland, Hungary, Germany). Wide range of sports - both active and passive (sporting events) in relation to the cultural landscape and selected activities particularly cycling and walking.

Products System of Marketing Strategy 2013 – 2015

Product line is built, broken down by key and by-products, is linked to basic communication topics and placement destination. The focus of creation products is the regional and local level. The basis for the

creation of product is the supply processing of inter-service coordination, implementation and ensure supply / quality control of individual services. An essential aspect of the product is its actual feasibility of the market, ie the number of sold products.

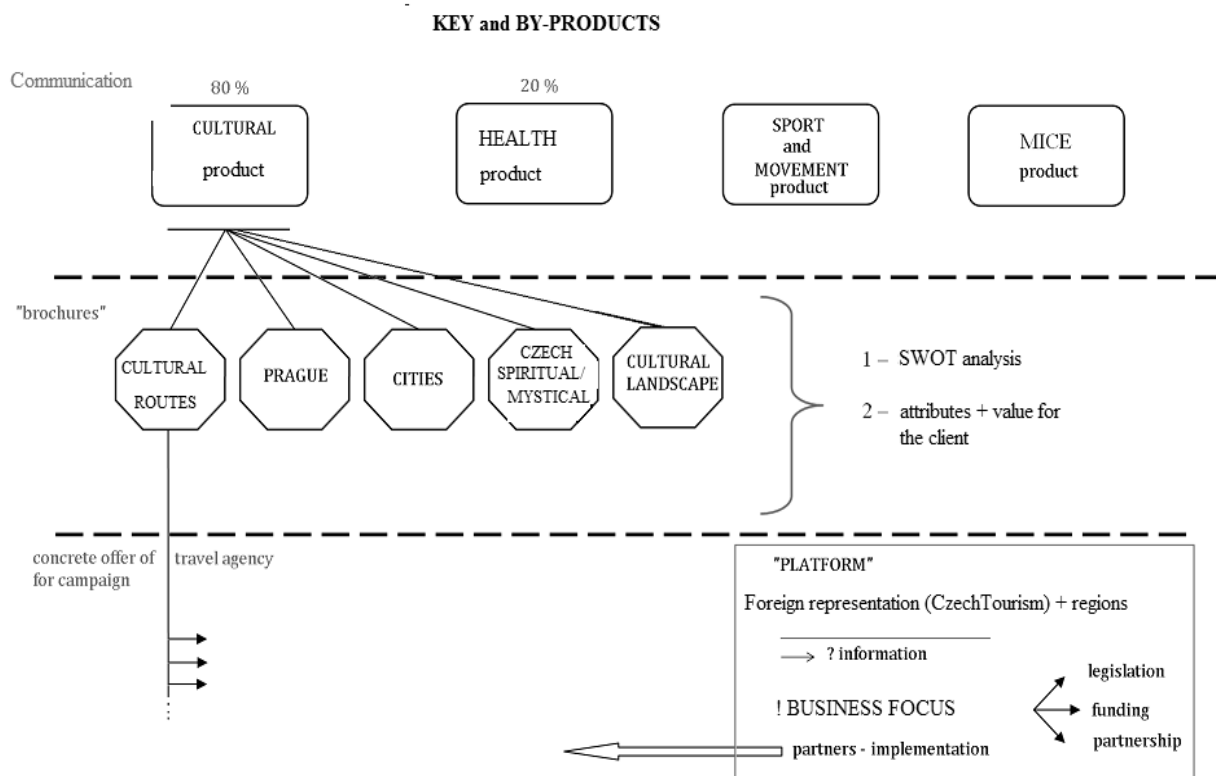
System of products generate competitive advantage of destination. It is specifically compiled and organized set of services for the main forms of holiday. Key products are based on an analysis of potential destinations and establish the relative competitive advantages in comparison with competing destinations. Competitive products are affected by many factors, most notably co-ordination and collaboration of service providers, innovation, quality (price / performance ratio) and reliability of supply.

Common attributes

- Focus on experience
- Creation of product - the basis are regional and local products, integrating them into a national brand (national / thematic products)
- Sales of products and cooperation with destination management organizations (destination management company), guarantees the quality and availability
- Commercial orientation - cooperation with partners outside the tourism sector
- Commercial product focus - cooperation with partners (businesses) who pay a fee for participation in the creation of products and a better position in communication campaigns. At the same time guarantee quality of service, monitor the number of clients and product development.

For the Czech Republic are the key products and CULTURAL HEALTH in the second level: PRAGUE, CULTURAL WAYS, CULTURAL LANDSCAPES, TRADITIONAL SPA RESORTS and SPA WELLNESS. The by-products are SPORT AND MOVEMENT, MICE (or events), the second level: SPIRITUAL CZECH, MEDICAL, LOHAS (Lifestyle of Health and Sustainability), SPORT and MOVEMENT in WINTER / SUMMER, EVENTS. The appearance of a specific product portfolio should be made on the basis of the findings preparedness products and their complexity at the regional and local level. The decision to build its product portfolio will be based on the readiness of products for sale to customers (segments) including: level of coordination and preparation of the offer (not just a description), the level of quality, distribution channels, convenient booking options and purchase product.

Figure 1 KEY and BY-PRODUCTS



Source: own representation

Results and discussion

The process of preparation tourism products based on regional, respectively. local menu, which will connect bright, attractive theme. The choice of theme is part of a joint communication strategy to motivate and inspire interest in the Czech Republic and its selection of competing destinations. The basic theme of the product must be regularly upgraded according to current events and to initiate cooperation between different actors (sectors), a common implementation. For 2012 and 2013 are significant events of UNESCO - the anniversary of the birth of O. Wichterle, J. Trnka, the arrival of Cyril and Methodius to Great Moravia; anniversary of world famous Czechs - M. Forman, J. Jagr, R.A Kroc; the world's major events: Operation Anthropoid, etc.

The whole process of creation products is divided into several phases: **analysis of underlying assumptions, components, and destinations / regions, target segments, communication issues and photomanual.**

Example of the product - CULTURAL ROUTES

1) Starting point / preconditions to create a product

Range of cultural routes linking local cultural elements (tangible elements: monuments - religious, urban architecture, mansions, technical and military architecture of any small artifacts, intangible elements: traditional customs and celebrations, the way of life - living culture) and cultural infrastructure cultural organizations and traditional cuisine and products. Cultural travel must take the form of spectacle and clear, attractive theme. In case of well chosen topic can be linked to already existing cultural routes in Europe (see European Institute EICR cultural routes). The route is fixed (starting point), including form of transport. He has more stops, which are themed on notice boards. More detailed information are in brochures and on the web. It is possibility of individual use (Self-Guided Tour), routes are marked in the field.

2) Components / product mix - multifunction offer

Important is the selection of components with respect to the subject line - attractions, services (equitable participation of all groups of components), their interdependence and the resulting product - a whole that can creatively communicate and innovate.

Examples of components:

The main topic: cultural-historical era and architectural style (Storytelling principle), personality, cultural event of international importance (Prague Spring) historic event (Rosenberg year, the Battle of Austerlitz), nobility (Rosenberg, Pernštejns);

- Cross-cutting theme: The Animated past, to the sources of European culture, Czechs What gave Europe (World), Never Ending Story.
- Accommodation and meals: choice related to the topic
- Other services: cultural and other opportunities for leisure activities linked to the main theme (festivals, exhibitions, sporting events and programs specially prepared for the topic)
- Regional projects, products and events linked to the main topic

3) Selected destinations – regions

Bohemia is a compact unit with its center in Prague. The main idea of the arrangement and cultural ways can be: gems are not only in Prague (architecture, personalities, art, music) or the historical and cultural links with Europe (personalities and their work in the Czech lands, the specific elements of architectural styles - the dynamic baroque, cubism, secession ...). Moravia is not compact. Cultural routes can be structured into units, which are mostly linked to social-historical centers: Brno, Olomouc and Ostrava. Some trips can be linked across Bohemia with Moravia, some may be regional (industrial Ostrava).

Examples of cultural routes for immediate implementation

- Routes with the architectural style (Gothic, Renaissance, Baroque, functionalist path, the path of folk architecture, etc.), with the type of architecture (Burgenstrasse) or. linked with the architect, as Dientzenhofer and Santini - Cheb, Karlovy Vary, Plaska, Southern Highlands, České Budějovice, Prague, Kulnohorsk, Želiv, Zdar nad S. Rychnovsko, Broumovsko Jaroměřice etc.
- Gastronomic routes (beer, wine) Pilsen, Slovakia.
- The route of technical monuments (glassworks, strength, industrial monuments, etc.) of northern and eastern Bohemia, North Moravia.
- Routes in the footsteps of personalities or families: Charles IV, Franz Kafka, Gustav Mahler, Alfons Mucha, Napoleon, the Habsburgs, the Rosenbergs, Pernštejns, Dvorak, Bata etc.

4) Target segments

Cultural routes are designated as the main motivation for the visitors with cultural (Specific Cultural Tourists) and visitors (General Cultural Tourists) with another motivation as a secondary motivation to visit the destination.

Target segments: middle-aged (under 49 years), seniors 50 +, younger than 30 years., school groups, senior citizens over 60 years and possibly more.

5) Communication issues (value for the client)

Understanding and training in the form of animation, which does not reduce the cultural and historical value (90% of visitors); valuable entertainment, participation in special events - events for thematic routes, off-season offer for short stays, the reason for repeated visits. High quality of services included in the product.

6) Photomanual

A short History (international context) - celebrities - unique architecture (according to architectural styles) - interiors (artifacts) - placement in nature (especially baroque landscape, park, fields) - top attractions (recommended to see) - accommodation, food and drink - Events - route map, typical motivational images for each target segment.

Summary

Marketing strategy implementation process is handled by McKinsey's 7S model at two levels - at the level of destination Czech Republic and on the level of CzechTourism (corporate strategy). Implementation of the strategy beyond the competence CzechTourism and interferes with the tourism policy, which is the responsibility of the Ministry of Regional Development and other institutions. CzechTourism activities are limited and dependent on legislation and powers to stakeholders.

Implementation of the proposed System of products has focus in the following steps:

- create a database of completed projects in infrastructure, creation and marketing of products and supported by EU funding, the budget of counties and municipalities
- evaluation of products from the database and including the level of their sales - the number of clients (statistical data of tourist destinations, IC, NIPOS, destination management companies, destination cards, competitions)
- assessing the quality of products - The national system of quality tourism services, regional systems of quality
- business strategy - to take a more business-oriented position with emphasis on "sale" and commercially oriented destination offers (networking, local small business)
- creation (coordination) of key products
 - a selection of regional products into product lines - to establish clear criteria (in particular the criteria of quality)
 - creating new products (including events) as incentives for partners
 - for each year in advance to establish a common communications topic / topics for the preparation of products
 - require a guarantee of quality of services provided within the product
- coordination of marketing activities - Destination Management Company / Region / CzechTourism - effective utilization of funds and focus on different segments

A new approach to product policy is the focus of for the implementation of marketing strategies. Creating the product is key to implementing the strategy and approach must change CzechTourism in coordinating marketing activities and link national, regional and local level. The aim is to change the perception of destinations Czech Republic and product placement (destinations), based on strong product line differentiation and communication mix to match the vision set out, in cooperation with strong partners in foreign markets.

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Strategic Marketing Management – the Employment of Strategic Tools in a Destination Marketing Strategy (The Case of the Czech Republic)

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Abstract

The paper is dealing with the theme of strategic marketing management in a tourist destination with focus on the development and the implementation of the destination marketing strategy. The aim of the paper is to verify the possibility of the employment of the general marketing and management tools and methods (usually applied in private companies) on a tourist destination, namely the Czech Republic. The method of a strategy map and related balanced scorecard method can be considered to represent the backbone of the strategy in terms of the logical structure and measurement of the strategy performance. From other numerous methods used in the Czech destination strategy¹ the 7-S-McKinsey model was chosen to be presented in the paper as an effective tool to the strategy implementation. The own 3-level model of the national product mix of a tourist destination was developed as an original model and is presented in the paper. Subsequently the advantages, limits and barriers of the application of the four mentioned managerial methods in a strategy destination have been summarized and discussed. The aim of the paper is to show possible employment of general marketing management methods in the destination marketing management, to compile a review in terms of the mentioned methods applied in a tourist destination and to summarize advantages, limits and barriers of the application incl. identifying of further orientation. The originality of the paper (and the strategy) consists in the trustworthy application of the four above mentioned (and other) methods in case of a tourist destination. The presented literature review proves the novelty of the cited approach.

Key words

Destination, Destination marketing management, Marketing strategy, Czech Republic, 7-S-McKinsey model, Strategic map, Balanced scorecard model

Introduction

The incoming tourism in the Czech Republic thanks to the strong brand of Prague recorded the dynamic development of foreign visitors as well as receipts in foreign exchange. The situation has been slightly changing since the 2008 when the first deeper drop in foreign overnights occurred. Afterwards the following year 2009 didn't bring the improvement of the situation. In 2010 and 2011 certain amelioration in terms of foreign receipts, arrivals and overnights in the collective accommodation facilities esp. in Prague has been visible, however the number of nights in the Czech Republic hasn't reach the level of 2007 yet. The Czech national tourist organisation (NTO), the state funded agency Czech Tourism, decided to conceptualize its marketing plans and develop **the new marketing strategy for the Czech Republic** on the national level for the period 2013 – 2015 with the possible extension to the 2020.

The intention if the Czech destination strategy was to include new innovative aspects and to create a strong base for the strategy as well as its implementation with the help of modern marketing and management methods. **The aim of the paper is to show possible employment of general marketing management methods** in the destination marketing management, **to compile a review** in terms of the mentioned methods applied in a tourist destination and **to summarize advantages, limits and barriers of the application incl. identifying of further orientation.**

Problem formulation

The term **destination** can be defined by many ways (e. g. Bieger, 1996; Bartl and Schmidt, 1998; Bieger, 2005), but the most useful for the purpose of the strategy is the destination as the geographic area (state, region, location) where the bundle of primary and secondary supply and services are concentrated to be perceived and bought by the (potential) international or domestic visitor. Since the destinations are

¹ The author is a specialist manager of the team responsible for the marketing strategy concept developed for the CzechTourism.

the competitiveness units operating in the international (domestic) market, they have to be managed strategically and in conformity to the marketing principles (Palatková, 2006; Palatková, 2011).

The marketing management of a destination strives to influence the demand and to realize the positive (mainly economic) effects to a destination and its residents (stakeholders). The marketing management of a destination is a process of analysis, planning, goals setting, product development, communication and other strategies development, marketing mix, strategy implementation, control, evaluation and measurement. To manage a tourist destination successfully, the co-operation of private and public sector seem to be essential (Palatková, 2011).

The scope of sources focused on the various aspects of the national destination marketing strategy development is quite extensive however the communication, branding and positioning are the most frequent topics, e. g. Gnoth (1998), Ritchie and Ritchie (1998) followed by Morgan et al. (2004) dealing with the practical and managerial findings and consequences and many other (Hudson and Ritchie, 2009; Saraniemi, 2010).

The really issue is what is the “right” concept of a destination and if general methods of marketing management as they are applied in a company, can be employed in a destination. The destination is often compared to a company (Palatková, 2011), so it can be supposed that the company managerial methods can be used in a destination, however with some limits and barriers.

The Czech national destination strategy tries to treat the national destination as “a holding” and to introduce some innovative aspects. According to the new strategy, the destination marketing management in the Czech Republic changes the position and activities in **following innovative ways**:

- The commercial orientation of the strategy requiring the precise and concentrated budget allocation and the selection of target markets and segments.
- The product development using Prague as the central point of the Czech Republic in terms of product development and communication.
- The strong role of the branding and communication based on the partnership marketing and strategic alliances’ establishing incl. the commercial diplomacy using the partners from the non-tourism sectors.
- The decisive employment of the information and communication technology in the communication and distribution tools aimed the more effective performance of 1 USD invested in the communication and distribution tools.
- The system of effectiveness and efficiency measurement using the BSC (balanced scorecard) method.

The strategy reflects the international trends and is based on the up-to-date marketing management methods to be effective and efficient. The question was if the methods listed in the table 1 could be applied on the national destination because of its specific character.

Literature Review

The complex historical review of marketing strategy presents Shaw (2012) explaining the history of strategy from the ancient Greece, its adaptation from the military to business noted first by Xenophon of Athens, and further development up to the present days. Shaw emphasizes the terms marketing strategy and marketing management according to Lyon (1926) and explains the development of the terminology in the period of 60’s till 90’s as “... *a semantic jungle of strategy terms, obscuring and almost obliterating the development of improved strategic concepts, resulting in multiple conflicting approaches to marketing management strategy. Thus, the present state of marketing strategy knowledge is inconsistent at best and incoherent at worst.*” (Shaw, 2012., p. 32)

Nevertheless, **the marketing strategy** was defined by Oxenfeldt (1958, p. 267) in two parts: (1) definition of target markets and (2) the composition of a marketing mix” as a fundament for further works of subsequent marketing thinkers (McCarthy, 1960; Kotler, 1967; Kotler and Keller, 2009 and other). Strategy can be defined as a concept of complex behaviour of an organization, long-term programme and approach to the organization activities and the sources’ allocation necessary to reach the intended goals.

Foodness (2005, p. 20) pointed out the problem of perceiving the marketing strategy “... *as the outcome of mechanical application of traditional analytic frameworks and techniques (SWOT, Ansoff diagram, portfolio models, etc.) to highly standardized situations (growth markets, mature markets, etc.)*.” According Foodness (2005) the Mintzeberg’s (1994) difference between strategic planning as systematic programming of strategies and strategic thinking in terms of integrated perspective of the organization is the starting point how to create the key strategic thinking dimensions. The four strategic

thinking dimensions cover visualizing strategy (e. g. strategy map), thinking strategies (e. g. break assumption), strategic decision making (e. g. chances and options) and strategic decision making (e. g. determining the critical issues).

Surprisingly **the employment of the strategic marketing management methods** in the literature focused on strategic tourism marketing management remains still very low. There are more general literature devoted to the application of the strategic marketing management methods focused on management (e. g. Drucker, 2001; Kaplan and Norton, 1996; Kaplan and Norton, 2008) and marketing (Kotler, 2000; Kotler and Armstrong, 2007, and other). The key aspects of the marketing strategy development and implementation in terms of critical success factors review have been reflected by Waterman, Peters and Philips (1980), Rockart (1986) or Johnson and Friesen (1995).

The application of strategic marketing management methods in literature varies between the private and public (destination) sector. Since 90's the progress in the destination marketing management has been quite strong, not only at the general level (Bieger, 2005; Baggio and Scott, Cooper, 2010; Beech and Chadwick, 2006; Lennon, Smith, Cockerell and Trew, 2006), but also with focus on specific themes, primarily the branding and communication strategy (e. g. Clifton, 2009; Peters, Weiermair and Katawandee, 2006; Shani and Wang, 2011).

Concerning the strategic marketing management methods the results of the literature review proved that the usage of the mentioned methods in tourism is quite poor. The set of the most frequent methods applied in destination or private sector (esp. hospitality) encompasses benchmarking, portfolio analysis, strategic map, balanced scorecard, value chain analysis or SWOT analysis. The employment of the methods at the company (micro) level can be easier (e. g. performance measurement), while at the destination (macro) level the system of methods and indicators to monitor the effects and destination performance is rather difficult.

Benchmarking as the strategic tool was used by Kozak (2001), Kozak and Rimmington (1998) or Fuchs and Weiermair (2004) to evaluate tourist satisfaction in a destination. Laimer and Weiss (2009) used portfolio analysis to get the data for policy makers in the Austrian tourism industry. The value chain analysis was used as a management and performance measurement tool by Yilmaz and Bititci (2006) or Sharma and Christie (2010). One of the most frequented methods is the SWOT analysis utilized in various context of destination or private company marketing management (Weber, 1999; Karadakis et. al, 2010; Tew et. al, 2008). The method of TALC (Tourism Area Life Cycle) derived from the PLC (Product Life Cycle) was frequently used esp. in the destination context (Russel and Faulkner, 2004; Pratt, 2010; Butler, 2006; Garay et. al, 2011). The application of common marketing management methods as the Ansoff matrix, VRIO, SPACE and other has not been fully accepted in tourism marketing yet.

As far as the four mentioned methods used in the paper their employment is considerably scarce in destination marketing management.

The strategy map was used by De Carlo et. al (2008) as a starting point to develop the balanced scorecard model to assess the destination performance. On the case of city of Turin (Italy) the qualitative methodology served for identification of the key dimensions of strategy assessment incl. externalities. **The balanced scorecard model** was used by Evans (2005) for the performance assessment of the international hotel industry in Northern England. Evans pointed out that many hotel managers used some of the four (five) dimensions of the BSC model, but rather unconsciously and without complex knowledge. The growing importance of the BSC model in hotel industry was underlined by Sainaghi (2010) or Min et. al (2008).

The 7-S-McKinsey model how to implement the destination marketing strategy in the praxis was presented by Palatková (2011) on the case of the Czech Republic. Palatková and Tittelbachová (2012) used the 7-S-McKinsey model to identify the critical success points in the process of the implementation of the proposed marketing strategy for the Czech Republic 2013 – 2015 (2020) in the international market.

Data and Methodology

Regarding on the broad extent of the marketing strategy dealing also with the implementation and action plans the number of various methods have been used in the strategy as listed in table 1. Because of the scope of the paper, the paper will focus only on **the four methods bolded in the table**, namely on the strategy map development, the own three-level model of the national product mix of a destination, on the BSC concept and finally on the 7-S-McKinsey model and its application.

As far as the data used in the strategy, the quantitative and qualitative data and research studies have been used and the information gap as a challenge for the marketing research of the CzechTourism has been identified. The necessary data sources for the strategy consist of the specialized statistics, research studies and documents with focus on the Czech Republic (e. g. Czech Statistical Office, MMR-Stemmark) as well as the marketing strategies of several national destinations (e. g. Austria, United Kingdom, Vienna, South Africa).

Table 1 The review of the methods employed in the marketing strategy for the Czech Republic 2013 – 2015 (2020)

PART OF THE STRATEGY (CZEC REPUBLIC)	METHODS AND DATA USED
The logical construction of the strategy	The strategy map
The situation analysis focused on the competitiveness of the Czech Republic The destination vision + the mission of the CzechTourism + destination goals setting	Quantitative and qualitative analysis based on primary and secondary research ² , SWOT analysis, PEST analysis, TALC model, benchmarking, brainstorming, the concept of SMART goals
The proposal of a product mix	The own 3-level model of the national product mix Analysis of the consumer behaviour Porter's generic strategies (differentiation strategy)
The proposal of a geographical market and segment portfolio	Quantitative and qualitative analysis incl. economic, demographic and other predictions Ansoff matrix (concentrated marketing strategy)
The communication strategy incl. rebranding of the Czech Republic	Quantitative and qualitative analysis The branding concept – The brand wheel Benchmarking
The measurement indicators and tools to control and evaluate the strategy	The BSC concept
The implementation	The 7-S-McKinsey model

Results and Discussion

The four above mentioned methods will be discussed in this section in terms of their advantages and limits and barriers. The basic figures and schemes are included to demonstrate clearly the power and significance of the applied methods in the destination marketing management. The results can be adapted on other destinations in some extent.

1. The method of strategy map

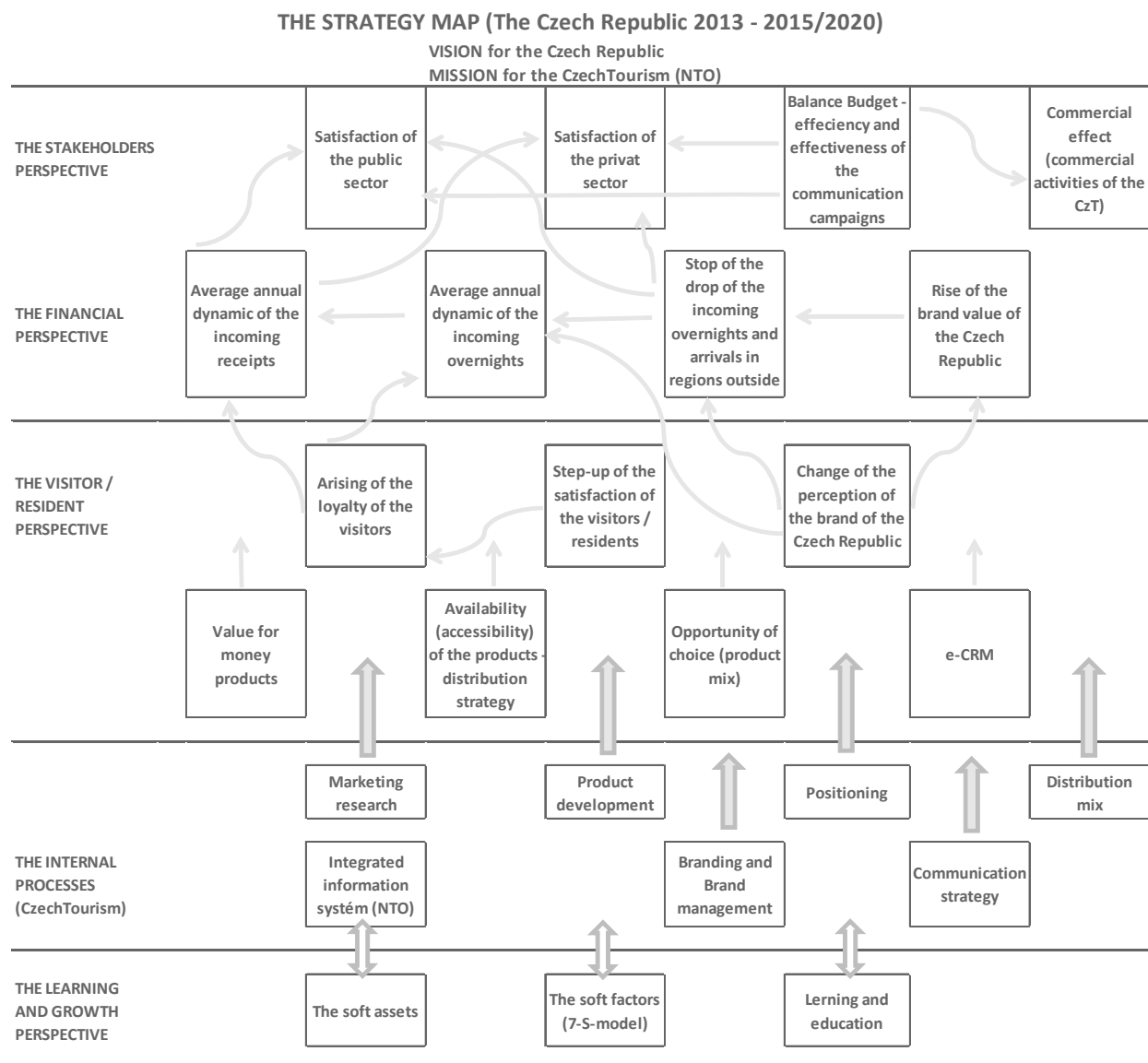
The strategy map is the backbone of the whole strategy since the vision for the Czech Republic as a tourist destination, the mission for the CzechTourism and the goals defined from different perspectives are defined in the strategy. The SMART goals are naturally extremely important not only for the CzechTourism, but mainly for the various interest groups. The perspectives of these interest groups are projected in the strategy map - the financial perspective, the customer perspective, the internal perspective and the learning and growth perspective are connected in one concept of the strategy map as depicted in figure 1.

Limits and barriers of the strategy map method in the national destination strategy:

- Labyrinthine horizontal, vertical and diagonal structure of relations among numerous interest groups making harder the communication, explanation, financing, managerial competencies and power and similar.
- Requirement to develop the conclusive business strategy for the CzechTourism in terms of internal processes and the clarification of relations and powers to various stakeholders.
- The commercial aspect of the strategy map can be hindered by the low motivation of the destination managers (office workers) in the destination management organisations which are funded exclusively from the public budgets.
- High demands on the quantitative and qualitative data and monitoring of the indicators pushing upwards the marketing research budget.
- Responsible treatment with the soft assets, namely people, culture, technology, education and learning, knowledge, management style and similar that are undervalued very often, but that are decisive for the strategy realisation.

² The Anholt Nation Brand Index, The Anholt City Brand Index (Prague), The Image of Europe in North America (ETC, 2004), The image of the Czech Republic in Europe (CzechTourism, 2010), The perception of the Czech Republic and its competitiveness (CzechTourism, 2003) and other.

Figure 1: The strategy map for the Czech Republic as a tourist destination 2013 - 2015 (2020)



Source: own figure used in the document "The Marketing strategy for tourism in the Czech Republic 2013 - 2013 (2020)

2. The own three-level model of the national product mix

The product development and communication have to be taken as the crucial points of the strategy. The really issue is to define the product from the view of the national tourist organisation and to define a concept how to develop it in practice. The three levels model for the product development at the national level was figured out as depicted in figure 2. The aim of the model is to sell the destination. The first level is the level of "the communication" which covers four core themes for the identified product, namely, the cultural product, the spa and health product, the active sport product and the MICE³ product. The middle layer comprises of the more detailed products at the "brochure" level.

The products are defined with respect to the visitors, but it is not a really product to be sold. The products which can be sold or bought by the visitors represent the concrete offer of regional and local destination, tour-operators and other subjects. The three-layer model enables to sell the destination, to develop the services chains and to create value for the visitors in a destination. The model is in conformity with the commercial aspect of the strategy.

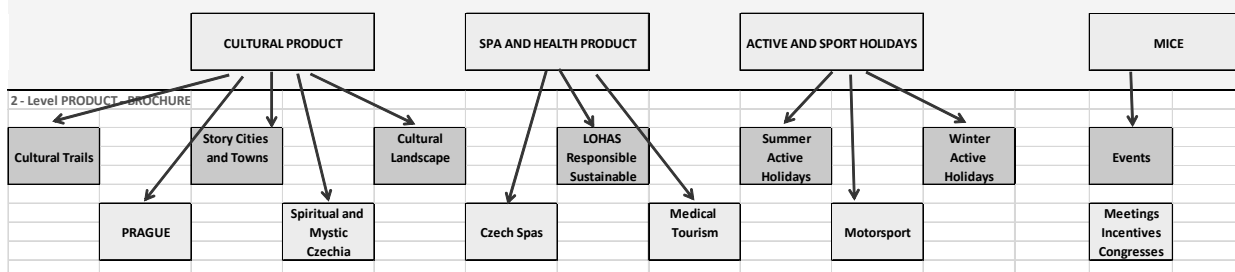
³ Only the „E“ as events became the part of the strategy since this strategy deals with the leisure tourism.

Limits and barriers of the three-level model in the national destination strategy:

- Complicated structure and low level of co-operation between private, public sector and non-profit non-governmental sector. The mistrust of the private sector of the activities of public sector.
- The model demands on the high level of knowledge and experience of destination managers at the national, regional and local levels of the destination marketing management system. The knowledge and experienced destination managers have to think laterally and their focus on business, effectiveness and efficiency has to be comparable to the manager in common private company.
- The experience from developed European destinations show the need of additional financial and/or non-financial tools to create the marketing/product alliances covering variety of players from private and public sector.
- The existing legislation dealing with the consumer protection (the EU-directives implemented in miscellaneous legal acts) doesn't take account of existence of destination management organisation. Thus, the business activities of public-private companies seems to be difficult in terms of product development, product selling and in terms of responsibility for the product (complains and compensation).

Figure 2: The three-level model of the national product mix

1 - Level PRODUCT - COMMUNICATION



2 - Level PRODUCT (concrete OFFER) TO SALE

Co-operation with regions, tour operators and other stakeholders and partners

LEGISLATIVE FRAMEWORK
FINANCIAL FRAMEWORK
PARTNERSHIP FRAMEWORK

Source: own figure used in the document "The Marketing strategy for tourism in the Czech Republic 2013 - 2013 (2020)"
the structure and names of the products at the level BROCHURE of Tittelbachová Šárka (presented in the mentioned strategy document)

3. The BSC concept

The balanced scorecard concept (BSC) is directly linked to the strategy map. The BSC was verified as the useful tool for destination strategy defining and seems to be very helpful for destination strategy managing, evaluating and controlling. With respect to the character of the destination the BSC enables to define and measure the effectiveness and efficiency from different perspectives as illustrated in figure 3. The goals and their indicators reflect the quantitative, qualitative and socio-economic goals divided into five perspectives.

The reason why the BSC was employed in the marketing strategy can be summarized as follows:

- The BSC enables to mix the short-term and long-term goals of a destination.
- The BSC covers not only the financial indicators (financial perspective) but the outputs from the (potential) visitor's perspective, from the residents' perspective and last but not least from the partners' (stakeholders') perspective.
- The BSC method is concentrated on the hard as well on the soft (subjective / qualitative) indicators and performance.
- The whole set of the performance.e indicators concentrates on the fulfilment of the vision and fixed goals at the national level.

Limits and barriers of the balanced scorecard model in the national destination strategy:

- Extremely high demand on qualitative and quantitative data delivered on regular basis and in first-class quality.
- Absolutely necessity to implement sophisticated information system in the CzechTourism working as the national destination information managerial system.
- The negative attitude of the destination managers to the complex measurement of strategy performance which puts pressure on the managers themselves.

- The broad extent of stakeholders in a destination brings the risk of dissatisfaction of some interest groups concerning the insufficient reflecting of their goals and visions in the BSC system at the national level.

Figure 3: The BSC model for the Czech Republic as a tourist destination 2013 - 2015 (2020)

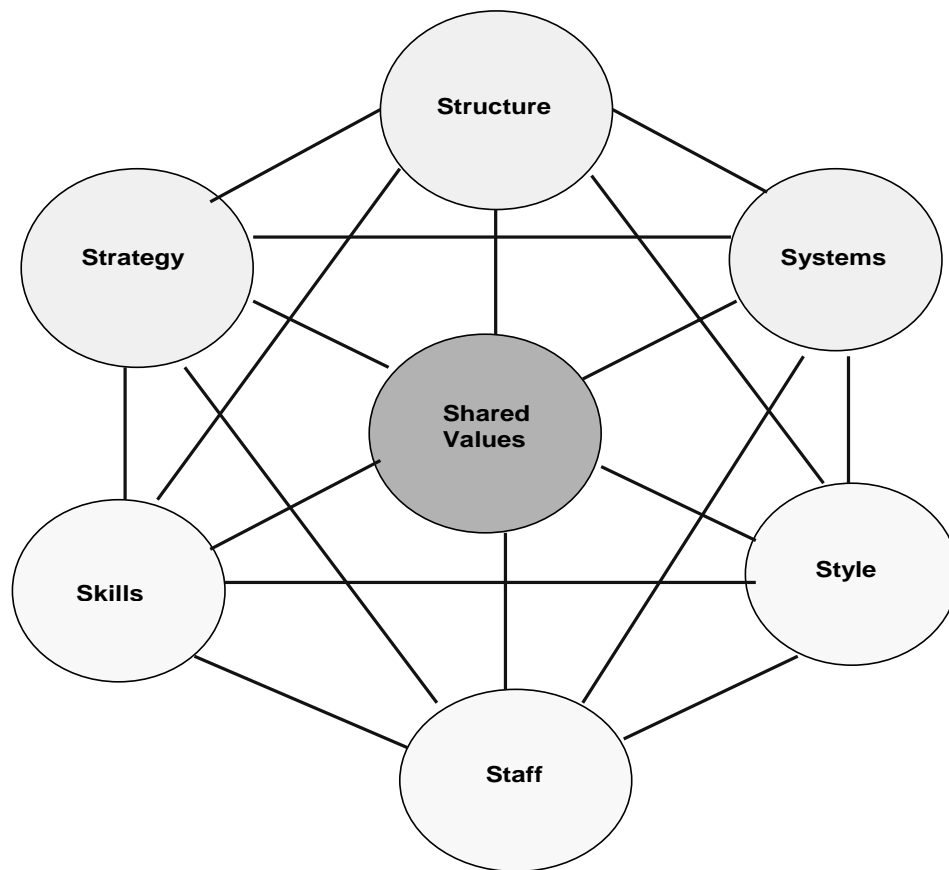
BSC	
STAKEHOLDER PERSPECTIVE	1.1 Satisfaction of the private stakeholders with the activities of the CzechTourism
	1.1 Satisfaction of the public stakeholders (national, regional, local) with the activities of the CzechTourism
	1.3 The effectiveness and efficiency of the marketing communication campaigns of the CzechTourism
	1.4 Commercial effect of the activities of the CzechTourism in case of product selling
FINANCIAL PERSPECTIVE	2.1 The keeping and growth of the number of foreign overnights (CE) by 2 % per annum
	2.2 The average growth of foreign receipts by 2 % per annum
	2.3 The keeping of the visitors and getting the new (potential) visitors of the destination Czech Republic – the growth of the "repeated" clients by 2 percentage points per annum (growth of the visitors' loyalty)
	2.4 Stop the relative diminishing of the foreign visits to the Czech regions (collective establishments)
	2.5 Growth of the brand value of the Czech Republic
VISITOR / RESIDENT PERSPECTIVE	3.1 Change of the perception of the Czech Republic in the selected international markets according to the attributes of the vision
	3.2 Growth of the brand value for the potential visitors
	3.3 Growth of the satisfaction of the foreign visitors and better attitude of the residents to the tourism
	3.4 Growth of the visitors' loyalty and development and management of relations to the (potential) visitors
INTERNAL PERSPECTIVE (Plan of the actions)	4.1 Marketing research (innovative process)
	4.2 Integrated information system guaranteed and operated by the Czech Tourism (innovative process)
	4.3 Product development (new process)
	4.4 Branding and Brand management (new process)
	4.5 Positioning (new process)
	4.6 Communication strategy (innovative process)
	4.7 Distribution mix (new process)
LEARNING + GROWTH PERSPECTIVE	The soft assets
	The soft factors of the 7-S-McKinsey model
	Learning and Education

Source: own figure used in the document "The Marketing strategy for tourism in the Czech Republic 2013 - 2015 (2020)"

4. The 7-S-McKinsey model

Concerning the 7-S-McKinsey model, its originality in terms of usage in the destination marketing strategy has to be emphasized. The reason why to use the 7-S-model was the implementation of the proposed strategy. Since the strategy as a paper document can be very distant from its realisation, the 7-S-model (figure 4) was employed with the aim to identify the critical success factors (CSF) of its implementation (Palatková 2011; Palatková and Tittelbachová, 2012). The model has been used since 80's to improve the level of success of organisations, but not destinations. Its application in the destination strategy demonstrated the ability to fulfil the similar objectives as in a company. The usage of the 7-S-model was two fold, firstly, it was applied to a national destination and secondly, it was applied to the organisation of destination marketing management (Czech Tourism).

Figure 4: The 7-S-McKinsey-Model



Source: Waterman, R. Jr., Peters, T. and Philips, J.R. (1980) "Structure Is Not Organisation" in Business Horizons, Vol. 23(3), pp.14–26.

There are not serious limits and barriers of the 7-S-McKinsey model in the national destination strategy. Nevertheless, some significant conclusions of the model application can be listed as follows:

- The experiences and analysis indicate the epicentre of potential risk of the strategy implementation in the soft factors – style, staff and skills. (Palatková, 2011; Palatková and Tittelbachová, 2012).
- Unfortunately, the soft factors can't be changed and improve by a low or other one-time measure. The adaptation of the soft factors is a long-term process depending primarily on the careful communication, not on the financial or legislative support.
- In the Czech Republic, the soft factors are in a very low conformity with hard factors (strategy, structure and system). The soft factors represent a hidden risk in the implementation process.
- The rethinking of the traditional organisational structure and system how the CzechTourism has used to work should bring more powerful position of its representatives abroad and thus better effectiveness and efficiency.

Conclusion

Since the 90's the scope of literature and research on strategic marketing (management) incl. tourism planning with main focus on the destination planning has grown considerably. The literature dealing mainly with the macro level (destination level) can be represented by Bieger (2005), Luft (2005), Gunn (1994), Jamal and Getz (1995) or Pearce (2000) to name just few. The issue is how to implement and transform the macro goals into the micro level and business, and how to measure them. Generally, the strategic marketing planning discussed in the tourism marketing literature is more or less focused on destination level without the connection to the particular stakeholders.

Generally, the sources and the application of strategic marketing (management) methods in the tourism marketing is relatively scarce. The gap between theory and practice in the field of strategic management and marketing concept focused on usage of managerial methods can be stated. The employment of the four presented methods is rather scarce in the strategic destination marketing management. To overcome

the gap between knowledge and its practical application the strategic thinking instead of only strategic planning has to be prioritized. At the same time, the strategic thinking with the help of various methods is the way to the strategy performance measurement and evaluation as the starting point to develop and implement a new strategy. The application of presented methods in the destination marketing management remains still a serious challenge for future research, both in academy and practice. Despite of the disadvantages or further requirements, the application of the methods can be considered to be very helpful. The “disadvantages” of the application of the four mentioned methods have to be highlighted and summarized as follows:

- Clarification of the labyrinthine horizontal, vertical and diagonal structure of relations among numerous interest groups in a destination.
- Requirements on the statistics (quantitative and qualitative data), measurement and evaluation of the strategy performance.
- The need of effective financial and/or non-financial tools to create the marketing/product alliances.
- Developing of the conclusive business strategy for the Czech Tourism (NTO) in terms of internal processes (strategy map and BSC method).
- Responsible perception and treatment with the soft assets (e. g. people, culture, technology, knowledge, management style). Long-term work on the soft factors decisive for the successful implementation of the strategy.
- Dealing with the legislation in terms of statistical monitoring, consumer protection and other fields.
- Risk of dissatisfaction or political pressure of some interest groups.
- Developing of the working destination information system as the managerial system for the stakeholders.

Regarding terminology the differences among number of terms is unclearly defined. The terminology differs especially between research and practice they use tourism marketing terminology at will. Sometimes it is difficult to separate the tourism strategic marketing from the tourism management and policy issue, esp. in the case of destination marketing management. Usually, the terms in the destination marketing management have been adopted and further adapted to the need of a destination. Nevertheless, the marketing principles are valid in a private company as in a destination in fact.

The use of models of strategy maps, balanced scorecard, the 7-S-Mc-Kinsey model and other (e. g. benchmarking, value chain analysis) can be seen as a really issue for strategic tourism marketing. Further research is required in the strategic control and measurement system depending on the SMART goals and indicators how to measure and evaluate them. The evaluation of benefit of strategy implementation for the stakeholders in a destination (e. g. residents, interest groups) has to become the part of the control and measurement system (BSC). The system has to be linked to the destination as a system, thus the point of view of a destination is crucial in the resource allocation in terms of their effectiveness and efficiency. Otherwise the papers and strategies remain just a theoretical analysis or a composition.

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Agritourism in Slovakia

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Abstract

The contribution deals with the problem of agritourism. Agritourism is a branch of tourism, which combines accommodation and catering services with the possibility of engaging in simple agricultural work. There are two organisations that work in the area of agritourism. In the contribution I point out some problems of agritourism and give some proposals for next development.

Key words

Agritourism, Problems of agritourism

Agritourism

Business today is influenced by many external changing factors, and also the high claims on the business management. Whether small and medium sized business, or large international corporations, the business environment has an impact in all countries. The ongoing economic crisis is already affecting several small or larger companies and many other difficult times are even waiting. The population in the implementation of the funds is expecting higher levels of quality of products or services. In this environment is a unique advantage to anyone who provides products or services better, different from the competition. However, how to get the advantage in the holdings of the agritourism?

The industry of agritourism combines the provision of accommodation and catering services, with the possibility of engaging in simple agricultural work. Although in rural areas are many of such possibilities to get into public awareness and gain a stable clientele is a bit more complex than it might seem. The main cause is the lack of interest in staying in the countryside for the urban population, and the tendency to prefer stays at sea. Another cause is the sort of distaste for the prospect of the animals, the possibility of involvement in the various agricultural works, which are often physically demanding, lengthy or "dirty". Therefore, the main attraction of agritourism is horseback riding, even though it is not on the direct involvement of the customer into the care of the animals. The alternative is a collection of forest fruits, mushrooms, what is in our country quite popular, but according to the definition of agritourism is not about a specific agricultural work.

In Slovakia are preconditions for the development of tourism and it's part - the agritourism for spending of free time, whether even the vacation, ideal. There are a variety of natural forms from the high mountains, plains to marshes. Also there are plenty of cultural and historical monuments, which attract visitors not only from Slovakia but also from abroad. For the development of the industry of agritourism also serve numerous rural options, where the breeding of domestic animals, whether works on the field still exists. Each region of Slovakia has its specificities, which may be the attraction for the guests.

By the research in the area of agritourism, the two main forms of agritourism are clear: the so called domestic and agricultural agritourism. After the change of the economic situation in our country, many rural residents as well as businesses were looking for a new way to improve its economic situation and offer visitors of the region the option of more attractive survival of vacation. Many enterprises owned buildings, previously used for administrative purposes, but in recent years, remained unused. The possibility has been offering accommodation capacities and reconstruction. Even rural residents also began to reconstruct the old farm buildings or after obtaining funding from the Fund, to build a new boarding houses or cottages.

Therefore, it is now a choice of varied type of accommodation, but also the forms of diets. Whether the customer prefers accommodations and catering service directly in a family house on a rural, wooden house, in the hotel or socially-owned accommodation, he can always choose from multiple options in the different areas of our country.

The organizational framework for entrepreneurs in the agritourism

There are two organisations, which currently span agritourism in our country. The longer functioning „Slovenský zväz vidieckeho turizmu a agroturizmu“(SZVTA) and a few years ago based the „Európsko-slovenské združenie agroturizmu a turizmu“(EZAT).

SZVTA is a non-political, voluntary and interest organisation bringing together entities that provide services related to rural development, to the use of rural resources especially in the area of tourism or are involved in creating the necessary conditions.

SZVTA is a member of EUROGITES -European Association of rural tourism and farmhouse holidays-families, based in Strasbourg.

The Mission of the Association is:

- a) to represent the legitimate interests of businessmen in agritourism and rural tourism, but also other businessmen in rural areas, with an aim of the support of the development of the conditions and infrastructure with a focus on tourism,
- b) to provide advisory assistance to the entrepreneurs in the agritourism and in rural tourism, other entrepreneurs in rural areas and the candidates on the business in the countryside,
- c) to organize courses, seminars and training courses aimed at the new knowledge for the development of agritourism, rural tourism and rural development,
- d) to provide Web site of Association,
- e) to issue a catalogue of rural tourism and agritourism facilities In Slovakia,
- f) to organise excursions, participation at exhibitions, trade fairs and other events, publicity,
- g) to cooperate with other associations, institutions and businesses, operating in the field of tourism and rural development,
- h) to cooperate with foreign unions like the focus,
- i) to provide comprehensive marketing activities and the coordination of other activities for rural development, in particular if they are focused on tourism. (1)

Although the Union works for several years, information presented on its website is found like no actual data, so it is questionable if the activity of the Association is effective.

EZAT arose in 2008 as a voluntary, non-political, interest Association of natural and legal persons with euro-regional, Slovak and cross-border scope. It organizes professional training events, courses and workshops in the field of rural tourism and agritourism, tourism, informatics, the environment, integrated programmes and other activities. It has experts with professional practice in and abroad. It works closely with organizations of tourism in our country and abroad.

It's activity supports:

- the promotion and marketing of rural tourism,
- the conservation of the natural and cultural heritage,
- the development of agritourism and ancillary services to rural areas,
- making the reservation and information systems for farm tourism,
- the creation of publications focusing on entrepreneurship in rural areas and in the rural tourism,
- investments in improving services in rural areas,
- the increase in the standard of living and the satisfaction of the citizens,
- the promotion of Slovak culture, rural, rural customs, traditions and social life abroad. (2)

The Association organizes various workshops and courses and on its website publishes topics, which are constantly up-to-date and which may take not only businessmen, but also the wider public, that is interested in information from tourism.

The problems of business in agritourism

The business of agritourism is for many providers of agro-tourist services a way how to improve its financial situation, in addition to agricultural production. This applies mainly to those entrepreneurs who have to agricultural production and the relationship to animals. A large part of the rural population thanks to the traditions and the practice keep domestic animals, so the services associated with agritourism can be provided by many others. Even here is worth, that the man is successful, when he inserts to the offer more than just accommodation, meals and easy opportunity to get involved in the care of the animals.

In pursuit of more agro-tourist facilities, it was shown, that success come to those, who are not discouraged by the first failure, do not wait only for the support from the state or EU, and the EU and seek to offer to their customers still wider list of services and activities. In the provision of services in the domestic agro-tourist facilities, is to the business engaged the whole family – each adult member of the family.

Weakness of each agro-tourist facility, however, was the lack of attention to individual management functions or the lack of their performance. Since the agritourism is rather difficult work, many entrepreneurs just in the field of management shows the deficiencies.

Almost none of the providers of the agroturizmu do have an exact vision of where he wants to be in this business for a few years. The objectives usually are general: to have a steady clientele, to be occupied

during the main season and the like. It is not drawn up any specific plan, from which it could be inferred, if the entrepreneur is successful in achieving his objectives.

Many agro-tourism establishments would need more skilled labour, however, by the family business, it often is not possible. Thanks to the time demand in agritourism, hardly any entrepreneur in this area may "schedule a vacation" whether to attend various more-days courses or training, which could help the in the business. If the agro-tourism and farming equipment to domestic animals, it is not possible to leave them without the necessary care. And ensure such care is another financial cost for each one of the entrepreneur. The second page of skilled workers is also their higher financial intensity.

Another problem, which agritourism deals, is not only the cooperation with the authorities of the municipalities, but also with different organizations and institutions, which would be agritourism covered by. In Slovakia, there is no uniform and comprehensive database of agro-tourist facilities and nor is any statistical data specifically for the agritourism industry. The data are provided in the area of agricultural production or as indicators of tourism, which makes it difficult to track the various indicators of agritourism.

It is just a few of the many problems which the entrepreneurs in the area of the agritourism face. Of course, there is also many other areas which merited attention, but due to their size, I do not mention them.

Proposals for improving the business in agritourism

A clear advantage in this business has the one who has the commercial spirit and is not afraid of change.

A few proposals for agro-tourist services providers, which could take advantage of are:

- in recent years, a major attraction for the guests is "wellness", which, however, does not mean only comfort, but also offer the biological or organic products, healthy stocks,
- it extends the offer of various meditations, exercises in nature, the trend is also organizing training courses with various interesting themes about the healthy lifestyle, weight loses or spiritual focus,
- an attraction is also the arrangement of the different competitions in traditional crafts, race horses, catching fish, mown hay etc.
- providing a favorable stay for weekend or 3,4-days associated with the specific program (e.g. duck, goose feast, the village pilgrimage),
- the creation of programs and visits for children (the possibility of the beneficiary of the prices for the parent, if he wants to come to visit the child), animation, children's corners and below.

One of the instruments for success in this business is the "return" of customers to the facility and their satisfaction with the services provided. Each entrepreneur should therefore focus on their guests, to try to create the best atmosphere and to try to be a good host. Just in agritourism is very important, "Mr and Mrs home" approach to guests, their friendliness, their interpersonal skills, the ability to be a good storyteller and listener. From that depends the feeling of the guests that they are at home.

Summary

In Slovakia there are enough options for agritourism and well enough providers of agritourism services. Nevertheless, that combine more industries, agritourism is also in the form of business and require an enterprise implementation of managerial functions as everyone else, which is quite often overlooked. Similarly, as every other industry, also has own problems, which must entrepreneurs in agritourism face. Nevertheless, in the centre of attention, however, should remain a customer. After all, not in vain is said: Our guest, our boss!

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5. Legal, Ethical, Cultural, Environmental and Psychological Aspects of Management

Social Intelligence as a Predictor of Managers' Behaviour in Demanding Situations of Managerial Work

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Abstract

The selection of people for managerial positions is a precondition of effective functioning of organization. Appropriateness of these people choice can be verified especially in dealing with difficult situations in managerial work. The study presents the results of analysis of social intelligence as a predictor of behaviour of managers in difficult situations of managerial work. Analysis of data obtained on a sample of 205 executives and managers, confirmed advisability of thinking about social intelligence, as one of the most significant and important predictor of the effectiveness of managerial work, which resulted in identifying attributes of the connection between social intelligence and assessment of behavioural patterns of managers in difficult situations of managerial work.

Introduction

Prediction of the behaviour of managers in dealing with difficult situations in managerial work is one of the key issues that are at the centre of attention not only in selecting people for managerial positions, but also for their further education and training and, ultimately, are also important for career guidance to each manager. While respecting the multidimensional and complex nature of that prediction of behaviour in this paper we present findings related to the position of social intelligence, as one of the most important predictors of managerial behaviour. The focus was in the context of approaches to examining social intelligence focused on the concept of social intelligence as the power of personality characteristics of managers. Carried out analysis confirmed several important connection between the structural elements of social intelligence that was evaluated by original EMES methodology and by selected factors for coping with difficult situations in managerial work, which were determined by CSI methodology.

Social intelligence

Since 1920 when concept of social intelligence was first defined by Thorndike (1920, s.228) the attention has been dedicated to it as "the ability to understand and manage men and women, boys and girls and to act wisely in human relations." The author is inclined to the definition of two-factor structure of the definition of social intelligence, and within this structure distinguishes cognitive elements (understanding other people) and behavioural elements (wise behaviour in interpersonal relationships) of social intelligence. Marlowe (1986) defines social intelligence similarly. He understands it as the ability to understand other people and social interaction and apply this knowledge to lead and influence others for mutual satisfaction.

While determining the category of social intelligence from historical perspective is to be noted that this phenomenon is paradoxically more identifiable at the level of practical experience (it is clear that in real conditions we meet managers with good orientation in the social environment, they can get along with people, to convince them, motivate, inspire them to be successful in negotiating and so on.) then at theoretical definition of cognition.

Despite the efforts of more precise definition of categories of social intelligence we run into some problems (Silver, Martinussen, Dahl, 2001). A rich debate that unfolded in the conceptualization and subsequent operationalization of social intelligence, the authors concentrate attention at least four areas of questions:

- Resolution specification and definition of social intelligence in relation to similar, related fields of knowledge.
- Structural elements of the social intelligence construct definition.
- Personality and psychometric approach to the examination and survey of social intelligence.
- Ethical dimension of the implications of social intelligence in real life. Conceptualization of social intelligence refers to one of the key issues discussed in relation to this issue since its birth, and the

resolution of social intelligence from other similar constructs (academic intelligence, emotional intelligence, practical intelligence, but for example also communication, social influence) and follow-up to this fact also define the options and procedures for its detection.

A significant issue that justifies the existence of social intelligence, as a separate field of knowledge is the specification and differentiation from the general, academic intelligence. Although some research has confirmed the existence of differences between social and academic intelligence, yet are also studies (Ford, Tisaková, 1983) that these differences are captured, respectively specify the dimensions of social and academic intelligence, where a link was found, in contrast to those dimensions, where such relationship has been established (Makovská, Kentoš 2006).

The existence of social intelligence is also supported by Gardner (1993) and his view that it is not possible to consider only one intelligence type but on contrary, it is necessary to specify different types of intelligence based on either the developmental characteristics or the systems of the brain.

On the possibility to specify multiple types of intelligences in the context of managerial work focusing attention Albrecht (2006), who identifies six kinds of intelligences (abstract, social, practical, emotional, aesthetic, kinaesthetic).

The concept of social intelligence in content, in addition to academic intelligence is very close also to understanding of emotional intelligence. The close relationship to emotional intelligence in case of social intelligence is noted by Bar-On (2006), who states that it is the description of two aspects of the same construct, then, that most existing definitions of social and emotional intelligence includes one or more of the following skills:

- Understand and express emotions constructively.
- Understand the survival of other people and create cooperative interpersonal relationships.
- Effectively manage and regulate emotions.
- Realistically handle new situations and solve problems of personal and interpersonal nature.
- Be optimistic, positive-tuned and internally motivated to formulate and achieve goals.

The concept, which presents the author, brings together two groups of characteristics representing the intrapersonal level (knowledge and awareness of their own positive and negative characteristics, survival) and the interpersonal level (knowledge and awareness of the characteristics and survival of other people). So is not enough to know, realize, and predict the behaviour of other people's survival, but simultaneously, it is necessary to know, realize their own circumstances. The concept that focuses attention on both points is the most important for the characterization of social intelligence. For the effective manager is typical that in comparison with other workers they are at a higher level in terms of intrapersonal and interpersonal characteristics (Birknerová, 2010), but they do more apt to align their values, goals and activities with the goals, values, needs and activities of the organization. One possible resolution of social and emotional intelligence is a comparison, based on the definition of emotional intelligence. This type of intelligence is important among the factors that determine success in life. The basic definition of emotional intelligence by the authors Saloveyho, Mayer (1990) summarized into five main areas:

- Knowledge of own emotions. Self-awareness is known recognition of the feeling at the time of its creation, is one of the cornerstones of emotional intelligence. If we are unable to realize our true feelings, then we are helpless against them. People who are confident their feelings, they know in their lives to make better decisions.
- Dealing with emotions. Work with your emotions to match the situation, the ability, which is related to the developed self-confidence. People who have this ability is rare, are often faced with feelings of anxiety. Conversely, those in which it thrives, is capable of shocks and disappointments of life recover faster.
- Ability to motivate myself. Emotional self-control is essential to any success. People whose have this ability, are more productive and more powerful in almost everything they undertake to.
- Responsiveness to the emotions of other people. Empathy, this property is the increasing emotional self-awareness deepens. Empathic people are more receptive to others about what they want or need. They excel in professions such as teacher by profession, manager, or work in sales.
- The art of human relations. Whether a person has adequate interpersonal relationships, depends largely on the ability to empathize with the emotions of others and also to adapt their behaviour. People outstanding in this area, are ready to work closely with others, they are generally sociable.

Perhaps more in terms of application to solve specific problems in managerial work is necessary to draw attention to the fact that emotional intelligence is not directly touch the management of situations in

which the dominant aspects is the real social context. It can for example address emotional states that are individual problems of a particular manager (ungovernableness of tasks, time pressure, career, etc.), in which the social context is included only secondarily, as an individual developmental characteristics. This fact describes Goleman (2006) as self management, relationship management over, which is typical of social intelligence.

Although Goleman (2006) contributed mainly to the expansion of interest in the area of emotional intelligence, pointed out the differences in the definition of emotional and social intelligence. Apart from the already mentioned differences in self and relationship management is possible to distinguish the self-awareness at the level of emotional intelligence and social awareness (empathy, social cognition) at the level of social intelligence.

Structural elements of the concept of social intelligence

In all approaches that were presented in the previous chapter, more or less echoes the second most frequently discussed issue in relation to social intelligence, which is related to the definition of the structural elements of this concept.

This question evokes discussion about what to enter as a multidimensional characteristic in defining categories of social intelligence, and what will be the only location characteristics (personal, situational) that will be analyzed in relation to social intelligence. As in the case of other generalized terms, in this case, we see a tendency to include in the definition of social intelligence as much as possible features.

Discussion about aspects of the mosaic structure of the content of social intelligence results in ultimately either cognitive dimension of understanding of the concept, either the ability to understand other people (Barnes, Sternberg, 1989), or focusing attention on the behaviour, thus solving interpersonal situations (Ford, Tisak, 1983) and emphasize the behavioural aspect of the issue. Characterization of these two aspects of the structure of the construct of social intelligence is related, as already mentioned, with Thorndike (1920) approach to social intelligence.

Most approaches to social intelligence includes both of these components (cognitive and behavioural) and perhaps the only discussion on the issue of superiority of cognitive, respectively behavioural elements in characterizing social intelligence, which is on a methodological level, reflected in the survey procedures, respectively measurement of social intelligence.

Emphasising the cognitive approach to defining social intelligence is based on the fact that an individual understands and interprets their behaviour and the behaviour of other people as well as according to this interpretation can effectively regulate self behaviour.

In this context, Silver, Martinussen and Dahl (2001) argue that social intelligence consists of the following components:

- The processing of social information.
- Social perceptiveness.
- Social skills.

It is clear that the first two components are cognitive oriented, the third component is behaviourally oriented.

Orosová, et al. (2004), highlight the person's ability to understand the feelings, beliefs and behaviours of others and oneself, and according this understanding to act appropriately. If the level of such ability in humans is low, it can cause problems in social relationships. Develop socially intelligent behaviour of the individual expected to improve self-reflection, reflection of the social processes, sense of subjective interpretations of behaviour, practicing social skills. These contexts are also relevant in terms of preparation and training of managers in improving the efficiency of managerial work.

In terms of prediction of behaviour of managers in difficult situations, managerial work-based social intelligence is challenging the definition of the components of social intelligence, which indicates Kosmitzki and John (1993):

- Perception of other people's psychological state.
- Ability to relate to other people.
- Knowledge of social rules and norms.
- Understanding of complex social situations.
- The social manipulation techniques with others.
- Understanding the perspective of others.
- Social adaptation.

Overlapping of cognitive and behavioural elements we can see even in this definition. But mention of handling the others suggests that social intelligence is not an ethical category and in this context is rather neutral in charge.

Behavioural-based approaches are more focused on behaviour, i.e. the ability to work or successfully influence other people (Ford, Tisak, 1983). If we compare these two approaches, it is clear that behavioural elements of social intelligence are more visible than cognitive. Therefore, in practice social intelligence often is considered just by behavioural side.

Psychometric personality concept of social intelligence

Specification of psychometric and personal approaches as the two study of social intelligence baselines (Kihlstrom, Cantor, 2000) are another, the third, discussed problem in this area of knowledge.

Psychometric approach is conceptualizing and operationalizing social intelligence as a property or group of properties, while people may be compared on the dimension of low vs. high, and in this case the difference compared to the academic study of intelligence is mainly focused on social sphere.

In contrast, officials oriented on personal approach reckoning behavioural based of social intelligence in various interpersonal situations that are not evaluated strictly on the performance dimension. Considerable attention is focused on the aspect of subjective assessment of the situation.

Another, in terms of frequency is not so often discussed issue is the issue that is related to pro-social, respectively anti-social contexts of social intelligence, respectively with a discussion of social intelligence as ethical category. In normal, everyday language is "socially intelligent behaviour" more or less automatically rated as pro-social, moral, ethic. We believe that the social intelligence construct is in this sense, neutral charge. According Birknerová et al. (2009) social intelligence is a construct that can be used in both pro-social and antisocial context.

The difference between social and emotional intelligence is also reflected in the discussion of pro-social, respectively anti-social context of using these types of intelligence in practice. Emotional intelligence in this context is significantly associated with pro-social behaviour, non-aggressive reactions. Social intelligence in the context of this discussion preferably evaluated with neutral opinion. It is associated with pro-social and antisocial behaviour, with non-aggressive and aggressive reactions, and according to our findings, it is an ethical category.

In concrete terms a person can apply social intelligence, for example in resolving social conflict with a positive impact for all participants, or social intelligence can be used to "get the better of, deceived, outsmart, manipulate other people. This situation demands and personal aspects, determine goals and practices in the name of the achievement of which subjects can use their social intelligence (Kaukiainen et al., 1999). This understanding is closely related to the debate on machiavellizme (Machiavellian intelligence) as part of social intelligence (Jakobowitz, Egan, 2006). Studies in our conditions (Makovská, 2005) confirmed already mentioned idea that people normally do not include the social intelligence as the negative element of behaviour in social situations.

Dealing with difficult situations in managerial work

Area of management is one of the typical environments in which the incidence of difficult situations is not rare. Difficult situations can be perceived by managers either as of the problem, crisis, conflict, difficult, unpleasant, critical load, or as an opportunity to demonstrate and apply their skills as a challenge and the start ramp for their career (Frankovský, Ištvaníková, Stefko, 2009). Depending on how the individual handles these situations, it may be a self-enforcement or self-threatening human behaviour (Fedáková, 2002), which is related not only to the effectiveness of dealing with these situations, but also with medical and psychological consequences of managerial work.

Difficult situations in managerial work are represented by critical milestones in the life of the manager (job loss, removal from post, or a new appointment), or the existence of the organization (company bankruptcy, unexpected benefit), but also relate to problems and difficulties with which the managers meet more frequently, sometimes daily (disagreements with co-workers, supervisor respectively subordinates, redundancies, conflicts among subordinates, division of tasks, pay employees, etc.).

Manager meetings with difficult situations, how they were addressed and the residue of these processes can significantly affect quality of his life, existence, his mental and physical health, but also the effectiveness of the organization and ultimately the whole society. The quality of managerial work is one of the indicators is the solution to difficult situations, is also close to the issue of sustainable development.

Therefore increasing attention is currently focused on issues of perception, experience and effective solutions to difficult situations in the management, but not without preferences or unnoticed are even states that these situations and solutions caused.

Finding effective ways of coping with difficult situations at work is a management process that must come from an interdisciplinary perspective on the issue and has a multidimensional character.

Formulating of essential research questions coping with difficult situations in managerial work envisages the focus on finding answers in at least three basic research contexts (Frankovský, Ištvaníková, 2008):

- Identify, characterize and classify situations which the managers perceived as problematic, difficult, conflicting, stressful, unpleasant and so on. This line usually results in the definition of several essential dimensions of the situations under which it is then suggested some empirical taxonomy and classification of these situations.
- Analysis of the behaviour of managers in dealing and coping with these situations. In this context, most research processes can be characterized as efforts to create taxonomy through inductive general classification of the behaviour of managers in dealing with difficult situations.
- The third context involves the analysis of links between ways of coping with difficult situations in managerial work and dispositional characteristics of the manager, respectively situational conditions occurrence of a specific problem. The focus of attention is usually concentrated on the personal characteristics of managers and organizations operating conditions.

Research project, the results presented in this study, attention focused in this context to analyze the relation between social intelligence, personal characteristics such as power managers and the possibility of prediction of behaviour of managers in demanding situations.

Difficult situations that may arise in the company management characterized by Copper and Marshall (1978) based on six areas of stress in the work context as:

- Internal work environment - in this area, attention is focused mainly on the conditions and symptoms directly related to the performance of work activities, such as mental or physical overload, work environment, work rhythm, level of risk factors, and the flexibility.
- The environment of the organization - in this area stand out work organization factors, such as precise definition of work activity and the level of responsibility.
- Social environment - in this respect, attention is mainly focused on social relationships with peers, superiors and subordinates. These relationships are considered as an important mediator of action of stress factors, the effect can be corrected in both positive and negative sense.
- Career prospects - in this area can include issues related to professional growth and the labour process (transfer to a higher, lower position, clear terms of career growth, advancement opportunities, etc.).
- Organisational culture - the content of this field are factors related to the overall culture of the organization of life, level of communication by keeping employees, problem solving, employee care.
- Work and family life - in this area can include activities related to harmonization of requirements that a person puts on employment and family. In particular, solving conflict situations in which you must meet the requirements to the detriment of the family.

Last view on a specific definition in the management of difficult situations is represented in the present approach is very busy examining work-family conflict as a clash of two responsibilities in relation to the family and in relation to employment. Several studies (Alukov, 2009) describe this type of difficult situation as highly stressful. Balance work and family life is also one of the main topics on the agenda of European Union social policy (Sklenar, Frankovský et al., 2007). In real organization life, this theme is reflected in the implementation of family friendly strategy for coping with this difficult situation in the management of organizations.

According Oravcová (2004) difficult situations in managerial work can be specified not only on the basis of stress conditions, but also in contexts which are not rare even in everyday life and are based on:

- Time pressure - mostly associated with the implementation of exactly-term tasks.
- Excessive number of tasks.
- Excessive variety of tasks.
- Chaotic patterns.
- Stereotypes and work tameness.

Relatively independent and specific area of difficult situations in the management of the organization is determined by the issue of organizational change and the associated management of change and coping with its consequences. In this context, Judge, Thoresen and Pucik (1999) examined the management of organizational change management in terms of the seven personality characteristics of managers (control position, self-assessment, self-image, positive emotions and openness to new experiences, tolerance and level of risk). Based on these characteristics extracted two factors, positive self-concept and tolerance for risk, which are significantly related to coping with management of organizational change. At the same time the authors highlighted the importance of the context in which the change takes place in the organization (job title, salary, job satisfaction, organization management, career development, as well.). Analysis of the above authors confirmed the position of mediators of contextual conditions through which the extracted factors affect the process of managing organizational change.

The importance of coping processes as active practice focused on success in implementing organizational changes highlighted Cairns and Beech (2001). These authors also pointed to cases in which coping is understood rather than passive, defensive reaction to change.

Another possible approach to specifications and categories of difficult situations in the management of the organization is the resolution of individual and collective difficult situations (Muhonen, Torkelson, 2008). It is clear that challenging situation may occur in the context of an individual, as well as in the context of the entire organization, or any of its components. Addressing the issue of whether or not to accept a new job is a difficult situation of a particular individual worker. Reorient production on a new product is on the contrary, collective difficult situation, the solution which involved a group of people. Such specification of difficult situations, of course, is also related to their way of coping. The procedures for coping with these situations were examined, in this case, in the broader context of the contributory factors, namely gender and organizational level.

Střelka (2008) pointed on the context of the situation, how an important factor to categorize difficult situations, too. Author based on that factor distinguishes these situations:

- Situations with a simple context, are stable, have a high rate of structure.
- Situations with complex context, which is not entirely clear cause and effect relationship, have a relatively high rate of structure.
- Situations with a comprehensive context; contain a large number of interrelated elements, their relationships are highly dynamic, the whole is more than the sum of all relationships.
- Situations in chaotic contexts are unstructured; it is not possible to determine the causes and consequences of causality in these situations.

In relation to the above specifications, different types of situations are to be noted that a particular difficult situation may contain several characteristics.

Another look at the incidence of difficult situations at managerial work in terms of more qualitative characteristics, presents Urban (2008). Author assumes that the bulk of managerial work is not only creating long-term visions and strategies as an essential task of managers, but also small human problems solution, questions of motivation, improving skills of employees, solving interpersonal problems, etc.. From this point of view proposing 10 areas of difficult situations that managers must manage. Distinguishes the following areas of difficult situations:

- Self-management.
- Transition from executive to managerial role.
- Managing motivation and persuasion.
- Management and control the transmission of bad news.
- Managing unruly colleagues (subordinates and superiors).
- Overcoming conflict and stress.
- Change Management.
- The transition from management to leadership and coaching.
- Creation and management of effective team.
- Management in an international environment.

Of course, it is possible to discuss also about other areas of difficult situations in managerial work. As the author notes, however, the number of defined situations is not crucial. Goal of the challenging situations specifications presented was to include a substantial areas of managing, from his own person up to the international, cultural management context. The searching procedures in area of difficult situations

structure in managerial work represent typical approaches to this issue with which we meet in the literature. The multi-dimensional approach to defining the structure of these situations is characteristic for them as well as empirical-inductive process of identifying the individual elements of the structure of difficult situations. The theoretical-deductive procedure for classifying structures difficult situations we encounter not so often.

The presented difficult situations taxonomy in managerial work suggests that exist very much of these approaches, designs, concepts. In addition to the above general characteristics that can be in a colourful mosaic of these approaches possible to find, we want again to point out and emphasize the importance of subjective assessment of a difficult situation, which is linked with the personality attributes of the manager, as well as with the terms of the particular situation.

It should be noted that the intensity is related not only to the current perception of the situation, as stated by Birknerová (2010), and situations that in fact are not so demanding, they are somewhat onerous, but long-lasting so they are not stressful for its intensity, but for the duration.

Method

The research sample consisted of 205 managers, of whom 141 were males, ie 69% and 64 women, that is to say 31%, with a mean age of 42.2 years (age range from 28 years to 62 years).

Out of all 205 managers 55 respondents, i.e. 27% worked in senior management, 78 respondents, 38% worked in middle management level and 72 respondents, i.e. 35% were working at the operational management - line managers.

The mean length of experience was 8.5 years, minimum managerial experience was one year and maximum length of managerial experience was 31 years. In the present research we investigated the social intelligence with the original methodology EMESI (Frankovský, Birknerová, 2011). In case of the methodology social intelligence is measured by the performance characteristics and its development was inspired by a questionnaire PESI, designed and developed by Kaukiainen et al. (1995). PESI methodology was developed for peers or their teachers, and measured the level of perception of social intelligence as performance. It contains 10 items and its internal consistency (Cronbach's alpha) was 0.90. Methodology EMESI contains 21 items that are assessed on 5 - point scale (0 - never, 4 - very often).

By Factor Analysis (Principal Component Analysis with Varimax rotation) were extracted three factors of social intelligence - empathy, handling and lack of ability to manage their own emotions which Birknerová and Frankovský (2011) define as follows:

- Empathy - managers, who in this factor reaches a higher score, they can recognize the intentions, feelings and other people's weaknesses. They can very well adapt to other people, they can estimate their wishes while they are able to fulfil these wishes. The value of Cronbach's alpha for this factor was at 0.816. At the same time, this factor explained 21.1% variance.
- Handling – managers, who are characterized by a higher score on this factor, are able to convince others to have them done anything. They can convince others to stand on their side and they know to use others for own benefit. Often used other lies for own benefit. The value of Cronbach's alpha for this factor was at 0.846. At the same time, this factor explained 14.6% variance.
- Uncontrolled own emotions – managers, who achieve high scores on this factor, contact with other people make them nervous, the feelings of other upset them as to adapt to other people making a big deal for them. They disperse and irritate of weaknesses and desires of other people who are willing to do anything for them. The value of Cronbach's alpha for this factor was at 0.771. At the same time, this factor explained 7.9% variance.

The ways of behaviour of managers in difficult situations of managerial work were identified by methodology CSI - Coping Strategy Indicator Amirkhan (1990). CSI is a methodology, based on a methodological assumption of disposal understanding of prediction behaviour. This means that regardless of the particular situation, there are relatively stable ways of solving difficult situations which regardless of the specific aspects of the situation influence the choice of answers. So it is accepted that exists as mentioned above, generalized trans-situation stability in the behaviour of managers in difficult situations. The questionnaire contains 33 questions reflecting and describing different ways of solving (solutions of different contexts) situation that the respondent himself elected, respectively can name and describe it in the introduction to the methodology. These questions correspond to the three subscales that represent different strategies of coping with the situation (each strategy is represented by 11 questions). Each question managers assessed in 4-point Likert-type scale (1 - yes 2 - rather yes 3 - no more, 4 - no). In our

conditions above mentioned methodology adapted and validated Sarmány (1992). CSI questionnaire allowing identifying by Amirkhan (1990) specified three strategies of coping with difficult situations - an instrumental strategy, strategy of seeking help, the avoidance strategy.

Results

Analysis of the links between social intelligence as the power characteristics and behaviours of managers in difficult situations of managerial work confirmed several of statistically significant links of the contexts (Table 1).

Empathy, characterized as the ability to recognize intentions, feelings and weaknesses of other people positively, statistically significantly positively correlated with the behaviours of managers, which were defined as searching help assistance, social support and avoidance of addressing the situation. Managers who scored higher in empathy, at the same time less preferred for solving these two behaviours

Analysis of the link between the handling that was specified as the ability to persuade others to have done anything to get support, using the others to their advantage and studied behaviours of managers brought analogous results. Statistically significant positive correlation between manipulation and behaviours of managers, specified as searching assistance, social support and avoidance of addressing the situation, were found.

Managers, who scored higher in the handling, less favoured as a solution to the situation these two behaviours in challenging situations.

The third factor of methodology which was characterized as a lack of controlled own emotions, (contact with other people make them nervous, the feelings of other upset them as to adapt to other people making a big deal), statistically significantly correlated with all the behaviours of managers in difficult situations of managerial work . A positive correlation was identified between this factor and behaviours, which are defined as an instrumental strategy, means directly addressing the situation. Conversely, a negative correlation was found between their own uncontrolled emotions and behaviours of managers, which were specified as assistance searching and avoidance. Managers who scored higher in the extent of own uncontrolled emotions are less oriented to address directly the situation, and more preferred assistance searching respectively avoiding the situation solving.

Table 1 Correlations of factors methodologies EMESI and CSI

Factors	IS	SHP	SVH
Empathy	0,00	0,53*	0,48*
Handling	-0,05	0,42*	0,25*
Uncontrolled own emotions	0,25*	-0,43*	-0,36*

Legend:

IS - instrumental strategy,

SHP - help searching strategy,

SVH - avoidance strategy

While interpreting the above findings, it should be also taken into account factors inter-correlations of factors of social intelligence as the performance characteristics (EMESI) with each other (Table 2) and differences in the preferences of particular strategies of individual behaviours of managers in difficult situations of managerial work (Table 3).

Table 2 Correlations between factors EMESI

Factors	Empathy	Handling	Uncontrolled emotions
Empathy	-	0,48*	-0,28*
Handling		-	-0,23*

The observed statistically significant positive correlation between empathy and handling shows that the control of other people connected with the capacity to enter into their thinking, feeling, experiencing, understand them and to have own benefit (sometimes it is in favour of the other people also). Empathy, however, negatively correlated with their uncontrolled emotions. This shows that ability to behave empathically is possible only with people who control their own emotions in contact with others to resist them. It is a statistically significant negative correlation between manipulation and uncontrolled emotions. That finding according our opinion means that people associated with handling, as well as with empathy

are able to control their own emotions. Managers who better control own emotions are able to penetrate and understand the feelings, thoughts, and survival of people and then effectively manage those people. In context with presented findings, we consider that should be noted that the assessment of the preferences of individual managers' behaviours in difficult situations of managerial work was significantly different (Table 3). Managers most preferred instrumental strategy, the solutions as a direct intervention into the situation. Managers most preferred instrumental strategy, the solutions as a direct intervention into the situation. Second were ways of dealing with difficult situation preferences for the strategy of seeking help and the third avoidance strategy.

Table 3 Preference of behavioural strategies for managers in difficult situations of managerial work

Factors	Mean Rank	Chi-Square	Asymp. Sig.
IS	1,18	210,78	0,000
SHP	2,03		
SVH	2,79		

Legend:

IS - instrumental strategy,

SHP - search help strategy,

SVH - avoidance strategy.

Conclusion

Finding ways and means how to increase the effectiveness of managerial work, which is closely related to the effectiveness of the organization and ultimately the effectiveness of the whole society is not just the current issue, drawing attention of experts from various fields of science, but also issues linked to improving the position of the organization in a competitive environment with more efficient use of its potential tangible and intangible, including human capital, and is ultimately connected with the concept of sustainable development. In frame of so-defined development human capital has its significance and it is irreplaceable.

Finding and selecting the right people for management positions is an effort of each organization. Filling this effort is neither easy no simple. To define and then also to know how to diagnose essential prerequisites for managerial work is also a multidimensional and multidisciplinary problem solving of which envisages cooperation of experts of several disciplines.

With difficult situations we encounter throughout life. We meet with them regardless of whether we want or not in different life contexts and related proceedings in situations with different actors and different specific content. This makes it possible to focus attention, for example on family life, school, sports, friends, environment, and of course, to the area of work and working life.

Just in work appears important particularly difficult situations management solution because the management is often associated with the solution of life existential questions and its results have implications for the whole context of human life and, ultimately, the effectiveness of management actions and functioning success of the organization as a whole also affect other people. In the presented study we have focused attention on the analysis of the potential use of social intelligence as a predictor of managers' behaviour in difficult situations of managerial work. Founded statistically significant relationships between the attributes of social intelligence and assessment of behavioural patterns of managers in difficult situations of managerial work clearly confirmed the meaningfulness of thinking about social intelligence, as one of the most significant and important predictors of the effectiveness of managerial work. The presented results suggest that managers with higher levels of empathy do not prefer for these situations solutions escape, avoidance behaviours. At the same time managers who know how to manage their own emotions are more empathic, able to penetrate and understand the feelings, thoughts, and survival of people and then they are able to effectively manage these people. Managing people is also linked to the ability of handling people, but also partners in the negotiations with meaning to persuade, motivate, inspire, get them on your side and so on. The presented results clearly confirmed two contexts. Efficiency of handling increases with the rising level of empathy and own emotions controlling. If managers are to be effective they must be empathetic and to be able to control their emotions.

These findings should be interpreted in the context of clearly preferred instrumental strategy, directly aimed at problem solving in demanding situations of managerial work. It should be noted that managers did not refuse even to use the other two strategies (seeking help, and avoidance) to address these

situations. In their application, however the handling level reduces and vice versa, is typical for them the higher level of their own emotions uncontrolled.

We expect that this prediction has implications across the entire spectrum of management activities.

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Motives as Predictors of Role Conflicts in Entry-Level Managers Some Conceptual Insights and a Research Proposal

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Leadership styles and behaviours are permanent issues in management literature due to obvious reasons. Research shows that leadership outcome variables correlate with the Big Five personality factors but leadership styles show only weak relationships with personality factors. Furthermore important leadership behaviours can be learned via training. One yet unanswered question is whether every leader can successfully cope with leadership role requirements. It is very likely that without motivational “fuelling” the adoption of a leadership role causes stress. Emotional exhaustion can occur in a long-term perspective in case of a bad fit between explicit motives (questionnaire data) and implicit motives (data based upon projective or semi-projective measures). This paper tries to combine distinct areas of research: recent leadership theories, motivational constructs, and job related role stress. It sketches as well a research idea concerning motivational predictors of role conflicts in entry-level managers.

Key words

Leadership and motivation, leadership and personality, role stress, transformational leadership.

1. Does personality make leadership successful?

Before this question will be answered, we should clarify the term leadership. Bartram and Inceoglu (2011, p. 3) sketch some central aspects of leadership as follows: „Leadership is about influencing people such that they come to share common goals, values and attitudes, and work more effectively towards the achievement of the organization's vision.” Contrary to general management tasks where it is important to keep an existing system running, leadership is more about developing a system or to change its direction (ibid., p. 4). This definition does not give us any hint about exactly *how* leaders¹ achieve their influence upon others. Alternatively one can regard leadership as a “developing process of career identification where a person increasingly takes on a set of institutionalized roles viewed as personally compatible.” (Miner, 2005, p. 328) We will come back to this point of view later.

Early leadership research often focused upon the personality of leaders alone. The idea is that charismatic leaders influence the fate of enterprises decisively (very detailed in Neuberger, 2002). There are several problems concerning the theory of the “great man” (seldom “great woman”). First, they often disregard socio-economic variables (Gladwell, 2008), second the descriptions rely often upon anecdotic evidence, and third they sometimes ‘skate on thin ice’ with regard to the differentiation between normal and pathological leadership and employee behaviours. From a clinical point of view, narcissistic leaders need dependent followers, the weakness of the latter forming the strength of the leaders (Dammann, 2007). So all in all we can consider the ‘great man theory’ as outdated, or can we? Do certain traits of leaders correlate with successful leadership behaviour? The next paragraph shows some evidence for the importance of personality variables in predicting leadership behaviour outcomes.

Four of the Big Five personality factors (Costa & McCrae, 1992a) are correlated with leadership success: extraversion, conscientiousness, emotional stability and openness to new experiences. In their meta-analysis Judge, Ilies, Bono & Gerhardt (2002) found correlation coefficients varying between .24 und .31. The study included about 44.000 participants; criteria were perceived leadership emergence and leadership effectiveness. Although the correlations are not very high, they can be useful for selection purposes. Agreeableness did not show significant correlations with success variables due to several reasons. Personality measures predict various aspects of job success over a great variety of job families (Hough & Dilchert, 2010). Big Five factors can be captured with the help of various measures, for instance directly with the (German) NEO-FFI (Borkenau & Ostendorf, 1993), or indirectly (Big Five included) with instruments like the Occupational Personality Questionnaire OPQ32r (SHL Ltd.). The

¹ I will use both terms manager and leader to describe individuals in a business context who work on a functional level that allows them officially to decide over resources and to influence others.

added value for companies lies in the possibility to better match job characteristics with personality of applicants. Based upon competency models (Lapierre & McKay, 2002) enterprises of all branches can minimize wrong and expensive selection decisions (Burke, 2005), and enhance HR development strategies (Huselid, 1995). To answer the central question of this chapter: up to a certain extend leadership outcomes can be predicted via personality factors. The next paragraph drills a bit deeper into some aspects of leadership behaviours.

Research shows that the correlations between certain leadership styles and Big Five variables are mostly weak. Transformational leadership for example consists of several behavioural facets such as idealized influence and inspirational motivation as well as intellectual stimulation and individualized consideration (Bono & Judge, 2004; Avolio, Bass & Jung, 1999). Bono & Judge (2004, p. 906) found that only 12% of the variability in charisma, and 5-6 % of the variability of intellectual stimulation and individualized consideration were explained by Big Five factors. To put the results into a nutshell: it showed that only extraversion (positively) and neuroticism (negatively) correlated substantially and stable with different and composite measures of transformational leadership ratings. The authors argue first that leadership may simply be less trait-like, because certain aspects of transformational leadership can be learned. For example inspirational motivation as a part of this leadership style can be learned via training (Frese, Beimeel & Schoenborn, 2003). Second, the authors consider the Big Five model as too broad (see also Griffith & Hesketh, 2004 with regard to sub-facets of openness to experiences). Third, it is argued that real life settings often are “strong” situations which suppress the “natural demonstration of transformational-transactional leadership” (Bono & Judge, 2004, p. 907).

Nevertheless transformational leadership does show some advantages over transactional leadership style (traditional management) in terms of leadership success (Sturm, Reiher, Heinitz & Soellner, 2011). We can draw one conclusion here: Although a limited set of personality factors may be useful in terms of selection purposes, there must be more to predict leadership styles and behaviour. The basic ingredients of successful transformational leadership are not yet fully understood. It is still unclear why some people easily embrace their role as a (transformational or transactional) leader and others struggle with their leadership role. I argue that motivational variables are crucial for the acceptance of the leader role as will be sketched within the next chapter.

2. Role conflicts in leadership

Leading people and managing a business requires a broad role set. Mintzberg (2011) defines some typical management roles. He distinguishes between internal and external roles in an organization. Internal roles may be communication and monitoring of business processes as well as leading and motivating people. External roles may comprise being a spokesman or ‘messenger’ for the organization as well as the acquisition of new projects or negotiations with clients or other stakeholders. Each of these roles can be very stressful as will be shown next.

2.1 Different types of role conflicts

Roles can be contradictory, they can clash, and unfortunately there is more than just one role conflict. In the HR-consulting business we find typical role problems². Probably one of the most prominent role conflicts for entry-level management is the role switch (yesterday colleague, tomorrow supervisor). In middle management positions the realization of unpopular processes often occurs. On higher functional levels we find managers who are forced to use expensive internal providers due to company policies. Yet external providers can be a lot cheaper and sometimes better than internal units. Research finds at least 6 *different types of role conflicts* (after Neuberger, 2002). These are listed as follows with typical implicit or explicit content in parenthesis.

1. Intra-Sender-Conflict („Work quickly and error-free!!“): In this case, one person sends two contradictory messages. Employees cannot work quickly and error free at the same time, at least not for long. Leaders should avoid suchlike messages.

2. Inter-Sender-Conflict (Person 1: „Be hard!“ + Person 2: „Be nice!“): This might be called a typical conflict for mid-level managers (sandwich position). Role expectations of two or more important others are contradictory. In a suchlike case the clarification of a (new) leadership role is important.

² The author also works as HR-consultant and executive trainer. The ideas to cluster typical problems have been discussed in depth with the author’s partner Arne Voigt, highly interesting and fruitful debates have been carried out about these issues. I would also like to thank Prof. Dr. Tim Warszta for a useful change of thoughts.

3. Inter-Role-Conflict („I am a father.“ + „I am a manager.“): What seems to be a very easy to understand constellation turns to be not trivial at all if we take into consideration that in Germany about 78% of all young fathers take a time off the job for maximum 2 months - if at all (Bundesministerium für Familie, Senioren, Frauen und Jugend, 2011 [German ministry for families, seniors, women and young people]). Of course decision makers in politics and business should focus suchlike issues as well.

4. Person-Role-Conflict: („I am an honest man.“ + „I am supposed to lie.“): Here we find a conflict between core personality variables like attitudes and values and role expectations from the environment. This may be typical for young professionals who are idealistic at work and show a high degree of integrity. If a suchlike person is forced to lie for instance in front of a client, this may cause a high degree of stress.

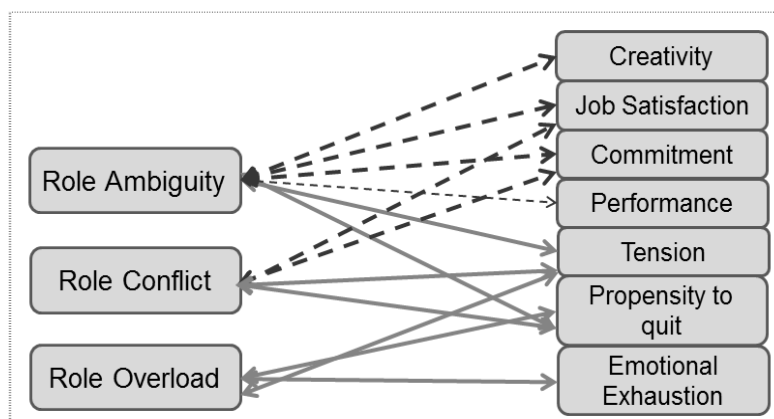
5. Role ambiguity: (“Do the blabla and behave as an honesto leakerer...”): Role ambiguity means not to know exactly what the job role looks like, and what is expected. This is not uncommon if we think of early stages in management careers. The call for ambiguity tolerance of managers (Windsor Westbrook, 2001) should not be overstretched and serve as a compensation for non-existing job descriptions. Core job elements should be clarified and well communicated. An exchange with experienced managers can be useful here.

6. Role Overload: (“I am a father, member of the fire brigade, director of Human Resource Management, coordinator of the NGO project X, chairman of party Z...”): Obviously this is a conflict that has something to do with individual preferences. Time management can help here. In this case one could also speak of a self-chosen role variety.

2.2 Impacts of role conflicts

Why do we have to take role conflicts into consideration? Because they have negative impacts on individuals and behavioural outcomes as figure 1 shows (based upon different studies: Fischer & Wiswede, 2002; Furnham, 2005; Keller, 1975; Oertquist & Wincent, 2006; Tang & Chang, 2010).

Figure 1 Correlates of role conflicts, ambiguity, and overload (Fischer & Wiswede, 2002; Furnham, 2005; Keller, 1975; Oertquist & Wincent, 2006; Tang & Chang, 2010). Arrow thickness: thick = medium or strong effect size; thin = small effect size. Dotted arrows: negative correlations.



Role ambiguity shows negative correlations (dotted lines) with job satisfaction, creativity, and performance. Role ambiguity also shows positive relations with tension, and the propensity to quit the job. Role conflicts and role overload show several positive relations to tension, the propensity to leave, and emotional exhaustion. Although a differential correlation pattern can be seen here, the general negative impact of role conflicts is distinct.

2.3 Leadership success and motivational variables

Transformational leadership and other leadership styles share one precondition: the leadership role must be clear, and the individual should display this role on a voluntary basis. What has been investigated rarely is the question exactly who is prone to different role conflicts in leadership. Personality variables should be taken into account here. For instance it is very likely that inexperienced or entry-level managers will suffer from role ambiguity more than experienced ones. Leaders high in power motive (*nPower*)

might also be better equipped with energy that is crucial to deal with role conflicts in leadership situations. Early findings suggest a *leadership motive pattern* consisting of high *nPower*, high *nAchievement* and low affiliation motive (*nAffiliation*) is correlated with success of leaders of non-technical backgrounds (McClelland and Boyatzis, 1982). Motives were captured via TAT (Thematic Apperception Test, Murray, 1948). *nPower* also predicts success in a broad range of job families like engineers, scientist, and executives (House and Singh, 1987). What was not measured in these studies was leadership success in terms of dealing with role stress in entry-level managers. Leaders with a high *nPower* should also cope with role conflicts better than those scoring low. But not every manager shows a high degree of *nPower* and *nAchievement*. What remains unclear is the question whether it is merely the level of the power and/or the achievement motive that predicts leadership or managerial success.

2.3.1 Implicit and explicit measurement methods of motives

In Germany we currently find 2.187 Bachelor and Master programs which focus business and economics (Hochschulrektorenkonferenz, 2011). Alumni of those programs mostly strive for managerial positions. So it might be interesting to find out what motive pattern is crucial for success nowadays.

McClelland and Boyatzis (1982) have shown that capturing implicit motivational constructs is useful in predicting management success. Yet we do not know whether individuals who score high in *explicit* leadership motivation are successful as well concerning leadership role behaviour. Nowadays test providers and HR experts primarily rely on *explicit measures*. Test providers like SHL Ltd. (<http://www.shl.com/de>) or cut-e (<http://www.cut-e.de/>) offer assessment products worldwide that also focus motivational aspects. The promise for companies who use suchlike products is that if one knows explicit leadership motives, one can predict leadership success. As we have learned above, this assumption is quite naïve. It might be hard to behave as an authentic leader (Goffee & Jones, 2006) if the leadership behaviour is not ‘fed’ by *implicit* motives. As Brunstein (2006, p.240, translated by the author) states: “Explicit motives do not exhibit a comparable predictive validity concerning criteria like productivity, innovation, and creativity in adulthood.”

The reason is that explicit and implicit motives concerning the same theme often differ (Eichstaedt, 2008). Explicit motivation can easily be captured via questionnaires (for leadership motivation: Felfe, 2012; for achievement motivation: Modik, 1977). Implicit motivation or motives *cannot* be captured by questionnaires (Rheinberg, 2002). Implicit constructs can be measured via projective methods like the TAT (see above) or semi-projective methods like the OMT (Operant Motive Test; Kuhl, Scheffer & Eichstaedt, 2003). Recently computer-based measures are in use as well. The IAT (Implicit Association Test, Greenwald, McGhee & Schwartz, 1998) uses a reaction-time paradigm (Eichstaedt, 2008). One basic idea is that the association of positively evaluated concepts (e.g. attitude or motive) with a *negative* term takes longer than the association of a positively evaluated concept with a *positive* term due to the network architecture of semantic representations in human memory (for an overview see Solso, 2005). Thus reaction time delays are a useful measure to capture implicit constructs.

Effective leaders in terms of coping with role stress do probably not only score high in *nPower*. The difference between implicit and explicit motivation should be of predictive value as well. Suchlike inconsistencies easily occur when one’s role as a leader is questioned, unclear or threatened. In case of great discrepancies it should be more difficult for young professionals to cope with role conflicts (Kahn et al., 1964; Neuberger, 2002). Especially those individuals who score high in explicit leadership motivation and low in *nPower* should be stressed in difficult situations:

“Individuals with a high discrepancy between basic motives and motivational self-image [explicit motivation] can easily maneuver themselves into situations in which they strive for goals that are not backed up by basic motives. These actions are per se no fun at all. In suchlike cases one constantly has to make a strong effort [to keep things going].” (Rheinberg & Vollmeyer, 2012, S. 202, translated by the author)

This strong effort (self-regulation) consumes mental resources, as demonstrated in the case of stress related self-regulation (Muraven & Baumeister, 2000). Kehr (2004b) in a longitudinal field study found that discrepancies between implicit and explicit motives negatively impact performance of managers (volitional strength) because this misfit leads to an enhanced activation of volition and thus psychological depletion. Kazen & Kuhl (2011, p. 325) recently showed that especially motive discrepancies “in the power motive are more important for well-being of managers than those in affiliation or achievement.” Felfe & Gatzka (2012) recently introduced a differential measure of explicit and implicit leadership motivation. The authors were able to identify differential patterns of leadership motivation (affective,

calculative and normative motivation), but role conflicts were not taken into account. Miner (2005) in his role motivation framework points out that a projective technique to capture role motivation is of great use. Yet, he did not take difference measures into account.

Resources to cope with stress are probably overstretched in role conflicts, especially in person-role conflicts (see above). This type of conflict is characterized by a misfit between central self-relevant aspects (e.g. values) and explicit goals or role descriptions (Neuberger, 2002). In case of role ambiguity (Kahn et al., 1964) the job description remains blurry, expectations are unclear or unspoken. A strong difference in explicit and implicit motivation might lead to problems here as well. Individuals who show congruence in explicit and implicit measures probably can easier develop a strong leadership self-efficacy in analogy to Bandura's conceptual framework (Bandura, 1982) and should therefore better cope with role ambiguity. The next chapter deals with a research proposal based upon the concepts discussed above.

3. Prediction of role stress: a research proposal

The following questions are supposed to function as guidelines in this research idea:

- Which motivational factors predict different role conflicts over time in entry-level-managers?
- Are there further personality and organizational variables which significantly contribute to the prediction of role stress?
- Is it possible to identify the proneness for role conflicts (especially inter-role conflicts) on the basis of personality variables, especially leadership motives?
- How can the results be transformed into reasonable HR practices?

By tracking alumni of study programs with an economic focus for instance at the EBC-Hochschule Berlin (University of Applied Sciences) we try to answer the questions above. The research design is now introduced briefly.

Figure 2 Research model (adapted and extended after Judge, Ilies, Bono & Gerhardt, 2002; von Rosenstiel, 2004; Bronfenbrenner, 1994).

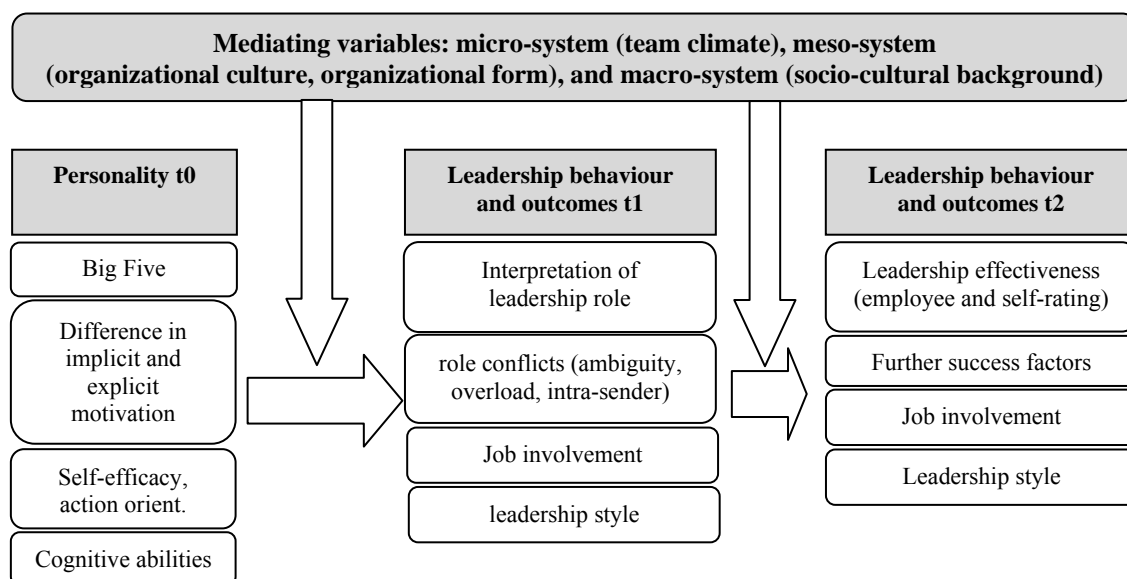


Figure 2 shows a first overview over important variables in a proposed research design. The mediating variables are called macro-, meso-, and micro-system variables (only due to space limitations they are displayed as moderators). The terms refer to the developmental psychologist Urie Bronfenbrenner (1994) who argues that one must understand ecosystems in which human behaviour is embedded to fully understand behaviour (for a differentiated view upon organizational forms and management roles see Miner, 2005). We plan a longitudinal study with 3 points in time (for references concerning variables see above). First, we would like to capture the Big Five variables, general and work-related self-efficacy, cognitive abilities, and a difference measure of implicit and explicit leader motivation (t0). Cognitive abilities should be taken into consideration because they significantly explain variance in leadership outcome variables (Salgado et al., 2003; Schmidt & Hunter, 1998). These variables should contribute to

variables measured about one year after job-entry (t1): the interpretation of the leadership role (agreeable, pleasant vs. threatening, unpleasant), role conflicts, leadership style, and general job involvement (Lodahl & Kejner, 1965) for validation purposes. The third point in time (t2) focuses job involvement again as well as leadership effectiveness and further success factors such as job strain. The model should also include situational and/or organisational variables such as market position or size.

For the prediction of the ability cope with role conflicts we need to capture also self-efficacy (Bandura, 1992) and locus of control (Rotter, 1966) as well as personal initiative (Fay & Frese, 2001). Individuals with an internal locus of control believe that they can change things and are responsible for the outcomes of their action, those high in self-efficacy generally believe (and have experienced) that their actions will be successful, and individuals high in personal initiative actively search for ways to cope with job related challenges without waiting for external reinforcement. Also self-regulation should be taken into account. Kuhl (1994) stresses individual differences with regard to negative action outcomes such as failures, and setbacks. Some individuals concentrate immediately on future actions and improvements (action orientation) whereas others begin to ruminate about why the problems occurred (state orientations). Action oriented managers should deal with role stress more successfully. We should take into account that personality can only become effective if situations are not too “strong” (as mentioned above, Bono & Judge, 2004). Data analysis will include bivariate correlations, regression analysis, and path-analysis as well as analysis of mean differences (e.g. with regard to gender differences - due to space constraints we cannot go into details here).

We hope to gain further research partners to support our ideas and to clarify the role of personality variables in the prediction of role stress. One overriding aim is to contribute to research in leadership. The second aim is to give useful advice to HR practitioners, and last not least our research findings may help our former students who have just begun their careers as future decision makers.

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Logistics of Waste Streams as a Tool of Environmental Management

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Abstract

The issues of natural environmental protection are very important: the society has noticed the pollution volume, and the industry has to adapt to more restrictive law regulations and improve the performance to use less of natural sources and to emit less pollutants to the environment. Such actions might be crucial for industrial enterprises while taking care of the nature increases the competitive position and allows to avoid the financial losses like environment degradation fees and punishments. A large number of enterprises already have been functioning within environmental management regulations, which is used to achieve the environment protection goals. However it is also possible to use the logistics of waste streams with the aim to improve the environmental activity of enterprises, because it is perceived as a useful tool of environmental management. The paper presents the literature review at this field and practical use of logistics processes for industrial waste management.

Key words

Waste, logistics of waste streams, environmental management

Introduction

Enterprises activity, as a rule, always is based on the management theory and practice, and testifies to the fact that the organization is a complex unit of multilateral relations with the environment. This complexity is not only business opportunities to build for-profit strategy, but also that organizations must take responsibility for the environment, which is an important element of the external environment. Today, companies are designed to not only produce goods and services and to provide and maintain a workplace that is associated with social responsibility, but also take care to maintain certain standards of ethical companies setting out their obligations with regard to environmental aspects.

Modern management is based on a system approach whose starting point is the assumption that the company and nature are closed systems. As concerns means that the outside of the plant leaves only ecological product, experienced staff and financial resources. However, in each production cycle the waste are produced, which in the analysis system are returned to the production cycle, and converted to other products, feed materials to another cycle or subjected to neutralization and utilization treatment. This creates the basis for the connection between environmental management and logistics of waste streams. They are linked by very strong dependence – logistics of waste streams allows by its processes for valuable materials recovery and their reuse, so it strongly support as a useful tool the environmental management and its ecological (waste minimizing and reuse) priorities.

Environmental management ecological and waste management priorities

For many years, it is known that the greatest environmental damage is done by the industry, and therefore it was decided to create the legal system for using economic instruments to protect the environment and to impact on businesses. Economic instruments are impact measures on the company finances of or other business entities that make cost-effective environmental protection. For some enterprises may be a means of economic coercion, and for others there may be in the form of premium protective measures. In any case, they have a significant impact on the financial result of the company, shaping the relationship of costs and benefits in income or production efficiency by reducing profits by paying penalties (Kozłowski, 2000).

With this comes an increasingly popular concept in the organization of environmental management. It is extremely important to highlight the European Union regulation (EWG nr 1836/93) issued in 1993 on environmental management. Law regulating environmental management system ensures the effective implementation of the objectives and tasks of the organization for the environment protection, and for this were developed a series of standards with number ISO 14000 (Paczuski, 1996).

General purpose for which the ISO 14000 series of standards was developed is to improve the environmental performance of the company, producing products with minimal use of natural resources,

energy and water while maintaining quality at the same level. According to this series of environmental management system is an integral part of business management (Słysz, 2000).

Defined an environmental management system refers to a part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy (Penc, 1997). Environmental management system include items such as: environmental aspects, environmental objectives and targets, environmental programs, lists of individual acts, ready to respond to emergency operational control, waste management, protection of air, water and waste management, noise abatement (Słysz, 2000).

The basic principle of environmental management is continuous improvement, systematically minimize the negative impact of the resources available to the enterprise environment. Environmental management system includes the prevention of potential environmental threats in the enterprise, development of environmental awareness throughout the organization and communication of information about how the impact on the environment (Tsoulfas, Pappis, 2001).

By contrast, the environmental management system purpose is a continuous reduction of the negative impact on the environment by ensuring the compliance of companies with established environmental policy (Grabara, 1999). The task of this system is to provide methods, measures, practices and tools necessary to reduce the occurrence of failure and eliminate the potential risks to the environment in case of an emergency.

Conducting business without harming the environment requires a systemic approach and continuous improvement of the environmental management system (Bajdor, 2012). Such a system is needed to determine any undertaking environmental objectives and to achieve those objectives, and to act according to the rules in the field of environmental protection.

Logistics management of waste streams for environmental management

Logistics management of waste streams is primarily used as a tool for management in an appropriate manner all kinds of waste. Waste, and the consequences associated with their presence in the environment in recent years become a major problem in the environmental field. Hence, interest in the subject comes to waste management increasingly wider scale. Significant progress is observed in advanced technologies that not only enable the minimization of pollutants generated, but also allow for redevelopment or disposal of waste (Poskrobko, 2007). The Waste Act defines it as all items, and solids and liquids other than water management resulting from business activities or human existence and unsuitable in a place or time, which they arise; as waste is also considered sludge. In addition, there has been clarified that municipal waste is solid and liquid wastes generated by households, in public buildings and public services, including rubbish collected in cesspools, abandoned motor vehicle wrecks and waste, street, and industrial waste is any waste arising from the conduct of any business (Polish Waste Act, 2001). Municipal waste is an integral part of society, but in fact industrial waste require special attention in the field of waste management, because they have far more negative impact on the environment.

Waste is produced in all kinds of activities, but also arises in managing the logistics of waste streams in the process of collection and processing. Recycled waste can then be used as secondary raw materials or substitutes for new products. Depositing waste in the landfill is the final option, which should be used only if no possibilities of re-use are not possible (Wu, Dunn, 1995).

Logistics management of waste streams is often seen as a set of activities related to environmental management, which combines the management of logistics operations, taking care of natural environment and reducing waste (Kot, Starostka-Patyk, 2008).

The activities related to waste management with logistics management of waste streams divided into two systems: closed and open loop. Issues of closed and open loop systems are the result of the creation the concept of logistics management of waste streams. Their essence is the follow up of waste products and waste - if they do not undergo any treatment, but merely are transferred to collection points, or landfills that are dealing with the open loop, and if they are subjected to processes for the value recovery it is closed loop, because the recovered value returns to the forward production and logistics (Rogers, Tibben-Lembke, 1998).

Open loop logistics management of waste streams is a very simple flow of materials and waste. Raw materials are delivered to the production process, where are made products with waste production. The product reaches the ultimate purchaser, by which it is used, and after consumption becomes a waste, and

when it is not re-used, the most often is deposited in a landfill. Also, waste products are not used but only spent on the site. The only logistics management of waste streams processes occurring in open-loop are associated with the accumulation of waste and waste products, their transport and storage potential, and deposition in the landfill (Popa, 2012).

Closed loop is characteristic for recycling waste and used products. Products used by end users do not necessarily become waste, but they might be returned to the production process, where they can be reused in whole or in parts (Kleineidam et al., 2000). Of course before they are thoroughly inspected and tested in order to maintain the quality. Consumed low-quality products can be recovered as secondary raw materials or deposited in a landfill. Also waste products do not go straight to the landfill, but those that have any value are subjected to secondary recovery operations. Thanks to them, the secondary raw materials are returned to the production. In this system, recycling of waste products allows the use of good environmental management practices using the processes of logistics management of waste streams (Toktay, Wein, Zenios, 2000).

The concept of logistics management of waste streams based on four basic principles that are structured by the validity as following (Wu, Dunn, 1995):

- materials used in the production should be recycled instead of new materials,
- used materials should be organic,
- recycled materials should be re-used (primarily packaging) materials should be recovered in different ways and from different sources as widely as possible.

Waste management is a fundamental task of logistics management of waste streams, and by this the last conception becomes the useful tool of environmental management. Dealing with waste is the basic operation within any kind of enterprise as it is necessary for environmental protection to realize the ecological priorities of environmental management (Bloemhof-Ruwaard, Fleischmann, van Nunen, 1998). Processes realized in this regard might be as follows (Beullens, Van Oudheusden, Cattrysse, 1999):

- Prevention of waste, including became obvious by the rationalization of production and consumption;
- Generation of waste, including the design of products taking into account the rest mass of recycled after use;
- Separate collection, mainly by the segregation of waste at source;
- Recovery of matter and energy contained in waste, or waste recycling in whole or in part, or recovery from waste substances, materials or energy and their application;
- Recycling, a recycling of substances or materials in waste in the production process in order to obtain the substance or material the original or other purposes;
- Disposal of waste consisting of being subjected to processes of biological, physical or chemical treatment to bring about a state that does not pose a risk to human life, health or the environment.

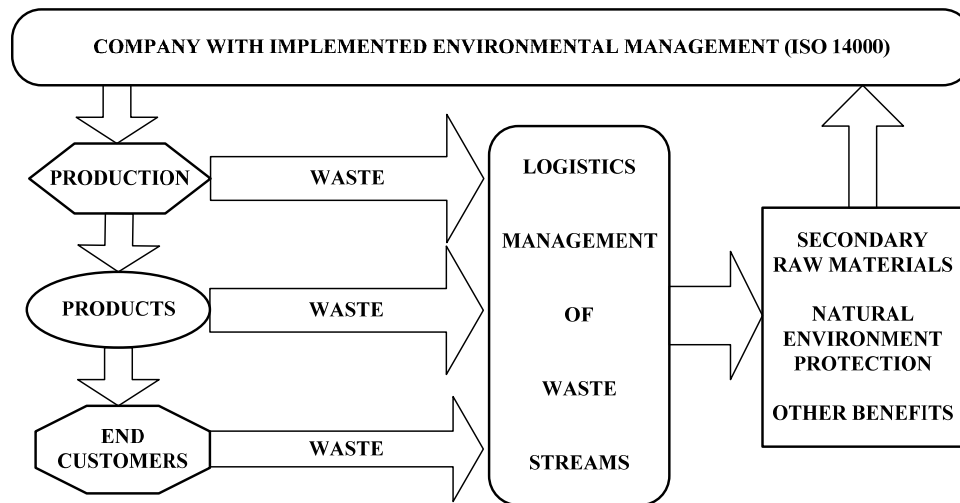
In terms of the preferred process is to prevent waste, became obvious in the rationalization of production and consumption, and became obvious and the least desirable waste disposal (Beullens, Van Oudheusden, Cattrysse, 1999).

The implementation of the logistics management of waste streams, in particular, its various processes is laborious and slow and expensive, and at the same time quite complicated, it is necessary to take into account its unique and comprehensive application and possibility to implement it in stages.

Environmental management supported and benefited by logistics management of waste streams

As is was presented in the previous parts, some of environmental management priorities are strongly concentrated on waste and their proper management. Through such activities it is possible to create the positive impact on natural environment and gain to the ecological goals. The figure 1 presents where and how the company with implemented environmental management can benefit from simultaneous implementation of logistics management of waste streams.

Figure 1 Benefits for companies from using environmental management together with logistics management of waste streams.



Source: Author's own elaboration

The figure clearly emphasizes that logistics management of waste streams states useful tool for environmental management. As the companies produce different products and sell them to the customers, at each stage of these processes some kind of waste are occurring. At first these are industrial waste, at the end municipal waste, but they all should be proper managed to avoid damage of natural environment. In the same time, by using the processes of logistics management of waste streams there are some important benefits for enterprises. Especially in the form of secondary raw materials, which are cheaper, usually with equal to new quality, and their usage during the production has the advantage for saving natural resources. Also, all actions connected with waste management and its logistics allow for better environmental protection, because the main goal here is to reuse and not to dump waste to the landfills. Of course there is also a number of other benefits from using environmental management together with logistics management of waste streams, such as for example financial benefits from using secondary raw materials, avoiding of environmental penalties, etc.; social benefits, as nowadays customers are willing to buy ecological products and they prefer trademarks with well-known ecological policy.

Summing up, implementation of environmental management to the company strategy is a very good solution, but it performs better while is supported by logistics management of waste streams. Of course there are necessary quite big investments at first, but they are worth of this effort, because in medium or sometimes long-term they will be multiplied with the benefits of such solution.

Summary

All discussed the advantages of both environmental management and logistics management of waste streams are very important for companies, especially those with intensive industrial activities. However, companies that use the concept of logistics management of waste streams to protect the environment and realize environmental management, are still not the main group on the market due to the low popularity of these kind of actions. The reason for this is the state of affairs, which can be considered as the main, the high costs of environmental management and logistics management of waste streams implementation and their maintenance. Only the largest companies can invest in such processes conducting. For other companies that are not neutral with the environment there is possibility to conduct such processes on behalf by specialized organization, which lowers costs.

Therefore, in order to lower the degree of contamination of the environment and depletion of natural resources, it is necessary to promote the introduction of environmental management for the companies. These solutions are usually beneficial for both parties - the environment gains in purity, and the trader by the costs of materials and penalties for polluting. In addition, it is also gaining customers, because they receive very good quality products, but made with environmental technology. As the very positive sign an increasing number of companies in recent years have joined such environmental activities, and it is not under legal compulsion, but voluntarily by notice the impact of industry on the environment.

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Condition and Problems of Organic Production in Agriculture of Ukraine

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Abstract

The article is considered the value of organic agriculture in Ukraine. Determined the demand for organic products in Ukraine. Considered the development of organic production from ancient times to this day. Defined promising directions of development of organic production in Ukraine based on analysis of best practice farms and official data. The results of analysis of statistical data on the life of rural areas based on the integral indicator. Recommendations to improve organic agriculture in Ukraine. Defined perspective directions of development of organic production in Ukraine based on analysis of best practice of agricultural enterprises and public data.

Key words

Organic farming, Ecological agriculture, Organic food, Agriculture in Ukraine

Organic agriculture - a promising area of agriculture, which is characterized by a range economic, social and environmental benefits. Despite on the perspective of organic production in Ukraine, increasing its share in the agricultural production, great opportunities expansion of domestic output to foreign markets, barriers to its operation and development is the lack of legislative control, lack of reasonable economic parameters, which significantly inhibits growth creation of organic farms and diversification of businesses in agriculture, undeveloped infrastructure market for organic products. All this leads to the fact that Ukraine does not use her chances on the world market of environmental products.

In the mid 20-ies of XX century the famous Austrian philosopher Rudolf Steiner has created the theory of anthroposophy, which one must feel part of the Universe and seek to live in harmony with the environment, maintaining the balance between moral and material. Since then, organic agriculture experienced had many modifications in essence, by name, but his roots always has been the same - agriculture, which does not harm the environment.

A prerequisite for the start of scientific research and research in organic agriculture has become a progressive trend of destruction and environmental pollution worldwide. Characteristic for the second half of the twentieth century development of technology, intensification agricultural production, it chemicalization to meet the growing demand for food have led to environmental degradation in agriculture (Shuvar, Ivan, et al., 2009). An additional motivation for the development of organic agriculture is the rising prices of fertilizer and pesticides, achievement in biotechnology and genetic engineering in agriculture master national agency, the low level of domestic medicine and health care. In search of environmental management methods in agriculture makes use of human food that may endanger her health, generations health through the remains of the components of plant protection products, transgenic components. In this regard, the growing of crops became more important, which have brightly expressed dietary and medicinal properties. Cultivation of organic agricultural products in Ukraine is relevant because of the accident at Chernobyl, the consequences of which Ukrainian try to be healthier by eating organic food. One of the negative consequences of the tragedy became a trend towards more deaths than births population. Socio-economic crisis in 1991 has reinforced these processes, and also low standards of living, unsatisfactory environmental situation, political instability.

The current economic difficulties have created the preconditions for the transition to the introduction of energy-and cost-friendly technologies. The development of agriculture, which denies or is such that rapidly restricts the use of synthetic fertilizers, pesticides, may be attractive for a lack of funds for their purchase. Reducing the amount of fertilizers and pesticides leads to significant reduction in contamination of soils, water resources, crop production and have a positive effect on health. Domestic research show that the use of such technologies make receiving not only the best quality natural products, but the yield is often hot lower than under intensive management (Shuvar, Ivan, et al., 2011, 198-253).

Research Federation of Ukraine show that modern domestic consumer market of organic products in Ukraine began to develop from 2006-2007, reaching in 2008, 600 thousand euros in 2009 - 1.2 million euros in 2010, rising to 2.4 million euros, and in 2011 - to 5.1 million (Official website of the IFOAM).

The first certified organic farms in Ukraine appeared in 90 of the last century. According to statistics IFOAM, at the end of 2002 in Ukraine, the number of organic farms was 31, the land under organic production accounted for 164.449 hectares. At the beginning of 2004 certified organic farms, there were 69, and the area of agricultural land - 239, 5 thousand hectares at the end of 2010 under 142 farms and 270.2 ha (Shuvar, Ivan, et al., 2006). The dynamic development of organic agriculture in Ukraine significantly was the result of the rapid expansion of the market of organic produce in the world, particularly in the European Union.

Analysis of scientific researches in Ukraine and also abroad, and experience of farms which are engaged in organic production, shows that in Ukraine for today. Exist such necessity and there are all preconditions for the development of organic agricultural production, which is caused by such groups of factors:

- a) environmental - high land tilled soil, excessive consumption of natural resources;
- b) economic - damages of pollution of land chemicals, higher costs of traditional methods of soil compared with organic methods, the cost of organic production is much higher than usual;
- c) social - there is a demand for organic products among the population, because more often appears the need for receiving a useful material for the body from agricultural produce, but not the toxic residues of chemicals or genetically modified product features, whose impact on people has not been studied.

The world market of organic products in 2009 studied organizations such as IFOAM, FiBL, The Datamonitor Group. The research results showed the growth of the organic products by 9.7% - up to 60 billion dollars. USA. As is predicting by 2014 the world market price will be \$ 96.5 billion dollars. USA. The growth will be 60.7% of indicators in 2009 (Official web site of FiBL).

National sociological surveys indicate a significant potential as to Ukraine on the establishment and functioning of the health food market. Specifically, 82.7% of respondents want to consume such products every day, but the willingness to buy it showed only 49.5% (Baschuk L., et al., 2010, 15-37). People are aware of the benefits and necessity of consumption of healthy food, but overpriced cost in comparison to similar products makes it inaccessible for many citizens of our state, particularly by low income.

The research that we had conducted showed that the respondents have information about organic products, want to buy it and, as our research shows, every year their interest is growing. Most of them are youth, because their stereotypes are not established for decades and they rely on research and advertising information about healthy lifestyles. The greatest need of organic products are experiencing by urban dwellers, as through a large number of road dust, limited green space and unhealthy lifestyles they are more aware of the importance of healthy eating. Access to these products is free, as its sale is possible at the grocery market, in specialized stores and large supermarkets. These are the places chosen by the majority of respondents to purchase food. Particularly, almost every third buys the product on the market, small shops and supermarkets (28%, 35% and 35% accordingly).

Today in Ukraine there is a demand for organic products. Specifically, 14% of respondents have agree to pay a higher price for organic produce, understanding that its composition does not contain hazardous pollutants, while 39% do not agree to overpay for such products as compared with a similar, and 46% of respondents agree sometimes to buy organic products, particularly for their young children and sick relatives.

Historically, in the former USSR area of land that were treated with pesticides from 1980 to 1986 increased from 16.3 million to 210 million hectares. Their safety for people had little regard for producers (Korsak K., et al., 2004, 228). Such facts of negative impact on human health could not cross out the policy of the Soviet Union, which was oriented on the use of pesticides of the first generation (based on chlorine) in daily farming practice. When Western countries recognized the negative impact of plant protection products they have abandoned their use in the Soviet Union were gladly to meet the offer of Western manufacturers to buy at discounted prices such drugs that were also much richer in "chemistry" than domestic. It was also estimated that the mass of cheap plant protection products will help to solve the problem of food security, with no note were taken of the fact that many of these drugs was banned in producing countries because of harmful effect on human.

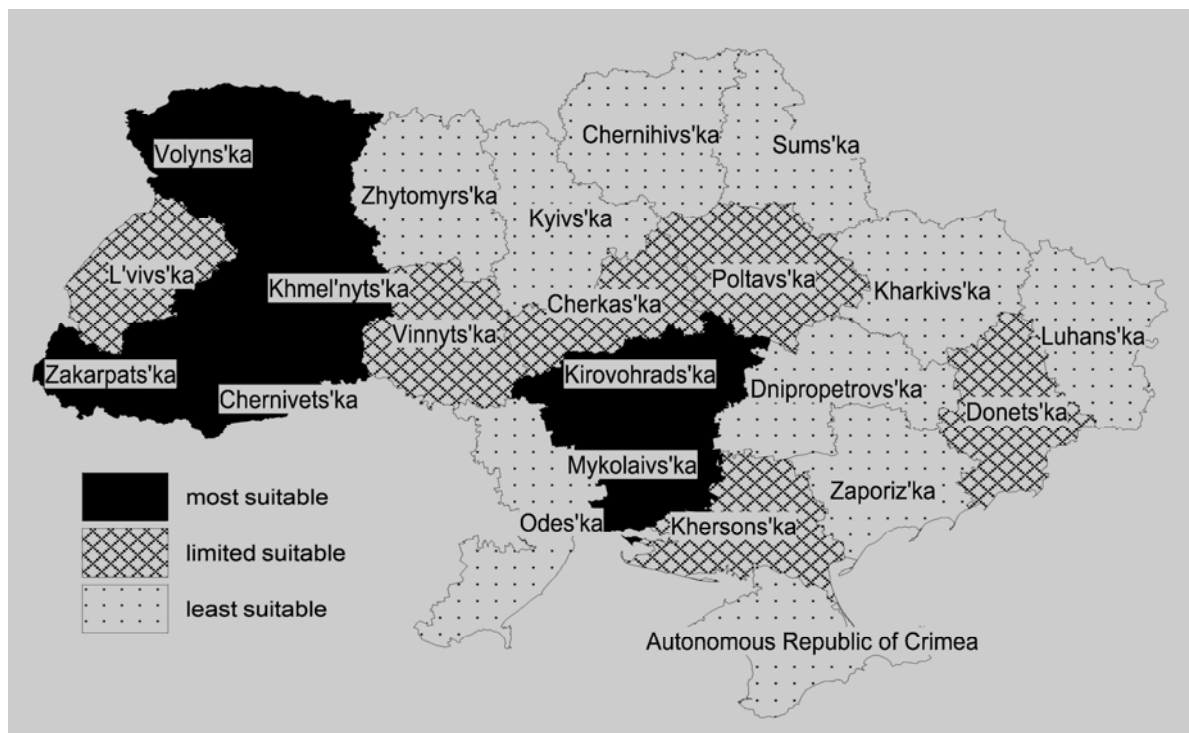
Over the last decade in Ukraine has repeated trend similar to that was observed in 40-70s of last century. Absolute growth of mineral fertilizers per 1 ha in 2010 compared to 2000 increased by 45 kg active substance and was 58 kg / ha (Agriculture in Ukraine in 2010, 2011, 105), and the proportion of

fertilized area in farms increased by 32.5%, representing 54.0% of the total area in the reporting year. Such benefits of humus mineralization over its reproduction has led to significant losses of humus in the soil. In particular, for 25-30 years humus content in soil decreased in all areas of the country, and medium black Ukraine moved into the category of humus (less than 6%) (Nelep V., 2004).

The growing trend of mineral fertilizers in Ukraine could lead to the violation of natural cycle: water pollution - excessive growth of algae and plankton formation, soil pollution - by changing its agrochemical properties, fertility, changing the balance of nutrients.

On the basis of statistics about emission of pollutants into the air from stationary and mobile sources of pollution, the volume of solid waste in landfills and landfills Ukraine, wastewater from sewage treatment plants, waste pesticides at the end of the year and taking into account indicators of population density and number of farms, based on the integrated index (ranged set, compiled from figures in the order of their attractiveness for organic production) compiled map life in Ukraine before placing them on organic agriculture (figure 1). The most suitable proved to be the western part of the country, while the least fit - east of the country.

Figure 1 Suitability regions of Ukraine to organic agriculture



Analysis of domestic organic production allowed us to focus on the main aspects of its development. Strengths:

- farmers that produce organic products strictly comply with the standards of IFOAM and periodically are inspected by relevant authorities by regarding compliance with these requirements;
- many of the agricultural famers that are engaged in production of agricultural products by traditional methods, have no need to wait for clearing soil from synthetic fertilizers or remedies that are appropriate conditions for the transition of enterprises to organic production method;
- 40% of organic products are exported abroad, where there is great demand for it;
- availability of fertile soils and sufficient human resources;
- reduction the rates of application of fertilizers, pesticides and other synthetic materials is a positive factor for the development of organic production;
- transition to organic agriculture initiated various projects;
- existence of NGOs and associations involved in the development and promotion of organic production;
- certification of organic products in accordance with the provisions of the EU, IFOAM standards allow to label products as organic appropriate marking "BIOlan", EU, Switzerland, USA etc. and be sure of high quality product and reliable origin.

Weaknesses:

- economic losses incurred by farmers through awkwardly launched organic production is one of the factors of decline of the enterprise or its return to the previous traditional method of agricultural production;
- scientific researches in Ukraine are at a primary stage that makes it impossible fully appreciate the benefits for the consumer and producer of organic products;
- lack of awareness about the availability of organic produce, its essence, the benefits of consumption;
- poor communication between government agencies and research institutions in the field of organic production;
- terms of bank loans for farmers are unprofitable;
- difficulties in certification of enterprises, because experts do not make records of all daily transactions, payments and financial transactions. It does not allow inspecting authority to ensure the veracity of activity. In addition, the high cost of certification and lack of certification organizations;
- lack of organic seed, sufficient equipment, fertilizers, biological agents for protection against pests and weeds.

Features:

- using best practices of world leaders in organic production, their experience of production and marketing activities;
- increased confidence and interest to the Ukrainian organic products after passage of the Law of Ukraine "On organic production and promotion of organic products through the media";
- opportunity to develop organic production, with the assistance of foreign organizations and projects that are created jointly with the Ukrainian authorities and farms in the area of research of organic agricultural products in Ukraine;
- the possibility of financial investment, success of which depends on the legal framework and stability of the political situation in the country;
- development of internal and output on the international market for organic produce;
- lack of competition that is in the market of organic produce, reveals a wide ground for its producers.

Hazard (risk):

- global climate change and natural disasters in the world;
- unstable situation in the country;
- lack of legal framework for the regulation of production, market development of organic products and their certification;
- absence from the state qualified quality control of organic products that produce and sell, and also the processing sector of organic products;
- floating prices for organic products;
- increased competition - the emergence of new foreign manufacturers in the domestic market to establish the low prices for organic products that will force domestic producers to lower their profits;
- staffing problem that manifests itself in the unwillingness of the rural population to work on the ground;
- the risk of cancellation of farm subsidies.

The national experience of organic agriculture has shown that soil technologies require less time tillage compared with conventional, less fuel and ten times less fertilizer (Shykula M., 1998, 627), which helps to increase crop yields (Voloshka V., 2003, 82). This should encourage farmers to switch on organic production and consumers - to change their idea of a healthy lifestyle.

Evidently, there is need for the Law of Ukraine "On organic production, which clearly define the legal, social and economic principles of organic agriculture, the requirements for growing, producing, processing, storage and other processes. Law opens good prospects for manufacturers and consumers of organic products in Ukraine it will raising the agricultural sector to the next level by developing the market for organic produce and enhance the authority of the state in the world.

Summary

Thus, the requirement of increasing food security of Ukraine, creating conditions for public access to organic food and, consequently, improve the health and welfare of society is fully justified. This should be

a top priority in the development of state standards and the adoption of laws relating to agriculture and allied sectors with it. Looking for the high demand of organic agricultural products, promoting a healthy lifestyle is important to develop a systematic approach for creating a market of organic produce and state control over its operation, to approve the rules of production, certification and standardization of organic products.

For a quick introduction of organic production among Ukrainian farmers, it's necessary to develop a clear national policy and regulatory framework, develop a targeted state program of development of Ukrainian organic agricultural production, introduce a system of certification of organic products based on international standards and promote it in society through the implementation of training programs in preschool and school educational institutions, educational institutions at all levels in industrial production and exchange of experiences in developed countries, organic production of agricultural products as well as through the media for consumption of organic products, health and the environment, preserve the gene pool of the nation.

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Identification and Mapping of Regional Security Risks

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Abstract

Past years clearly confirmed deficiency and problems in the field of crisis management in public administration, especially related to floods in 2010. Among the main factors, which have direct relation to the mentioned deficiencies, belong besides others: occurrence of new risks – not typical for the particular region, ignoring the symptoms of cardinal climate and geomorphological changes, insufficient analysis of security risks, absence of experience with solving new crisis situations as well as lack of necessary sources and means for eliminating the resulting damage. Similar problems can be observed more and more often in other countries. Related to increasing trend of these new risks, early identification, analysis and set of appropriate actions, will have crucial meaning by the defense of human lives and minimization of damages caused by these risks.

The article contains the pilot part of a project, which is focused on the identification of security risks in the Prešov region, their categorization and following analysis of main types of security risks, using the possibilities of modeling their development and possible evolving to security crisis. The models will also include predicted progress of these crises with consequential verification by the means of a simulation tool. The goal of the article is to show the importance of early identification of potential risks in the region, their accurate mapping, followed by analysis of factors which determine them.

Key words

Security risks, Global risks, Crisis, region, Identification, Categorization and mapping of risks

Introduction

Within the past few years we are witnessing of enormous increase of risks in the field of security, which more often evolve into particular crisis situations and affect a whole range of human activities.

Escalation of these risks into particular crisis clearly confirms the increase of the meaning of crisis management – not only in the military field, but especially by non-military threads and resulting non-military crisis. It is necessary to realize the fact that all known and especially new security risks, are an inevitable burden which will always accompany men in all areas of their activities. Their early identification, understanding the causes of origin and analysis of possible consequences, is just the beginning step on the way to accept effective decisions and arrangements for prevention or elimination of possible security crisis.

I. Identification of risks

For the identification of security risks and factors which influence them, it is inevitable to carry out in-depth and complex analysis of global, international (geopolitical) as well as internal (national) safety environment with the emphasis on the changes which recently occur in the environment and causes of these changes.

Level of national security environment is determined by external and internal threads, which often intersect each other and cannot be separated. In a large extent they are determined by global changes and trends.

Fundamental development trend of safety environment (generally in conditions of Slovakia too) is the increase of instability, indefinites and unpredictability of its development in the world.

According to the Security strategy of the Slovak Republic, our safety environment is characterized mainly following factors, which have direct influence on the establishing and evolution of safety threads, which can become serious security risks for the Slovak Republic and its inhabitants:

- Slovakia is geographically and its historical, cultural, political, economical and other relations, a part of Euro-Atlantic area.
- SR became a part of collective defense system by the entrance to NATO and EU, and its safety is guaranteed by allied agreements.
- By the acceptance as the member of EU, SR gained guarantees of political and economical stability and the opportunity to actively take part in the safety and defense policy.

- Geopolitical position of SR in the central Europe determines security policy of SR.
- Membership of SR in fundamental international organizations changed its safety environment radically.
- Increasing globalization has direct impacts on the international safety environment.
- Uncontrolled spread of informational and military technologies.
- Disproportion in development of world regions.
- Unbalanced demographical development and migration movements in the world.
- General increase of intolerance (especially religious) and nationalism.
- Increasing dependence on resources of vital importance and their limitations.
- Degradation of environment.

The above mentioned factors are the source of security risks that SR has to count with and needs to be prepared for:

- Uncontrolled spread of mass destruction weapons and their carriers.
- Terrorism
- Failing countries which contribute to regional instability.
- On-going regional conflicts.
- Organized crime.
- Vulnerability of information and communication systems.
- Illegal and uncontrolled migration.
- Activities of foreign intelligence agencies focused against SR.
- Unpreparedness of the country to flexibly react to globalization.
- Increasing influence of non-governmental actors on safety and stability in the world.
- Increasing economical unbalance in the world.
- Increasing dependency of countries on resources of vital concern, including food and water.
- Increase of radical nationalism and intolerance.
- Natural disasters and accidents.
- Ecological changes.
- Unbalanced demographical development.
- Increasing possibility of quick spread of contagious diseases as a result of globalization.

From the range and origin of possible sources of security risks it is obvious, that their identification must be process-oriented and categorized into various field of sources in particular safety environment. Presumption for early and successful risk identification will be especially continuous monitoring and evaluation of safety environment and factors, which can fundamentally influence the development of known risks or can be the source of new risks, which we do not know yet. By the risks identification according to Varcholová - Dubovická (2008) we can use two groups of methods, depending on the approach to the sources of necessary information (data):

- **Methods of direct identification** – necessary identification data are obtained directly in particular environment. These methods include various measurements (especially in environmental field), sociological researches, continuous data acquisition (progress of actions), factor analysis etc.
- **Methods of non-direct identification** – using data which are already available in processed form, especially from international sources (NATO, WEF...), as well as results of scientific research in particular science disciplines.

Efficient use of the efforts of all interested parties and information (from various sources) requires a comprehensive and systematic approach on the each levels of crisis management managed from one center to ensure the early identification of new security risks for a particular region, their consistent analysis and consequent implementation of measures to eliminate them or prepare emergency plans in case of their progress to the real crisis.

II. Risk categorization

Division of security risks into specific categories is particularly important in terms of their analysis and comprehensive evaluation. Identified risks can be categorized in each of several points (e.g. in terms of

their sources, factors, the extent of possible impacts, place of origin, area of operation, symptoms and course).

The basis for categorization is particularly the extent of possible impacts of security threats on the security environment:

1. **Global risks** have geographical areal impact, their direct impact would interfere many sectors. They are characterized by uncertainty over a wide time frame and the management of such risks requires cooperation and collaboration of number of interested parties.
2. **International (regional) risks** - their geographic impact would affect several countries in one region of the world (but indirectly may occur in other regions), their overgrowth into the crisis and the subsequent consequences (economic, social) can occur in much shorter time frames than global risks.
⇒ These two categories of security risks is possible (in light of the assessment of the security environment of the state) to consider as **external risks** that originate outside the observed system (country) because they occur outside the direct influence of the state (especially globally). Their effects can have a direct impact mainly on external security of the state, but can also disrupt the functioning of the internal security system with all its negative consequences.
3. **National risks (internal risks)** – they occur within the monitored system (state) and are result of defects and deficiencies within the system. They may have different nature and extent (national, regional, local) but the state has the resources and possibilities to eliminate them before they outgrow into the real crisis.

Organization of international crisis management and national crisis management branches as well as other major world organizations and institutions (economic, scientific, social, etc.) are concerned with security risks identification, evaluation and management. Their aim is, in particular, early identification and analysis of global risks and their possible impacts on security environment (international and national).

The categorization of regional security risks will therefore be based on the criteria used in assessing global, international and national security risks by the most important international crisis management organization – North Atlantic Treaty Organization (NATO), Organization for Economic Cooperation and Development (OECD), World Economic Forum (WEF) and World Bank, World Bank (WB) and the criteria used by the national security system.

III. Mapping of security risks in the region

In the simplest sense, mapping of security risks is used to prioritize risks in a given security environment pursuant to graphic representations of significance of identified risk factors on the coordinate axes. Generally are evaluated these basic criteria:

- ♦ The level of potential impacts of a particular risk and probability of its occurrence,
- ♦ The potential impact on defined criteria (e.g. warning time, response preparation time etc.).

Mapping of risks but can be also used to identify sources of risks that may result in fatal disruption of a particular security environment. Difficulty of such a map will result from the complexity of the system which consists of many (often) very specific components and their mutual direct and mediated relationships. These relationships are in constant flux and development which requires continual attention to their monitoring and evaluation.

In addition to the traditional, prioritization maps OECD (2012) specifies several types of maps that enable to understand the relationship of processes in security environment system:

- ♦ **Physical maps** - describe the spatial relationships between different variables (boundaries, population distribution, storage locations, topographic features).
- ♦ **Conceptual maps** - can be used for understanding a complex system that has or has not tangible, physical elements.
- ♦ **Process or organizational maps** - describe the sequence and (often but not always) time-dependent processes.

Rigorous mapping of identified risks is a tool that enables crisis management to reveal weaknesses and vulnerabilities of the region. It also serves as a basis for further analysis of the risks, their potential consequences and subsequent processing of crisis (emergency) plans in case of their escalation into a real crisis.

Conclusion

The aim of the project part of which is this contribution is to provide to national and regional branches of crisis management not only at a theoretical basis but in particular a consistent analysis of possible risks, their sources and factors that can result in overgrowth of those risks into specific crises.

First phase of the project is focused on analysis of the security environment of the Prešov region, to identify, evaluate and describe the security risks in the region. Subsequently, based on the comprehensive evaluation of the most important security risks and assessment of possible escalation into specific crises using the modelling options is the aim to process methodology and shaping and draft measures to eliminate individual risks or to address emerging crises at the level of state administration and regional self-government.

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Cost-Benefit Assessment Related to Assurance of Environmental Quality

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Abstract

The quality of the environment, represented by set of components surrounding man and is prerequisite of the life on earth, has been significantly affected by human activities in recent years. Anthropogenic activities are signed on its previous and present state and are difficult to quantify. Therefore it is necessary to find ways of protection, preventing damage of the environment as well as the possibility of eliminating the pollution and for this it is necessary to know the costs associated with environmental protection. The main objective of this paper is to evaluate development of the cost related to environmental protection and returns related to environmental protection.

Key words

environment, investment costs, operating costs, returns, environmental protection

Introduction

The issue of environmental protection is often discussed and popular topic. Reflections on the state and quality of the environment and the quality of its particular components incline to rather pessimistic scenario. Globalization and strong media interest caused that mass-media almost constantly bring new and fresh information on the vulnerability of life, natural disasters, environmental disasters, etc. But if the environment were so polluted that it would not provide suitable opportunities for life anymore, more adequate attention would be paid. However, reports on the state of the environment are often just generic and descriptive, without trying to find specific opportunities for improvement. The society focuses its interest much more to monitor economic developments, financial or economic crisis; it is much more interested in a more or less accurate predicting the economic development of society. However, to ensure optimal quality of life of the individual has always oscillated between economic and ecological well-being. And recently such a quality life is supplemented by one important dimension, and it is its sustainability.

Materials and methods

The main objective of this paper is to evaluate the development costs of environmental protection and benefits related to it. To achieve this, we use the available data from the Statistical Office and the relevant literary sources.

Results and discussion

Humanity in its development has undergone various phases and on each phase it somehow influenced the quality and state of the environment. Even now man does not use the possibilities of biosphere very rationally. Anthropogenic activities arising mainly from industry production is still on a larger scale influencing the environment in which we live.

The causes of environmental exploitation in the context of global trends Romančíková (2004) considers, in particular:

- causes conditioned by development,
- socio-economic causes.

As causes conditioned by the development she means:

- population growth (coupled with the increasing need for resources, food, etc.)
- concentration of population (migration, problems of large settlements, etc.)
- economic growth (associated with increasing demands of mankind)
- technical - economic impacts (eg, changes in production technology).

The society began to realize the consequences of these actions and knowledge of the above mentioned reasons, and is trying to find ways to eliminate negative effects on the environment. So we

can conclude that in the present stage of human development, which is often referred to as a knowledge-based economy, an economy based on information, the man realized the consequences of their previous actions, and the second half of the 20th century are beginning to form stronger opinions on the promotion of sustainable life – using the sources of the Earth, without compromising the needs of future generations.

As we already mentioned above, ensuring optimal quality of life of the individual oscillates between economic and ecological well-being.

Economic sustainability differs from ecological sustainability, although both try to maximize human well-being. Economic sustainability focuses on sustainable consumption (with regard to natural resources and their limitation) in relation to the production of goods and services. Ecological or environmental sustainability is aimed at maintaining "complex menu of services" of ecosystems. The valuation of these services is not always clear.

The effort to build a comprehensive sustainable development is gradually transformed into everyday economic and social life, and many companies have adopted environmental measures in their production processes, or they are trying to produce in accordance with the principles of sustainability. Cleaner technologies and environmental management systems, environmental projects, eco-labelling, and their certification are more promoted and in the modern society is prevailing the increase of environmental awareness of the population particularly through environmental education. However, in the present conditions of economic instability, it is difficult to simultaneously achieve economic and environmental sustainability.

Quality of environment – of all its components is difficult to quantify, but for this purpose various synthetic and analytical indicators have been developed to evaluate the individual components of the environment. But the quality of the environment cannot be complexly expressed only by the results obtained on the basis of one of the selected indicators. Always has to be taken into account as much as possible variable phenomena; it is necessary to monitor their development for a specific time period, since the quality of the environment is considered to be a dynamic phenomenon in space, which, although in the short term it may seem like a constant, but in the long term environment and the quality of its components changes and evolves, which is affected by the different factors and their interactions, synergy (eg. climate change, anthropogenic activity, etc.).

A necessary condition for the maintenance of quality of environment and the essential components for future generations is a concern for the environment and its protection and knowledge of the consequences of environmental damage.

Based on available data from the Statistical Office of the Slovak Republic for the period 2005 – 2010 it is possible to evaluate the amount of investments to environmental protection and operating costs on environmental protection as well as to assess the amount of benefits from environmental protection. We will evaluate the costs and benefits of environmental protection of both Slovak municipalities and businesses. (We will consider only companies with more than 20 employees.)

Table 1 Costs and benefits relating to the environmental protection (business and municipalities together) in thousands of €

Indicator		Year						Index 2010/2005
		2005	2006	2007	2008	2009	2010	
Investment in environmental protection in thousands of €		281 362	332 426	292 154	321 256	321 256	260 005	0,92
There Of	Soil and ground water protection	19 998	73 634	72 364	77 832	30 734	26 624	1,33
	Air protection	130 729	97 577	77 091	47 726	77 276	78 085	0,60
	Waste management	27 063	39 560	24 453	38 738	23 077	31 187	1,15
	Sewerage water management	69 740	102 901	112 696	147 828	134 610	106 408	1,53
	Noise and vibration elimination	814	985	1 094	2 829	5 868	9 197	11,30
	Biodiversity and landscape protection	952	4 792	765	845	598	508	0,53
	Others	32 065	12 976	3 689	5 460	7 433	7 996	0,25
Current expenses of environmental protection (in thousands of €)		501 230	772 666	579 293	479 118	448 594	474 013	0,95
There Of	Soil and ground water protection	11 450	22 062	27 126	15 267	18 229	16 433	1,44
	Air protection	101 695	164 618	89 246	60 647	49 370	47 860	0,47
	Waste management	245 174	322 782	317 583	271 918	275 540	296 367	1,21
	Sewerage water management	66 087	60 440	88 028	83 230	79 550	80 658	1,22
	Noise and vibration elimination	526	7 018	257	437	477	535	1,02
	Biodiversity and landscape protection	2 728	3 488	3 278	3 074	5 927	7 196	2,64
	Others	73 571	192 259	53 776	44 544	19 501	24 964	0,34
Returns from environmental protection (in thousands of €)		261 033	265 705	268 829	396 294	355 312	449 015	1,72
There Of	Soil and ground water protection	3 796	9 498	4 033	6 234	3 291	2 318	0,61
	Air protection	23 317	10 246	13 727	13 298	23 974	26 333	1,13
	Waste management	171 075	212 703	21 502	333 145	294 006	377 327	2,21
	Sewerage water management	53 837	27 851	29 250	36 744	30 491	39 469	0,73
	Noise and vibration elimination	C	C	C	C	C	C	C
	Biodiversity and landscape protection	72	99	1 413	945	437	649	9,01
	Others	8 934	5 305	5 368	5 888	3 067	2 881	0,32

Note: C – confidential information,

Source: Statistical Office of the Slovak Republic, <http://www.statistics.sk>

Environmental investments are generally group of investments spent directly for the purpose of environmental protection, or towards improving the quality of the environment. Amount of investment in environmental protection reached in 2010 as much as 260 005 thousand €, which in comparison to 2005 is a decrease of 8%. Partially the highest investments were made in 2010 for "sewerage water management" next was a "air protection" and "waste management." The most significant increase was in 2010 compared to 2005 recorded at the cost of investment to "noise and vibration elimination", the amount was more than tenfold.

Investments in those spheres have a longer return of investment period, but the community and businesses that have decided to invest in the mentioned areas of environmental protection should draw benefits from their implementation in the long term. It is also financing and subsequent implementation of such complex investment projects, which often companies or communities are unable to finance from its

own resources, but to co-finance activities aimed at protecting the environment - preventive investments, or investments that lead to the removal of damage and pollution of environment (Adamišin, 2008), the use of national or European funds aimed for such purposes which may have (primary or secondary effect) not only on the quality of the environment components, but the quality of the environment in the whole region. Adamišin (2008) provides some insights into the assessment of environmental investment, particularly on the economic evaluation of environmental investments, whereby he evaluates the effect of the implementation of new environmental investments into the practice as a product of economic efficiency, science and technology efficiency and effectiveness for the environment. He also states that the assessment and selection of appropriate environmental investments in economic terms is a complex set of activities.

Current costs of environmental protection consist of the sum of internal organization's costs and costs of environmental protection covered by other entities (as indicated by the Statistical Office of the Slovak Republic). Slovak Environmental Agency (SEA) defines these costs as in-house expenses, ergo the costs or particular entities related with the operation, maintenance and repair of their own equipment to protect the environment. We can divide them to the cost of labour and other operating costs. The costs also include payments for environmental protection covered by other entities, fees and charges of public authorities and organizations as well as private individuals and entrepreneurs (pollution charges, fines, penalties, license fees, etc.).

Based on the assessment presented in Table 1, we can conclude that most current costs in 2010 were spent on "waste management" the next one was "sewage water management" and "air protection" and this trend is constant throughout the period we considered. At least current costs have been spent on "noise and vibration elimination". The cost "Biodiversity and Landscape protection" was recorded the highest growth rate, when we compare 2010 and 2005, the amount of costs increased by more than 160%.

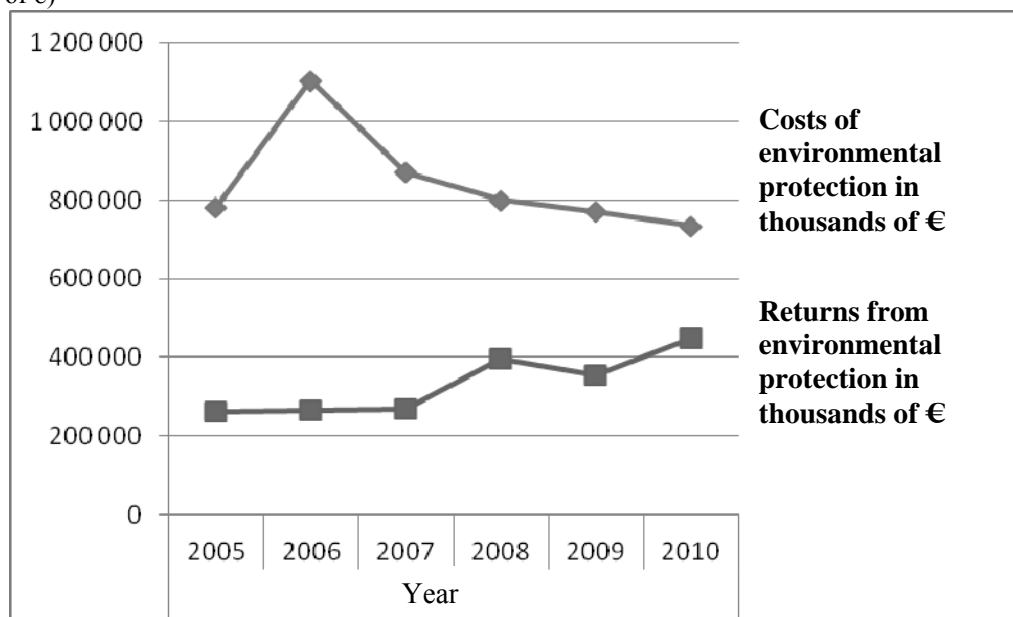
The assessment of current and investment costs of environmental protection showed that the most costs are accumulated in "waste management", "sewage water management" and "air protection". Clearer and more comprehensive picture of the impact of these activities on the environment would be given by their careful structuring (sorting, and accurate determination of what costs it is - whether it is a fine and penalty fees for licenses, or pollution charges), because the dynamics and amount of the current cost of each of these categories may have different impacts on the state and quality of the environment. For example increasing the costs of fines and penalties cannot be assessed positively, but spending more funds for e.g. the license (for cleaner technologies) can be (and are expected to) a positive impact on the quality of the components of the environment, ergo the quality of the environment as a whole.

Returns from the protection of the environment, as the SEA represents, are income to the organization gained from the sale of its products and technologies, equipment and components for environmental protection to other entities. It is mainly focused on selling technology to protect the environment, if the organization has developed such a device or technology, or purchased it with resale rights, but also includes the provision of services to protect the environment for other entities, if such action organization provides within its jurisdiction.

Table 1 indicates that the highest total returns from environmental protection were achieved in 2010. Total returns in this period had increasing growing rate, and in comparison with 2005 in 2010 they increased by more than 70%.

Again, it would be useful to know the detailed structure of returns, since some return items under certain circumstances cannot be evaluate positively (e.g. extra returns – insurance process of the harmful event). Analogous to the cost items also in return items dominate returns from the "waste management", "sewage water management" and "air protection returns." The "waste management processes", in 2010 compared to 2005 recorded nearly 120% increase, which can be evaluated positively and a slight increase was also recorded in returns from air protection. The largest growth rate was recorded in "biodiversity and landscape protection," but in other return items a decline was recorded.

Figure 1 Development rate of costs of environmental protection and the returns from environmental protection (in thousands of €)



Source: Statistical Office of the Slovak Republic, <http://www.statistics.sk>

Figure 1 shows the development rate of costs, the development rate of returns related to environmental protection. Currently, the cost of environmental protection exceed returns by nearly 300,000 thousand €, but as it is possible to predict from the graph, while maintaining the unchanged conditions we expect to reduce this difference. In 2005, the difference between costs and returns was more than 500 000 thousand € and now the difference is almost 50% lower. It should be noted that it is not at desirable all to reduce costs of environmental protection, because it can lead to the deterioration of the environment, but it is necessary to look for more effective ways to its protection.

Conclusion

In conclusion it should be noted that the quality of the environment depends on the behaviour of the individual and society as a whole to environmental conditions and state of the environment depends on the activities that are carried out in it. Therefore quality of the environment cannot be comprehensively assessed solely on the basis of the above mentioned approaches, but these assessments can be considered as "indicators" of development of quality of environment. Fines set by environmental protection authorities play a special role in evaluating the quality of the environment, which have since 2002 an increasing trend (the total amount of fines) and in 2008 reached a level of almost 1 million €, as indicated by the Statistical Office. The highest amount of fines went from the "water management" 44% of the total amount of the fines, the next was "waste management" 32% of the total amount of fines and "air protection" (15%). The lowest amount of fines occurred in the "Nature protection" (7%). To preserve the quality of the environment for future generations it is the necessity for companies to implement preventive measures and environmental standards in their business activities and to implement environmental projects so that companies, communities, and society as a whole carried out their economic activities within the principles of sustainable development.

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**6. Econometrics, Quantitative Methods
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Data Smoothing in Space

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Abstract

Noisy data of complex structure are common in social, economical, technical and scientific life. The paper proposes a way for smoothing such data enhancing the capabilities of classic regression. It is based on a new approach involving the IZA representation of polynomials as well as proper allocation of reference points. These two building elements step into the process of piecewise approximation and ought to ensure smooth transition from one segment to another which the main approximating area is divided into. To complete the task we consider two models – the sequential and the en-bloc one. While the first one approximates one segment at a time the latter approximates all segments simultaneously.

Introduction

Means of representing various kinds of data in space are commonly used these days. Whether we are talking about GoogleEarth or other applications the possibilities are endless. We can imagine many sorts of information under the word data, but in our case they are represented by points from which we create 3D graphs or other 3D objects. The point itself, as the basic construction element, is represented as a three-dimensional vector of coordinates consisting of some real numbers. We must not forget the proper coloring as well. With such apparatus we are able to depict data with various functional dependencies.

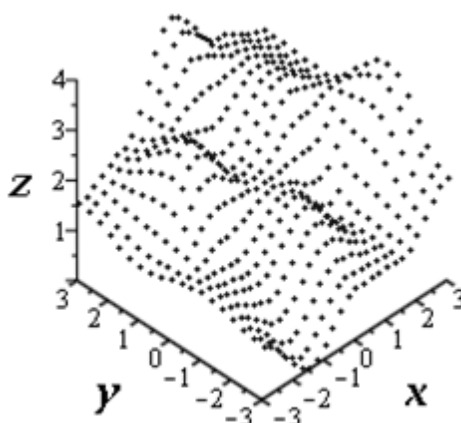


Fig. 1 Complex structured data

Data represented in Figure 1 have complex structure. To express the dependency of the third coordinate on the first two by a single function is somewhat problematic. But piecewise approximation could be a solution, when we approximate the data by parts [1, 2]. The problem in this case is to design dependencies that will allow a smooth connection between neighboring parts without gaps. This paper introduces a new approach, that is compared with the one proposed in [5].

But first we have to take a look at theoretical background the backbone of which is formed by the IZA representation of polynomials. Disecting this representation in Chapter 2 we obtain construction elements for creating the two part smoothing scheme. As it has already been mentioned, there are two approaches for constructing such scheme: the sequential one (on-line smoothing) described briefly in Chapter 3 but one can find more about it in [5] and the en bloc one (off-line smoothing) being the content of Chapter 4.

Theoretical background

This chapter is devoted to theory behind constructing the two part scheme. Let us have the following polynomial of two variables x and y at our disposal

$$P_{p,q}(x,y) = \sum_{i=0}^p \sum_{j=0}^q a_{ij} x^i y^j.$$

First we introduce the IZA representation of this polynomial and then an assertion claiming its interpolation component can be expressed as a product of vectors of base functions and parameters. These alternative notations give us some flexibility during the scheme construction. Now, the IZA representation of polynomials follows in a form of an equation. More details regarding this matter can be found in [3-5].

$$P_{p,q}(x,y) = I_p^{\mu,\nu}(x,y) + \underbrace{z_4^{\nu}(y)A_{q-4}^{\nu}(x,y) + z_4^{\mu}(x)A_{p-4}^{\mu}(x,y) + A_{p-4,q-4}^{\mu,\nu}(x,y)}_Z, \quad (1)$$

Since the incomplete interpolation $I_p^{\mu,\nu}(x,y)$ plays an important role in securing the smooth transition between neighboring segments, we are going to represent it in the next assertion as sum of four scalar products of basis functions and function values $I = I_{LB} + I_{RB} + I_{RT} + I_{LT}$, where L(ef) and R(ight) refer to the first and last parameters of μ_0, μ_1 a μ_2, μ_3 , and similarly B(ottom) and T(op) represent the first and last parameters of ν_0, ν_1 a ν_2, ν_3 .

Assertion 1

The incomplete interpolation polynomial $I_p^{\mu,\nu}(x,y)$ can be defined in the following form

$$I_p^{\mu,\nu}(x,y) = I_{P, LB}^{\mu,\nu} + I_{P, RB}^{\mu,\nu} + I_{P, RT}^{\mu,\nu} + I_{P, LT}^{\mu,\nu},$$

where (for the sake of transparency $I_{P, LB}^{\mu,\nu}(x,y) = q_{LB}^{\mu,\nu} \cdot \varphi_{P, LB}$ will be changed to $I_{LB}(x,y) = q_{LB} \cdot \varphi_{LB}$; but understandably in case they are needed more indices will be used)

$$I_{LB} = q_{LB} \cdot \varphi_{LB}, \quad I_{RB} = q_{RB} \cdot \varphi_{RB}, \quad I_{RT} = q_{RT} \cdot \varphi_{RT}, \quad I_{LT} = q_{LT} \cdot \varphi_{LT}$$

and vectors of basis functions and function values are represented by equations

$$\begin{aligned} q_{LB} &= [p(x, \mu_0) \cdot p(y, \nu_0), p(x, \mu_1) \cdot p(y, \nu_0), p(x, \mu_1) \cdot p(y, \nu_1), p(x, \mu_0) \cdot p(y, \nu_1)], \\ q_{RB} &= [p(x, \mu_2) \cdot p(y, \nu_0), p(x, \mu_3) \cdot p(y, \nu_0), p(x, \mu_3) \cdot p(y, \nu_1), p(x, \mu_2) \cdot p(y, \nu_1)], \\ q_{RT} &= [p(x, \mu_2) \cdot p(y, \nu_2), p(x, \mu_3) \cdot p(y, \nu_2), p(x, \mu_3) \cdot p(y, \nu_3), p(x, \mu_2) \cdot p(y, \nu_3)], \\ q_{LT} &= [p(x, \mu_0) \cdot p(y, \nu_2), p(x, \mu_1) \cdot p(y, \nu_2), p(x, \mu_1) \cdot p(y, \nu_3), p(x, \mu_0) \cdot p(y, \nu_3)], \\ \varphi_{LB} &= [F(\mu_0, \nu_0), F(\mu_1, \nu_0), F(\mu_1, \nu_1), F(\mu_0, \nu_1)], \\ \varphi_{RB} &= [F(\mu_2, \nu_0), F(\mu_3, \nu_0), F(\mu_3, \nu_1), F(\mu_2, \nu_1)], \\ \varphi_{RT} &= [F(\mu_2, \nu_2), F(\mu_3, \nu_2), F(\mu_3, \nu_3), F(\mu_2, \nu_3)], \\ \varphi_{LT} &= [F(\mu_0, \nu_2), F(\mu_1, \nu_2), F(\mu_1, \nu_3), F(\mu_0, \nu_3)]. \end{aligned}$$

Such prescription gives us great flexibility in accomodating the interpolation component to our specific needs.

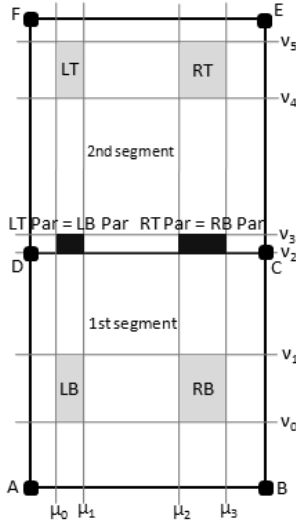


Fig. 2 Shared parameters in segment approximation

On-line smoothing

In this chapter we discuss the way of constructing a two part smoothing scheme using sequential (on-line) approach for two segments defined by knots $[A,B,C,D]$ and $[C,D,E,F]$. As the name suggests, we will approximate one segment at a time. After the first segment has been approximated the second one can be connected from any side. Figure 2 depicts the case when the second segment connects from the top. Hereafter we describe the connection from the right. In the abstract we mentioned the proper allocation of reference points, finally this matter gets concluded here and the next chapter. Since each segment has 16 reference points, grouped into four packs LT, RT, LB, RB by four points, it logically means that we have 32 of them at our disposal. But as Figure 2 suggests we are not going to need them all because 8 parameters in the connection area are shared. When it comes to placing the points, there are almost no constraints or restrictions except for the ones in the connection area which have to be placed close to each other along the x- axis.

So let us consider two polynomials of degree $p=4$ and $q=3$ written in the following IZA form

$$\begin{aligned} F(x, y) &= I_{F,L}^{\mu_a, \nu}(x, y) + I_{F,R}^{\mu_a, \nu}(\mathbf{x}, \mathbf{y}) + w_F^{\mu_a, \nu} \cdot \beta_F, \\ G(x, y) &= I_{F,L}^{\mu_b, \nu}(\mathbf{x}, \mathbf{y}) + I_{G,R}^{\mu_b, \nu}(x, y) + w_G^{\mu_b, \nu} \cdot \beta_G \end{aligned} \quad (2)$$

with 24 refpoints based on $\nu_a = \nu_b = (\nu_0, \nu_1, \nu_2, \nu_3)$, $\mu_a = (\mu_0, \mu_1, \mu_2, \mu_3)$, $\mu_b = (\mu_2, \mu_3, \mu_4, \mu_5)$ and $\mu_3 = \mu_2 + \tau_x$, where τ_x is a small positive real number, interpolation components I we get from Assertion 1,

$$\begin{aligned} w_F^{\mu_a, \nu} &= [z_4^{\mu_a}(x), z_4^{\mu_a}(x) \cdot y, z_4^{\mu_a}(x) \cdot y^2, z_4^{\mu_a}(x) \cdot y^3], \beta_F = (a_{4,0}, a_{4,1}, a_{4,2}, a_{4,3}) \\ &\text{and} \\ w_G^{\mu_b, \nu} &= [z_4^{\mu_b}(x), z_4^{\mu_b}(x) \cdot y, z_4^{\mu_b}(x) \cdot y^2, z_4^{\mu_b}(x) \cdot y^3], \beta_G = (b_{4,0}, b_{4,1}, b_{4,2}, b_{4,3}). \end{aligned}$$

It can be seen from μ_a and μ_b , that μ_2 and μ_3 are shared and the first interpolation component of $G(x, y)$ relies on function values of the second interpolation component of F in μ_b . From this and the close proximity of μ_2, μ_3 the quasi smooth connection of these two polynomials implies.

Based on (3) we define the two part model over segments $S_1 = [u_0, u_1] \times [v_0, v_1]$ and $S_2 = [u_1, u_2] \times [v_0, v_1]$ as follows:

$$\begin{aligned} \tilde{F}(x, y) &= I_{F,L}^{\mu_a, \nu}(x, y) + I_{F,R}^{\mu_a, \nu}(\mathbf{x}, \mathbf{y}) + w_F^{\mu_a, \nu} \cdot \beta_F + \varepsilon_F, \\ \tilde{G}(x, y) &= I_{F,L}^{\mu_b, \nu}(\mathbf{x}, \mathbf{y}) + I_{G,R}^{\mu_b, \nu}(x, y) + w_G^{\mu_b, \nu} \cdot \beta_G + \varepsilon_G \end{aligned} \quad (3)$$

The smooth connection is in $\mu_2 = u_1$, ε_F and ε_G are uncorrelated error sequences and elements of μ_a, μ_b are from the interval $[u_0, u_1]$, elements of ν from interval $[v_0, v_1]$ and $\mu_a = (\mu_0, \mu_1, \mu_2, \mu_3)$, $\mu_b = (\mu_2, \mu_3, \mu_4, \mu_5)$. Let us consider M and N measurements $\{[\tilde{z}_i, x_i, y_i], i = \overline{1, M}, \tilde{z}_i = \tilde{F}(x_i, y_i)\}$

and $\{[\tilde{z}_i, x_i, y_i], i = \overline{1, N}, \tilde{z}_i = \tilde{G}(x_i, y_i)\}$. The approximants $\hat{F}(x, y)$ and $\hat{G}(x, y)$ we get sequentially. The first one $\hat{F}(x, y)$ of S_1 is approximated using regression independently from the data of $S_2 - 2$ interpolation components and a vector β_F mean 16 + 4 parameters to estimate. As for $\hat{G}(x, y)$ after we got $\hat{F}(x, y)$ we are considering $I_{F,L}^{\mu_b, \nu}(\mathbf{x}, \mathbf{y})$ instead of $I_{F,L}^{\mu_a, \nu}(\mathbf{x}, \mathbf{y})$, that means 8 parameters we already

have. So it remains to estimate the remaining $8 + 4$ parameters for $I_{G,R}^{\mu_b, \nu}(x, y)$ and β_G . From the second part of model (3) we obtain for $i = \overline{1, N}$

$$\tilde{z}_i = \tilde{G}(x_i, y_i) - I_{\hat{F}, L}^{\mu_b, \nu}(x_i, y_i) = I_{G, R}^{\mu_b, \nu}(x_i, y_i) + w_{G, B}^{\mu_b, \nu} \cdot \beta_G |_{x_i, y_i},$$

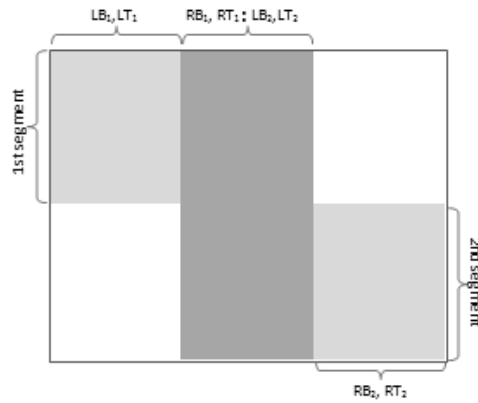
or in a matrix form $\tilde{Z} = X\beta$. From there we get the final parameter estimate $\hat{\beta} = (X^T X)^{-1} X^T \tilde{Z}$.

Off- line smoothing

Unlike the sequential approach, where we are approximating one segment at a time, in the en bloc approach all segments are approximated simultaneously. The IZA representation of polynomials and reference points play the same role as previously. However they are estimated differently. The common reference points ensure smooth transition between neighboring segments. In the sequential approach the common points are estimated with data from one segment only. The key difference in en bloc approach is that the eight common parameters/function values are estimated more precisely thanks to data from both segments in a model matrix.

Figure 4 shows the structure of the model matrix X . Notice that RB_1, RT_1 and LB_2, LT_2 are estimated based on both segments. The white area contains zeros.

Fig. 3 Model matrix X



In the last chapter we show that the en bloc approach performs better in terms of accuracy using the Sum of Squared Errors (SSE) indicator. The lower the SSE the more precise is the approximation.

Example

The goal of this chapter is to compare the two piecewise approaches to smooth noisy data described in previous chapters on an example. We show a simple way how to leverage the IZA representation to data generation as well.

Data generation

The initial configuration is not too different from the one in Chapter 3 that means two segments

$$S_1 = [u_0, u_1] \times [v_0, v_1] \text{ and } S_2 = [u_1, u_2] \times [v_0, v_1].$$

To generate data for two segments, first of all we need two appropriate functions that have a smooth transition at the common border. It can be easily accomplished thanks to IZA. For the four reference points of every pack we define a common value. The construction is based on Assertion 1. For our two segments we can have the following configuration, see Figure 4.

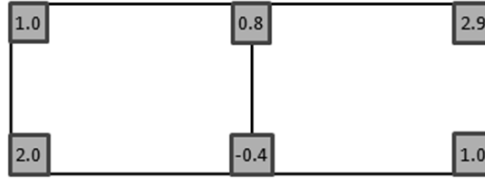


Fig. 4 Z-coordinates for function generation

The first segment will have z coordinates 1,0.8,2,-0.4, and the second one 0.8,2.9,-0.4,1. The functions for these segments we get as sums of each part of the interpolation component I , namely I_{LT} , I_{RT} , I_{LB} , and I_{RB} . The two functions are depicted in Figure 5a. As for the intervals used, $S_1 = [-2,0] \times [-3,3]$ and $S_2 = [0,2] \times [-3,3]$.

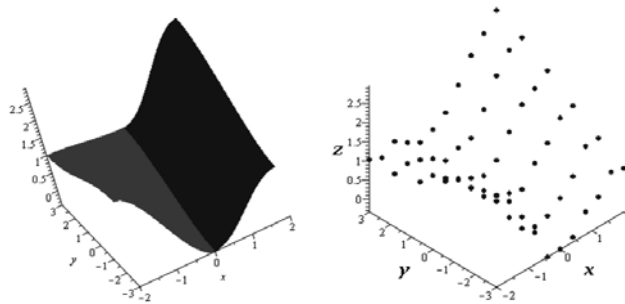


Fig. 5 Generating functions and noisy data according to them

Based on these functions the noisy data of Figure 5b are generated. The number of points for each segment is a matter of user preference, but in general the more points for one segment in the beginning, the better result in the final approximation.

Approximation

So, Figure 5b represents the input for approximation. The first task at hand is determination of the point count for each segment. Let M , N determine a grid of points for each segment. In order to eliminate the occurrence of redundant data we are going to follow the pattern: the very first segment is obviously going to be determined by the $M \times N$ grid; the other ones in the first row will be determined by an $M \times (N-1)$ grid; the first column of segments will be assessed by an $(M-1) \times N$ grid and the rest of them by an $(M-1) \times (N-1)$ grid. Let us assume, that $M = 6$, $N = 6$, and the number of segments is identical to the aforementioned example. Then the point count should be 36, 30 for the only row.

After determination of the point count, the task is to assign exact coordinates to these points. Once that's done the resulting triples are going to participate in the construction of the model matrix X (the first two coordinates are involved), as well as the final parameter estimation where the last coordinate is multiplied by the model matrix according to the well known formula:

$$\hat{\beta} = (X^T X)^{-1} \cdot X^T \cdot Z.$$

The final approximation of each segment is done by summing the product of basis functions and the respected parameter from $\hat{\beta}$. The result of point count and approximation as well can be seen in Figure 6a.

Figure 6b is a depiction of sequential approach ran on the same set of points. One can notice the difference in accuracy at first glance – see the points underneath the successive approximant, but for correctness the two residuals are provided in caption, too.

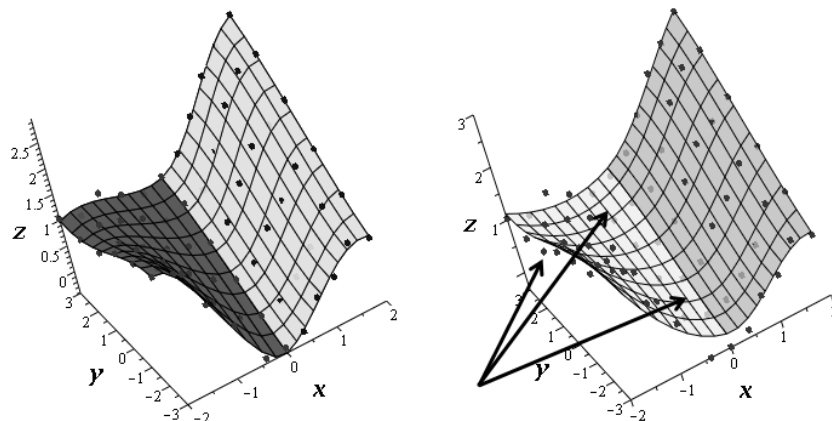


Fig. 6 a) En bloc approximation, SSE = 0.3022178224 b) Sequential approximation, SSE = 3.105650955

Conclusion

In this paper we presented solutions to the problem of smoothing noisy data of complex structure. We considered two approaches, the on-line and off-line one, showed their theoretical background, their principles of operation and results on practical example. According to the SSE indicator we used we came to a conclusion that our assertion from the introduction, the en bloc approach estimates more precisely, has been confirmed.

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Exact Solution of a Wetting System with Phase Transition

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Abstract

An exact solution of a linear system is determined. The system describes the wetting process in porous material with phase transition. It consists of three equations. The first equation is a diffusion equation for liquid moisture concentration w_l ; the second one is a diffusion equation for saturated vapor concentration w_v ; both equations are tied with the rate I of change of moisture concentration that arises in the pores due to the evaporation or condensation. The third equation is algebraic one and describes two complementary parts of the pores volume. The system is solved by means of the variables separation method. The obtained analytical solutions are programmed and displayed in figures.

Key words

wetting, liquid moisture, saturated vapor, variable separation method

Introduction

At present, the energy saving management and closely related the environmental management play a vital role in thermal insulation of buildings. One of the main risks in this area is the presence of moisture in the porous building material used.

In the past, several authors have studied the problem of moisture transfer in porous media. Let us mention at least the following works of Lykov [14], [15], de Vries [6], [16], Glasser [7], Vasilieva [24], Reeves and Celia [20], Reshetin and Orlov [21], Korjenic, Teblich and Bednar [10], [11], and many others [1], [2], [3], [4], [5], [8], [9], [17], [18], [19], [22]. In some of these works the moisture is viewed as a set of water molecules regardless of their phase state. The reason is that even new experimental methods for moisture detection like neutron radiography method [17] or magnetic resonance method [23] cannot distinguish between different phases. In reality, different phases of water in the pores of material are present and should be considered.

The present work provides moisture transfer model, in which the moisture is subdivided into a liquid component (water) and saturated vapor (water vapor). This subdivision has a practical significance in the fact that during the wetting of a dry sample a condensation occurs in the pores of the material as well as diffusion of condensed vapor from the material surface where the vapor condensates into the internal pores of material. Furthermore, the model describes not only the condensation of vapor into the water but also the evaporation of the water to saturated vapor in the pores of material. Next, we suppose a macroscopic isothermal process of wetting when wetting rates are rather low for imparting too large temperature gradients within the material.

In this work we formulate a problem of wetting of a dry sample and looking for the exact solution using the method of separation of variables and the method of constant variation. The received formulas of exact solution are programmed and displayed in the corresponding figures which allow us to conclude a correctness of the proposed model.

Model

Let us consider a dry sample consisting of a solid phase while in the pores of the material some saturated vapor and no liquid are present. Let us introduce the function of the concentration of liquid $w_l(x, t)$, the function of the concentration of saturated vapor $w_v(x, t)$, and the source function $I(x, t)$ characterizing the rate of a phase transition which takes positive values if the liquid is evaporating and negative values if saturated vapor is condensed into liquid, while x is independent spatial variable and t is independent time variable. Let us denote Π the constant pores volume, ρ_l and ρ_v the density and the diffusion coefficients for the liquid phase ($i = l$) and for the saturated vapor phase ($i = v$). We shall assume that all these coefficients are positive and that $\rho_l > \rho_v$.

Then we can describe the model of wetting of a dry sample by the following system of three equations

$$\frac{\partial w_l}{\partial t} = \frac{\partial}{\partial x} \left(D_l \frac{\partial w_l}{\partial x} \right) - I, 0 < x < 1, t > 0, \quad (1)$$

$$\frac{\partial w_v}{\partial t} = \frac{\partial}{\partial x} \left(D_v \frac{\partial w_v}{\partial x} \right) + I, 0 < x < 1, t > 0, \quad (2)$$

$$\Pi = \frac{w_l}{q_l} + \frac{w_v}{q_v}, 0 \leq x \leq 1, t \geq 0. \quad (3)$$

The equation (1) describes the liquid diffusion with the diffusion coefficient D_l , the equation (2) describes the saturated vapor diffusion with the diffusion coefficient D_v , and these equations are tied with the function I , ($I > 0$ is a source of the vapor, resp. $I < 0$ is a source of liquid). The equation (3) can be understood so that the pore volume consists of two complementary volumes and namely the liquid volume and the saturated vapor volume. This equation was used also by other authors, e.g. see the works [21] and [24].

Finally, in order to ensure the uniqueness of the solution of (1) – (3) and to simulate the conditions of a wetting process we shall formulate the initial condition

$$w_l(x, 0) = 0, 0 \leq x \leq 1, \quad (4)$$

which express that at the process beginning the pores are fulfilled with the saturated vapor and the liquid is not present, and the boundary conditions

$$\frac{\partial w_l}{\partial x}(0, t) = 0, t > 0, \quad (5)$$

$$w_l(1, t) = \Pi q_l (1 - e^{-\alpha t}), t > 0, \quad (6)$$

where $\alpha \gg 1$. The condition (5) means that the left end of the sample is isolated and the condition (6) means that after a relative short time the volume of the liquid in the right end of the sample is increasing to the maximal value Πq_l .

Solution

We shall solve the problem (1)-(6) in following steps.

1. We shall express unknown functions w_v, I by the function w_l . Multiplying the equation (1) by $1/q_l$ and (2) by $1/q_v$ and adding together so arranged equations we get

$$\frac{\partial}{\partial t} \left(\frac{w_l}{q_l} + \frac{w_v}{q_v} \right) = \frac{D_l}{q_l} \frac{\partial^2 w_l}{\partial x^2} + \frac{D_v}{q_v} \frac{\partial^2 w_v}{\partial x^2} - I \left(\frac{1}{q_l} - \frac{1}{q_v} \right), 0 < x < 1, t > 0.$$

Using the fact that Π is a constant than by (3) the left side of this equality is equal to zero. After a little arrangement we obtain

$$I = - \frac{q_v(D_l - D_v)}{q_l - q_v} \frac{\partial^2 w_l}{\partial x^2}, 0 < x < 1, t > 0. \quad (7)$$

From the equation (3) it is clear that

$$w_v = q_v \left(\Pi - \frac{w_l}{q_l} \right), 0 \leq x \leq 1, t \geq 0. \quad (8)$$

Substituting (8) into (1) we can write this first diffusion equation in the form

$$\frac{\partial w_l}{\partial t} = D_v \frac{\partial^2 w_l}{\partial x^2}, 0 < x < 1, t > 0, \quad (9)$$

where

$$D_0 = \frac{q_1 D_1 - q_2 D_2}{q_1 - q_2}. \quad (10)$$

2. Instead the unknown function w_1 we shall introduce a new one w by the following expression

$$w_1(x, t) = w(x, t) + \Pi_{q_1}(1 - e^{-\alpha t}), \quad 0 \leq x \leq 1, t \geq 0. \quad (11)$$

Then it is easy to convince that this new function satisfies the equation

$$\frac{\partial w}{\partial t} = D_0 \frac{\partial^2 w}{\partial x^2} - \Pi_{q_1} \alpha e^{-\alpha t}, \quad 0 < x < 1, t > 0 \quad (12)$$

with the initial and the boundary conditions

$$w(x, 0) = 0, \quad 0 < x < 1, t > 0, \quad (13)$$

$$\frac{\partial w}{\partial x}(0, t) = 0, \quad t > 0, \quad (14)$$

$$w(1, t) = 0, \quad t > 0. \quad (15)$$

3. The task (12)-(15) we shall solve applying the separation of variables method. If we analyze the differential operator $\Phi: X \mapsto X''$ on the set of functions $X \in C^2(0, 1)$ satisfying $X'(0) = X(1) = 0$ we find that it has negative eigenvalues and the corresponding eigenfunctions

$$\lambda_k = -\left[\frac{(2k-1)\pi}{2}\right]^2, \quad X_k(x) = \cos \frac{(2k-1)\pi x}{2}, \quad k = 1, 2, 3, \dots \quad (16)$$

forming the complete orthogonal system. So we shall look for the solution of (12)-(15) in the form

$$w(x, t) = \sum_{k=1}^{\infty} T_k(t) X_k(x), \quad \text{t.t.}$$

$$w(x, t) = \sum_{k=1}^{\infty} T_k(t) \cos \frac{(2k-1)\pi x}{2}, \quad 0 \leq x \leq 1, t \geq 0. \quad (17)$$

We can easily verify that such function satisfies the boundary conditions (14) and (15). Writing the number 1 in the form

$$1 = \sum_{k=1}^{\infty} \frac{4(-1)^{k-1}}{(2k-1)\pi} \cos \frac{(2k-1)\pi x}{2}, \quad 0 < x < 1 \quad (18)$$

and substituting (17) and (18) to the equation (12) after a little arrangement we obtain the equation

$$0 = \sum_{k=1}^{\infty} \left\{ T_k'(t) + D_0 \left[\frac{(2k-1)\pi}{2} \right]^2 T_k(t) + \Pi_{q_1} \alpha e^{-\alpha t} \frac{4(-1)^{k-1}}{(2k-1)\pi} \right\} X_k(x) \quad (19)$$

for $0 < x < 1, t > 0$. The equation (19) and the initial condition (13) due to orthogonality of the eigenfunctions X_k lead to the system of linear equations

$$T'_k(\tau) + D_0 \left[\frac{(2k-1)\pi}{2} \right]^2 T_k(\tau) + \Pi q_i \alpha e^{-\alpha \tau} \frac{4(-1)^{k-1}}{(2k-1)\pi} = 0, \quad T_k(0) = 0 \quad (20)$$

for $\tau \geq 0, k = 1, 2, 3, \dots$. Solving (20) using the classical integration and constant variation method we obtain

$$T_k(\tau) = \frac{4\Pi q_i \alpha (-1)^{k-1}}{(2k-1)\pi \left\{ D_0 \left[\frac{(2k-1)\pi}{2} \right]^2 - \alpha \right\}} \cdot \left\{ e^{-D_0 \left[\frac{(2k-1)\pi}{2} \right]^2 \tau} - e^{-\alpha \tau} \right\} \quad (21)$$

for $\tau \geq 0, k = 1, 2, 3, \dots$.

4. Finally, using (3) and equalities (11), (17) and the fact that $X''_k = \lambda_k X_k$ we obtain the exact solution of the problem (1)-(6)

$$w_i(x, \tau) = \sum_{k=1}^{\infty} T_k(\tau) X_k(x) + \Pi q_i (1 - e^{-\alpha \tau}), \quad (22)$$

$$w_v(x, \tau) = q_v \left(\Pi - \frac{w_i(x, \tau)}{q_i} \right), \quad (23)$$

$$I(x, \tau) = -\frac{q_v(D_i - D_v)}{q_i - q_v} \sum_{k=1}^{\infty} \lambda_k T_k(\tau) X_k(x) \quad (24)$$

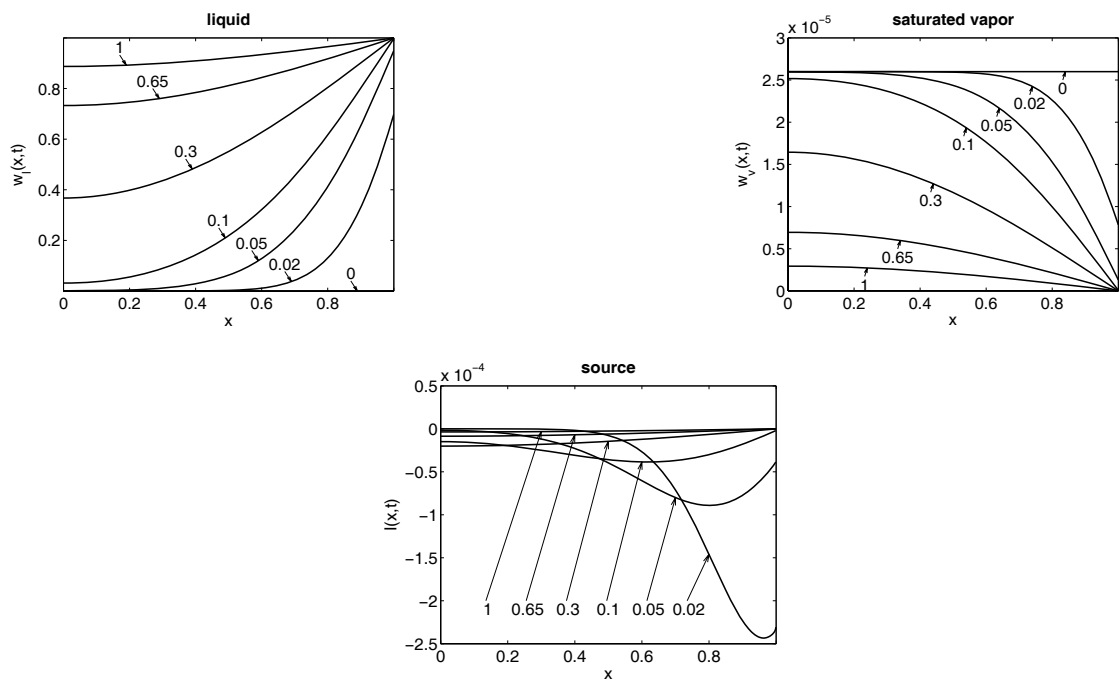
for $0 \leq x \leq 1, \tau \geq 0$, where $\lambda_k, X_k(x), T_k(\tau)$ are given by (16) and (21).

Summary

Relations (22), (23), and (24) we used to calculate the curves of the functions $w_i(x, \tau), w_v(x, \tau), I(x, \tau)$ at the time moments 0, 0.02, 0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10, 20 corresponding to the state of the sample at 0, 0.4, 1, 6, 13 and 20 days from the beginning of the wetting process. We have made calculations for the following parameter values: $\Pi = 0.2, q_i = 5, q_v = 0.00013, D_i = 1, D_v = 0.5, v_0 = 0.019645, \alpha = 60$. In doing so, we $\sum_{k=1}^{\infty}$ approximately replaced by $\sum_{k=1}^N$ with a sufficiently large N (we have used $N = 1000$).

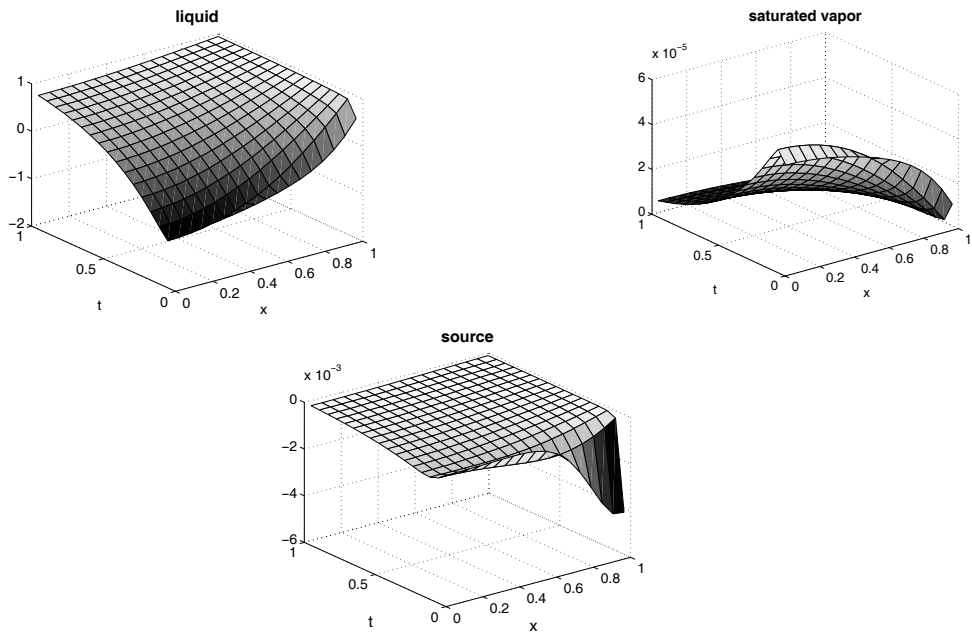
The results are shown graphically in Fig. 1. and in 3D graphics in Fig. 2. We can see that the profiles of water concentration w_i are successively increasing while the profiles of water vapor concentration w_v are successively decreasing. The profiles of the source function I at the beginning of the process are rapidly decreasing and after they are slowly increasing. The obtained exact solution (24), (25), and (26) adequately reflects the wetting process with phase transition. Founded exact solution brings knowledge about the process of wetting of buildings materials. This in turn allows a more precise formulation of the recalculation of the thickness of the insulating material for the optimal management of the cost of its acquisition.

Fig. 1 Solution obtained for liquid w_l and saturated vapor w_v concentration, and for source function I .



Source: Own elaboration

Fig. 2 Solution obtained for water w_l and water vapor w_v concentration, and for source function I in 3D graphics.



Source: own elaboration

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Calculation of the Moisture Transfer for Coupled Room and Building Components

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Abstract

To model the moisture behaviour of fibrous materials, a model was developed that can illustrate both the microscopic and the macroscopic hysteresis of the moisture storage and transport processes. The necessary parameters for the model have been obtained using measurements from a number of different materials that were used as humidity buffers. Specific equipment to measure humidity was constructed, tested, and used over a very long period of time, during which the very precise absorption and emission of moisture could be measured from sheets of construction materials. The calculations using the developed model showed very good agreement with the measurements. In addition to the components performance (material characteristics) it is necessary to know the properties the whole room/building, taking into account various uses. For the validation of coupled room and building component simulations, an analytical solution of this unsteady problem is developed and presented in this paper.

Key words

Moisture transport, Room model, analytical solution

Introduction

The indoor climate condition of a room is a result of the heat and mass flows within the building and between the surrounding environment and the building. Heat and moisture transport in building components is very important for the functionality and durability of buildings. The energy demand, the comfort of the indoor climate, the moisture conditions of the building components, the risk of mold and many other building physics issues are connected to the heat and moisture interaction of the outdoor climate, indoor climate, the components and the use of rooms.

It is not always possible to decouple the component behavior from climate, where climate is defined as a boundary condition. In the case of high component humidity, the indoor air is influenced by the moisture release of the surfaces and vice versa affecting the indoor climate the moisture release of the building components. Many researchers deal with this topic and try to develop models with higher accuracy and higher specificity to single out targeted aspects. In [3], a coupled heat and moisture transfer model in building envelopes and indoor air was developed. With the addition of new literature data and available field generated monitored data, a simplified model for the wall air cavity ventilation was in [4] developed. In [5] showed that the use of hygroscopic, wooden finishing materials improved indoor climate, comfort and perceived air quality in four different climates. In order to better describe hygroscopic materials, a method to search for the moisture transfer coefficient function, $D(w,t)$, is presented in [6] for the first time in the form of the sum of power and the exponential function which depends on the moisture concentration, w . The results of [7] shows that it may be possible to reduce heating and cooling energy consumption by up to 5% and 30%, respectively, when applying hygroscopic materials with well controlled HVAC systems.

Additional mostly unknown parameters include the moisture buffering properties of home furnishings and the humidity released by plants, which in turn represents heat removal.

Other aspects that should be investigated in relation to indoor climate are the air flow distributions within a room, solar irradiation conditions, daylighting influence amongst others. Publication [8] reviews the most recent results regarding healthy buildings: predicting and validating the performance of dynamic daylighting controls. The aim of our investigations was to develop more simplified models that can be integrated into the energy certification program and to reduce energy consumption for humidification and dehumidification.

The simulation models for predicting room air humidity from the research framework of IEA Annex 41 [9] have been used. Our goal was to develop a balanced model that fits into the computing scheme of the energy certificate.

Within a funded project with the goal of "strategic minimization of energy demand for humidification and dehumidification using moisture buffering, air volume control strategies and moisture recovery" all

these factors were determined from measurements, validated by simulations and some simplified models were developed. Based on experimental measurements and the results of several simulations, the effect of changing the ventilation rate, the heating strategy or the available hygroscopic material was assessed in [1]. In the course of this investigation the simulation results were validated using the measurements from a real dwelling. In addition, several alternatives were compared to demonstrate several ways by which the occupants themselves could adjust the indoor climate of their residences.

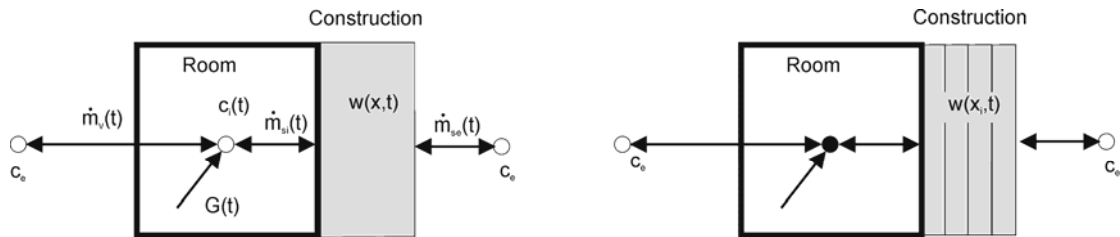
The second part the investigation presented in [2] shows the material characteristics which regulate the storage and transport of moisture in a material and thus determine the moisture buffering capacity of a material. A model was developed to replicate the moisture behaviour of fibrous insulation materials to show both the microscopic and macroscopic hysteresis of the moisture buffer and moisture transport processes [2].

This paper focuses on the moisture storage and transport in both the room air and the building envelope. To solve this unsteady problem, an analytical solution for coupled room and building component simulations was developed. The hygric behaviour of a room was also simulated by means of a simulation model. The aim of the model was to gain insight into the effect of buffering materials and ventilation rate on the indoor climate of a room, and especially on the humidity of the indoor air.

The calculations were validated using appropriate measuring rooms. A specially equipped measuring room was created for this purpose in which the building component properties, moisture loads and air exchange rate are precisely defined. Moisture buffering surface panels were chosen not only for increasing the moisture buffering but also for acoustics. Since room acoustics are important, the two functions should be combined in a single material. Wood fiberboards combine both functions and are presented here.

Room model; Mathematic formulation of a validation example

Fig.1 schematic representation of the coupled room building component: model (left); numerical discretization (right)



An analytical solution of an unsteady problem was developed to validate coupled room and building component simulations and is discussed in the following chapters. A number of simplified assumptions are needed to solve a problem analytically. The problem is formulated and then is solved using the Fourier analysis as seen below.

The water vapour in the temperature and humidity range is of interest here; it can be assumed that the state variables are connected by the ideal gas law.

$$p = c_v \cdot R_D \cdot T \quad R_D = 461.5 \frac{\text{J}}{\text{kgK}} \quad (\text{gas constant}) \quad (1)$$

The convective exchange of moisture (in kg/s) can be described with the help of the absolute humidity, the air exchange rate or the volume flow:

$$\dot{m}_v(t) = n \cdot V \cdot (c_e - c_i) = R_a \cdot (c_e - c_i) \quad (2)$$

- n air change rate in h^{-1}
- V room volume in m^3
- c_e outdoor air moisture concentration in kg/m^3
- c_i room air moisture concentration in kg/m^3
- R_a air flow rate in m^3/s

The moisture exchange with the building components (kg/s) can be described using the moisture transfer coefficient and the difference between the moisture content at the component surface and in the indoor air.

$$m_s(t) = A \cdot \beta_{pi} \cdot R_D \cdot T \cdot (c_i - c) = A \cdot \beta_i \cdot (c_i - c) \quad (3)$$

- A surface of the considered construction element in m²
 β_{pi} moisture transfer coefficient of the thin layer of air near the construction element in kg/m²·s·Pa
 R_D gas constant = 461.52 J/kg·K
T room air temperature in K
c construction element moisture concentration in kg/m³

Using the transport terms (2) and (3), the moisture balance of the room can be categorised together with the moisture production rate:

$$m_v + G - m_s = V \frac{\partial c_i}{\partial t} \quad (4)$$

- G moisture production in kg/s

The differential equation for moisture storage and moisture transport in the building component is a result of the balanced equation for humidity and the moisture transfer by diffusion. To formulate an analytically solvable problem, a linear approach is chosen for the sorption isotherms. The sorption moisture content is therefore assumed as a function of relative humidity.

$$\frac{\partial w}{\partial x} = \delta_v \cdot \frac{\partial c}{\partial x} \quad w = \zeta \cdot \varphi = \frac{\zeta}{c_{sat}} \cdot c \quad (5)$$

- w building construction moisture content in kg/m³
 δ_v water vapour permeability in kg/m·s·Pa
j relative humidity
z Moisture capacity in kg/m³

The boundary condition and therefore the coupling to the room ($x = 0$) or to the outside air ($x = L$) can be described by the following equation:

$$\beta_i \cdot (c_i - c(0, t)) = -\delta_v \left. \frac{\partial c}{\partial x} \right|_{x=0} \quad (6)$$

$$\beta_e \cdot (c_e - c(L, t)) = \delta_v \left. \frac{\partial c}{\partial x} \right|_{x=L} \quad (7)$$

For the validation example, the volume and the building component surface are assumed as follows:

$$V = 6 \cdot 8 \cdot 2.7 \text{ m}^3 = 129.6 \text{ m}^3$$

$$A = 6 \cdot 2.7 \cdot 2 + 8 \cdot 2.7 \cdot 2 + 6 \cdot 8 \cdot 2 \text{ m}^2 = 171.6 \text{ m}^2$$

The air exchange rate is assumed to be constant:

$$n = 0.5 \text{ h}^{-1}$$

The moisture production in a room is generated with a square pulse,

$$G(t) = \begin{cases} G_0 & 09:00 - 17:00 \\ 0 & 17:00 - 09:00 \end{cases} = G_0 \cdot (u(t - (9h + m \cdot 24h)) - u(t - (17h + m \cdot 24h))) \quad (8)$$

where $u(t)$ is the step function, $G_0 = 0.5 \text{ kg/h}$ and m an integer from 0 to ∞ .

The temperature and the outside air conditions are assumed to be:

$$\vartheta_e = \vartheta_i = \vartheta(x, t) = 20^\circ\text{C} \quad p_{sat}(\vartheta_e) = 2342 \text{ Pa}$$

$$\varphi_e = 0.3 \quad c_e = 5.193 \text{ gm}^{-3}$$

The daily average value of indoor air humidity is:

$$\bar{c}_i = c_e + \frac{\bar{G}}{R_a} = 7.765 \text{ gm}^{-3} \quad (9)$$

$$\bar{\varphi}_i = 44.858 \%$$

The moisture transfer coefficients are assumed to be standard values:

$$\beta_{p,i} = \frac{1}{5 \cdot 10^7} \frac{\text{kg}}{\text{m}^2 \text{ s Pa}} \quad \beta_{p,e} = \frac{1}{1.25 \cdot 10^7} \frac{\text{kg}}{\text{m}^2 \text{ s Pa}} \quad (10)$$

Moisture capacity and density are based on the typical material parameters of porous concrete for water vapour permeability:

$$\delta_p = 3 \cdot 10^{-11} \frac{\text{kg}}{\text{m s Pa}} \quad \frac{dw}{d\varphi} = 42.965 \frac{\text{kg}}{\text{m}^3} \quad \rho = 650 \frac{\text{kg}}{\text{m}^3}$$

Water vapour can be converted between the state variable, the absolute humidity and the water vapour pressure using the ideal gas equation:

$$\delta_v = \delta_p \cdot R_D \cdot T \quad (11)$$

Derivation of the analytical solution

An analytical solution to the problem can be determined using the Fourier transformation. It is necessary to transform the individual dimensions into the frequency space. The aim of the solution is to determine the unknown's amplitudes $\hat{c}_{i,k}$:

$$c_e = \sum_{k=0}^{\infty} \hat{c}_{e,k} \cdot e^{ikt \frac{2\pi}{t_p}} \quad G = \sum_{k=0}^{\infty} \hat{G}_k \cdot e^{ikt \frac{2\pi}{t_p}} \quad (12)$$

$$c = \sum_{k=0}^{\infty} \hat{c}_k \cdot e^{ikt \frac{2\pi}{t_p}} \quad c_i = \sum_{k=0}^{\infty} \hat{c}_{i,k} \cdot e^{ikt \frac{2\pi}{t_p}} \quad (13)$$

where t_p is the period duration.

The building component equation and the boundary condition can also be transformed into the room frequency:

$$\frac{\partial c}{\partial t} = a \frac{\partial^2 c}{\partial x^2} \quad a = \frac{\delta_v \cdot c_{sat}}{\zeta} \rightarrow ik \frac{2\pi}{t_p} \cdot \hat{c}_k = a \cdot \frac{\partial^2 \hat{c}_k}{\partial x^2} \quad (14)$$

Boundary conditions are as follows:

$$\beta_i \cdot (c_i - c(0, t)) = -\delta_v \cdot \frac{\partial c}{\partial x} \Big|_{x=0} \quad \beta_i (\hat{c}_{i,k} - \hat{c}_k(0)) = -\delta_v \frac{\partial \hat{c}_k}{\partial x} \Big|_{x=0} \quad (15)$$

$$\beta_e \cdot (c_e - c(L, t)) = \delta_v \cdot \frac{\partial c}{\partial x} \Big|_{x=L} \quad \beta_e (\hat{c}_{e,k} - \hat{c}_k(L)) = \delta_v \frac{\partial \hat{c}_k}{\partial x} \Big|_{x=L} \quad (16)$$

General solution for the building component

The building component equation can be solved using the following approach:

$$\hat{c}_k = P_1 \cdot \sinh mx + P_2 \cdot \cosh mx \quad (17)$$

From the balance equation: $ik \frac{2\pi}{t_p} \cdot \hat{c}_k = a \cdot \frac{\partial^2 \hat{c}_k}{\partial x^2} = a \cdot m^2 \cdot \hat{c}_k$ results in the following condition for m :
 $m^2 = ik \frac{2\pi}{t_p} \cdot a$

Taking into account the relation: $i = \left[\frac{1}{\sqrt{2}}(1+i) \right]^2 = (\sqrt{i})^2$ the possible solutions can be calculated by the following expression:

$$m = (1+i) \cdot \sqrt{\frac{k}{a} \frac{1}{2} \frac{2\pi}{t_p}} = (1+i) \cdot \sqrt{\frac{k}{a \cdot t_p} \pi} \quad (18)$$

Using the boundary conditions (15) and (16), the following expressions can be derived for P_1 and P_2 :

$$P_1 = \frac{\beta_i}{m \cdot \delta_v} \cdot \frac{(\beta_e \cdot \hat{c}_{e,k} - \hat{c}_{i,k} \cdot \beta_e \cdot \cosh m \cdot L - \hat{c}_{i,k} \cdot \delta_v \cdot m \cdot \sinh m \cdot L)}{X} \quad (19)$$

$$P_2 = \frac{\beta_e \cdot \hat{c}_{e,k} + \frac{\beta_i \cdot \beta_e}{m \cdot \delta_v} \cdot \hat{c}_{i,k} \cdot \sinh m \cdot L + \hat{c}_{i,k} \cdot \beta_i \cdot \cosh m \cdot L}{X} \quad (20)$$

$$X = (\beta_i + \beta_e) \cdot \cosh m \cdot L + \left(\frac{\beta_i \cdot \beta_e}{m \cdot \delta_{vm}} + \delta_v \cdot m \right) \cdot \sinh m \cdot L \quad (21)$$

Point $x = 0$ is essential for solving the room balance equation. The coefficient P_1 can be calculated at this point as follows:

$$P_1 = M_{12} \cdot \hat{c}_{e,k} - M_{11} \cdot \hat{c}_{i,k} \quad (22)$$

$$M_{12} = \frac{\beta_i \cdot \beta_e}{\delta_v \cdot m} \cdot \frac{1}{X} \quad (23)$$

$$M_{11} = \left(\frac{\beta_e \cdot \beta_i}{\delta_v \cdot m} \cdot \cosh m \cdot L + \beta_i \cdot \cosh m \cdot L \right) \cdot \frac{1}{X} \quad (24)$$

Room balance equation solution

The balance equation (4) for the room:

$$n \cdot V \cdot (c_e - c_i) + G - A \cdot \beta_i \cdot R \cdot T_i (c_i - c(0, t)) = V \frac{dc_i}{dt} \quad (25)$$

can be written in the frequency room as follows:

$$n \cdot V \cdot (\hat{c}_{e,k} - \hat{c}_{i,k}) + \hat{G}_k + A \cdot \delta_v \cdot m \cdot P_1 = V \cdot i \cdot k \cdot \frac{2\pi}{t_p} \cdot \hat{c}_{i,k} \quad (26)$$

The solution for the building component is obtained for the amplitudes of the room air humidity with the following expression:

$$\hat{c}_{i,k} = \frac{(R_a + A \cdot \delta_v \cdot m \cdot M_{12}) \cdot \hat{c}_{e,k} + \hat{G}_k}{R_a + A \cdot \delta_v \cdot m \cdot M_{11} + i \cdot V \cdot k \cdot \frac{2\pi}{t_p}} \quad (27)$$

$$m = (1 + i) \cdot \sqrt{\frac{k}{a \cdot t_p} \cdot \pi} \quad (28)$$

General solution

The general solution for the room humidity is obtained by summing all partial amounts:

$$c_i = \operatorname{Re} \sum_k \hat{c}_{i,k} e^{ikt \frac{2\pi}{t_p}} \quad (29)$$

For $k = 0$, the following special case results:

$$c_i = c_e + \frac{G_0}{R_{a0}}$$

$$R_{a0} = R_a + A \frac{1}{\frac{1}{\beta_i} + \frac{L}{\delta_v} + \frac{1}{\beta_e}} \quad (30)$$

The average amount of room air humidity only depends on the outside humidity, the average moisture production, the average volume flow and a small contribution by the stationary loss over the building component.

For all $k > 0$, the amplitudes can be calculated using the expressions (27), (22), (23), (24), (21) and (18).

Validation of the room model – an analytical solution

The correctness of the developed analytical solution was validated using the BuildOpt-VIE simulation software developed at the Research Centre of Building Physics and Sound Protection of the Vienna University of Technology. It is a multi-zone model for hygrothermal calculations of the whole building which has already more than 6000 interacting zones. Building constructions are simulated using a finite volume method with an explicit time scheme. The equations of motion are integrated by the Runge–Kutta 4th Order method with step size control. The wall type models coupled heat and moisture transfer in the envelope. Diffusion, liquid water transport, phase changing and icing are taken into account. This software was validated with the data from Annex 41 (2008) and many experimental validations from real buildings [10], [11].

The following figures show the simulated time course of room humidity and the time course determined by the analytical solution for two different cases.

Case 1 Tight exterior surface $\beta_{p,e} = 0$

Fig 2 Comparison of the analytical and numerical solutions for different building component thicknesses

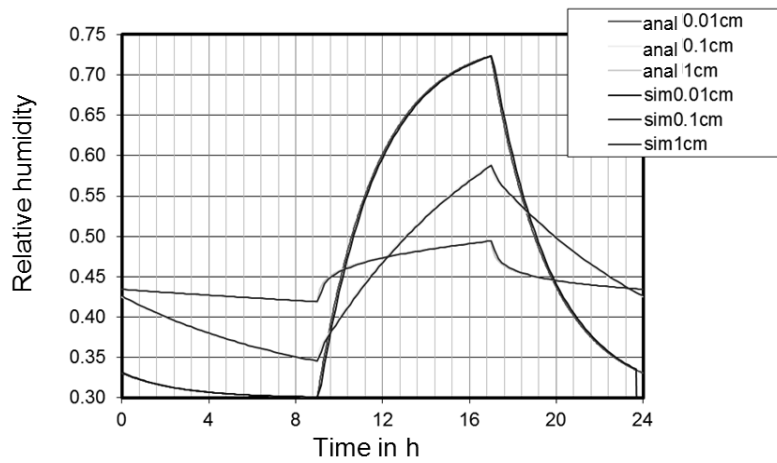
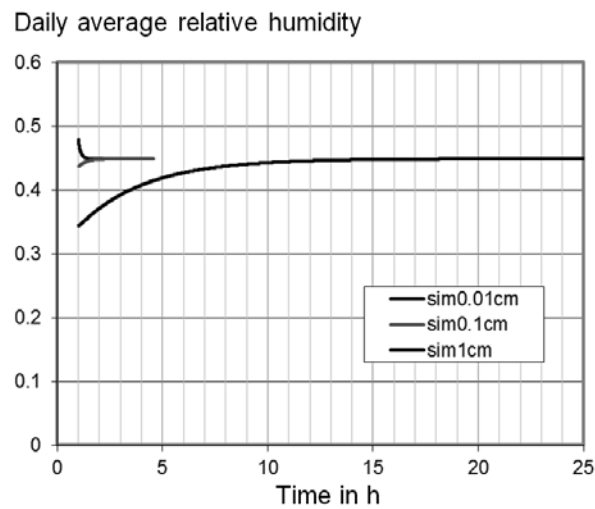


Fig 3 Time course of the numerical solution until the periodic state



Case 2 Open exterior surface

Fig 4 Comparison of the analytical and numerical solutions for different building component thicknesses

$$\beta_{p,e} = \frac{1}{1.25 \cdot 10^7} \frac{\text{kg}}{\text{m}^2 \text{sPa}}$$

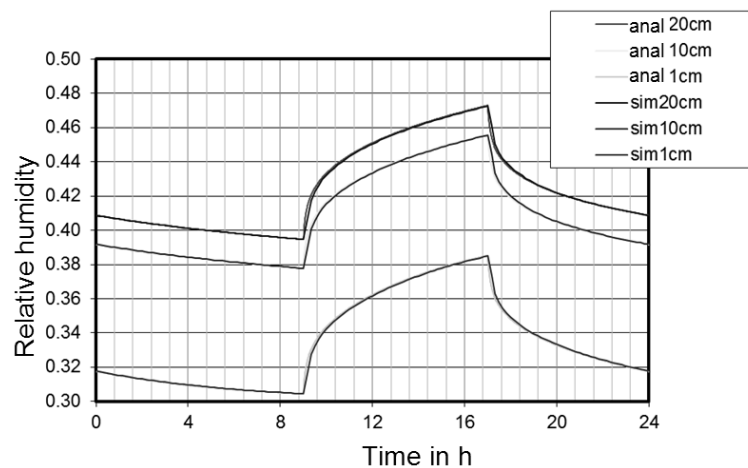
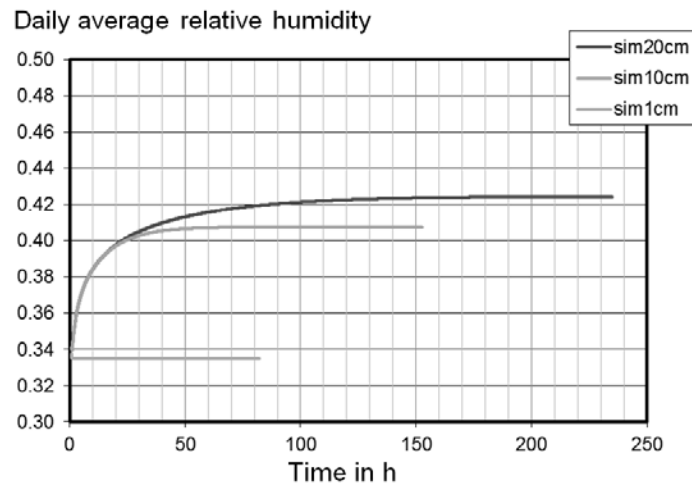


Fig 5 Time course of the numerical solution until the periodic state



It can be seen that there is excellent agreement between both the simulations and results determined using the analytical solution.

Validation of the room model - real object

A test flat in the Kammelpweg 10 apartment building located in the 21st district of Vienna was furnished to validate the BuildOpt_VIE simulation software. This flat was provided by the company Mischek Property Development Service GmbH. A data logger for temperature and humidity was installed in the middle of each room. A data logger was also installed in the air supply and exhaust of the decentralized ventilation system.

Fig 6 Apartment building in which a flat was provided for experimental purposes (left), and approximately 50m², 2cm thick, soft fibreboard for increasing the moisture buffering effect of a room (right)

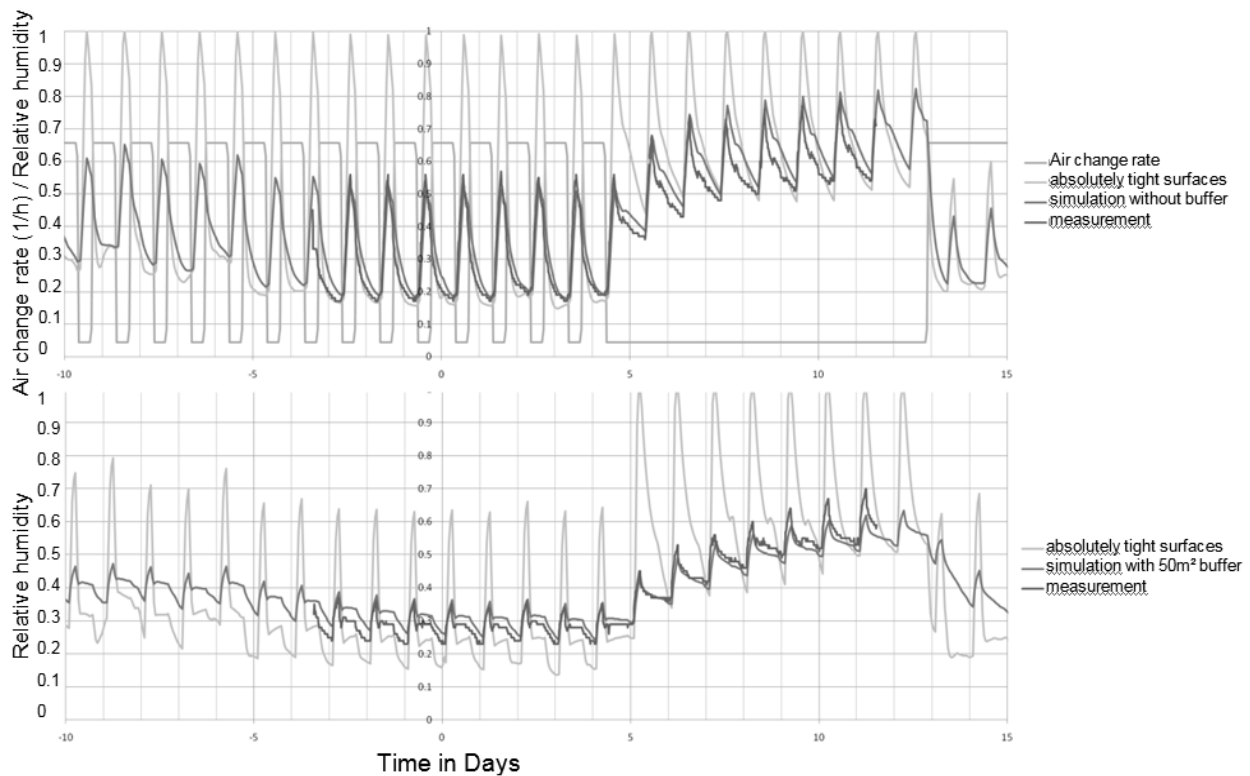


Different situations were simulated with the HAM-modelling building simulation program BuildOpt_VIE developed by the Vienna University of Technology and compared with measurements.

The walls of the test flat are covered with woodchip wallpaper and painted with emulsion paint. The floor is covered with a laminate floor.

The ventilation system was put in a time-dependent operation. The humidification was timed by ultrasonic humidifiers.

Fig 7 Time course of indoor air humidity in the test room without humidity buffer (above) and with approximately 50m² fibreboard (below). The gray curve represents the simulation results without taking into account any moisture buffering.



The comparison of the measured and simulated indoor humidity courses shows very good agreement between the simulated and measured courses.

Conclusion

With the aim to strategically minimize the humidification and dehumidification energy consumption using moisture buffering, air volume and moisture recovery control strategies were developed along with numerous computational and measurement investigations any mathematical models. These investigations and developed models are used as a basis for energy balancing in for calculating energy certificates. The effect of ventilation air change rate, heating strategy, or the available hygroscopic material was presented in [1]. In the course of this investigation, several means by which the occupants themselves could adjust the indoor climate of their residence were shown. In [2], a model was developed to reproduce the moisture behaviour of fibrous insulation materials to illustrate both the microscopic and macroscopic hysteresis of the moisture buffer and moisture transport processes. Precise equipment to measure humidity was constructed, tested, and used over a very long measurement period during which detailed measurements of moisture absorption and emission were measured from different types of fibreboard sheets.

In this paper, an analytical solution was developed to calculate the coupled room and building component relationships. Excellent agreement is shown between the simulations and results determined by the analytical solution. The simulation model used was validated with the measurement data from the test apartment equipped with various amounts of soft fibreboard as humidity buffers that were dampened or aired in an instationary manner. The comparison between the measurements and simulations showed very good agreement.

Acknowledgment

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Computational Investigation of Renovating Plate Joints and Their Effects on Moisture and Salt Load

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Abstract

On a moist and salt loaded masonry, especially in cellar areas, calcium silicate plates are often used. These panels can absorb a lot of moist and when the surrounding humidity becomes lower they release moisture again. Due to the large porous system, a lot of salts can be accumulated within the plate without causing damage. To use these rooms regularly after the renovation (plate application), the plates' surfaces will be hydrophobized. By the use of salt and/or renovating plates of calcium silicate (named as renovating plate hereafter) irregularities were observed that depend on the hydrophobizing method as well as on the used adhesives. Because of difference of materials physical properties between the renovating plate and the adhesive, thermal bridge effects can occur. These effects damage the inner surface by formation of mould, water condensation, salt crystallization and the like. To examine these influences, calculations and investigations were performed. Especially, the following parameters were investigated: (1) Kind of the adhesive; (2) joint width; (3) hydrophobizing depth; (4) Hydrophobizing the join side.

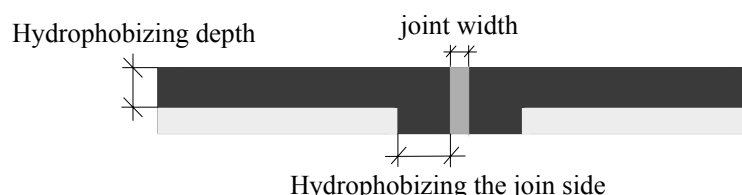
Key words

Renovating plate, Adhesive, Joints, Salt load, Building

Introduction

To investigate the irregularities in the joint area, the computer program WUFI-2D was used. Using this software, it is possible to calculate the time-depended temperature and humidity course of a building component under real climate boundary conditions. The moisture transport takes into account both diffusion and liquid water. The calculations were conducted for a period of 10 years with cyclic repeated climate data set.

Fig 1 Illustration of a plate joints



To be able to detect all described influences, five variants have been examined for four different adhesive (Table 1).

Table 1 List of the examined variants.

	Joint width (mm)	Hydrophobizing joint side (mm)	Hydrophobizing depth (mm)
variation-1	1	without	10
variation-2	1	20	15
variation-3	1	One plate 20, second without	15
variation-4	3	without	10
variation-5	3	20	15

The described variation-1 represents the initial state. Usually, the hydrophobic depth of the plates is 10 mm and the shock sites are not hydrophobic.

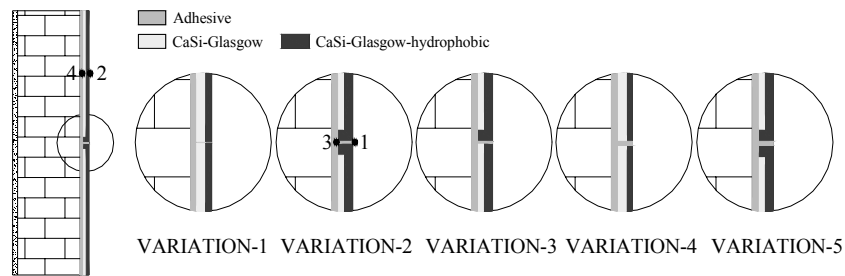
At original renovating plates the hydrophobic depth was measured by 15 mm. The shock side was approximately 20 mm hydrophobic. Therefore, those values were investigated (Table 1).

Investigated Variants

At the example of 25 cm thick solid brick masonry, all mentioned combinations were tested. In all variants, it was assumed that these are 100% bonded.

The exact examination relevant construction points with regard to temperature, relative humidity and water content was carried in the simulation via so called monitor positions. The monitor positions could be set within a cross section at any location. For these points, the computed data were output separately. The different examined variants are presented in Fig. 2.

Fig 2. View of examined wall with the valued monitor positions (points 1–4 in each variant).



Material data and climate conditions

To investigate the adhesive influence, four different adhesives were applied. With regard to the functionality of the system (renovating plate and adhesive), in addition to the thermal conductivity, the moist technical performance, especially the water absorption and the water transport are important. For this reason, the adhesives were selected with various humidity technical qualities.

For the selected adhesives and the renovating plates, the complete material characteristics were determined at our institute within the framework of a previous investigation and filed into WUFI databases. The most important material characteristics that are necessary for the calculations of the coupled heat and moisture transport of used adhesives, as well as the calcium silicate board are summarized in Table 2.

Table 2 Characteristic values of used building materials.

Material / adhesive	Cape	Bayosan	V1	V3	CaSi-Plate
Density (kg/m^3)	1179.2	441.9	1456.4	1302.7	355.3
Thermal conductivity (W/mK)	0.25	0.08	1.26	0.54	0.09
Porosity (m^3/m^3)	0.403	0.748	0.217	0.503	0.850
Saturation water content (M-%)	34.2	169.3	14.9	38.6	239.1
Normalized water content (M-%)	15.3	90.3	7.5	22.6	225.0
Water absorption coefficient ($\text{kg/m}^2\text{h}^{0.5}$)	0.6	7.0	0.4	4.3	25.0
Vapour diffusion resistance number (-)	10	4.9	63.6	7.9	4.8

The climate data from Holzkirchen 1991 was used for the calculations. This climate represents extremely high requirements for the wall constructions. The internal room climate has a temperature of 21 ± 1 °C and relative air humidity of $50 \pm 10\%$. At the beginning of the calculations, the initial conditions for temperature and moisture are defined. The initial water content corresponds to water content at the 80% relative humidity and the initial temperature of the materials was assumed to be 20 °C.

Results

The results of the calculations for all variants are represented in Figs. 3–5. The graphs in Fig. 3 demonstrate the total water content of the whole wall construction using the investigated adhesives. The influence of the different variants cannot be seen. All curves in a graph are superimposed. The results indicate that the total water content of the wall in all variants is constantly changing. There is no moisture enrichment in the construction. It has been reported (Dissertation Bednar) that the liquid water transport (through different depths of hydrophobic) for a low moisture accumulation in the wall is essential. For this reason, the different depths of hydrophobic were not analyzed in this study. The calculations were

performed with a measured depth of 15 mm and with the planned depth of 10 mm. It can be seen that the capillary-active adhesives (Bayosan and V3) reduce the water contents of the wall opposed to Cape and V1 adhesives.

Fig 3 Course of the total water content in case of investigated variants.

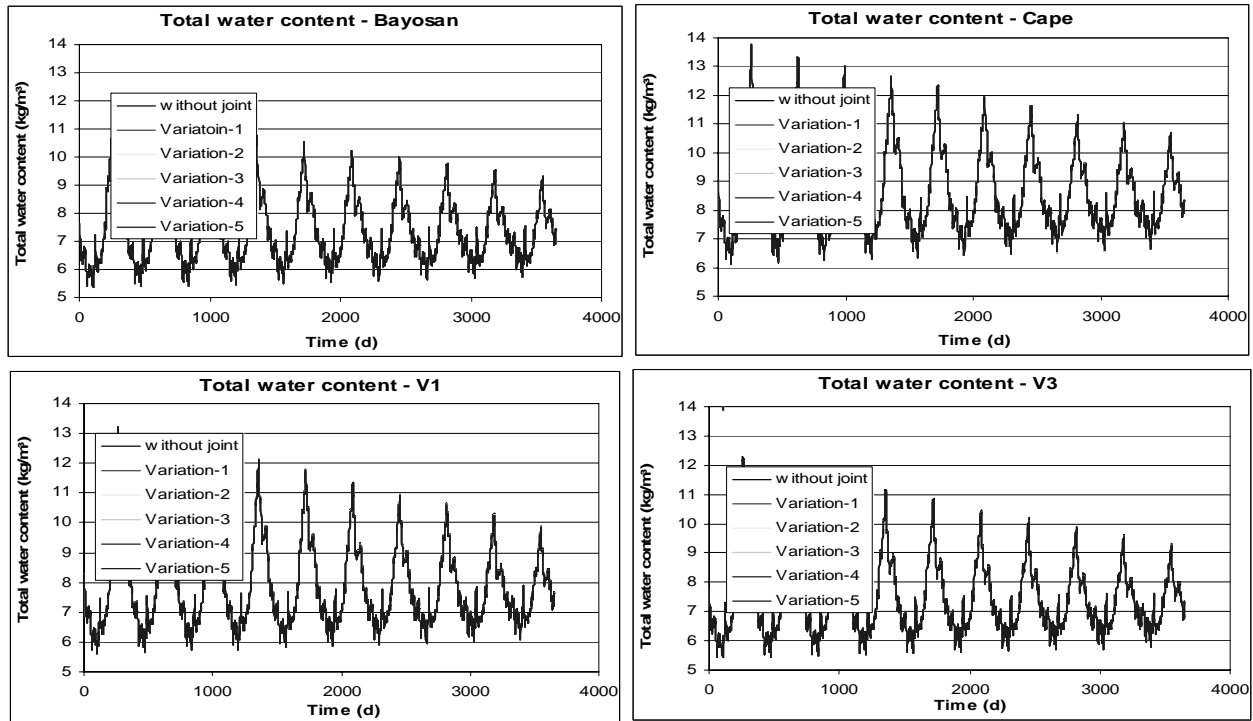
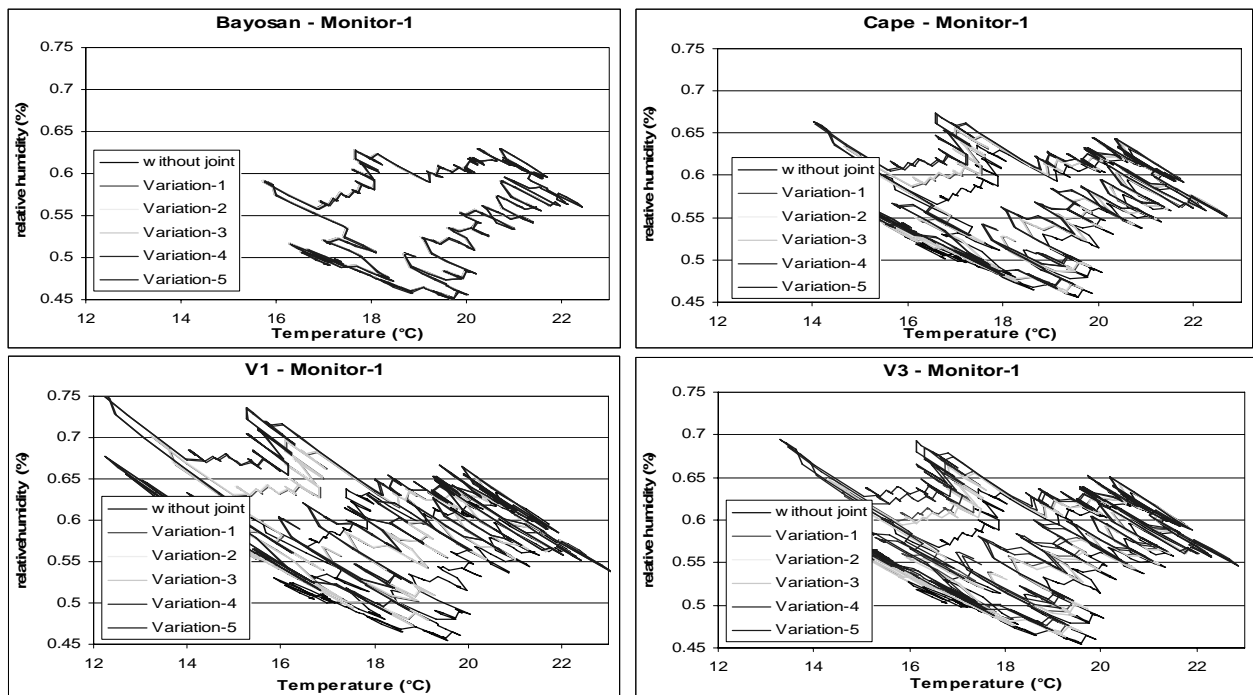


Figure 4 shows the time course of the temperature and humidity process in monitor 1 (see Fig. 2), during the tenth year.

Fig 4 Course of the relative humidity and temperatures on the inner wall surface.



The diagrams indicate that the temperature and humidity profile are at the surface in the joint area, mainly depending on the type of adhesive. The adhesive Bayosan shows big difference from the other ones. It can be recognized, that the course is almost constant, independent of the hydrophobizing depth of the renovating plate, joint width or hydrophobizing the join side.

This is recognized to the larger capillary conductivity, smaller water vapor diffusion resistance and thermal conductivity. In the cases of other adhesives, variations of different parameters (five variants) show significant influence of time changes on the temperature and relative humidity. A particularly large difference between individual variants is shown with thick adhesive V1. The temperature temporary decreased up to 3.5 °C and the relative humidity up to 12% larger than in the field without joint. The most critical conditions occur at the variants with 3 mm joints.

Fig 5 process of the relative air humidity and the temperatures in the adhesive behind insulation.

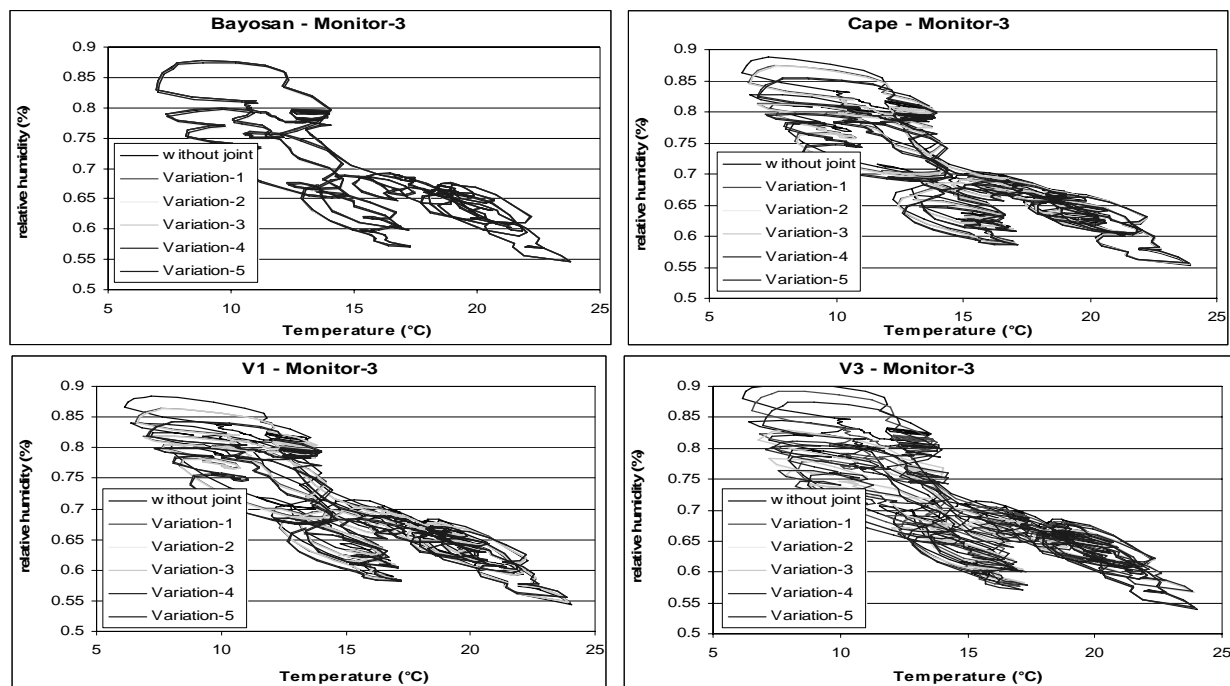


Figure 5 represents the situation in monitor 3 in the tenth year (see Fig. 2). The best results were recorded in the use of Bayosan-adhesive. The influence of the different variants was minor for this adhesive. It is shown that the hygrothermal situation between the different variants in case of other adhesives significantly is different. Through the influence of the temperature from warm side is understandable why the moisture situation in the area relaxed. The adhesives conduct (through their larger thermal conductivities) more heat as the renovating plate from the inner surface in the direction of exterior surface. As a result, the temperature in this field increases and the air can include more humidity; therefore, the relative humidity becomes smaller. The adhesive Bayosan had a similar thermal conductivity like the renovating plate; therefore, there were no significant changes.

Investigation of the panel joints in case of moist masonry

Within the framework of the previously described studies, the effects of the type of adhesive, plate hydrophobizing and the joint width on the temperature and humidity profile at the surface of the joint area, as well as the construction itself under normal hygrothermal conditions were investigated. This means that the masonry is in balancing humid area and is exposed to real climatic conditions.

Starting from the fact that the renovating plate is used mainly for redevelopment at walls with large moisture contents is necessary to investigate the plate joins on moist masonry. In the next step, the selected variants were investigated of moist masonry.

In the case of normally climate conditions the most positive results were obtained when the Bayosan adhesive was used. By the denser adhesives, no big differences appeared. The adhesive Cape corresponded in about the mean of the other three adhesives and was therefore representative for the

following investigations and calculations for this adhesive group. For the second part of investigation, the Bayosan and Cape adhesives were selected.

Based on the previously presented results, it can be stated that in cases with joint widths of 1 mm, no significant effect on the indicated temperature and humidity gradient was observed. It was also shown that no differences can be seen whether one or both joint side are hydrophobic. Therefore, variants 4 and 5 (with joint width of 3 mm) were selected for the following investigations and calculations.

Boundary condition for second part of the investigation

For this part of investigation the initial conditions for temperature and humidity were defined, so that masonry was represented as moist at start of the calculation.

The initial water content was specified for each layer separately. The bricks with a water content of 230 kg/m³ were given, corresponding to a water content that occurs at 100% relative humidity. Adhesives were also defaulted as moist with water content by 100% relative humidity. The external plaster (lime cement plaster) was predefined with approximately 99% relative humidity (200 kg/m³ – water content). The renovating plate was accepted with the balancing moisture (80% relative humidity).

As starting temperature of the materials, 18 °C was selected. Furthermore, the calculations occurred with the climate Holzkirchen and disregarding rain. In the internal area was also of one middle room climate (temperature = 21±1 °C, and relative air humidity = 50±10 %) chosen.

Representation of the results

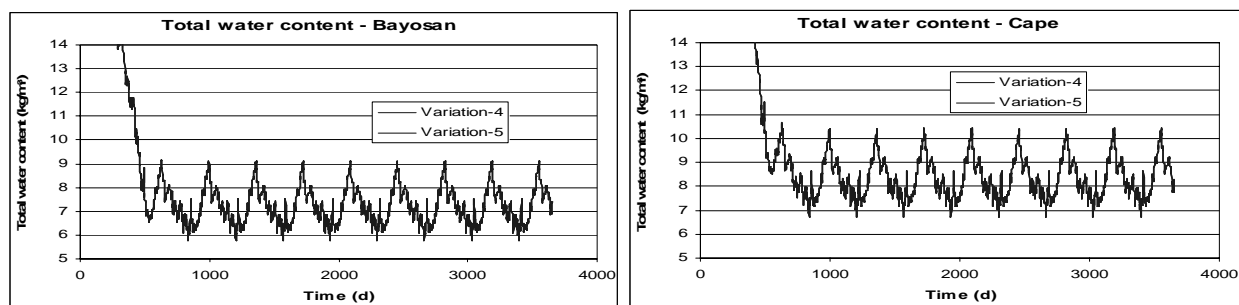
The results of the second part of this investigation are presented in Figs. 6–10. The course of the total water content of the calculated wall is shown in Fig. 6, from 10 years after the redevelopment with the renovating plates. In this way, the influence of the renovating plate on drying out of the moist masonry is shown.

It is shown that the drying of the masonry occurs in the first two years. After achieving the equilibrium moisture content (compared with the diagrams in Fig. 3), there are no significant differences in the course of the water content. It does not cause moisture enrichment in the wall.

In this part of the computational investigation, the advantage of the Bayosan adhesive was also confirmed compared with the denser adhesives. The adhesive Bayosan reduced the total water content in the construction to approximately 1 kg/m³ opposing to the Cape adhesives.

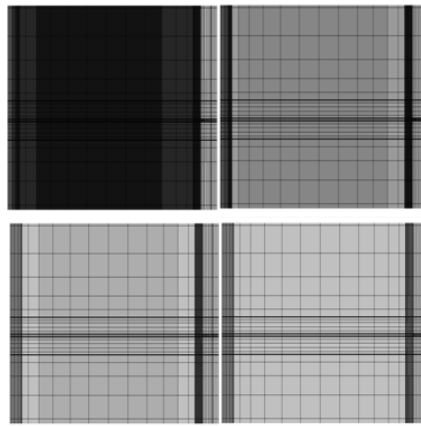
In the process of total water content between the two calculated variants (variants 4 and 5) no difference can be recognized. This means that the hydrophobic sides of the shock, as well as the hydrophobic depth do not affect the course of drying of the masonry.

Fig 6 Course of the total water content with use of the Bayosan and cape adhesives in the case of selected two variants.



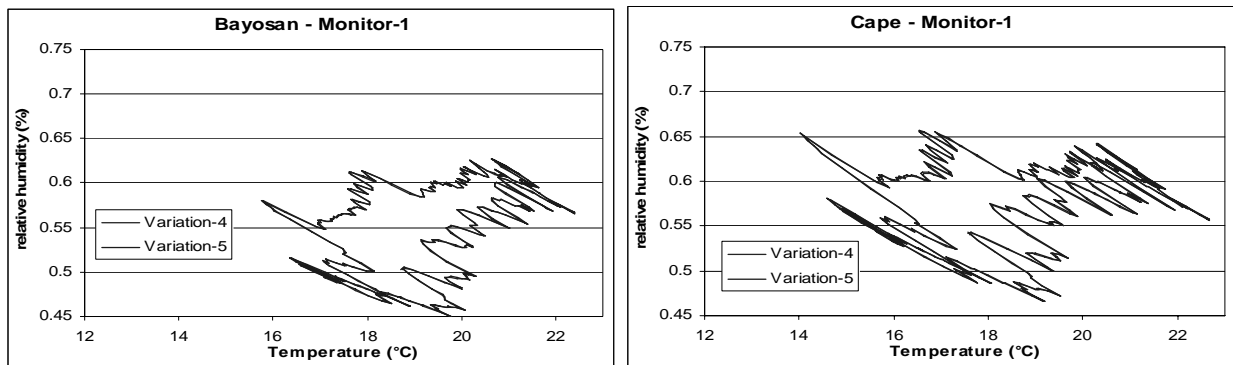
The presumed disability effect of the drying because of the temperature decrease in an interior insulated masonry was not confirmed. Drying occurred both outwards and inwards as can be seen in Fig. 7. No change of humidity distribution in the joint field appears. That means, no destruction of the plate in this field is to be expected.

Fig 7 Representation of the moisture distribution in the wall cut at various time periods.



In the Fig. 8, the time course of the temperature and humidity in monitor 1 during the tenth year are presented.

Fig 8 Course of the relative air humidity and the temperatures on the inner wall surface (monitor 1).



Compared with the corresponding diagrams in Fig. 3, there are no differences in temperature and moisture distributions. This state adjusts directly in the second year after which the drying out of masonry occurs.

Fig 9 Water content profile for a horizontal section through the wall in the joint area.

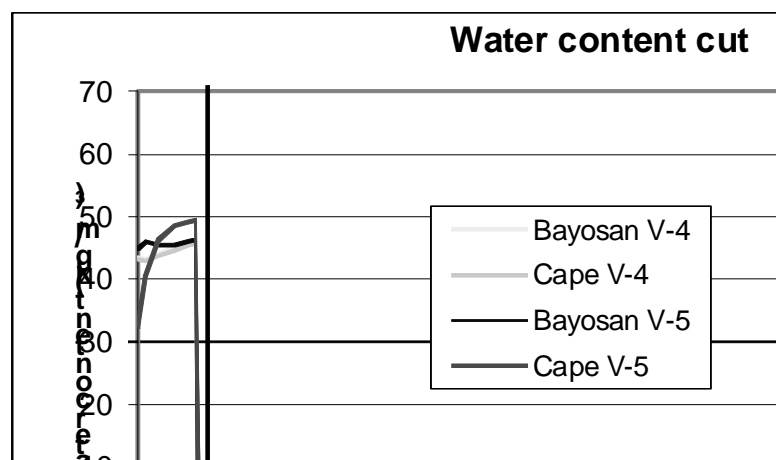


Fig. 9 presents the moisture level in a horizontal section through the wall in the joint area in the second year during the winter (where the largest moisture content occurs). Assuming that the practical moisture content (at 80% RH) from the Cape adhesive to be 59.8 kg/m^3 , and from the Bayosan adhesive to

be 14.8 kg/m³, it can be seen an increase in water content in the adhesive behind the insulation, which decreases strongly to the inside direction. Slightly more noticeable is the increase in the case of Bayosan adhesive version 5 when the shock side 20 mm are hydrophobicized and the hydrophobic depth 15 mm. In the variants 5, we have a smaller proportion of absorptive plate that can absorb the moisture. This observation indicates once again that the hydrophobic depth should not exceed 10 mm.

Summary and conclusions

The aim of this computational study was to identify the impact of the type of adhesive, plate hidropobizing and the joint width on the temperature and humidity profile of the surface in the joint area as well as on the construction itself. To obtain a realistic view of the time course of the temperature and humidity condition of a 25 cm thick with renovating plate inside insulated brick wall, simulations were carried out. The influence of defects (in joints area) can be detected only by two-dimensional calculations.

Within the framework of this work, two investigations were carried out. A dry masonry was examined in the first part (balanced humidity). In the second part the investigations were carried out with moist masonry.

It was shown that in the case of a capillary-active adhesive (Bayosan), the effects are not as strong as in the case of tight glue. The calculated variations showed that the hydrophobic depth has no significant effect on the temperature and humidity profile in the joint area and on the drying behaviour of the masonry. Slightly larger water contents were recorded in the adhesive behind the insulation, but the hidropobizing depth should not differ from the intended value (10 mm), so a maximum of salts can be absorbed into the plate. It is clear that by use of a tight adhesive, the joint thickness has a significant role. The greater the joint is the worse states are observed in this area.

The two-dimensional computational study demonstrated that the problems on the plate shock of the renovated plates are not significant.

The calcium silicate boards are used for the repair of walls with high moisture levels and salt loads. Therefore, it is necessary to determine whether in the joint area on the surface, the salt efflorescence or destruction occurs. It is not yet possible to detect these processes computationally; therefore, in the present study, the influence of possible salt concentrations was not considered.

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Knowledge Management and Limits of Rationality

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Abstract

Knowledge Management is generally accepted as a rational activity based on collection, storage and distribution of knowledge. At the same time, research shows that the rationality influences behavior of individuals and organizations at a lower intensity than generally presumed.

In our presentation we show the areas of knowledge management that are affected by not-fully-rational behavior and demonstrate that under certain conditions such behavior is fully approved. We also propose strategies to minimize losses caused by underestimating and/or inappropriate reactions to not-fully rational decisions making that could lead to unbalanced solutions affecting the company's holistic approach to knowledge management. Influences to education and educational systems are also discussed.

Key words

Knowledge management, Rationality, Irrationality, Organizational structure, Education for life.

Introduction

Since Descartes' *Cogito ergo sum*, rational and critical thinking started playing its principal role in European philosophy and research. It led to the industrial revolution and to the quick development of the Western science and technology. Its dominance lasted for two centuries. Recently, we witness its step out of the leading positions. It implies that we have to start looking for a contemporary weapon that could resume our leading position.

Recent studies of psychologists indicate that one of reasons can be rooted in our too big stress on the rational approaches. The rational thinking does not have as unique and irreplaceable role in human reasoning and decision making as generally presumed. Isenberg [1] found out that in making their day-to-day and minute-by-minute tactical maneuvers, senior executives tend to rely on other thought processes such as using intuition; managing a network of interrelated problems; dealing with ambiguity, inconsistency, novelty and surprise; and integrating action into the process of thinking. Agor [2] came to a similar conclusion when disclosing that without exceptions, top managers differ significantly from middle and lower managers in their ability to use intuition to make decisions. He adds that women and people with Asian background demonstrate this feature above the rest. The recent stress on increasing the number of women in managerial positions exemplifies an application of these observations.

Glass [3] observed that also during the preparation of future managers the intuitive approaches are often neglected: *"Given our choice of decision-making techniques, most of us would use quantitative approaches first and rational ones second; intuition would come at or near the bottom of the list"*. Again, the development students' soft skills can be a way to reoccurrence into our leading position. Glass also shows that not-fully-rational decisions are applied even in the fields in which rationality seems to be governing – programming and software development: *We invent other names for it, cloaking its apparent irrationality in socially acceptable terms. For example, we speak of "gut" decision making—decisions coming from some deeply felt belief that goes against the grain of the environment surrounding the decisions.*

The usage of not-fully-rational approaches disregards branches of industry or administration. Brunson [4] shows that choices are facilitated by narrow and clear organizational ideologies, and actions are facilitated by irrational decision-making procedures which maximize motivation and commitment. Guo [5] understands that not-fully-rational procedures can lead to problems in strategic marketing but stresses their positive contribution in getting information, carrying out information analysis, efficiency and quality of decision making and in implementing strategic planning.

Dann and Pratt [6] believe that the non-conscious information processing system has evolved earlier in humans and is based on automatic and relatively effortless processing of information. According to them, researchers view intuitions as one of the products of this non-conscious, or automatic, system of information processing. They underline that the term "intuition" is used in different ways: either addressing the process running in human brain or its outcome or both. They propose an exhaustive list of

its interpretations. It leads them to introducing the terms *intuiting* for the process and *intuitive judgments* for its outcomes. In describing the intuiting, they identify its following features:

- Intuiting is non-conscious,
- Intuiting involves making holistic associations,
- Intuiting is fast,
- Intuiting leads to affectively charged judgments.

Their research neighbors to our field of interest – knowledge management – as they also take into account the domain knowledge factors, in particular, the heuristic or expert ways of derivation of new knowledge from the existing one.

All above authors underline positive contributions of not-fully rational approaches in their research fields regardless whether they call them “emotions”, “intuition” or “irrationality”. In their research, the concepts do not mean “no sagacity” or “nonsense”. They rather specify a kind of reasonableness not fully controlled by our erudition and formal reasoning.

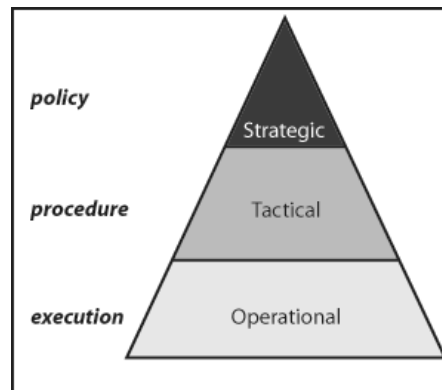
In our recent papers [7, 8], we have demonstrated importance of not-fully-rational decision making in knowledge management. In this paper, we concentrate on the consequences of the application of our previous conclusions to organizational behavior, human resources development and education.

Transformation of managerial levels

The subject of above described research is the management of different levels of hierarchy – top managers, middle managers and low managers. Top managers are responsible for strategic decisions. The middle managers transfer them into procedures in order to implement the company’s strategy. Finally, operational managers are responsible for day-to-day execution of the strategy.

Traditionally, the proportion between their numbers is expressed in a form of a pyramid [9]. Their numbers grow starting from the top.

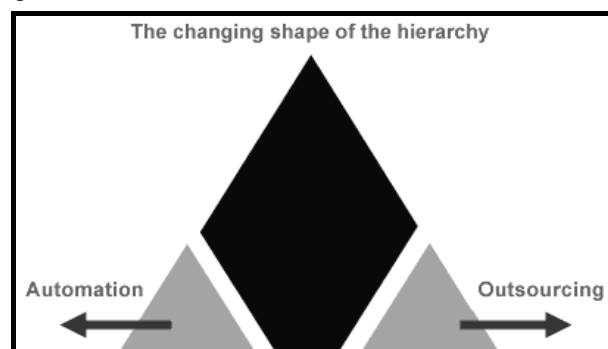
Figure 1 Managerial levels



Source: Business Environment Study Support [9]

This popular pyramid is undergoing a transformation [10]. The recent development of technology and of managerial methods causes that its lowest level is reduced– see Figure 2.

Figure 2. Diamond-shaped managerial levels



Source: Schofield [10]

The managerial levels' pyramid is getting the form of a diamond. There are two principal reasons of the reduction of its basis:

- One part of the positions (on the left bottom section of the picture) disappears as a result of the automation and progress of technology. For example, in a traditional automotive production this group is formed by production-line supervisors. When the workers are replaced by robots, supervising (in the traditional sense) loses its meaning and positions diminish. Introducing advanced machinery has a similar effect. For example, in forestry axes are now replaced by tree harvesters. The number of lumbermen declines but the remaining ones must have a higher qualification, different skills, specific knowledge and experience.
- The other part (the right bottom) goes away as a result of outsourcing. These managerial positions do not disappear completely; they are rather restructured. Some managers move to higher positions because they now lead the companies executing formerly in-sourced functions.

As a result of the described transformation, the number of middle and top managers grows. Consequently, the importance of not-fully-rational thinking and reasoning grows, too, because the outsourced managers are likely to promote to higher positions in their new companies. Their promotion will place them into positions requiring problem-solving with lower portion of fully-rational solutions.

There is another argument for such development. As the routine activities become gradually executed by machines, non-routine tasks are still dominated by people. Their solutions can hardly be prescribed. They are often using analogy i.e. require creativity, experience, and the competence to adapt previous solutions for new, different problems.

All this implies that there is a necessity of changing the proportion between rational and not-fully rational problem-solving methods in the future managers' education and training. Our proposed approach is based on Knowledge Management.

Learning from the perspective of Knowledge management

The most popular model of human and organizational learning from the point of view of Knowledge management is called the SECI model. It shows the interaction between two principal forms of our knowledge:

- A portion is called **explicit knowledge**. It can be captured using data, formulas, instructions, drawings, and similar. Its owner can usually identify its source – education, training, reading, etc.
- The rest of our knowledge is **tacit knowledge**. It is acquired in a foggier way, often through our day-to-day communication with our environment, by mentoring and coaching i.e. via informal education.

Interactions between their existing combinations were first described by Nonaka and Takeuchi' in [11] – see Figure 3. The below explanation of the knowledge development processes comes from Hvorecký & Kelemen [12].

Figure 3. The SECI model

	TACIT KNOWLEDGE	EXPLICIT KNOWLEDGE
TACIT KNOWLEDGE	Socialization	Externalization
EXPLICIT KNOWLEDGE	Internalization	Combination

Source: Nonaka & Takeuchi [11]

Tacit knowledge interacts with tacit knowledge in the process called *Socialization*. It is performed by interpersonal communication and/or intrapersonal insights. It is the most traditional form of learning and it happens in every community.

People also express their internal knowledge using various forms of *Externalization*. Its aim is to represent their concepts in standardized formats. These presentations (numbers, texts, graphs, formulas, and others) serve for distribution of knowledge. Due to that, the “dialogue” between the author and consumer of the piece of knowledge does not depend on their geographic and time distance.

The main advantage of formal notation lies in the opportunity to process the pieces of knowledge using formal manipulations. Such *Combination* may lead to new knowledge and can now and then be performed

by computers and robots. However, as we stressed in Section 1, many activities performed by humans cannot be accomplished by technology yet.

In the last stage, people try to interpret the outcomes of their activity and want to comprehend them. Through *Internalization*, the new piece of knowledge becomes an integral part of our individual knowledge.

According to the SECI model, the knowledge-acquiring processes run:

- *Inside each of the four quadrants:* During Socialization we learn by communicating non-explicit knowledge with our partners. We absorb their style of thinking, study their mentality and effects of emotions on them etc. During Externalization we learn to visualize our ideas and demonstrate them in agreed formats. During Combination we learn to control our mental procedures to get fair results and search for efficient combination methods. During Internalization we adjust the new piece of knowledge into our already existing system of knowledge.
- *The clockwise order indicated by the initial letters S-E-C-I* shows that learning runs in cycles. The ideas are born in our minds (S). Then we express them in a concise way (E). This preliminary outcome is then formally manipulated in order to test its validity, acceptability and usefulness (C). Finally, we “digest” the new piece to a contour that becomes a part of our knowledge weaponry (I).
- *Eternally:* Each new piece of knowledge is presented to the community and discussed. Its “socialization” begins and may lead to new ideas. As a result, the knowledge processing acquires the form S-E-C-I-S-E-C-I-S-... Thus, the SECI model shows a life-cycle of knowledge with its multiple reincarnations. Our knowledge grows and deepens with the flow of time.

Irrational activities in the SECI components

Rational approaches to problem-solving and decision making are traditionally stressed in the preparation of future managers. On the other hand, they are only applicable when the problem has been transformed to an exact notation, i.e. when the solution can be completed by Combination. The ways of its externalization i.e. of its transformation of its foggy inner form to its exactly specified analogue are rarely trained. The same holds for the internalization of its result i.e. for its full comprehension and mental ownership.

There are other irrational factors that are necessary to become a part of weaponry of contemporary managers. Hvorecký & Lichardus [13] showed that all SECI elements contain activities that are done in not-fully-rational way – see Figure 4.

Figure 4 Irrational factors in the SECI model

Socialization	Externalization
Story-telling Discussion Listening to other opinions Opposing common opinions Playing a devil's advocate Showing example behaviour Teaching and training Brain storming	Speaking and writing excellence Capturing of the idea's core Formalization Introduction of a new notation Posing “right” questions Demonstrating skills
Internalization	Combination
Digesting of a new piece of knowledge Practicing a new activity Implementing a problem solving method Learning a new formal notation Becoming interested in the topic Estimating of potential “usefulness” of knowledge	Lateral thinking Creating analogies Selection of the right knowledge processing method Identification of the new piece of knowledge

Source: Hvorecký & Lichardus [13]

Notice that the majority of these abilities is not included in the standard university curricula. The education of future managers concentrates mostly on manipulations with explicit knowledge and its combinations to explicit one. As a result, the Combination block is dominating in university education, the remaining three are neglected.

As we have showed above, the Combination activities are the most frequent subjects of automation. There are some attempts to automate Internalization (e.g. in Machine Learning [14]) or Externalization (e.g. in Digital Storytelling [15]) but their massive applications are still far ahead.

Consequences for the future managers' preparation

The contemporary education is strongly oriented to the usage of explicit knowledge – on memorizing facts and procedures. Much less efforts is devoted to comprehending the relationships between them and to building internal knowledge structures in the learners. To make a progress we have to ask with Fadem [16]. He proposes the following questions as a basis for strategy design and development:

1. What do we know?
2. What do we not know?
3. What are the objectives?
4. What is still required to meet the objectives?
5. What can we obtain this information from?
6. How are we going to obtain the information required?
7. When we obtained the information what results are we expecting to achieve?
8. How do we use the information after it is obtained?

Our answers are numbered in accordance to the order.

1. We know that our education is based on explicit knowledge. To educate specialists, it must be present. We cannot leave it behind. To our advantage, educational methodologies targeting explicit knowledge are well-developed and wide-spread.
2. We do not have well-elaborated methods for sharing tacit knowledge. Nevertheless, there are some good examples.
3. Thus, increasing the proportion of tacit-knowledge-based approaches should be our main objective.
4. To meet the objective will require developing new educational methodologies and enhance teacher training.
5. Can we obtain this information? Yes, there are already “islands of positive deviation specified in [17].
6. Obtaining the required information can be predominantly done by sharing best practices, coaching, mentoring etc. Unfortunately, a lot of this information is not available yet and should become the subject of our further research.
7. Our expected results should develop selected students' soft skills i.e. to improve these components of tacit knowledge that correspond to the presumed profile of the particular specialist. As discussed in [18], different managerial positions require different components of tacit knowledge so their preparation should reflect that.
8. The obtained information should be used as a basis for further research, applied to education of future managers and retraining of existing ones. Through them, it could facilitate the innovation strategies and economic growth.

Summary and perspectives

The employers often stress the importance of soft skills in the university graduates [19]. In our paper we demonstrated their growing importance. Using Knowledge management tools, we identified their key elements and designed an approach to their wider introduction into university education. In the meantime, we implement results of our research into our designed Bachelor study program “Information Systems Management” that is developed under the umbrella of the European Structural Fund.

Its aim is to offer a program that would combine explicit knowledge from programming and information science with tacit knowledge that may help to the managers to develop their creativity, to intensify their intuition capability, and to become able of quick and effective reaction to our ever-changing business environment. We believe that the program will bridge the gap between the exact and formal rational thinking necessary for a successful preparation of computer applications and not-fully-rational functions of IT managers.

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Multinomial Logit Choice Model for Durable Goods

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Abstract

The paper presents the model of multinomial logit choice as a mean for decision between more than two alternatives.

Key words

logit choice model, multinomial, durable goods

Introduction

Multinomial logit model is one variety of general logit model and is counted as a new way of theory and practice in econometrics. There are a few econometricians, such as R. D. Luce, who introduced multinomial choice probabilities (1959), J. A. Hausman and D. A. Wise who work mostly with probit model for qualitative choice [3]. G. Aydin and J. K. Ryan used multinomial logit choice model for product line selection and pricing [4]. But American economist Daniel L. McFadden introduced multinomial logit choice model as a mean for decision between more than two alternatives in his Nobel Prize Lecture: "Economic Choices" on December 8, 2000. He payed attention especially to choice behavior of consumers who face discrete economic alternatives. He described consumers as the ones who make choice to try to maximize their self-interest. He also recognizes empirical data analysis as an important way leading to the right decision making. However the multinomial logit choice model is primarily used in transportation and marketing.

Formulation of Multinomial Logit Model

Multinomial logit model is based on choice probabilities as a function of all alternatives.

Let

- p_i be the probability of choosing an alternative i from a set of J alternatives.
 $i = 1, 2, \dots, J$
- I_j be the systematic component of the utility of alternative j .

Then the expression for choosing an alternative i can be written in the form:

$$p_i = \frac{\exp(I_i)}{\sum_{j=1}^J \exp(I_j)} \quad (1)$$

Using (1) we can illustrate the case of three alternatives for decision maker:

$$p_1 = \frac{1}{1 + \exp(I_2 - I_1) + \exp(I_3 - I_1)} \quad (2)$$

and in general:

$$p_i = \frac{1}{1 + \sum_{j \neq i} \exp(I_j - I_i)}, \quad \forall i \in J \quad (3)$$

The Linear Multinomial Logit Choice Model

Usually when we try to specify the utility function, we assume that the relationship is linear:

$$I_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_k X_{ki} + \dots + \beta_K X_{Ki} \quad (4)$$

To describe the problem with $J=3$ alternatives we can choose the model which explains the probability that the i th person chooses alternative j . Hence

$$p_{i1} = \frac{1}{1 + \exp(\beta_{12} + \beta_{22}x_i) + \exp(\beta_{13} + \beta_{23}x_i)}, \quad j = 1 \quad (5)$$

$$p_{i2} = \frac{\exp(\beta_{12} + \beta_{22}x_i)}{1 + \exp(\beta_{12} + \beta_{22}x_i) + \exp(\beta_{13} + \beta_{23}x_i)}, \quad j = 2 \quad (6)$$

$$p_{i3} = \frac{\exp(\beta_{13} + \beta_{23}x_i)}{1 + \exp(\beta_{12} + \beta_{22}x_i) + \exp(\beta_{13} + \beta_{23}x_i)}, \quad j = 3 \quad (7)$$

Summary

To describe the case of applying the multinomial logit choice model for durable goods, we need to take into account that the customer is faced with a wide range of alternatives. Durable goods are specific for a few reasons. One of the reasons is usually price. It means that customer choice is more influenced by the both price of the certain goods and by his income. The product properties also play more important role than advertising although in comparison with that the advertising can play more important role if the customer makes decision for certain clothes or pair of shoes.

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Information Systems in Management Praxis

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Abstract

This contribution deals with information systems. It mainly describes their importance and use in management practices and also their structure, properties and method of construction and developing. It analyzes data models applied in the data base implementation of information systems and characterizes the technologies that are used for mining information and data selection.

Key words

information systems, data models, data mining, data selection, information systems developing

Introduction

Information systems have an important role in making decisions in management praxis. For right decisions it is essential to have not only knowledge about management and controlling but also enough relevant information about controlled processes and their properties and also about their environment. Management information systems are a special group among information systems. While management information systems are extremely useful in generating statistical reports and data analysis, they also can be used for management by objective tools.

What information system is – definitions of basic terms

There are a lot of definitions of information system. It is possible to find them on the Internet and also in monographs, special text- and course books and also in special, technology related dictionaries. An information system is any combination of information technology and people's activities that supports operations, management and decision making processes on the base of up to date information and actual relevant data. In a very broad sense, the term 'information system' is frequently used to refer to the interaction between people, processes, data, information and technology [1].

The term information system is used to refer not only to the information and communication technologies (ICT) that an organization uses, but also to the way in which people interact with this technology to get useful and needed information in support of business, management and decision processes [2]. In connection with the structure, construction, development and implementation of information systems used a number of basic scientific (professional) terms. The content of many of the key terms is clear and unambiguous, but they are nevertheless often used freely, inappropriately in other meaning.

Information technologies: Are procedures and methods (in a very broad sense also equipment, hardware, software and other tools and resources), for collecting, acquiring, coding, storing, processing, transmitting, transporting and providing needed up to date information for a wide range of users in an appropriate form regarding quality and express delivery (on-line).

Database information systems: Are information systems based on database systems. Database system = database (files containing sorted and structured information) + database management system (programs and applications that are processing, updating, providing etc. information to the database). Some make a clear distinction between the database system and database, but very often there are confusing. Study programs of many universities – oriented to economics and management – include the subject "Databases" but in fact its contents are corresponding to the subject of Database systems. Some do not make a clear distinction between these two terms and very often mix them. Databases are only parts (although very important parts) of database systems.

Information system (IS) can be also regarded as a working environment for solving problems in a specific area. IS in this sense is as a special type of work system. A work system is a system in which humans and/or machines perform work using resources to produce specific products and/or services for customers. An information system is a work system whose activities are devoted to processing (capturing, transmitting, storing, retrieving, manipulating and displaying) information [2].

Classification of information systems

Information systems can be classified on several criteria. On the basis of the purpose of their use we can recognize the following types of IS.

A special group among information systems is management information systems. These are different from other IS because they are used to analyze operational activities in the organization [2, 3, 4].

Management information system (MIS) provides information that is needed to manage organizations, companies, corporations, firms and manufactories efficiently and effectively. Most management information systems are specialized in particular commercial and industrial sectors, aspects of enterprises, or management substructures. MIS involve three primary resources: people, technology, and information for decision making. Academically, the term is commonly used to refer to the group of information management methods tied to the automation or support of human decision-making, e. g.

“MIS produce fixed, regularly scheduled reports based on data extracted and summarized from the firm’s underlying transaction processing system to middle and operational level managers to identify and inform structured and semi-structured decision problems”.

Decision support information systems (DSIS) - are computer program applications used by middle management to compile information from a wide range of sources to support problem solving and decision making.

Executive information systems (EIS) - are reporting tools that provide quick access to summarized reports coming from all company levels and departments such as accounting, human resources and operations.

Marketing information systems (MIS) - are specifically designed information system for managing the marketing aspects of the business.

Office automation systems (OAS) - support communication and productivity in the enterprise by automating work flow and eliminating bottlenecks. OAS may be implemented at any and all levels of management.

Companies and firms often use the integrated information systems (IIS) that contain information from all areas of their activities and operations and all levels of control, so you can eliminate redundancy of data and maintain data integrity and compatibility. Abuse of information stored in a database of used information system is prevented from invalid access by giving users different access rights. Integrated information systems also provide various services that are accessible only to a certain level of management. That means that this kind of IIS contains all of the previously listed IS as a comprehensive database management system, which operates over a common complex database.

Information systems can be divided according to their area (field) of use. Information systems can be built in various areas to support various activities and control them. Accordingly, we can talk for example about:

School (management) information systems - cover school administration, time-table scheduling system and often include learning and teaching management system (LTMS) with teaching and learning materials. In many cases integrated school information system includes the school library control and their services and also the school inventory system [2, 3, 4, 8].

Store (management) information systems – such system is used by all e-shops, classic shops and stores with electronic cashboxes.

Library (management) information systems – include not only e-catalogs of the books, articles and other information sources, but also several services for readers and costumers.

Bank information systems – are used for e-banking and several services for costumers.

Reservation information systems – are used for reservation place in transport, theatres, cinemas, performances, several services etc.

Schedule (timetable) information systems – are used for planning services (deadline for a visit to the doctor, dentist and a specialist, supervisor, director, etc.), but also can be used for planning work activities for the company. For example, if a company provides comprehensive services such as building houses. In this way can such a system implementation plan the entire process: from architectural design to ensure static stability parameters and structures, the entire execution and completion of all details, including landscaping the surrounding area.

It is very difficult to distinguish between different types of information systems, because the same system can be used for different purposes. For example: a participant of a conference, through its information system (accessible on Internet), could log in to the conference, be registered, order the offered services (accommodation, meals, special events ... etc.). On the other hand the organization committee

using the same information system and data, added by participants, control their organization activities, create the sections, schedule the program, order the services, accommodation, reserve the classrooms etc.

Many information systems have a high AI, especially those that are used as expert systems in decision-making processes.

Developing Information Systems

The actions that are taken to create an information system include system analysis and design, data analysis, select suitable tools for implementation, implementation (programming), testing, checking the reliability and validity of the system, conversion, production and maintenance. These actions usually take place in that specified order but some may need to be repeated or to be accomplished simultaneously.

Data models

Data analysis results in a model of data and their structure, as a base of database of the creating system. Various techniques are used to model data structure. Most database systems are built around one particular data model, although it is possible for products to offer support for more than one model. For any logical model various physical implementations may be possible. Very often standard data structures (array, file, file of record etc.) are used depending on the used programming environment for the system implementation. Most of the products will offer the user some level of control in tuning the physical implementation, since the choices that are made have a significant effect on performance.

A database model is a theory or specification describing how a database is structured and used. Several such models have been suggested [2, 3, 4]. Common models include:

Flat model – it is not really a data model. The flat model consists of a single, two-dimensional array of data elements, where all members of a given column are assumed to be similar values; and all members of a row are assumed to be related to one another. It is used mainly for transforming text files to database tables.

Hierarchical model – here data is organized into a tree-like structure, implying a single upward link in each record to describe the nesting, and a sort field to keep the records in a particular order in each same-level list.

Relational model – it is based on first-order predicate logic. Its core idea is to describe a database as a collection of predicates over a finite set of predicate variables, describing constraints on the possible values and combinations of values. This model we can imagine as a data structure in a table form, in which one line contains all attributes of one object of database and each column contains a specific (same types) attributes (values) of all objects of the database. This model is very often used for everyday information systems, because the access to all elements of the database is very simple and safe. The selection of looked up information is fast. For quick selection it is possible to use index files. Often for program implementation (for purposes of data storage) is used file of record data structure (with sequential access) or array of record (for processing the data and the information with direct access to them).

Network model – This model organizes data using two fundamental elements, called records and sets. Records contain fields, and sets define one-to-many relationships between records: one owner, many members.

Object-relational model – is similar to a relational database model, but objects, classes and inheritance are directly supported in database scheme and in the query language.

Star scheme – is the simplest style of data warehouse schema. The star schema consists of a few fact tables (preferably/presumably only one, justifying the name) referring to any number of dimension tables. The star schema is a special case of the snowflake schema.

Semantic data model – A semantic data model is a technique to define the meaning of data within the context of its interrelationships with other data. A semantic data model is an abstraction which defines how the stored symbols relate to the real world. A semantic data model is sometimes named as conceptual model.

Generic data model – is the generalization of the conventional data model. Generic data model defines standardised general relation types, together with the kinds of matters that may be related by such a relation type. Generic data models are developed as an approach to solve some shortcomings of the conventional data models. For example, different modelers usually produce different conventional data models of the same domain. This can lead to difficulties in connecting the models of different people together and is an obstacle for data exchange and data integration. Invariably, however, this difference is attributable to different levels of abstraction in the models and differences in the kinds of facts that can be

instantiated (the semantic expression capabilities of the models). The modelers need to communicate and agree on certain elements which are to be rendered more concretely, in order to make the differences less significant.

Creating own information systems

At the J. Selye University database systems are taught in two study programs. At the Pedagogical Faculty this subject is included into the Computer Science Teaching Program and at the Faculty of Economics into the Business and Management. The students will learn to design, implement and use business information systems in innovative ways to increase the effectiveness and efficiency of their future company. The practical part of the course is carried out as a project - in which students implement an own database system. The databases of the student database projects are implemented on the relational data model. In the process of creating the database systems students very often choose the topics as their bachelor and master theses [5, 6, 7].

Scientific electronic on-line dictionary

In the last academic year in the field of database information systems, three projects were successfully implemented. The applications are purposeful combinations of hardware and software tools. The first of them is a scientific electronic on-line dictionary for ICT (especially for e-learning). The development application and its implementation have been used on an ordinary laptop computer. To ensure the easy transfer XAMPP web serving software package was used that contains Apache 2.2.14, MySQL 5.1.41, PHP 5.3.1, 5.10.1 MinipEARL, 0.9.81 OpenSSL, phpMyAdmin 3.2.4 which provides a simple configuration and install of the system. Notepad++ is an efficient instrument for coding HTML, PHP or even CSS languages. Graphical editor Paint.NET was assigned to a graphical environment. Using the software tool phpMyAdmin, which is the SQL command language interpreter, could have been more convenient to work with databases other than MySQL.

Because the users are working with different web browsers, which generally adhere to the standards prescribed by the W3C, during system testing, we used the applications and adjusted the two most widely used browsers, Firefox 4.0 and Internet Explorer 8.0. The application is available at: <http://netwalker.userweb.selyeuni.sk>

Electronic interactive on-line dictionary with automatic text analysis

The second project was the Electronic interactive on-line dictionary with automatic text analysis. Glossary is compiled on the basis of selection of terms from scientific publications using automatic analysis of texts. The dictionary also includes real examples of the terms in context. The dictionary is implemented as a database information system. It has many useful features and services for the user. It is dynamic, updatable only in its database, but also in its capabilities and services.

Advantages and disadvantages of common information systems

Nowadays we can hardly imagine our daily lives without information systems which are getting more and more intelligent. They provide us with miscellaneous information for decision making available from different information sources and databases, and they also offer us a useful service which helps us in the process of decision making and makes it easier to find the most appropriate and satisfactory solution.

The advantages of such information systems are:

- on-line access to information (from home);
- opportunity to compare and verify the different solutions;
- the choice of many offers and having the tools to compare and evaluate solutions; free to choose and decide;
- collecting and processing the information based on selected criteria;
- obtain clear and neatly prepared outputs;
- obtain valid certificates (certificates) of the ordered services;
- obtain relevant evidence of the amount paid;
- integrated, compatible systems that preserve the integrity of separately stored data in different information systems and resources, etc.

Also the field of management information systems (MIS) can deliver a great many benefits to enterprises in every industry.

On the other hand there are also some disadvantages of the IS which could cause inconveniences for the users.

These include:

- invasion of privacy,
- publication of compromising information,
- the used data and information in information systems are out of date and are not relevant, which can have disastrous consequences,
- Customer frustration can lead to mistrust in electronic information systems etc.

E.g. At night time a customer could remain at the station waiting for a connection which – in the meantime – had been canceled, however the new information was not uploaded into the information system and therefore it mislead the customer.

So it's good to check the relevance of the information in the "national" or local information system, which is thought to be the primary source of such information.

Thus it is important for the user to possess a certain level in information literacy and to have the necessary skills to be able to find information, sense its security and verify and check its relevance.

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