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INTERNATIONAL TECHNOLOGY AND INNOVATION COMPETITIVENESS OF POLAND AS COMPARED TO OTHER CENTRAL AND EASTERN EUROPEAN COUNTRIES (EU-10)

Abstract

The main objective of this paper is to compare how international competitiveness of the economies of the new European Union member states (the countries of Central and Eastern Europe, EU-10) has been formed at the beginning of the 21st century, with particular emphasis on competitiveness in technology and innovation.

The paper opens with a brief presentation of the analyzed issues. Further on, the development of international competitiveness of the EU-10 economies is discussed in the light of reports drawn up by the world's leading scientific research centers. Next, international competitive capacity of these countries is analyzed, focusing on their ability to invent and to innovate. The paper closes with a summary and conclusion.

JEL Classification Code: **F00, F40**

Keywords: international competitiveness, Central and Eastern Europe, European Union, innovation.

Introduction

In the contemporary world economy, countries (and groups of countries) are more and more strongly competing with each other on an international scale. Many

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interesting discussions on the forming of international competitiveness of national economies of countries and their groups can be found in the literature on the subject (e.g. in the works of economists exploring the issues of international economic relations and location of economic activity in the world). So far, however, there have been no uniform and generally accepted theory of international competitiveness of a given country's national economy (a theory that could be verified with empirical analyses). Neither there is any clear-cut, unequivocal definition of „international competitiveness" because, as J. Misala says (2011, p. 63), „(…) in fact, this notion (…) has not been defined. As it turns out, it is understood in all the ways possible" (for more on the subject of multiple definitions of „international competitiveness" see e.g.: Bossak, Bieńkowski 2004, Misala 2011).

In the formulated definitions, specific takes on competitiveness are distinguished. For example, H. Siebert and H. Klodt (1998, p. 2-5) have noted three aspects of competition: competing in the area of products, competing in the area of factors of production and the so-called institutional competition. J. Fagerberg, M. Knell and Shrolec (2004, p. 11-20), on the other hand, have distinguished the following:

a) technology competitiveness – defined as the ability to effectively compete on the markets for new goods and services, with this type of competitiveness being closely tied to the innovativeness of the given country;
b) capacity competitiveness – i.e. the ability to increase human capital resources, develop ICT (information and communications technology) infrastructure, implement new technologies quickly and create favourable institutional and social solutions;
c) price competitiveness – i.e. competing in terms of costs of production and prices of the products offered;
d) demand competitiveness – i.e. the given country's ability to adjust the structure of its production and exports to the changing structure of import demand in the global economy.

The lack of a universally accepted definition of international competitiveness has many different causes. One of them is equating three basic subcategories of competitiveness that are interrelated and interdependent, namely:

a) international competitive capacity – i.e., according to J. W. Bossak (1984, p. 37), „the ability to compete for benefits associated with the country's participation in the international division of labour. This ability is relative in two senses; firstly, it is relative to other countries, and secondly, to the features of international competition characteristic of a given stage of development". This mainly concerns two changing components of this capacity, namely the real component (own and foreign resources and economic infrastructure in a broad sense) and the institutional component (system of the functioning of the state);
b) current international competitiveness (competitiveness in the strict sense) – i.e., as J. Misala (2011, p. 118) puts it, „the current state and the direction of changes of the real and institutional components of international competitive capacity

as countries compete for the benefits of their participation in the international division of labour";

c) international competitive position – i.e. „the state and changes of a given country's participation in broadly defined international trading (of goods, services and factors of production – E.S.), as well as the evolution of this trading, including adequate quality changes" (Misala 2011, p. 118).

An important problem is the way of measuring international competitiveness. Many direct measures are used today as well as many measurement methods where various synthetic measures are constructed. The measures used, e.g. those assessing a given aspect of competitiveness, are both quantitative and qualitative.

Generally all those measures can be classified as follow:

- indicators of the general rate of economic development for a given country, GDP growth rate, unemployment rate, inflation rate, condition of the state budget, current account balance, the balance of payments, level of foreign trade reserves, internal and external debts,
- indicators informing about structural changes and changes in the effectiveness of usage of individual factors of production as well as freedom of mobility of factors of production domestically and internationally,
- indicators of education, knowledge and human resource development
- indicators of innovativeness, R&D, and especially ICT development,
- indicators informing about the degree of involvement in international trade

Numerous positive aspects of these measures can be mentioned, as well as some shortcomings (for more on this subject see e.g. Misala, 2007, p. 83-104).

Due to the scope of this paper, only selected indices and measures of competitiveness are used further on.

Technology, innovations, international competitiveness on the background of macroeconomic opportunities

The important factors of economy's competitiveness are technical resources, the level of development and effective usage of technical knowledge, and knowledge in the fields of organization, management and marketing. These are the areas of activities which can be broadly defined as innovativeness of economy. The relationships between innovativeness and economy's competitive ability are presented in Figure 1.

Innovativeness means a set of innovative actions which can take place in industry or services. They can refer to products (creating new ones or significant modifying of already existing products), production processes (making them more efficient) and production methods (development of new production technologies and techniques). Moreover, innovativeness includes also changes increasing efficiency and effectiveness of enterprise activities, thus it also refers to the spheres of organization, management, marketing and finance.

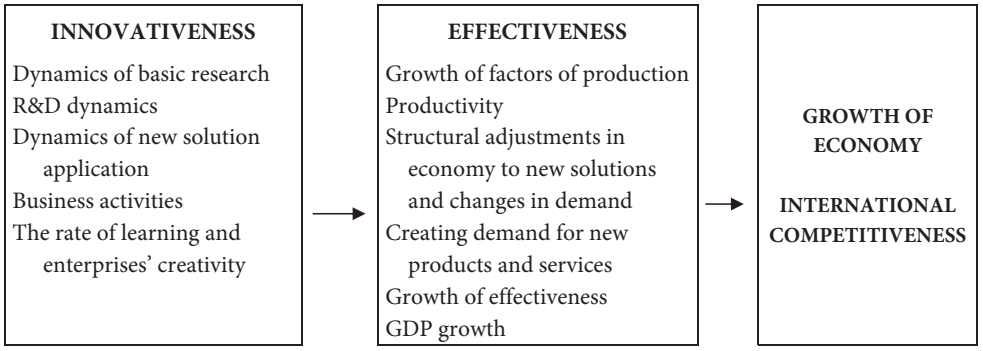

Figure 1. Innovativeness vs. international competitiveness
Source: Bukowski (2010, p.3).

National innovative capacity, characteristic of a given economy is a long-term capacity to create and commercialize the stream of new innovations. Thus, it means a long-term trend towards creative activity in different areas of economy and practical usage of its results. It is a function of material and intellectual resources, outlays indispensable for using these resources (outlays on basic research, R&D), innovative and economic policies of the state creating conditions for development of entrepreneurship and innovativeness, and market competition among enterprises (see: Stern, Porter, Furman, 2000, pp. 1-10; Weresa, 2003, p. 97).

Ability to create innovations has become one of the most important factors of long-term growth and economic development. Innovativeness is based on research and development activities, i.e. on works conducted in laboratories aiming at making production processes more efficient and improving them, developing and creating new technologies and products.

In modern economy, the growth in productivity of factors of production is mainly a consequence of the accelerated scientific and technological progress (outlays on scientific and technological development, R&D), the quality of human resources, entrepreneurship and innovativeness. The very outlays on scientific research measured by their share in GDP do not decide about future effects. A mechanism stimulating conversion of scientific solutions into practical applications in the form of new production methods and new products is indispensable.

The state, to a large extent, is able to influence the amount of outlays on research but it cannot cause that the research results are applied in economy. A mechanism of market competition is indispensable to this end. It enforces improvement of production methods and introduction of new products to the market. The state can create conditions for efficient functioning of the market and competition or it can restrict their activities and sometimes, in many areas, even replace them. However, the experience of many countries proved that such actions are not effective.

Overregulation of economy (including labour market) which is reflected in excessive bureaucratic restrictions in the form of regulations (governing activities in different economic areas), directives, bans and licences leads to limiting the stimuli of innovativeness and reducing productivity of factors of production. The latter is the result of fiscalism in the economic policy of the state accompanied by overregulation of economy. On a macroeconomic scale it is revealed by a high share of taxes and parafiscal charges in GDP and, on the other hand also in the high share of the state expenditures in GDP (the so-called fiscalism index). On a microeconomic scale fiscalism means high tax burden for enterprises as well as different levies of social nature and administrative charges. High fiscal burden reduces the rate of national savings in GDP and hence it has an adverse effect on economic growth. On the other hand, high state expenditures trigger the crowding-out effect, which means a drop in investments and private consumption (Bukowski, 2010).

Administrative intervention in the form of excessive restrictions regulating business activities leads to reduced flexibility of enterprises in adjustment to market signals and changes that occur in the world's economy.

Protectionism in foreign trade is another unfavourable factor affecting competitiveness of economic innovativeness. It leads to disturbances in the market mechanism of allocating resources of factors of production in economy, weakening of stimuli of effective management in enterprises and stimuli of technical and technological progress. Enterprises are deprived of competitive pressure from abroad (see: Bukowski, 2003, pp. 45-47).

The above mentioned factors (overregulation of economy, fiscalism and protectionism) lead to petrification of economic structures, reduced entrepreneurship and innovativeness, reduced management effectiveness and consequently lower productivity of factors of production, slow rate of economic growth and eventually lower competitiveness of economy in comparison to foreign countries. Figure 2 presents system-related determinants of international competitiveness of economy.

What is particularly important is assuring openness of property (ownership) rights. The open system of property rights means that there are no restrictions to undertake, run and benefit from business activities. This system includes different forms of ownership and treats them equally. Yet, it must be borne in mind that when there is freedom of undertaking business activities and competition, private ownership is the factor strengthening development of private sector which is more effective and efficient and innovative than the public sector based on non-capitalistic ownership (see: Bossak, Bieńkowski, 2004, p. 64). Hence, privatization processes play a very important role in economy. These processes broaden the scale of economic freedom. As J. Bossak puts it: „privatization of economy means broadening the limits of economic freedom and competition and reducing market regulation, including ownership rights, finances, labour and foreign co-operation".

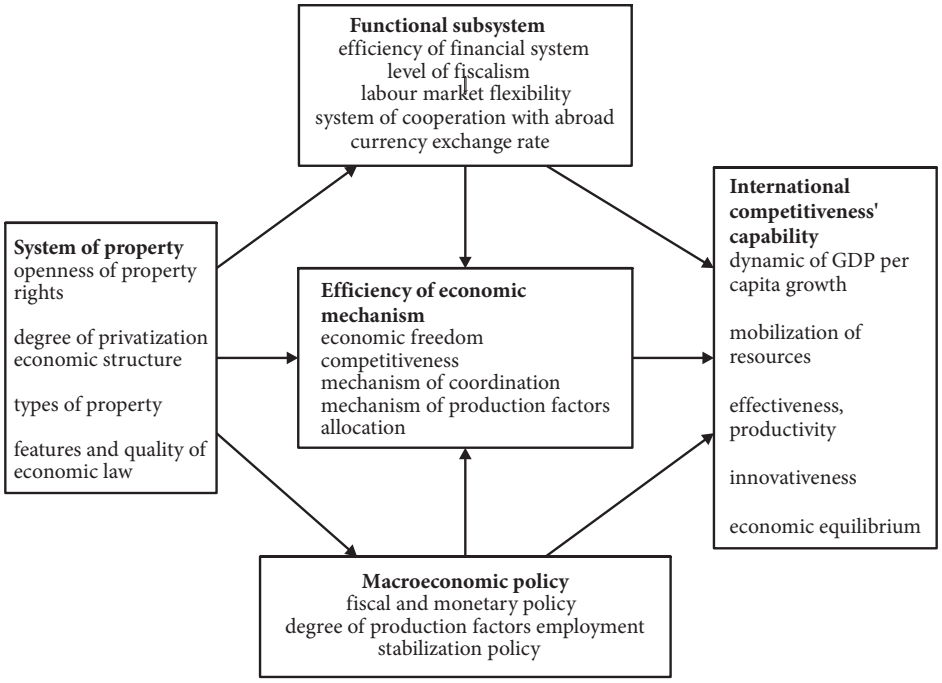

Figure 2. System-related determinants of international competitiveness

Source: Bossak (2001, p. 52).

Broadening of the range and intensity of market mechanism influence enhances selective and location functions of the market and thus mobility of resources (especially, labour mobility) and promotes higher economic effectiveness (see: Bossak, Bieńkowski, 2004, p. 64).

Macroeconomic policy based on deregulation of economy and liberalization of economic links with abroad as well as creating conditions for competition mechanisms among enterprises may favour the long-term economic growth based on innovativeness to a greater extent. Creation of institutional conditions enabling flexible market functioning, including labour market, is of crucial importance here. It is also important to ensure a high degree of economic freedom and freedom of competition mechanisms between domestic and foreign enterprises. Economic policy of the country may only correct effects of market mechanisms but it cannot replace them. It is essential to reduce fiscalism in economic policy which is measured by the share of taxes, contributions towards social insurance and other parafiscal charges in GDP. The state can support processes of economic growth by ensuring openness and protection to ownership rights, providing broad economic freedom and supporting entrepreneurship and innovativeness. In particular, the state can and should

care about development of infrastructure, society's education, development of the system of education at different levels and financing scientific research (first of all basic research which builds the foundation for progress in the sphere of technology and education and adjusting society and economy to challenges posed by foreign environment in the long-run) (Bukowski, 2010).

EU-10 countries in the selected rankings of international competitiveness

One of the world's leading academic centers doing research on international competitiveness of economies is the Institute for Management Development (IMD). The research results are published in he World Competitiveness Yearbook annual reports covering several dozen countries. IMD experts define the competitiveness of economy as the country's capacity to create added value and contribute to the increase of wealth through efficient management, attractive conditions for business operations and globalization and integration of all these factors into a single coherent social and economic model. The IMD research on competitiveness include an analysis of numerous factors determining its level, classified in four groups: macroeconomic results (including domestic economy, international trade, international investment, employment, prices), government efficiency (public finance, fiscal policy, institutional framework, business legislation and societal framework), efficiency of businesses (productivity, labour market, finance, management practice, attitudes and values) and the quality of infrastructure (basic infrastructure, technological infrastructure, scientific infrastructure, health and environment, education)[1].

In the IMD competitiveness rankings, the countries of Central and Eastern Europe have not ranked high, and in 2012 their position was lower than in 2008 (except for Poland). In 2012, IMD experts recognized Estonia, Czech Republic and Poland as the most competitive economies in the region. The positions of Bulgaria, Romania and Slovenia have deteriorated, with these countries ranking in the bottom ten.

A slightly different take on the aspects of competitiveness[2] is presented by the international competitiveness ranking developed by the experts of the World Economic Forum (WEF), with competitiveness understood as a country's capacity to achieve a constant high rate of the GDP per capita growth.

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[1] More than 300 criteria are used to analyze these factors, including the so-called hard data (measurable, e.g. GDP) and soft data (non-measurable, e.g. management practices or life quality). For more on the ranking's methodology, see IMD (2012, p. 480-484).

[2] 12 pillars of competitiveness are analyzed, divided into three groups: basic requirements (institutions, infrastructure, macroeconomic stability, health and primary education), efficiency enhancers (higher education and training, goods market efficiency, labour market efficiency, financial market sophistication, technological readiness, market size) and innovation and sophistication factors (business sophistication, innovation).

Table 1. Positions of the EU-10 countries in IMD rankings (in terms of overall competitiveness and selected criteria) 2008-2012

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Overall competitiveness										
2008[a]	39	28	23	38	–	36	**44**	45	30	32
2009[b]	38	29	35	45	–	31	**44**	54	33	32
2010[c]	53	29	34	42	–	43	**32**	54	49	52
2011[d]	55	30	33	47	–	45	**34**	50	48	51
2012[d]	54	33	31	45	–	36	**34**	53	47	51
Economic Performance										
2008[a]	38	20	23	39	–	28	**31**	35	32	25
2009[b]	26	25	48	33	–	36	**39**	32	34	21
2010[c]	46	29	52	40	–	57	**24**	47	54	42
2011[d]	48	34	51	44	–	53	**31**	49	57	43
2012[d]	49	29	38	35	–	46	**30**	52	55	43
Government Efficiency										
2008[a]	29	33	10	47	–	36	**49**	48	31	43
2009[b]	28	31	22	50	–	25	**44**	49	34	38
2010[c]	32	33	24	51	–	34	**36**	50	41	53
2011[d]	41	28	20	52	–	47	**35**	49	42	53
2012[e]	44	30	24	51	–	37	**36**	52	43	53
Business Efficiency										
2008[a]	48	34	28	45	–	41	**50**	47	26	32
2009[b]	47	36	41	52	–	35	**50**	56	26	39
2010[c]	56	40	36	47	–	41	**38**	49	43	57
2011[d]	57	35	32	50	–	45	**41**	49	42	56
2012[d]	59	41	38	49	–	36	**39**	52	43	57
Infrastructure										
2008[a]	41	24	26	27	–	32	**37**	43	36	29
2009[b]	43	25	28	33	–	29	**39**	53	37	27
2010[c]	48	26	27	35	–	30	**36**	43	40	34
2011[d]	53	29	33	35	–	36	**34**	42	41	31
2012[d]	52	30	32	35	–	31	**36**	50	39	33

[a] out of 55 countries analyzed; [b] out of 57 countries analyzed; [c] out of 58 countries analyzed; [d] out of 59 countries analyzed.

Source: IMD (selected editions).

In the WEF competitiveness rankings, the countries of Central and Eastern Europe have not ranked high, either. It was mostly the ability to invent and to innovate that received a relatively poor assessment. Poland was definitely outdistanced in the rankings by such countries as the Czech Republic, Estonia and Slovenia.

Table 2. Positions of the EU-10 countries in World Economic Forum rankings (in terms of overall competitiveness and selected criteria) from 2008 to 2012

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Overall index										
2008[a]	76	33	32	62	54	44	**53**	68	46	42
2009[b]	76	31	35	58	68	53	**46**	64	47	37
2010[c]	71	36	33	52	70	47	**39**	67	60	45
2011[d]	74	38	33	48	64	44	**41**	77	69	57
2012[e]	62	39	34	60	55	45	**41**	78	71	56
Basic requirements										
2008[a]	82	45	30	64	55	46	**70**	87	52	38
2009[b]	80	45	34	58	60	47	**71**	86	54	29
2010[c]	72	44	25	59	61	52	**56**	77	53	34
2011[d]	74	45	27	55	66	49	**56**	89	60	39
2012[e]	65	44	26	55	54	49	**61**	90	62	39
Efficiency enhancers										
2008[a]	65	26	26	48	47	43	**41**	54	32	37
2009[b]	62	24	27	45	51	47	**31**	49	34	37
2010[c]	65	28	34	41	63	49	**30**	54	37	46
2011[d]	59	29	36	42	54	48	**30**	62	44	51
2012[e]	59	34	31	52	48	46	**28**	64	51	55
Higher education and training										
2008[a]	61	25	19	40	33	26	**34**	52	45	22
2009[b]	60	24	21	35	34	30	**27**	52	47	19
2010[c]	67	24	22	34	35	25	**26**	54	53	21
2011[d]	70	30	23	45	34	26	**31**	55	53	21
2012[e]	63	38	25	49	42	26	**36**	59	54	23
Technological readiness										
2008[a]	53	33	17	40	41	38	**46**	48	36	30
2009[b]	56	30	16	40	47	36	**48**	58	33	32
2010[c]	48	32	24	37	51	33	**47**	58	34	35
2011[d]	50	31	27	36	46	34	**48**	60	37	32
2012[e]	52	31	25	49	38	33	**42**	59	45	34
Innovation and sophistication factors										
2008[a]	92	25	40	55	84	49	**61**	75	53	33
2009[b]	89	26	42	61	86	53	**46**	75	57	30
2010[c]	95	30	45	51	77	48	**36**	91	63	35
2011[d]	96	32	37	52	64	50	**57**	99	71	45
2012[e]	97	32	33	58	68	47	**61**	106	74	36
Innovation										
2008[a]	96	25	31	45	93	55	**64**	69	58	33
2009[b]	91	25	37	45	88	58	**52**	70	68	29
2010[c]	92	27	37	41	77	51	**54**	87	85	34
2011[d]	93	33	30	34	59	48	**58**	95	96	40
2012[e]	92	34	30	37	64	43	**63**	102	89	32

[a] out of 134 countries analyzed, [b] out of 133 countries analyzed, [c] out of 139 countries analyzed, [d] out of 142 countries analyzed, [e] out of 144 countries analyzed.

Source: WEF (selected editions).

The EU-10 countries are building international competitive capacities of their economies at various stages of economic development. However, while the Czech Republic and Slovenia have already entered the stage of building and developing the so-called innovation-driven economy (where fundamental importance is attached to developing the residents' ability to invent and innovate by means of education and development of international business ties), the remaining countries (especially Bulgaria and Romania) are still at the stage of building efficiency-driven economy (where fundamental importance is attached to the striving for the improvement of economic efficiency by increasing the productivity of the factors of production used, especially by perfecting the quality of human resources, improving the functioning of the markets and advancing the level of technology).

An important factor determining a country's opportunities for economic development and for improving its competitiveness is the so-called degree of economic freedom. The easier it is to achieve and sustain a higher competitive position relative to other countries, the higher the degree of economic freedom. Overall economic freedom is measured with a model consisting of ten components[3] scored on a scale from 0 to 100%. When calculating the overall index, these components are treated as equally significant.

In the light of the Heritage Foundation rankings, Poland's international competitiveness measured according to the Index of Economic Freedom (IEF) has not been particularly elevated, especially when compared to other EU-10 countries. In 2008, the IEF for Poland and Slovenia was the lowest among the analyzed countries, barely exceeding 60%, which put Poland in the group of economies of rather limited economic freedom. The rest of the EU-10 countries had a higher IEF and could be thus classified as countries of medium economic freedom. As the 2013 ranking shows, the IEF exceeded 60% in almost all the EU-10 countries, and in the case of Estonia and Lithuania it was even over 72%. Nevertheless, there were still some problems with property rights protection in the countries of Central and Eastern Europe (especially in Bulgaria, Romania, Latvia and Slovakia) and the corruption index was relatively high.

Another method for measuring the competitiveness of economies is the KAM (Knowledge Assessment Methodology). It has been developed by the World Bank Institute experts within the Knowledge for Development Program in order to analyze the possibilities for the transformation of individual countries towards knowledge-based economy. The method assumes that the opportunity to use and create knowledge in a given country is the key driving force for its long-term growth and development. The method's main objective is to facilitate the identification of problems

[3] These are the following: freedom of business activity, the extent of trade liberalization, fiscal burden, government intervention, monetary policy, foreign investment, banking and finance, property rights, freedom from corruption, labour rights. See Heritage Foundation (http://www.heritage.org).

and opportunities already present in the area of technological advancement. Using this method makes it possible to determine the right directions for economic policy and investment measures that would facilitate the future development of knowledge-based economy.

Table 3. The Index of Economic Freedom for the EU-10 countries from 2008 to 2013

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Overall score										
2008	63.7	68.1	77.9	67.6	68.3	70.9	**60.3**	61.7	70.0	60.2
2009	64.6	69.4	76.4	66.8	66.6	70.0	**60.3**	63.2	69.4	62.9
2010	62.3	69.8	74.7	66.1	66.2	70.3	**63.2**	64.2	69.7	64.7
2011	64.9	70.4	75.2	66.6	65.8	71.3	**64.1**	64.7	69.5	64.6
2012	64.7	69.9	73.2	67.1	65.2	71.5	**64.2**	64.4	67.0	62.9
2013	65.0	70.9	75.3	67.3	66.5	72.1	**66.0**	65.1	68.7	61.7
Property Rights										
2008	30	70	90	70	55	50	**50**	30	50	50
2009	30	70	90	70	55	50	**50**	35	50	60
2010	30	65	80	65	55	55	**55**	40	55	60
2011	30	65	80	65	50	60	**60**	40	50	60
2012	30	70	80	70	50	60	**60**	40	50	60
2013	30	70	85	65	50	60	**60**	40	50	60
Freedom from corruption										
2008	40	48	67	52	47	48	**37**	31	47	64
2009	41	52	65	53	48	48	**42**	37	49	66
2010	36	52	66	51	50	16	**46**	38	50	67
2011	38	49	66	51	45	49	**50**	38	45	66
2012	36	46	65	47	43	50	**53**	37	43	64
2013	33	44	64	46	42	48	**55**	36	40	59

Source: Heritage Foundation, http://www.heritage.org/index [accessed 5 April 2013].

According to the World Bank experts, beside the degree of economic freedom, the primary determinants of technological advancement of a given country include: an effective innovation system (the capacity of companies, research centers, universities and other institutions to create scientific and technological knowledge and implement it in practice), the education level and resources of skilled human capital (able to create and adapt technological knowledge) and state-of-the-art ICT infrastructure (various tools facilitating the transfer and processing of the created or imported scientific

and technological knowledge). These factors are taken into account when constructing the so-called Knowledge Economy Index – KEI[4]. The value of the KEI ranges from 0 to 10, with higher values indicating a more advanced knowledge-based economy.

Table 4. The Knowledge Economy Index for the EU-10 countries in 2008 and 2012

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Score KEI 2008	6.72	7.92	8.3	7.88	7.61	7.7	**7.52**	6.18	7.44	8.27
2012	6.8	8.14	8.4	8.02	7.41	7.8	**7.41**	6.82	7.64	8.01
Economic Incentive and Institutional Regime 2008	7.01	7.77	8.68	8.39	8.04	7.94	**7.39**	6.87	7.93	8.11
2012	7.35	8.53	8.81	8.28	8.21	8.15	**8.01**	7.39	8.17	8.31
Innovation System 2008	6.42	7.59	7.48	8.13	6.38	6.58	**6.91**	5.65	6.85	8.31
2012	6.94	7.9	7.75	8.15	6.56	6.82	**7.16**	6.14	7.3	8.5
Education and Human Resources 2008	7.37	8.1	8.46	7.82	8.51	8.42	**8.82**	7.21	7.21	8.26
2012	6.25	8.15	8.6	8.42	7.73	8.64	**7.76**	7.55	7.42	7.42
ICT 2008	6.07	8.29	8.57	7.15	7.52	7.87	**7.52**	6.16	7.7	8.42
2012	6.66	7.96	8.44	7.23	7.16	7.59	**6.7**	6.19	7.68	7.8

Source: World Bank, http://info.worldbank.org/etools/kam2 [accessed 10 April 2013]

In the analyzed period, the EU-10 countries improved or retained their position in the area of building knowledge-based economy. The indices for innovation, education and scientific and technological infrastructure have improved, which indicates positive trends as to the possibilities of absorbing more and more advanced technological solutions.

In recent years, Poland has noted a visible progress in the process of developing the basics of knowledge-based national economy. Nevertheless, as far as the advancement

[4] KEI takes into account 12 variables grouped in four dimensions: economic incentive and institutional regime (tariff & nontariff barriers, regulatory quality, rule of law), innovation system (royalty and license fees payments and receipts, patent applications granted by the US Patent and Trademark Office, scientific and technical journal articles), education and human resources (average years of schooling, secondary enrollment, tertiary enrollment) and information and communication technology – ICT (telephones per 1,000 people; computers per 1,000 people; internet users per 10,000 people).

of this process is concerned, Poland still cannot match not only the countries that are highly developed economically (e.g. Germany) but also other countries of Central and Eastern Europe, especially Slovenia and Estonia, which have joined the group of producers and exporters of cutting-edge technological solutions (the so-called innovation followers). This is confirmed by the results of *Innovation Union Scoreboard 2011*, a report drawn up by the Maastricht Economic and Social Research Institute on Innovation and Technology under the PRO INNO Europe Initiative[5].

Table 5. The Summary Innovation Index (SII*) in the EU-10 countries from 2007 to 2012

Year	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
2007	0.173	0.397	0.395	0.314	0.191	0.265	**0.284**	0.226	0.295	0.431
2008	0.192	0.404	0.410	0.316	0.205	0.272	**0.293**	0.242	0.309	0.454
2009	0.205	0.386	0.476	0.320	0.215	0.242	**0.292**	0.265	0.307	0.485
2010	0.216	0.400	0.492	0.333	0.213	0.258	**0.304**	0.259	0.322	0.499
2011	0.239	0.436	0.496	0.352	0.230	0.255	**0.296**	0.263	0.305	0.521
2012	0.188	0.402	0.500	0.323	0.225	0.280	**0.270**	0.221	0.337	0.508

* the SII value ranges from 0 to 1, with higher index value indicating a higher level of a country's innovativeness.

Source: IUS (2012, p. 70; 2013, p. 73).

According to the *Innovations Union Scoreboard 2013 report*, Poland belongs to the group of moderate innovators. Bulgaria, Lithuania, Latvia and Romania come at the end of the list and are described by the authors of the report as modest innovators, or countries who are catching up.

International competitive capacity of the EU-10 countries

The EU-10 is a group of countries that differ in terms of area, population or GDP creation structure. Poland undoubtedly has the greatest economic potential among them. It is, however, no match for most of them in terms of GDP per capita.

[5] Summary Innovation Index (SII) distinguishes between 3 main types of indicators and 8 innovation dimensions, capturing in total 25 different indicators: Enablers (capture the main drivers of innovation performance external to the firm and cover 3 innovation dimensions: 'Human resources', 'Open, excellent and attractive research systems' as well as 'Finance and support'), Firm activities (capture the innovation efforts at the level of the firm, grouped in 3 innovation dimensions: 'Firm investments', 'Linkages & entrepreneurship' and 'Intellectual assets'), Outputs (cover the effects of firms' innovation activities in 2 innovation dimensions: 'Innovators' and 'Economic effects'). See: IUS (2012, p. 6).

Table 6. The area, population, GDP per capita and the structure of economy according to added value of the EU-10 countries in 2010

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Area (thousands km^2)	110.9	78.9	45.2	93	64.6	65.3	**312.7**	238.4	49	20.3
Population (millions)	7.6	10.5	1.3	10	2.2	3.3	**38.2**	21.5	5.4	2
GDP per capita (thousands of euro)	4.8	14.2	10.7	9.7	8.6	8.4	**9.3**	5.8	12	17.3
Economy structure (in % in 2009)										
Agriculture	4.8	1.9	2.8	3.4	3.8	2.8	**3.6**	7.2	3.1	2.4
Industry	22.1	30.2	19.8	24.6	15.8	21.3	**24.6**	26.8	25	23.1
Services	73	67.9	77.4	71.6	80.4	75.9	**71.8**	66.1	71.9	74.5

Source: Eurostat data, http://epp.eurostat.ec.europa.eu [accessed 10 April 2013].

In the period analyzed, the EU-10 countries differed also in terms of the extent of participation in the international division of labour. This concerned their engagement in the international exchange of both goods and services.

In the analyzed period, the EU-10 countries' share in global trading of goods and services was scarce, despite a clearly visible growth tendency. In 2000 these countries' total share in global exports of goods was about 2%, rising to about 4% by the end of 2012. Their share in global imports of goods was running at a similar level. It is worth adding that as much as half of this trading was generated by two of the analyzed countries, namely Poland and the Czech Republic.

There is no doubt that the process of integration of Central and Eastern European countries with the European Union has had a positive effect on the development of their foreign trade. It should be noted, however, that in the analyzed period in Poland and other EU-10 countries (except for the Czech Republic) the exports to imports ratio in the trading of goods was below 100%, which meant they had a disadvantageous competitive position in this trading. In some of the countries, though, surpluses in foreign trading of services played an important role in the process of toning down the trade balance deficit (e.g. in Latvia, Slovenia and Estonia).

From the perspective of shaping the countries' competitiveness, and their technological competitiveness in particular, an adequate export structure is of great importance, especially the significance of processed goods in this structure, with particular emphasis on goods that are technologically intensive.

Table 7. The participation of the EU-10 countries in the global trading of goods and services in selected years between 2000 and 2012

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Share in global exports of goods										
2000	0.07	0.45	0.06	0.44	0.03	0.06	**0.49**	0.16	0.18	0.14
2005	0.11	0.74	0.07	0.60	0.05	0.11	**0.85**	0.26	0.30	0.18
2008	0.14	0.91	0.07	0.67	0.06	0.15	**1.06**	0.31	0.44	0.21
2011	0.15	0.90	0.09	0.61	0.07	0.15	**1.03**	0.34	0.44	0.19
2012	0.15	0.85	0.09	0.57	0.08	0.16	**1.00**	0.32	0.44	0.18
Share in global imports of goods										
2000	0.10	0.48	0.07	0.48	0.05	0.08	**0.73**	0.19	0.19	0.15
2005	0.17	0.70	0.09	0.61	0.08	0.14	**0.94**	0.37	0.19	0.19
2008	0.22	0.86	0.10	0.66	0.10	0.19	**1.26**	0.51	0.45	0.22
2011	0.17	0.82	0.09	0.56	0.09	0.17	**1.13**	0.41	0.42	0.19
2012	0.18	0.76	0.10	0.51	0.09	0.17	**1.06**	0.38	0.42	0.17
Share in global exports of services										
2000	0.14	0.45	0.10	0.39	0.08	0.07	**0.70**	0.12	0.15	0.13
2005	0.18	0.47	0.13	0.51	0.09	0.12	**0.65**	0.20	0.17	0.16
2008	0.20	0.57	0.13	0.52	0.12	0.12	**0.92**	0.33	0.22	0.19
2011	0.18	0.53	0.13	0.51	0.10	0.12	**0.88**	0.25	0.16	0.17
2012	0.16	0.50	0.12	0.45	0.10	0.13	**0.87**	0.22	0.16	0.15
Share in global imports of services										
2000	0.11	0.37	0.06	0.32	0.05	0.04	**0.61**	0.13	0.12	0.10
2005	0.14	0.43	0.09	0.47	0.06	0.08	**0.65**	0.23	0.17	0.12
2008	0.16	0.48	0.09	0.49	0.09	0.11	**0.83**	0.33	0.25	0.14
2011	0.11	0.47	0.09	0.44	0.07	0.09	**0.77**	0.28	0.18	0.12
2012	0.10	0.47	0.09	0.38	0.06	0.10	**0.77**	0.21	0.16	0.10

Source: WTO data, http://stat.wto.org [accessed 11 April 2013] and the author's own calculations.

The Czech Republic and Hungary, and to a lesser extent Slovakia, Slovenia and Poland, have so far based their exports expansion mostly on exporting processed industrial goods, especially machines and transportation equipment. This was due to the reallocation of manufacturing from Western Europe to relatively less economically developed countries, a practice known as offshoring and outsourcing. This largely concerned the manufacturing of parts, units and sub-assemblies for automotive and machine industry. In some countries, such as Hungary and Slovakia, the effect was a considerable share of technologically intensive products in exports.

Table 8. The share of selected groups of goods in the exports of the EU-10 countries in selected years between 2000 and 2011

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Share of ICT products in exports										
2000	0.8	4.6	25.3	25.7	0.9	4.8	**4.1**	5	3.3	1.9
2005	1.5	11.1	17	25.6	2.0	5.3	**4.0**	2.2	9.4	1.3
2008	2.2	14.1	5.4	22.7	4.6	3.0	**7.0**	4.5	16.9	2.1
2010	2.5	15	7.9	25.6	5.8	2.7	**9.5**	8.4	19.3	2.2
2011	2.1	16.4	12.7	22.8	4.7	2.3	**7.2**	8.3	15.8	3.4
Share of chemicals (SITC 5) in exports										
2000	10.0	7.1	3.3	6.5	6.4	8.4	**6.8**	5.8	7.6	11.0
2005	7.6	6.0	5.1	7.3	6.3	8.7	**6.8**	5.7	5.7	12.4
2008	8.0	6.0	6.3	8.3	9.2	13.7	**7.8**	6.1	4.7	13.4
2010	7.9	5.8	5.0	9.5	9.2	13.0	**8.3**	5.8	4.7	17.8
2011	8.3	6.3	5.9	10.8	7.8	13.0	**9.1**	6.8	4.8	16.1
Share of machines and transportation equipment (SITC 7) in exports										
2000	9.6	44.4	33.2	59.1	7.1	15.5	**34.2**	18.9	39.3	35.9
2005	14.3	50.6	35.1	58.7	13.1	20.5	**39.1**	25.4	44.1	39.0
2008	15.5	53.8	29.5	60.2	21.3	19.0	**41.4**	35.9	53.9	41.2
2010	16.8	50.2	26.3	60.7	21.3	18.0	**40.5**	42.3	55.0	48.3
2011	17.8	56.4	33.6	61.7	19.2	16.9	**39.8**	44.6	51.7	40.7

Source: WTO data, http://stat.wto.org [accessed 11 April 2013] and the author's own calculations.

The significance of Poland as an exporter of processed and technologically advanced products, as compared to other EU-10 countries, was not particularly crucial in the analyzed period. The situation was slightly different when it comes to the direct export of technological knowledge through the exportation of production capital that is accompanied by the export of this knowledge, to a larger or smaller degree. Although the share of the EU-10 countries in the global flows of capital in the form of foreign direct investment (FDI) has been relatively small, in Poland these flows were still the most intense in the region.

Since the early 1990s, the situation of Poland has been disadvantageous as compared to other new EU member states with respect to the size of the acquired FDI per capita. In 2011, the value of the accumulated size of FDI acquired by Poland per capita was only about 4,500 USD, which was tantamount to ranking towards the bot-

tom of the list of all the analyzed countries (above Romania and Lithuania). Much better results were achieved by Estonia (about 13,700 USD), the Czech Republic (about 8,700 USD) and Hungary (about 7,600 USD).

Table 9. The EU-10 countries' share of global flows in the form of FDI in the selected years between 2000 and 2011 (in %)

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Inward FDI										
2000	0.07	0.36	0.03	0.20	0.03	0.03	**0.67**	0.08	0.14	0.01
2005	0.40	1.19	0.29	0.79	0.07	0.10	**1.05**	0.66	0.25	0.06
2008	0.55	0.36	0.10	0.35	0.07	0.11	**0.83**	0.78	0.26	0.11
2010	0.12	0.47	0.12	0.17	0.03	0.06	**0.68**	0.22	0.04	0.03
2011	0.12	0.35	0.02	0.31	0.10	0.08	**0.99**	0.18	0.14	0.07
Outward FDI										
2000	0.00	0.00	0.01	0.05	0.00	0.00	**0.00**	0.00	0.00	0.01
2005	0.03	0.00	0.08	0.25	0.01	0.04	**0.39**	0.00	0.02	0.07
2008	0.04	0.22	0.06	0.11	0.01	0.02	**0.22**	0.01	0.03	0.07
2010	0.02	0.08	0.01	0.09	0.00	0.01	**0.38**	0.00	0.02	-0.01
2011	0.01	0.07	-0.09	0.27	0.01	0.01	**0.35**	0.00	0.03	0.01

Source: UNCTADstat data, http://unctadstat.unctad.org [accessed 11 April 2013].

In the analyzed period, the share of global capital flows as well as the size of capital resources given out by Poland and other countries of the region in the form of outward FDI was much smaller than the size of the acquired resources. In 2011, the accumulated value of outgoing flows per capita was about 1,000 USD in Poland, while it amounted to about 4,600 USD in Estonia, 3,200 USD in Slovenia and 2,500 USD in Hungary.

All the EU-10 countries are undoubtedly still at the stage of building knowledge-based economy, with Hungary, the Czech Republic, Estonia and Slovenia being the most advanced, as can be confirmed by the share of research and development spending in the GDP, which has been consistently growing in these countries.

The EU-10 countries saw a slow but gradual increase of involvement in creating technological knowledge and in the process of internationalization of scientific research and the related transfer of disembodied technology. The transfer of technology in such a form was largely associated with big transnational corporations and their policy of using and acquiring Polish scientific and engineering solutions.

Table. 10. Research and development (R+D) spending as a GDP percentage in the EU-10 countries in selected years between 2000 and 2011 (in %)

Year	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithu-ania	**Poland**	Romania	Slovakia	Slovenia
2000	0.51	1.17	0.60	0.81	0.45	0.59	**0.64**	0.37	0.65	1.38
2005	0.46	1.35	0.93	0.94	0.56	0.75	**0.57**	0.41	0.51	1.44
2008	0.47	1.41	1.28	1.00	0.62	0.79	**0.60**	0.58	0.47	1.65
2010	0.60	1.56	1.62	1.16	0.60	0.79	**0.74**	0.47	0.63	2.11
2011	0.57	1.84	2.38	1.21	0.70	0.92	**0.77**	0.48	0.68	2.47

Source: Eurostat, http://epp.eurostat.ec.europa.eu [accessed 11 April 2013].

Between 2006 and 2010 the analyzed countries saw a consistent rise in the number of patents granted. Although according to the World Intellectual Property Organization (WIPO) technological advancement in the world is determined by scientists from three countries (United States, Japan and Germany), the role of scientists from the countries of Central and Eastern Europe, especially from the Czech Republic, Hungary, Poland and Slovenia, is becoming more significant by the year.

Table. 11. The number of patents granted in the EU-10 countries between 2006 and 2011 according to the World Intellectual Property Organization

Year	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
2006	21	96	11	131	12	10	**96**	28	25	40
2007	29	129	29	161	21	13	**102**	29	38	86
2008	28	152	34	170	21	19	**127**	11	39	106
2009	25	178	30	141	24	22	**173**	12	34	137
2010	33	137	45	172	26	11	**199**	19	44	126
2011	28	148	35	140	17	25	**235**	26	59	125

Source: WIPO (selected editions).

From 2000 to 2008, in the EU-10 countries the percentage of domestic inventions remaining under the control of foreign companies was relatively high. For the large part, these inventions were „exported", so to speak, to the home countries of the foreign investors. The rate of foreign ownership of domestic inventions remained at a relatively high level and was about 85% in 2008. Such a high value points to a big potential and high quality of human capital that is being more and more widely used by foreign entities, e.g. through outsourcing and offshoring transactions.

In the analyzed period, the control of companies from the EU-10 countries over foreign inventions was distinctly lower. The highest efficiency in using foreign technological and scientific solutions to create domestic inventions could be seen in Bulgaria, the Czech Republic, Hungary, Poland and Slovenia.

Table. 12. Patents grants at the US Patent and Trademark Office (USPTO) in the EU-10 countries in selected years between 2000 and 2009*

	Bulgaria	Czech Republic	Estonia	Hungary	Latvia	Lithuania	**Poland**	Romania	Slovakia	Slovenia
Foreign ownership of domestic inventions										
2000	6	68	9	99	15	12	**57**	12	17	40
2005	51	78	7	76	10	12	**73**	27	20	26
2008	5	77	5	25	2	6	**38**	39	7	3
2009	4	30	4	18	0	2	**16**	13	3	2
Domestic ownership of inventions made abroad										
2000	7	21	1	41	2	2	**12**	2	5	19
2005	14	17	3	21	3	3	**31**	3	7	23
2008	1	14	2	1	1	2	**11**	2	2	2
2009	0	3	1	0	0	2	**2**	1	0	0

* no data for 2010-2012.

Source: OECD data, http://stats.oecd.org/ [accessed 11 April 2013].

Conclusions

The EU-10 is a diverse group of countries, with differences determined by numerous factors, both economic (structural, technological and resulting from current economic situation) and non-economic (political, institutional and instrumental). It is worthwhile, however, to compare the experiences of these countries, since they can serve as inspiration for searching solutions contributing to the enhancement of international competitiveness of national economies, including that of Poland.

The EU-10 countries do not rank high in various competitiveness rankings prepared by international research centers. However, their competitive position has been improving by the year. It is noted that adequate processes of international competitiveness development proceed more slowly in Poland than in other countries of the region (e.g. Estonia, Slovenia or Czech Republic). This is also – or perhaps above all – true for technological development and broadly defined innovation.

The share of the EU-10 countries in global trading of goods and services is slight, and as a result the benefits they derive from this trade are relatively small, disproportionally low compared to these countries' potential and resources, e.g. of human capital. Inflowing production capital in the form of FDI has been allocated to the sectors of technologically advanced goods and services production for just a few years, but the share of technologically intensive products in manufacturing and exports of most of these countries is still unsatisfactory.

Competitive capacity of the EU-10 countries in terms of innovativeness of their national economies remains at a relatively low level. Although the Czech Republic, Slovenia and Estonia can be considered leaders in this area, nevertheless, when compared to the countries of the European Union's core (such as Germany or Sweden), the technological gap can be plainly seen. Relatively low spending on research and development, scarce number of patents and inventions and the failure of businesses to cooperate with scientific research centers are just a few problems faced by the countries of the region.

Poland's ability to invent and innovate is at a relatively low level when compared to other European Union countries, including the countries of Eastern and Central Europe. It thus seems necessary to strengthen the suitable ties between the public and private sectors. Moreover, it is necessary to attach more significance to the protection of intellectual property and to increase the number of innovative business enterprises and other economic entities.

We can formulate also conclusion in form of hypothesis that main reasons of above mentioned state of innovativeness and international competitiveness is overregulation of the Polish and the most of analyzed economies and lack of good macroeconomic incentives for innovativeness. But it is task for following investigation which the authors will develop.

References

Bieńkowski W. 1995. *Reaganomika i jej wpływ na konkurencyjność gospodarki amerykańskiej*. Warszawa: Wydawnictwo Naukowe PWN.

Bossak J.W. 1984. S*połeczno-ekonomiczne uwarunkowania międzynarodowej zdolności konkurencyjnej gospodarki Japonii*, Monografie i Opracowania, nr 153. Warszawa: SGPiS.

Bossak J.W., Bieńkowski W. 2004. *Międzynarodowa zdolność konkurencyjna gospodarki i przedsiębiorstw. Wyzwania dla Polski na progu XXI w*. Warszawa: Oficyna Wydawnicza SGH.

Bukowski S. 2003. *Teoretyczne podstawy i realizacji unii monetarnej krajów członkowskich Wspólnot Europejskich. Szanse i zagrożenia dla Polski*, Radom: Wydawnictwo Politechniki Radomskiej.

Bukowski S.I. 2010. *System-related Opportunities and Determinants of Innovativeness, International Competitiveness and Economic Growth*, Messenger of the International Nobel Economic Forum, No 1(3) 2010, Tom 1, Dniepropietrowsk: Dnipropietrowskij Uniwiersitiet Ekonomiki Ta Prawa, s. 38-47.

Eurostat Database, http://epp.eurostat.ec.europa.eu

Fagerberg J., and Mark Knell, and Martin Srholec, 2004. *The Competitiveness of Nations: Economic Growth in the ECE Region*, Working Papers on Innovation Studies 20040223, Centre for Technology, Innovation and Culture, University of Oslo. February.

Heritage Foundation, *Economic Freedom Indexes*, http://www.heritage.org/index

IMD (2008, 2009, 2010, 2011, 2012), *IMD World Competitiveness Yearbook*, International Institute for Management and Development, Geneva.

IUS (2012), *Innovation Unions Scoreboards 2011*, European Commission, Brussels.

IUS (2013), *Innovation Unions Scoreboards 2013*, European Commission, Brussels.

Measuring Knowledge in the World's Economies; Knowledge Assessment Methodology and Knowledge Economy Index, World Bank Institute, www.worldbank.org/kam

Misala J. 1995. *Międzynarodowa konkurencyjność gospodarki. Pojecie i sposób mierzenia*, Warszawa: IRIS.

Misala J. 2006. *Mechanizmy i realia integracji gospodarczej Polski z krajami członkowskimi Unii Europejskiej*, w: Misala J. (ed.) *Polska w Unii Europejskiej. Wstępny bilans członkostwa*, Radom: Wydawnictwo Politechniki Radomskiej.

Misala J. 2007. *Międzynarodowa zdolność konkurencyjna i międzynarodowa konkurencyjność gospodarki narodowej*, Radom: Wydawnictwo Politechniki Radomskiej.

Misala J. 2011. *Międzynarodowa konkurencyjność gospodarki narodowej*, Warszawa: Wydawnictwo PWE.

OECD Database, http://stats.oecd.org

Siebert H., Klodt H. 1998. „Towards Global Competition: catalysts and constraints", *Kiel Working Papers*, No. 897, IfW.

Stern S., Porter M., Furman J.L. 2000. „The Determinants of National Innovative Capacity", NBER, Working Paper, No 78776, September, s. 1-10.

UNCTAD Database, http://unctadstat.unctad.org

WEF (2008, 2009, 2010, 2011, 2012), *Global Competitiveness Report*, World Economic Forum, Davos.

Weresa M.A. 2003. *Zdolność innowacyjna polskiej gospodarki; pozycja w świecie i regionie*, w: Brdulak H., Gołębiowski T. (red.), *Trans 03 – Innowacje w gospodarce*, Warszawa: Difin, s. 96-114.

WIPO (2007, 2008), *Patents Report*, World Intellectual Property Organization, Geneva.

WIPO (2009, 2010, 2011, 2012), *World Intellectual Property Indicators*, World Intellectual Property Organization, Geneva.

WTO Database, http://stat.wto.org

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APPLICATION OF AN EARLY WARNING SYSTEM IN THE DYNAMIC MODEL FOR BUSINESS PROCESSES IMPROVEMENT

Abstract

The goal of the present paper is to depict the application of an early warning system as a part of the dynamic model for business processes improvement. The essence of the system is presented, the stages its building passes through, as well as the principle of its functioning.

JEL Classification Code: **L23**

Keywords: business process, optimization, external environment, internal environment, indicators, monitoring.

Introduction

Each organization is striving to enhance its competitiveness and to increase its revenues. It is a continuous process, which most often leads to modification not only of the production, but also in the management structure. The optimization should be in compliance with the selected strategy and the company structure. Further, the business processes improvement should take into consideration the following aspects: „flexibility" – showing the possibility of the managing bodies to take decisions related to the strategic reorientation or revision of the goals in accordance with the changes in the environment; „wholeness" – the existing and potential relations and interactions among all activities, processes and business processes in the organization to be used in order to achieve the specified common goal; and, „strategic range" – all events related to the business process optimization have to be in conformity with the company strategy. The practice shows that the applied methods of

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optimization would be more efficient, if you take into account the dynamics of the reasons which starts the improvements. The dynamic model of business processes improvement presents the optimization itself like a process, which is developing in time. It examined the reasons of improvements in their development and combines described features. It is constructed of three modules. The first module is functioning as an early warning system and is monitoring the presence of changes in the organizational environment. In the second module, the actual improvement of the processes is done and the third one depicts system of objectives in the organization.

The purpose of the present article is to present the first module of the dynamic model of business processes improvement, which is performing the functions of an early warning system. Also, to be depicted and analyzed the essence, the stages of construction and the specifics of its functioning.

Specifics of the early warning system

The early warning system has been built and functions through the early warning indicators. These are tools, which record changes in the environment of the organization through weak or strong signals (Bedenik, Rausch, Fafaliou & Labaš, 2012). The early warning indicators are divided into absolute – recording the condition as to a given moment and relative (Hopfenbeck, 2002). One of the main tasks of the indicators is to show where to look for changes in the environment, even it can't indicate when they will occur (Bedenik et al., 2012). „Weak signal" is understood as the presence of ambiguous and inaccurate information for pending changes in the environment that could lead to negative consequences for the organization (Ansoff and McDonnell, 1990). In contrast to them, „the strong signals" are carriers of clear and accurate information (Ansoff, 1979). The main function of the early warning system is aimed at monitoring and recording of the weak signals emitted by the environment (Figure 1). The presence of a deviation thereof is a signal for the company management to undertake actions and/or measures, whereby to carry out the necessary corrections (Hahn, 1979). Reading the changes of the early warning indicators parameters gives the companies the opportunity in due time:

– to identify the possible risks they are facing;
– to reveal hidden potential (Krystek and Müller-Stewens, 1993);
– to identify their strengths and weaknesses.

That way, each organization has the possibility/chance to avoid or prevent dangers, consequence of its existence (Gomez, 1983). Further, it acquires flexibility towards the occurrence of adverse events and the actions in order to deal with them should be in conformity with the selected strategy (Bedenic et al., 2012). The timely reporting of the weak signals, as well as their accurate analysis, are key factors for undertaking the correct measures of overcoming the approaching crisis (Barry and Elmes, 1997). The information received from the indicators is presented to the man-

agers, who take the decision for preventive actions for conformity with the environmental changes (Bedenic et al., 2012). Moreover, the early warning system analyzes the reasons of occurrence of the changes and evaluates the probable trends of their future development (Bedenic et al., 2012).

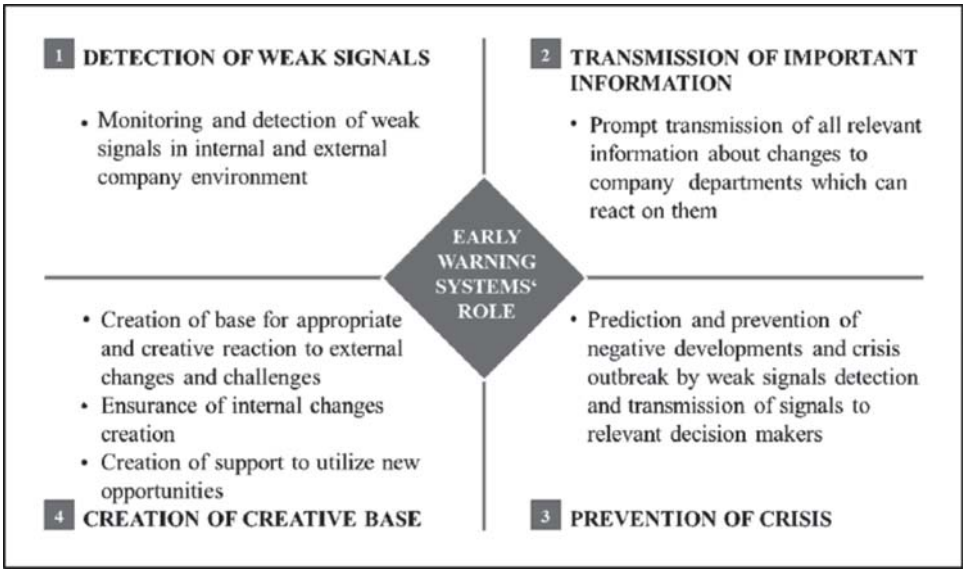

Figure 1. Functions of early warning system

Source: Bickhoff, N., Blatz, M., Eilenberger, G., Haghani, S., & Krause, K.-J. (2004). *Die Unternehmenskrise als Chance*, Innovative Ansatze zur Sanierung und Restrukturierung, Berlin, Springer.

Construction of the early warning system

The construction of the early warning system for the needs of the dynamic model of business processes improvement passes through three main stages.

In the first stage the way of reporting the changes in the environment is selected. Three main approaches exist in the practice: signal, discrete and structural.

With the signal approach, the values of the selected indicators are compared, at the initial position and immediately before the occurrence of the change in the environment (Kaminsky, Lizondo & Reinhart, 1997). It is necessary to choose period on which the signals must be reported. Its determination is within the competency of the organization's managers. Also, the control limits are identified, which are between two and three standard deviations of the indicators average values. In the classic model only one control limit is identified (Kaminsky et al., 1997), but later has also started determination of „warning limits" (Brugemann and Linne, 2002). The reporting of a weak signal, which is followed in future by a change in the environment is assumed as „a good" signal. Accordingly, the reporting of a signal, which is

not followed afterwards by a significant change in the environment, is called a bad signal or „noise" (Kaminsky et al., 1997). The main problem that should be solved is related to the selection of accurate early warning indicators, which should omit the bad signals and record the good ones (Kaminsky et al., 1997). To that end, the indicators are divided into the following four classes.

Table 1. Classification of the emitted signals

	Change in the environment (within the selected period)	No change in the environment (within the selected period)
Emit a signal	**A**	**B**
Don't emit a signal	**C**	**D**

Class A – indicators that have emitted signals during the relevant period and afterwards a change in the environment has occurred – good signal; **Class B** – indicators that have emitted signals, but a change in the environment has not occurred – bad signal; **Class C** – indicators that have not emitted signals, but a change in the environment has occurred – bad signal; **Class D** – indicators that have not emitted signals and there is no change in the environment – good signal.

Source: Kaminsky et al., 1997 (modified).

Every early warning system based on the signal approach should strive to minimize the correlation „good signal" to „bad signal" (A/B) (Kaminsky et al., 1997). There are also additional correlations between the classes, under which each indicator is evaluated: „the propensity of emitting a good signal" is equal to (A/(A+C); „the propensity of emitting a bad signal" is determined in a similar way (B/(B+); „noisiness of the indicator" ([B/(B+D)]/[A/(A+C)]); „conditional probability of change in the environment" [A/(A+B)]; „unconditional probability of change in the environment" ([(A+C)/(A+B+C+D)]) (Kaminsky et al., 1997). The signal approach of the early warning system is a useful tool of analysis, but it should not be absolutized (Edison, 2000). Combined with other techniques and methods of analysis and assessment, it gives a clear vision of the organization and its environment.

The discrete approach is a variety of the signal one, but with the difference that where the value of an indicator deviates from the average one beyond the specified limits, the indicator adopts the value „one" (Hajivassiliou and Ruud, 1994). While varying within the admissible deviations, its value is „zero". Subsequently, the value is regressed by using the „logit" or „probit" models[1], in order to determine the probability of occurrence of a change in the environment[2].

[1] In many cases the choice depends on the researcher's decision.

[2] For more information see: Hajivassiliou, V. and Ruud, P. (1994). *Classical Estimation Methods for LDV Models Using Simulating*. In Handbook of Econometrics, Volume IV, Elsevier Science B.V.

With the structural approach, various econometric models are used and the regression analyses are applied directly on the selected indicators.

On the second place, the type of the early warning indicators and the relations between them are determined. The type and number of indicators could be determined from:

– analysis of the external environment;
– analysis of the internal environment;
– the strategy of the organization through a balanced scorecard.

Analysis of the external and the internal environment of the organization with the dynamic model of business processes improvement

Upon the analysis of the external and the internal environment of the organization, the potential sources of damages and benefits for the organization are described and examined, notwithstanding whether they are beyond or within the corporate borders. The analysis is focused as on the external, as well as on the internal environment of the company, since they generate the strong and the weak signals.

External environment factors

The external environment is an aggregation of factors and components, which are not part of the company, but affect it. Such are the factors of the social, political, economic and technological environment (Eversheim, 1990). The changes in the environment have significant effect on the organization, but its influence on them is limited. The company should react to each change in the environment in order to be competitive. An important specific of the dynamic model of business processes improvement is that upon the analysis of the external environment, great attention is paid to the comparison with the direct competitors, as well as to the market position of the organization. The direct competitors are subject to monitoring and analysis, since their organizational and operational structures are similar and the flaws in the examined company could be outlined more clearly. Further, the elaboration of strategy or the implementation of a new product on the basis of performed analysis compared with the direct competitors could lead to stabilization and enhancement of one's own market position.

- social environment – it describes the culture and the norms in the social system. The influence of the cultural differences is weaker compared to the legislations of the various countries. It is expressed in regional changes and specifications of the products. The social environment factors are subject of research of the marketing departments (Hentze, 1993).
- political environment – it reveals the influence of the legislative, executive and judicial power on the organization. Here are included also the regulatory documents, regulations and laws, ensuing from international agreements and allianc-

es, which are obligatory to be performed by any economic entity in the country. The rules and norms fixed by the state serve to define the external borders of the organization. They are specific for each sector and branch of economy. The relationships inside the company are regulated through intra-company regulations and/or formation of groups by interests, etc.

- economic environment – it includes the measurers of the national economy and the international markets trends of development. Also, the influence of changes in the value of the resources needed for the realization of deliveries and sales is taken into consideration. The selection of a concrete indicator to be reviewed ensues from the specifics of the organization (Gälweiler, 1986). The economic environment factors exert the strongest influence on the organizations, since they affect their main goal, namely the profit (Hentze, 1993). Because of that reason the analysis and forecasts of the economic environment are of big importance and find wide application in the practice.
- technological environment – it concerns mainly companies applying strategy based on products innovation. The analysis of the technological environment is aimed at continuous supply of information and knowledge about the technology of the production processes. That knowledge is both familiar and applicable in the practice, or is in the development phase (Becker, 1988).

Internal environment factors

Characteristic for the analysis of the internal factors influencing the designing and the improvement of the business processes is that they are divided into three groups: the ones affecting the resources; the orders; and the products[3]. It should take into consideration the influence of: reasons for the occurrence of technological interruptions; what the technological norms for the branch are at present and their future changes; presence and significance of future economic forecasts (Hentze, 1993).

- resources – these are all necessary factors and components for the transformation of inputs into ready production. The resources are material (machines, buildings, personnel, etc.) and intangible (company culture, know-how, information, etc.). The material resources are used at a given moment only on one place, while the intangible – on different places and simultaneously. One of the most important company resources is the staff. The labour and knowledge applied by them in the production predetermine the company success. At the same time the workers and the company are in a mutual contradiction. The employees' income, in the form of wages, represents a significant financial expense for the organization. On the other hand, those incomes generate consumption,

[3] The two familiar techniques of the internal environment analysis are not applied – through „the Porter's chain of values" or through „analysis of the resources according to their profile".

which leads to increase of company's revenues and hence increasing the success (Kreikebaum, 1997). Through the interaction of the resources after placing the order, the final result is achieved – product/service. This product is designated to satisfy the needs of an internal or external customer. Selling is a process of moving product from the company to customers.

- orders – the order expresses the needs of an internal or external customer of the relevant product/service and triggers the performance of the process. External customers are outside corporate boundaries and are users of complete product/service. Internal customers can be departments that ordering unfinished product which will be processed into next phase of production cycle. Upon receipt of the result of the process, the customer is paying certain price. He evaluates the process for compliance with the agreed specification through factors, such as: time needed for delivery; abidance that time; quickness of service; price and quality of the product. Upon noncompliance with some of the listed factors, it is assumed that the customer shall turn to a competitive enterprise. The demand of company products leads to increase of the revenues and enhancement of the organization's success. From this point of view, the preferences and the desires of the customer are of great importance for the companies. They must take central place in the process of taking strategic and operative decisions.
- products – the products represents the result of the running of a process. The material and intangible resources of the organization are implemented in the product. The products themselves may also be determined as material (goods) and intangible (services) (Spur, 1994). The formation of a new product through running a process is characterized by the transformation of materials or of partially ready components and adding value (Günther, 2005). The processing and the transformation of those components into an end product can be expressed in change of the physical condition or addition of complementary benefits for the customer.

Selection of early warning indicators based on balanced scorecard

Besides based on the analysis of the external and the internal environment, the early warning indicators may be derived also from the organization's strategy. To that end, key indicators[4] are used in the balanced scorecard, through which the strategy is performed. The change in the environment leads to a change in the rate of strategic goals achievement. The key indicators from the balanced scorecard record any deviation from the set forth goals. The presence of a stable deviation from the goals generates a necessity of reorganization and optimization of the business processes.

[4] Those are indicators of qualitative and quantitative measuring of the rate of achievement of the set forth corporate objectives (Kaplan anad Norton, 1996).

On the grounds of this dependency, the early warning indicators could be derived from the key indicators used in the balanced scorecard. Another reason of deriving the early warning indicators from the balanced scorecard is that similar to them, the key indexes are also selected on the basis of defined criteria. They should be „measurable", „accessible", „clearness", „balanced", „quantitatively measurable", etc. (Kaplan and Norton, 1996). However, the practical researches show that the selection of indicators is complied with the specific of each company (Table 2).

Table 2. Example indicators

Finance	**Customers**
Total assets	Market share
Total income/assets	Customer volume
Income of a shareholder	Time needed for a client
Income from new products (customers)	Customer Loyalty Index
Total profit / assets	Index of customer satisfaction
Profit of a shareholder	Index of satisfaction of distributors
ROI	Rate of customers growth
Profitability of invested capital	Annual sales per customer
Profitability of income from new products	Profitability of a customer
Cost of capital	**Return volume**
Cash flow	
Internal business processes	Learning and Development
Administration costs	Index of staff turnover
Stocks turnover	Costs of staff training
Preparation time of production process	Satisfaction index
Production costs	Relative share of trained staff
Share of the rejected production	Relative share of training costs
Cost of purchasing and delivery of inputs	

Source: Schneier, Cr., Shaw, D., Beatty R. *Performance, Measurement, Management and Appraisal Sourcebook*, Numan Resource Development, 1995 (modified).

A list of possible early warning indicators is drafted from the obtained information from the analysis of the environmental factors affecting the organization, as well as from the balanced scorecard. The initial list may include also indicators from other sources of information, such as: consultancy companies, unit leaders, specialized literature, existing regulatory basis, market researches, etc. (Sexton, 2011). This information should be of high quality and accessible. Many of the initially chosen indicators are similar in their essence. Due to that reason, a selection of the indicators is done, most often through discussions between the executive officers and the heads of departments. Several individual indicators may be aggregated in one or to

be completely dropped off the system[5]. Besides, the various indicators are evaluated also in accordance with the emitted good signals to the system. In general, the definition of the indicators is a specific task for each business unit. Summarizing universal indicators is at least incorrect and even impossible.

Determining the causal relations between the indicators

The causalities between the indicators can be divided into: directly or inversely proportional; functional or stochastic. It is characteristic for the directly proportional relations that upon increasing/decreasing of the value of one of the indicators, the other is changing in the same direction. With the inversely proportional relations – the increasing of one of the indicators leads to decreasing the other one and vice versa. Functional dependency is present where a direct relation exists between the indicators[6]. Stochastic are the indirect, probability relations between the indicators. For the normal functioning of the early warning system it is necessary to ascertain whether causalities exist between the selected early warning indicators and what they are. This way, in case of deviation in one of the indicators, the managers shall be aware how the others would change.

In the third stage of building the early warning system for the needs of the dynamic model, control limits of the already selected indicators are set forth. A concrete value is specified for each indicator. Through it slight deviations in the indicators can be detected. The monitoring periods are determined, which are specific for each company.

In order to select the control limits, it is necessary to identify firstly the average level of each indicator. This is done by setting their quantitative values. The control limits are selected similar to those in the control cards. They can be: narrow – „warning limits" and broad – „intervention limits" (Kamiske, 2007). In practice, most often the „warning" limit is assigned a value of two sigma, and a „control" – three sigma from the mean. The more narrow control limits are chosen, the more signals will be counted, but at the same time will increase the reporting of bad signals (Bussiere and Fratzscher, 2002). Moreover, for some specific indicators (e.g. unemployment) is not necessary placement of the lower control limit. Therefore, the selection of specific values of the control limits is also the responsibility of management and is specific for each organization. If the values of a given indicator fall outside the „warning limit", a signal is sent for the appearance of a deviation. This deviation may have random character and to not have any further influence. But if increasing, the values of the indicator shall cross the „intervention limit", whereof immediate taking measures for the improvement of the relevant process should follow.

[5] See: Kaminsky et al., 1997.

[6] The functional relations could be: full – where their relation is quantitative; and incomplete – where the relation is of qualitative nature.

After the control limits of the indicators have been set, the monitoring periods should be selected. They also are specific for each company. The practice shows that most often quarterly periods are selected. A follow up reporting is done each quarter. Another possibility is the selected monitoring period to be in compliance with the product life cycle. Upon presence of an indicator value outside the „control limit", adjustment of the monitoring period is allowed.

Functioning of the early warning system

The functioning of the early warning system is performed by monitoring of the internal and the external environment of the organization. In the basis of this periodical research lies the cybernetic approach. Through recording the weak signals sent by it, the arising threats or possibilities are identified (Krystek and Müller-Stewens, 1993). The indication of such changes in the environment arising is realized within the already specified monitoring zones (Hahn and Klausmann, 1986). The monitoring is performing several main tasks. The first one is to accumulate information from the environment, through which innovative production technologies can be discovered, which could have positive effect on the organization. Another task of the monitoring is to regulate the responsibilities and competencies of the employees upon crossing the control limits of the relevant indicators. This is allowing for, in case of any deviation beyond those limits, the use of all resources for its elimination. In this regard, the application of elaborated in advance crisis strategies is necessary. All employees must be familiar with them and should undertake the relevant actions related to their application. An additional task of the monitoring is the provision of data about the position of the company in the branch and its status compared to the direct competitors at certain periods. The performance of the monitoring in the dynamic model of business processes improvement may be described as a sequence of several steps.

- **Step 1**: Scanning of the environment for the presence of weak signals. In case of available such signals, the change of the indicators values is reported.
- **Step 2**: In case of available deviations beyond the warning limits, an analysis is done of the reasons of their occurrence. All deviations are presented in a web diagram. This way, it becomes clear whether the deviations in the indicators are positive or negative.
- **Step 3**: It is ascertained whether there exists any functional relation between the deviations of the individual indicators.
- **Step 4**: In the fifth step a prognosis of the deviations development is made. The purpose is to identify the future change of each deviation, as well as its stability. Should the prognosis model show a trend towards increase and possibility of crossing the control limits, the next step should be undertaken. Otherwise, we assume that the deviation is of random nature and shall not cross the control limits.

⇨ **Step 5**: Sending information to the second module of the dynamic model of business processes improvement about the presence of deviations generating the necessity of processes optimization. The goal is to achieve sustainable improvement in the organizations process structure.

Whether the process optimization is effective and sustainable is determined at the next scan.

Conclusion

The early warning system presents the first phase of the dynamic model of business processes improvement. In this module monitoring of the company and the environment is performed. Early warning indicators are defined, which allow earliest possible reporting of changes in the environment. The indicators are derived through analysis of the external and the internal environment of the company or from the key indicators of the balanced scorecard. It is necessary to set forth control limits for each indicator as well as a period of time for the monitoring. The practice shows that the optimal monitoring period is quarterly. In case of deviations beyond the control limits of any indicator, analysis is performed of the reasons of its arising and prognosis of its future change. The actual bettering of the relevant process, in which a deviation has occurred, is done in the next module of the dynamic model. The application of the early warning system in combination with the „Business processes improvement" module, where the actual improvement is done, of the dynamic model of business processes improvement allows for the achievement of sustainable and efficient optimization of all processes in the organization.

References

Ansoff, H. I., & McDonnell, E. J. (1990). *Implementing Strategic Management*. New York, Prentice Hall.

Ansoff, I. (1979). *Strategic Management*. London, Macmillan.

Barry, D., & Elmes, M. (1997). *Strategy Retold: Toward a narrative View of Strategic Discourse*, Academy of Management Review, 22 (2), 429-452.

Becker, T. (1988). *Das frühzeitige Erkennen von Technologietrends: Patentanalyse, Bibliometrie, Technometrie*. In: Technologie und Management, 37 (4), 20-26.

Bedenik, N. O., Rausch, Al., Fafaliou, Ir., & Labaš, D. (2012). *Early Warning System – Empirical Evidence*. In: TRŽIŠTE, 24 (2), 201-218.

Bickhoff, N. Blatz, M., Eilenberger, G., Haghani, S., & Krause, K.-J. (2004). *Die Unternehmenskrise als Chance.* Innovative Ansatze zur Sanierung und Restrukturierung. Berlin, Springer, 5-10.

Bruggemann, A. & Linne, T. (2002). *Are the Central and Eastern European Transition Countries Still Vulnerable To a Financial Crisis?* Results from the Signals Approach. BOFIT Discussion Papers 5.

Bussiere, M., & Fratzscher, M. (2002). *Towards a New Early Warning System of Financial Crises*. Working Paper, Europian Central Bank.

Edison, H. (2000). *Do indicators of financial crises work? An evaluation of an early warning system*. Board of Governors of the Federal Reserve System, International Finance Discussion Papers, No. 675.

Eversheim, W. (1990). *Organisation in der Produktionstechnik*. Düsseldorf, VDI Verlag.

Gälweiler, A. (1986). *Unternehmensplanung, Grundlagen und Praxis, Neuausgabe bearbeitet und ergänzt von M. Schwaninger*. Frankfurt a. M.

Gomez, P. (1983). *Frühwarnung in der Unternehmung*. Bern, Haupt Verlag.

Günther, H.-O., & Tempelmeier, H. (2005). *Produktion und Logistik*. Berlin, 6 Auflage, Springer Verlag.

Hahn, D. (1979). *Frühwarnsysteme, Krisenmanagement und Unternehmensplanung*. In: Zeitschrift für Betriebswirtschaft, 79 (2), 25-46.

Hahn, D., & Klausmann, W. (1986). *Frühwarnsysteme und strategische Unternehmensplanung*. In: Strategische Unternehmensplanung, Hrsg.: Hahn, D., Taylor, B., 4. Auflage, Heidelberg.

Hajivassiliou, V. & Ruud, P. (1994). *Classical Estimation Methods for LDV Models Using Simulating*. In Handbook of Econometrics, Volume IV, Elsevier Science B.V.

Hentze, J., Brose, P., & Kammel, A. (1993). *Unternehmensplanung*, Bern, Haupt Verlag.

Hopfenbeck, W. (2002). *Allgemeine Betriebswirtschafts- und Managementlehre*. Deutschland, Verlag Moderne Industrie.

Kahl, K. (1989). *Ziele und Zielplanung im Unternehmen*. In: Strategische Planung, 4 (3).

Kamiske, G., & Brauer, J. (2007). *Qualitätsmanagement von A – Z: Erläuterungen moderner Begriffe des Qualitäts-managements*. München, Carl Hanser Verlag.

Kaplan, R. S., & Norton, D. P. (1996). *Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press.

Kreikebaum, H. (1997). *Strategische Unternehmensplanung*. Stuttgart, W. Kohlhammer Verlag.

Krystek, U., & Muller-Stewens, G. (1993). *Fruhaufklarung fur Unternehmen: Identifikation und Handhabung zukunftiger Chancen und Bedrohungen*. Stuttgart, Springer.

Schneier, Cr., Shaw, D., & Beatty R. (1995). *Performance, Measurement, Management and Appraisal Sourcebook*. Numan Resource Development.

Sexton, D. (2011). *Trump University*. Branding 101: How to Build the Most Valuable Asset of Any Business. Lotus.

Spur, G. (1994). *Handbuch der Fertigungstechnik*. Band 6: Der Fabrikbetrieb, Berlin, Springer Verlag.

Ulrich, P., & Fluri, E. (1995). Management – Eine konzentrierte Einführung. Bern und Stuttgart, Haupt Verlag.

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STATUS AND TRENDS OF TOURISM DEVELOPMENT IN THE LIGHT OF THE RESULTS OF STUDIES ON THE COMPETITIVENESS OF THE DISTRICTS OF PODKARPACIE PROVINCE

Abstract

The competitiveness of the tourist reception areas is the ability to achieve greater economic, social and cultural effects related to the development of tourism than the average for a country or a selected area across a continent or across the world. Regions compete with each other for both tourists and investors, also outside the tourist industry. In the era of globalization, competition between regions also increases its spatial extent. Moreover, it is difficult to talk about the ability to compete without having a vision of the future or having appropriate tools for the implementation of the vision, but these are just the beginning, and the effects which can bring tangible benefits to a region are the fruits of skillfully and consistently pursued policies in the development of each tourist region such as Podkarpacie Province with a great number of its competing districts. The aim of this article is to analyse the major determinants of tourist competitiveness related to the new paradigm of regional development, based on the example of Podkarpacie districts. The competitiveness of the tourist districts in Podkarpacie Province depends largely on their tourist attractiveness and their attractiveness for investors. On the basis of studies[1] on the competitiveness of Podkrpackie districts, presented in the article, the status and trends of tourism development in this area are analysed.

JEL Classification Code: **L23**

Keywords: tourism, regional development, competitiveness, determinants of tourism.

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[1] Studies were performed under the supervision of Prof. Associate, Sc.D. at Rzeszów University, Bogusław Ślusarczyk, within the doctoral dissertation: Słowik J., 2013, *Spatial diversity of tourist attractiveness and its impact on the competitiveness of Podkarpacie Region*, UTH in Radom, p. 455.

Introduction

For many years the tourism sector has been one of very important elements in the strategy of the development of Podkarpacie Province, which is largely due to its exquisite environmental conditions, tourist attractions, as well as its widely recognised cultural heritage. Due to its high forest cover, clean rivers and air, a diverse terrain, Podkarpacie Province has a high natural value and it is considered to be attractive for doing various forms of tourism, such as water sports, hiking, biking, skiing, horseback riding, etc. The following features are certainly big advantages of Podkarpacie districts: tourist attractiveness, transit and border location, natural and anthropogenic features that together with the development of tourism, tourist facilities and transport accessibility, may be of interest to potential visitors who would rather decide to come here than elsewhere. The number of people visiting a tourist destination has an impact on both its development and its social and economic situation. Thus, the counties where such tourist destinations are located are developing in more dynamic and various ways.

Each of the districts has specific conditions for the development of tourism, which is reflected, among others, in their expenses on maintaining and developing the tourist facilities, such as accommodation, catering, communication. These factors shape the tourist traffic, which is expressed as the number of users and overnight stays. Also, the expenditure on environmental protection, including protection of air, water conservation, wastewater and waste management, has an impact on the development of tourism in each district.

Polish membership in the European Union has created an opportunity for Podkarpacie Province to develop dynamically. In addition to the changes that took place after the introduction of a market economy in Poland, based on the competition, there are now possibilities for the regions and tourist areas to develop on the basis of EU funds. On the one hand, the EU funds created many opportunities for each area. On the other hand, however, they led to competition mechanisms. Local government units implement and use to a very large extent the European Union funds in which infrastructure projects are dominant and they account for almost two thirds of all funding.

This article presents the state of the development of tourism, the benefits it can bring to the society of Podkarpacie Province, and prospects and barriers for its further development in various aspects of the region's geographic, tourist and socio-economic features. The theme of the article is dictated by the lack of a full analysis of the fundamental determinants of development in the areas of tourist attractiveness and the degree of their investment attractiveness, which are essential features of tourism competitiveness and tourism development (including especially catering and related areas, and to a lesser extent, accommodation and transport). Determining the strengths and weaknesses of tourism development makes it possible to adopt proper strategies to improve the competitiveness of the tourist districts of Podkarpacie Province.

Human activity (tourists' activity), is closely linked to people's needs and their motivation. Hence the need for a deeper study of tourism development in Podkarpacie Province in terms of functional, social and mental needs of its residents as well as the needs of the visitors to this area. A targeted need arising from the system of values goes beyond the general activation of mobility and generates a specific mechanism in human behavior, which becomes the reason for the realisation of various forms of activity in tourism and recreation. The collected material turned out to be very extensive, so it was possible to demonstrate the links between various factors that determine the development of tourism, and it was possible to define in a practical way the directions for the development of tourism in different districts of Podkarpacie Province. It was also possible to demonstrate various interdependencies affecting the development of tourism, as well as to provide in a practical way the directions for the development of tourism in various districts of Podkarpacie Province.

This paper attempts to provide a statistical analysis of the essential characteristics that affect tourist and investment attractiveness, environment protection, investment expenditure and the tourist traffic in Podkarpacie Province. The competitiveness of Podkarpacie districts, which results from their tourist and investment attractiveness, was subjected to a detailed analysis too.

Tourist competitiveness of districts as the resultant of their tourist and investment attractiveness

Tourism competitiveness is a crucial factor for individual areas, regions and other places and the concepts of both tourism and investment competitiveness and attractiveness refer to similar things (Ślusarczyk, 2011, p. 41).

Tourism competitiveness of an area is the result of many elements, both natural and anthropogenic or economic. The areas valuable from the point of view of their natural qualities, including protected areas, are a natural space for tourist exploration. Therefore, national and landscape parks are of greatest interest for tourists as, in addition to their convenient location, each of them stands out by its specificity, diversity of nature and landscape, the presence of cultural objects and the degree of its spatial development.

Tourist values (natural and anthropogenic), accessibility, tourist development (accommodation, catering, communication and accompanying things) have a decisive impact on tourist attractiveness because they have a specified potential which allows for the creation of appropriate competitive tourist products in the sites popular with tourists due to their natural features.

Natural, as well as anthropogenic tourist values are considered to be the basis for the development of tourism, and therefore, also the basis for the tourist traffic to the area of tourist reception, but they must be complemented by both facilities

and equipment required for the development of tourism (accommodation, catering, communication etc.) as well as by proper service and technical infrastructure. The state of civilizational development of an area, its labor market and population ratios, financial policies of its local government, in conjunction with the activity of local districts and municipalities, can make potential tourists decide whether to visit such a place, and they can also help future investors consider whether it is worth investing their money in such an area (Gołembski, 1999, 2009).

Tourist attractiveness is just one of the elements of a high importance which favor the process of increasing the level of competitiveness of a given place. It is considered to be a relative and a rather complicated concept as all of the following can be considered attractive: a particular place, event, object, district or city. What is more, the whole region or only some places in a given region may be attractive. The determinants which help to decide whether a given element of space is attractive for tourists are on the one hand natural, cultural and social factors, and on the other, a simple evaluation made by tourists staying in an area. Tourist attractiveness can be understood therefore as some specific characteristics of the area or place resulting from the above-mentioned circumstances and determinants, which evoke the biggest interest among tourists. Tourist attractiveness is relative in its nature, as the same places, events or regions, or certain forms of tourism (e.g. cycling, hiking, skiing, sailing, riding or hunting) can evoke quite a different interest among different people. However, the attractiveness of a site may also have a universal character, and this results from the fact that cultural traits, landscape, supplies or good equipment, as well as adequate infrastructure, are generally attractive for most tourists (Kurek, Mika, 2008, p. 25). Tourist attractiveness defined in this way is made of the elements such as tourist attractions along with the environment protected in the area, tourist development (infrastructure of tourism), the availability of communication or entertainment events, sports, cultural and economic attractiveness of services for tourists. In more general terms, one can therefore say that tourist attractiveness consists of all kinds of interesting places, objects, people, events, equipment, and other items that make tourists eager to visit a region.

Investment attractiveness in turn is determined by a number of factors that determine the main areas of scientific, economic or political activities. Among them are: the availability of transport (communication), working and learning resources, market capacity, economic and social infrastructure, support of the local and regional government, regional economic policy, or the availability of institutions supporting the development of businesses. The possibilities of supply and the costs of raw materials, the supply of products to customers, transportation of employees, customers and suppliers depend on the transport (communication) accessibility and its relation to investment attractiveness. Depending on the type of a business, other elements of transport accessibility are also important. For industry, it is primarily the availability and quality of road and rail transport, and for advanced technology – transport by

air. Labour resources have in turn a decisive influence on possible employment opportunities of an optimal amount of well-prepared (educated) workers who would not require very high wages. The investors expect various types of labour resources depending on the type of the business they do.

Internal market capacity, in turn, determines the ability to sell products and services of the region or sub-region. The more residents who are well off, the greater the chance of a quick return on investment, and hence the greater willingness of potential investors to take investment risks. It should be noted, however, that market capacity is made up as much of public as private investment. Business institutions, the number of fairs and exhibitions or functioning of special economic zones, and so, the entire economic infrastructure considerably facilitate business activities of companies. Social infrastructure including living conditions, the climate of openness to immigrants and tourists, cultural base, training and education, affect in an indirect way the labor market and its capacity.

The following depend primarily on the state of the environment, if it comes to investment attractiveness: investment opportunities (which means that the more protected the areas are and the larger investment restrictions are, there is less attractiveness for some businesses – such a condition is very positive with respect to investment and tourism, and in most cases it appeals to investors who want to locate their businesses in the ecological environment, friendly for tourists) and operating costs (which means that the greater the pollution, the higher the cost of meeting environmental standards). The level of public safety, which is associated with larger expenditures on security, has relatively the smallest significance for investment attractiveness. The activity of units of Local Government – at the level of a region, districts, municipality, is on the other hand, of a great importance for investment attractiveness. The ability of local authorities to create and popularize the region's image among potential investors and to create a good climate for investment is also very important.

In general terms, investment attractiveness should be understood as a certain „ability to persuade investors to choose the region as a place of their investment", (Gawlikowska-Hueckel, Umiński, 2008). This „ability", which is the essence of investment attractiveness, is defined as the combination of advantages arising from the location of a business and resulting from specific characteristics of the area in which this the business operates. These benefits are referred to as location factors. The investment attractiveness of an area is determined therefore by the combination of these location factors. The areas that offer an optimum combination of location factors are attractive for investments as they allow for the reduction of both investment and ongoing costs of the business, making it easier to maximize profits and reduce any risks of investment failure. It seems that location factors are most influential here because the benefits they provide make it possible for businesses to considerably reduce their expenses. An area which is becoming increasingly attractive will attract

new investments, which will enhance the development of existing ones, and thus, there will be an increase this area's competitive advantage (Fels, 1998, p. 136-137).

Investment attractiveness of a region, district, commune, consists in their possible potential to induce the investors to choose this particular area as a place of their activity among a group of alternative locations, which results in the possibility of a better offer, or even an optimum combination of factors that contribute to maximizing future benefits. Just as in the case of tourist attractiveness, the attractiveness of a region does not depend, from the perspective of an investor, on one selected factor, but it depends on their entire complex. It should be noted that only some of the components forming investment attractiveness of a region can be directly influenced by regional authorities. Rating of investment attractiveness will probably always remain very subjective as, by its nature, it must reflect specific tastes and preferences of a particular investor, which in turn, are influenced by the characteristics such as the country of origin or even the region of origin, sector of activity, market segment, customers, the intensity of competition in the industry, size of the investor's business or its strategy. Attractiveness, by its nature, also means that an individual positively stands out from other individuals (Brodzicki 2010).

Assessment of the competitiveness of districts (based on research)

The areas at NUTS 4 (administrative districts and cities with district rights of Podkarpacie Province i.e. districts or municipalities) and the area at NUTS 2 level (Podkarpacie Province) are the object of the empirical analysis here. This choice stems from the fact that European regional policy applies only to three NUTS levels used to identify areas eligible for support under the EU structural policy. In the EU there are different solutions in terms of the division of competence at specified administrative levels in the development of an economy based on regions or areas. In the territory of Poland NUTS units have been extended to NUTS 4 (urban districts and rural districts) and NUTS 5 (communes). This choice is also influenced by the fact that most of the statistical data has been collected only for NUTS 2 level, which Poland is required to do as an EU member. The area of study in this article is the Podkarpacie Province of which 21 following districts have been analysed: Bieszczady, Brzozów, Dębica, Jarosław, Jasło, Kolbuszowa, Krosno, Lesko, Leżajsk, Lubaczów, Łańcut, Mielec, Nisko, Przemyśl, Przeworsk, Ropczyce-Sędziszów, Rzeszów, Sanok, Stalowa Wola, Strzyżów, Tarnobrzeg, and 4 urban districts: Krosno, Przemyśl, Rzeszów and Tarnobrzeg. The analysis was based on detailed data for the period of three years from 2008 until 2010. The time span was conditioned by the availability of statistical data.

In order to identify the determinants of tourism development in the districts of Podkarpacie Province 217 indicators divided into sections and groups were taken into consideration. In total 22 indicators and determinants of tourism development that help identify and illustrate tourism competitiveness were formed. The obtained

synthetic measures made it possible to rank districts according to the degree of their attractiveness and competitiveness in order to construct an objective ranking of Podkarpacie tourist districts.

In the process of analyzing the results of studies a range of research methods was used: the method of multidimensional comparative analysis, method of shift relative to the maximum, the expert method, horizontal and vertical analysis method, tabular – descriptive method, and the method of SWOT analysis. The scope of the issues in this article is dictated by the lack of full analyses of the fundamental determinants of tourism development in the areas of tourist and investment attractiveness.

The competitiveness of tourist districts of Podkarpacie Province consists of both tourist and investment attractiveness, rather than of a very large number of different factors, sometimes of a very complex nature, which had been examined individually (Słowik 2013). The basic elements making up the tourist competitiveness are presented in the form of a diagram (Figure 1).

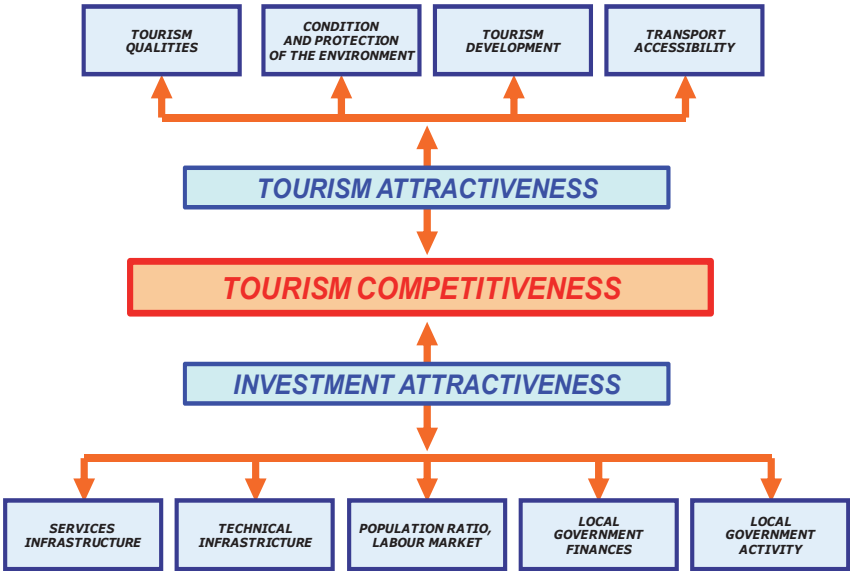

Figure 1. The competitiveness of districts versus tourist and investment attractiveness – general scheme

Source: own.

The final stage of analysis, associated with the use of synthetic indicators was to determine the competitiveness of tourism as a resultant of tourist and investment attractiveness. Both of these components were considered equally valuable and awarded each a weight of 0,5. The values of tourism competitiveness measures for Podkarpacie districts are summarized in Table 1.

Table 1. Synthetic measure of the competitiveness of tourist districts in Podkarpacie Province

DISTRICT	YEAR		
	2008	2009	2010
Bieszczady District	0,403	0,425	0,433
Brzozów District	0,309	0,321	0,332
Jasło District	0,350	0,374	0,360
Krosno District	0,338	0,347	0,362
Sanok District	0,392	0,417	0,396
Lesko District	0,457	0,474	0,473
Krosno Urban District	0,488	0,490	0,508
Jarosław District	0,350	0,349	0,344
Lubaczów District	0,320	0,320	0,334
Przemyśl District	0,299	0,334	0,342
Przeworsk District	0,310	0,333	0,338
Przemyśl Urban District	0,513	0,528	0,549
Kolbuszowa District	0,307	0,316	0,318
Łańcut District	0,358	0,375	0,364
Ropczyce-Sędziszów District	0,306	0,306	0,312
Rzeszów District	0,322	0,335	0,349
Strzyżów District	0,317	0,314	0,332
Rzeszów Urban District	0,520	0,513	0,501
Dębica District	0,326	0,331	0,326
Leżajsk District	0,316	0,333	0,335
Mielec District	0,318	0,326	0,321
Nisko District	0,285	0,330	0,318
Stalowa Wola District	0,337	0,363	0,365
Tarnobrzeg District	0,290	0,302	0,313
Tarnobrzeg Urban District	0,410	0,388	0,403
PODKARPACIE PROVINCE	0,358	0,370	0,373

Source: own.

Taking into account changes of the value of tourist competitiveness measure in the period of 2008-2010 one may note that in the analysed urban districts of Krosno and Przemyśl, and in the rural districts of Brzozów, Krosno and Rzeszów, there is an upward trend. It is also visible for the districts of Bieszczady, Przemyśl, Przeworsk, Kolbuszowa, Leżajsk, Stalowa Wola, Tarnobrzeg, as well as for Podkarpacie Province. Unfortunately, there is a downward trend in the case of the urban districts of Rzeszów and Jarosław.

The urban district of Rzeszów achieved a very high value of the measure in 2008 while in 2009 this very high value belonged to the urban district of Przemyśl which also held the first record in 2010. On the other hand, the districts of Nisko (2008), Tarnobrzeg (2009), and Ropczyce-Sędziszów (2010) obtained very low values.

In the next stage of the study districts were ranked according to a synthetic measure of competitiveness. The first position was given to the districts with the highest value of the measure. Next, the differences between 2009 and 2008, and between 2010 and 2009 were analysed, which made it possible to identify changes (shifts) in the ranking of the districts.

Table 2. The ranking of districts according to the value of the synthetic measure of competitiveness

DISTRICT	POSITION IN YEAR			PLACEMENT	
	2008	2009	2010	2009 vs 2008	2010 vs 2009
Bieszczady District	6	5	5	1	0
Brzozów District	20	20	19	0	1
Jasło District	9	9	11	0	-2
Krosno District	11	12	10	-1	2
Sanok District	7	6	7	1	-1
Lesko District	4	4	4	0	0
Krosno Urban District	3	3	2	0	1
Jarosław District	10	11	13	-1	-2
Lubaczów District	15	21	17	-6	4
Przemyśl District	23	14	14	9	0
Przeworsk District	19	16	15	3	1
Przemyśl Urban District	2	1	1	1	0
Kolbuszowa District	21	22	23	-1	-1
Łańcut District	8	8	9	0	-1
Ropczyce-Sędziszów District	22	24	25	-2	-1
Rzeszów District	14	13	12	1	1
Strzyżów District	17	23	18	-6	5
Rzeszów Urban District	1	2	3	-1	-1
Dębica District	13	17	20	-4	-3
Leżajsk District	18	15	16	3	-1
Mielec District	16	19	21	-3	-2
Nisko District	25	18	22	7	-4
Stalowa Wola District	12	10	8	2	2
Tarnobrzeg District	24	25	24	-1	1
Tarnobrzeg Urban District	5	7	6	-2	1

Source: own.

Comparing years 2009 and 2008 it can be seen that the biggest dynamics in development were achieved by the district of Przemyśl – with its shift in the ranking of 9 positions (23 to 14). In contrast, Lubaczów and Strzyżów districts were about 6 positions lower. Considering year 2010 and the changes in relation to 2009, there was

an upward shift of the measure for these two districts (an increase of 5 positions). However, the position of the district of Nisko has significantly dropped (a decrease of 4 positions).

The determination of synthetic measures for sections and spheres made it possible to use later in the analysis the method of shift relative to the maximum, which allowed to assess the attractiveness of individual districts depending on the possibility of a tourist function being formed there. In this method, it is assumed that the geometric measure of indexation is the Euclidean distance, calculated in a two-dimensional space. This method made it possible to easily assess the level of attractiveness of various districts of Podkarpacie Province from the perspective of generating a tourist function, thus five classes of districts attractiveness for tourism development were defined. (Słowik 2013, p. 15).

In order to better identify the districts with higher or lower tourism and investment attractiveness, and tourism competitiveness, they are shown in the two-dimensional coordinate system, where tourist attractiveness is presented on one axis, and investment attractiveness on the other.

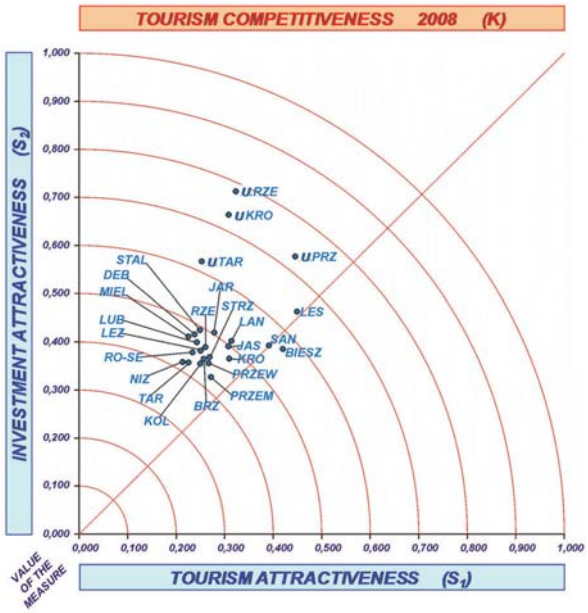

Figure 2. Location of the districts in the space of tourist and investment attractiveness (MpOATP)[2] in 2008

Source: own.

[2] See Słowik, J., 2013, *Spatial diversity of tourist attractiveness and its impact on the competitiveness of Podkarpackie region*, UTH in Radom, p 14 – MpOATP means the measure of the overall attractiveness of tourist counties for each districtes in the Podkarpacie Province.

In 2008, the urban districts of Krosno and Rzeszów were characterised by high tourist attractiveness. In the same year, the districts of Lesko, Sanok and the urban district of Przemyśl, apart from their high tourist attractiveness, were also characterized by a high degree of investment attractiveness. In general terms, most districts are concentrated in such a subgroup. The districts of łańcut, Jasło, Krosno are among those attractive for tourists and for investments. The districts of Tarnobrzeg and Nisko were closest to the center of the system, and therefore the least attractive in terms of tourism and investment in 2008.

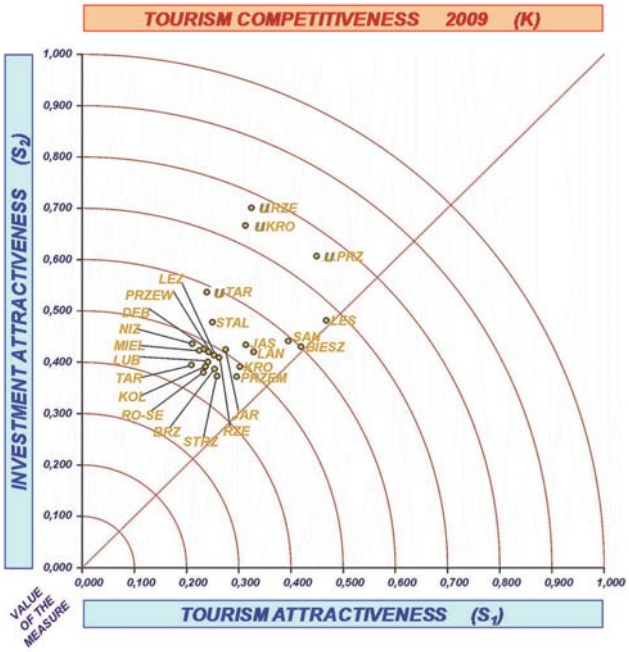

Figure 3. Location of districts in the space of tourist and investment attractiveness (MpOATP) in 2009

Source: own.

In 2009, the urban districts of Krosno and Rzeszów were in equal positions in the area of high tourist attractiveness. Also, the districts of Lesko, Sanok and the urban district of Przemyśl were attractive in terms of tourism and investment in the same year but the distance between the districts of Lesko and the urban district of Przemyśl slightly increased. The change in the case of the urban district of Przemyśl is the result of a decrease in its investment attractiveness compared to the previous year. Most districts are concentrated in the same area and the district of Łańcut can be considered attractive for tourists and for investments. However, the investment attractiveness of the district of Jasło slightly decreased (moving down the vertical

axis). The district of Tarnobrzeg is closest to the center of the system, and therefore it was the least attractive one for tourists and for investments in 2009.

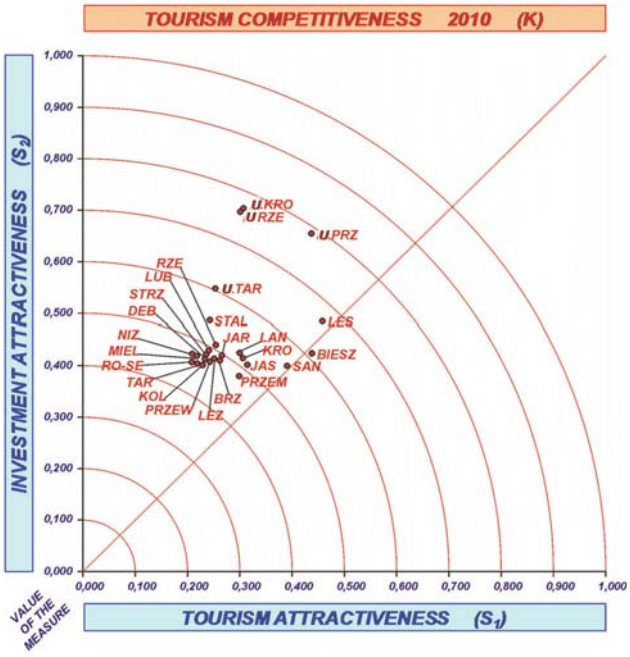

Figure 4. Location of districts in the space of the tourist and investment attractiveness (MpOATP) in 2010

Source: own.

In 2010, the urban districts of Krosno and Rzeszów were still in the space of high tourist attractiveness. Just as in 2009 the districts of Lesko, Sanok and the urban district of Przemyśl remained attractive for tourism and investment also in 2010. In 2010, as in 2009, most of the districts were in the so-called „similar area". The districts of Łańcut, Krosno and Jasło can be viewed as attractive for tourism and investment. They returned to a similar position as in 2008, and they were joined by the district of Przemyśl. In 2010 the districts of Nisko and Ropczyce-Sędziszów were close to the center of the system, and so in the least attractive positions in terms of tourism and investment attractiveness.

The competitiveness of tourist districts in Podkarpacie Province is shown on the map (Figure 5) which clearly indicates the correctness of its spatial distribution. The correctness arises from a number of factors influencing the attractiveness of tourist and investment attractiveness. The map reveals a predominance of districts located in the southern part of Podkarpacie Province over the districts located in the north and west of the region.

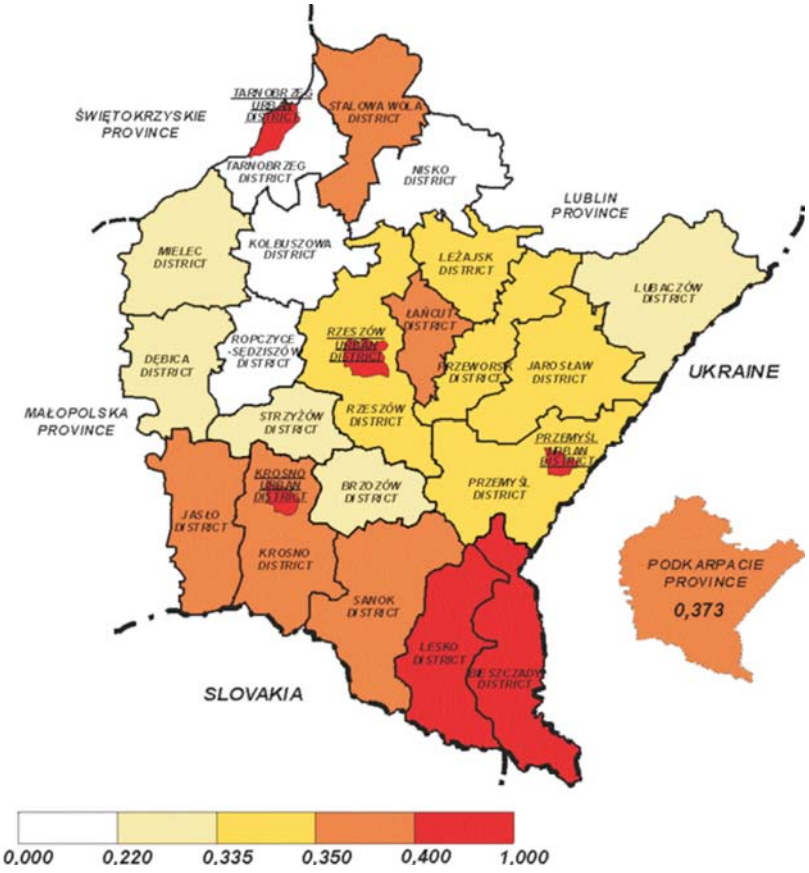

Figure 5. Tourist competitiveness of districts in Podkarpacie Province in 2010

Source: own.

Taking into account the changes of the measure of tourism competitiveness in the analysed districts, one can distinguish five groups of tourist competitiveness (PKT):

- first group consists of the districts of Bieszczady, Sanok, Lesko, and the urban districts of Krosno, Przemyśl, Rzeszów, Tarnobrzeg, for which obtained values ranged from 0,400 to 1,000 – very big – **BD**,
- second group consists of the districts of Jasło, Krosno, łańcut, Stalowa Wola for which the level of values fluctuated from 0,349 to 0,399 – big – **D**,
- third group includes the districts of Jarosław, Lubaczów, Przemyśl, Przeworsk, Rzeszów, Dębica, Leżajsk, for which the level of values ranged from 0,325 to 0,348 – medium – **S**,
- fourth group includes the districts of Brzozów, Kolbuszowa, Strzyżów, Mielec, for which the level of values ranged from 0,314 to 0,324 – small – **M**,

– fifth group includes the districts of Ropczyce – Sędziszów, Nisko, Tarnobrzeg, for which the level of values ranged from 0,000 to 0,313 – very small – **BM**.

The data on tourism competitiveness, for both individual districts and the entire Podkarpacie Province are shown in the graph (Figure 6).

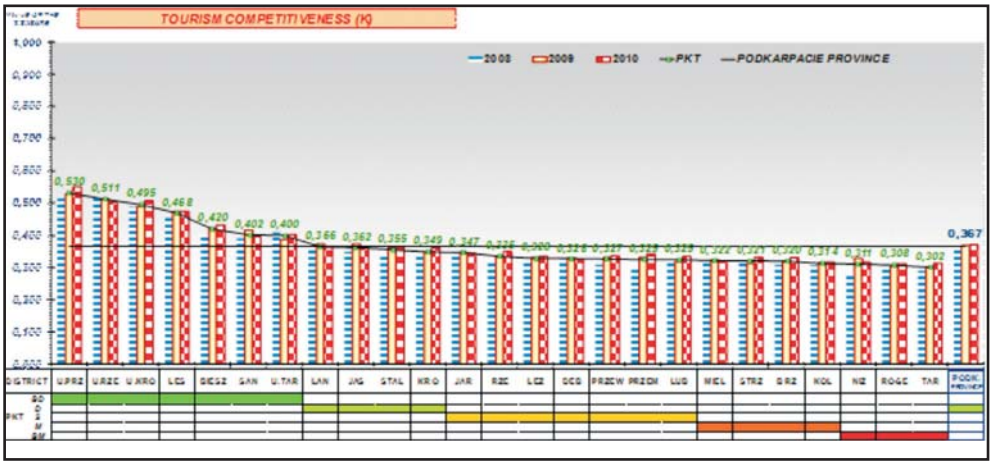

Figure 6. The level of competitiveness of tourist districts in Podkarpacie Province in 2008-2010

Source: own.

The urban districts of Przemyśl, Krosno, Rzeszów and Tarnobrzeg reached very high values PKT (BD) for tourist competitiveness which arise from many factors influencing their investment attractiveness, and in the second place, their tourist attractiveness. The highest value of the measure in 2008 was observed for the urban district of Rzeszów. In 2009, the urban district of Przemyśl got a very high value and it maintained the first position also in 2010. The competitiveness of the urban district of Rzeszów is clearly falling down whereas the increase in the competitiveness of both urban districts of Przemyśl and Krosno is clearly visible throughout the whole period of 2008 – 2010. The urban district of Tarnobrzeg is characterized by a downward trend in 2009 and an increasing tendency in 2010. The urban districts of Przemyśl and Krosno are becoming the most competitive tourist centers in the region, compared to the urban district of Rzeszów – the capital of the region located in its central part at the crossroads of major routes. This may indicate that both the tourist and investment attractiveness of this district are decreasing. The positive side of this trend is the existence in the region of at least three, and not just one vibrant centers of a high competitiveness value (BD).

Two rural districts: Bieszczady and Lesko have a very high level (BD) of tourism competitiveness, and this trend was steadily increasing during the analysed period.

These districts became well-performing centers with a high degree of tourist competitiveness in Podkarpacie Province. Their competitiveness certainly results from a national importance of the Bieszczady Mountains in Polish tourism. The districts of Sanok (BD), Krosno (D) and Jasło (D) are, in addition to these two districts, gaining a similar importance, as their position has a significant upward trend due to their high tourist attractiveness and, in the second place, due to their investment attractiveness. Six districts: Bieszczady (BD), Lesko (BD), Sanok (BD), Krosno (D), together with the urban districts of Krosno (BD) and Jasło (D) are a compact and spatially consolidated area in Podkarpacie Province, with a very big or big tourist attractiveness in the analysed period. A high position of the districts of Łańcut and Stalowa Wola results from an increase in their competitiveness too.

The districts located in central and eastern parts of the region represent average tourist competitiveness (S). These are the following rural districts: Rzeszów, Jarosław, Leżajsk, Przeworsk and Przemyśl. All of them show an increasing trend in the period of 2008 – 2010. The spatial distribution of these competing tourist destinations clearly indicates their potential for development and the benefits arising from the attractiveness of the tourist area of Pogórze Dynowskie and Pogórze Przemyskie. The urban districts (S) of Rzeszów, Przemyśl and the rural district of łańcut have a positive, consolidating impact on this area.

The districts of Brzozów and Strzyżów are characterised by little tourist competitiveness (M) (due to their low tourist development (especially concerning poor accommodation facilities available there), despite their high potential of tourist attractiveness). The districts of western and northern parts of the region – Lubaczów (S), Dębica (S), Mielec (M) and Kolbuszowa (M) are also little attractive in terms of tourist competitiveness.

The districts of Nisko (2008), Tarnobrzeg (2009) and Ropczyce-Sędziszów (2010) achieved even lower values (BM) which is due to their very low tourist and investment attractiveness, a peripheral position relative to other districts (e.g. Lubaczów, Mielec or Nisko). The urban district of Tarnobrzeg and the rural district of Stalowa Wola, thus the northern part of Podkarpacie Province, both occupy a particular position in terms of their tourism competitiveness, as, among others, they border with highly attractive tourist districts from neighboring regions.

The high tourist attractiveness of the district of Sandomierz (Świętokrzyskie Province), located near the district of Tarnobrzeg (BD), has in this case an extremely positive effect on it. A similar phenomenon (though on a smaller scale) occurs in Stalowa Wola district (D), but in this case it results from a high tourist attractiveness of the western part of Roztocze tourist area, located in the Lublin region. The negative impact on the tourist competitiveness of the district of Dębica (S) is due to, on the one hand its quite low attractiveness for tourists and investment, and on the other, the fact that it borders with the particularly attractive tourist district of Tarnów located in Małopolska Province.

The directions of development of tourism in the light of the results of studies on the competitiveness of districts as a resultant of tourist and investment attractiveness

The case diagnosis made it possible to do qualitative and quantitative analysis of the competitiveness of Podkarpacie Province. The following steps should be taken in order to increase the competitiveness of the tourist districts of Podkarpacie Province:

1. Making better use of unused or poorly used hydrological networks, mainly, the biggest rivers in the region – San, Wisłoka and Wisłok. Carrying on more frequent analyses of the status of rivers, lakes, reservoirs or ponds aimed at strengthening their tourism potential and its development, which should be based on systematic cleansing, restoring their original state and restoring their original wildlife. Increasing the activity of local authorities in order to prevent pollution of rivers by mainly rural households throwing off organic substances to the environment in Podkarpacie Province.
2. The creation of two national parks: Turnicki and Czarnorzecki National Parks in order to emphasise among others the exquisite quality of natural resources and landscape values of the districts they would be located in.
3. Initiating the activities that will significantly increase the efficiency of using natural and landscape values in building a tourist offer as well as offering tourism products. Making changes in promotion of tourism in the region by emphasising not only tourist attractions, but also the investment attractiveness so that the region would be associated with a „tourism-development-friendly" place by potential investors and existing businesses. The creation of new tourist products based on existing ones, and the creation of totally new products. Developing and launching a series of new tourism products that could compete with regions of greater tourist attractiveness (e.g. Małopolska Province), which would have a good chance of being transformed over time into branded travel products and branded products of a cross-border importance.
4. Giving priority to the protection of cultural values, in particular to the activities aiming at providing spatial order, improving the esthetical quality of the landscape, providing the necessary equipment and proper tourism and tourism related infrastructure. Starting-up proper procedures aiming at fuller making use of cultural values and their proper management (taking a conservation care of an even larger number of potentially historic objects without their immediate restoration, by just including them into the register of historic buildings). Improving the existing condition of historic objects resulting from improper protection of them and preserving them from destruction, especially caused by natural disasters.
5. Increasing the potential of tourism attractiveness through the development in the districts of Bieszczady and Lesko, improving their accommodation facilities as well as other conveniences such as: catering and related areas, communication) on

condition that all the environmental protection requirements are observed. Taking action to improve the development of tourism and transport accessibility in the southern part of the districts of Rzeszów, Przeworsk and Jarosław, and in the whole district of Brzozów, as well as in parts of southern and central Podkarpacie Province. The creation of an organized network of tourist tracks (as tourist products), which would make it possible to entirely expose the values of a given place or region. Increasing the development of spa resources as far as the possibility of natural balneothrapy conditions are concerned. Facilitating and accelerating the development in the area of Podkarpacie Province of missing specialized leisure centres. Creating opportunities for the development of eco-tourism farms and agro-tourism.

6. Encouraging local governments to act more intensely while raising funds from the European Union, in particular in the districts – leaders of tourism development, and counteracting the unfavorable and dangerous situation of excessive borrowing by LGUs (Local Government Units) through assisting them in every possible way in raising funds from domestic and foreign funds. Activating and encouraging local governments to achieve the key objectives contained in their strategic documents through interaction with the entities of local and regional level, in order to efficiently coordinate the development of tourism in the entire Podkarpacie Province and update in short periods of time the strategic documents at all levels of local government.
7. Supporting the activities of Podkarpacie businesses, local governments, as well as their creativity and their strong desire to cooperate, on the basis of existing tourist clusters, as well as by creating new tourist clusters. Creating a favorable environment for qualified staff to run tourist businesses in the region and promoting the inflow of such properly qualified personnel from other regions and from abroad, as these specialists are open to making improvements, introducing innovations, they are educated in the institutional systems in close integration with practical knowledge required for the tourist economy in Podkarpacie Province. Developing the existing, insufficient activity of single tourist institutions (e.g. museums), associations and social organizations in the region through activities and direct funds offered to these entities, the assistance in establishing international and national cooperation based on precise principles for cooperating.
8. Creating targeted funds aimed at developing strictly the tourist potential (expenditures on tourism are inadequate and do not constitute an element that would support widely understood tourism business) and giving up the strategy of making savings by reducing expenditures on one of the most important areas for the future development of the Podkarpacie Province, which is the education and science.
9. Striving to create a tourist area on the basis of competitively leading tourist districts (**P**odkarpacie **T**ourist **A**rea, in brief **PTA**). Assisting in the development of the tourism potential of the districts with a very small and low level of tour-

ist competitiveness (e.g. the districts of Nisko, Tarnobrzeg, Ropczyce-Sędziszów and Dębica), which results from low attractiveness of tourism, low investments, a peripheral position relative to other districts and their location close to highly attractive tourist areas of the districts in neighboring regions. Taking a priority program for the development of tourism in the districts of Przemyśl and Brzozów. Undertaking measures to increase the competitiveness of tourism for the districts of Dębica, Ropczyce-Sędziszów, Mielec, which are collectively referred to as „tourist attractiveness gap".

10. Extension of the statistical database for the tourism sector, because the existing one does not fully reflect the actual facts and makes it impossible to carry out complex analyses.

Conclusion

The rise in the number of tourists, overnight stays, an increasing number of tourist businesses, and the growth of investment, not only in the tourist area, which have a direct or indirect effect on tourism development, all result from the development of tourism competitiveness. Direct tourism investments include tourist infrastructure, together with the development of business initiatives of local people, whereas indirect tourism investments include the environmental protection, infrastructure services (e.g. shops, gas stations, pharmacies, banks and exchange offices, service stations, clinics and health centers, post offices, etc.) and technical facilities (e.g. power grid, water supply, sewerage and gas) as well as the availability of communication media.

Spatially differentiated tourist attractiveness and investment attractiveness are essential determinants of tourism competitiveness on a regional and local scale of Podkarpacie Province. The competitiveness of Podkarpacie Province is primarily determined by the districts and municipalities located in the border areas of southern Poland: the districts of Bieszczady, Sanok, Lesko, Jasło, Krosno, the urban district of Krosno, and, to a lesser extent, the districts located in the east of the region: the urban district of Przemyśl, and the districts of Przemyśl, Jarosław and Lubaczów. The tourist attractiveness of districts depends on their geographical location and natural and anthropogenic (non-environmental) qualities, an example of which are the most attractive districts of Podkarpacie Province: Bieszczady and Lesko, and the least attractive: Tarnobrzeg and Brzozów. Tourist attractiveness is also a factor in the absorption of investment funds (domestic and foreign) and so, it is also a co-creator of the investment attractiveness of the districts situated in Podkarpacie Province. The activity of local governments has a significant impact on the competitiveness of the tourist areas they administer, which can be proved by such examples as very high positions occupied by the urban districts of Rzeszów and Krosno and very low and low position of the districts of Tarnobrzeg, Ropczyce-Sędziszów, Mielec and Kolbuszowa. There are significant opportunities to improve the competitiveness of tourist districts

of Podkarpacie Province. Its increase is possible by undertaking several measures suggested above. Consequently, tourism development through competitiveness may result in an increase of revenues in the region and in the local community becoming wealthier. Moreover, it may result in Podkarpacie Province and its districts becoming more recognizable in Poland, Europe and in the world.

References

Brodzicki T., 2010, *Atrakcyjność inwestycyjna Województwa Mazowieckiego*, Instytut Rozwoju, Warszawa.

Fels G., 1998, *Zum Konzept der Internationalen Wettbewerbsfahigkeit*, Jahrbuch fur Sozialwissenschaft, Vol.39, s. 136-137.

Gawlikowska-Hueckel K., Umiński S., 2008, *Ocena konkurencyjności województw*, IBnGR, Gdańsk.

Godlewska-Majkowska H., 2011, *Atrakcyjność inwestycyjna a przedsiębiorczość regionalna w Polsce*, Szkoła Główna Handlowa w Warszawie – Oficyna Wydawnicza, Warszawa.

Gołembski G., 1999, *Regionalne aspekty rozwoju turystyki*, Wydawnictwo Naukowe PWN, Warszawa-Poznań.

Gołembski G., 2009, *Kompendium wiedzy o turystyce*, Wydawnictwo Naukowe PWN SA, Warszawa.

Kurek W., Mika M., 2008, *Turystyka jako przedmiot badań naukowych*, (w:) Kurek W. (red.), *Turystyka*, Wydawnictwo Naukowe PWN, Warszawa, s. 25, 38.

Rut J., Rut P., 2010, *Waloryzacja potencjału turystycznego inspiracją dla turystyki kulturowej w województwie podkarpackim*, Uniwersytet Rzeszowski, Wydział WF ZORTiH, KORAW, Rzeszów.

Słowik J., 2013, *Zróżnicowanie przestrzenne atrakcyjności turystycznej i jej wpływ na konkurencyjność regionu podkarpackiego*, UTH w Radomiu, Radom, s. 455.

Słowik J, Wagner W., 2006, *Wybrane metody graficzne prezentacji przestrzenno-czasowych danych turystycznych*, (w:) *Informacja Turystyczna*, Uniwersytet Szczeciński, Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Zeszyty Naukowe nr 429, Ekonomiczne problemy turystyki nr 7, Szczecin, s. 189-200.

Strategia rozwoju turystyki dla województwa podkarpackiego na lata 2007-2013, 2006, Podkarpacka Regionalna Organizacja Turystyczna, Polska Agencja Rozwoju Turystyki SA, Warszawa.

Ślusarczyk B., 2011, *Międzynarodowa pozycja konkurencyjna Polski. Teoria i praktyka*, CeDeWu Sp. z o.o., Warszawa.

Turystyka w województwie podkarpackim w latach 2008-2009, 2010, Urząd Statystyczny w Rzeszowie, Zakład Wydawnictw Statystycznych, Rzeszów.

Wagner W., Krupa J., Słowik J., 2007, *Analiza statystyczna w przekroju ekologiczno-turystycznym powiatów województwa podkarpackiego. Część I. Analiza nakładów na inwestycje ochrony środowiska*, (w:) Kurek W., Palusiński R. (red.), *Studia nad turystyką. Prace ekonomiczne i społeczne. Geograficzne, społeczne i ekonomiczne aspekty turystyki*, Instytut Geografii i Gospodarki Przestrzennej, Uniwersytet Jagielloński, Kraków, s. 253-264.

Warszyńska J., Jackowski A., 1978, *Podstawy geografii turyzmu*, Wydawnictwo PWN, Warszawa.

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CORPORATE SOCIAL RESPONSIBILITY AS A SOURCE OF COMPETITIVE ADVANTAGE

Abstract

Interest is growing in issues of corporate social responsibility. The need to develop this theory is raised not only by entrepreneurs themselves but also by a number of other parties to socio-economic life who affect functioning of businesses.

Enterprises which have implemented CSR gain competitive advantage by improving their image. Contemporary buyers are driven not only by quality and price of a commodity but also by company reputation. In addition, firms realising CSR assumptions become popular, win awards and thereby attract new custom.

JEL Classification Code: **L100, L210**

Keywords: corporate social responsibility, competitiveness, competitive advantage.

Introduction

Corporate social responsibility is a theory according to which enterprises take into account social, economic, ethical and ecological aspects in their strategies and operations, everyday decisions and contacts with their environment. The point of CRS is the social responsibility of a firm for consequences of its actions towards the so-called stakeholders, that is, all parties directly or indirectly affected by operations of a company which treats its rights as moral commitments.

This paper will discuss corporate social responsibility as a source of an enterprise's competitive edge.

Enterprises increasingly win competitive advantage owing to other than economic factors. CSR improves a company's market standing, facilitates cooperation with business partners and expands access to external sources of business financing.

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Businesses attempt to present themselves as institutions friendly not only to customers but to nearly all stakeholders and communities (Sołoma, 2010, p. 50).

The notion of competitiveness

The Competitiveness is multi-dimensional as it concerns states (macro scale), sector, industry, a part of economy (mezzo scale), groupings of countries (mega scale), enterprise (micro scale), commodity or service (micro-micro scale). Competitiveness as a microeconomic category relates to organisations, e.g. enterprises or plants. It is multi-dimensional and perceived in relations among: a business entity, its potential, opportunities and skills versus market structure and strategic opportunities available there.

Table 1. Selected definitions of competitiveness

Author	Definition
Cyrkon	Process in which all market players take part who try to realise their interests and offer better prices, quality or other characteristics which affect transaction decisions
Lubiński	An enterprise's capacity for long-term sustainable growth and its desire to maintain and expand its market share
Jakubik	Relative ability to enforce an own system of objectives, intentions or values
Gorynia	Ability to compete, that is, survive and operate in a competing environment
Jantoń-Drozdowska	An enterprise's capacity for improving effectiveness of its external operations by strengthening and improvement of its market standing
Flejterski	Ability to design, manufacture and sell goods whose prices, quality and other characteristics are more attractive than the corresponding features offered by competitors
Hampoten, Tomer	Rivalry and cooperation which help both to knowledge of key technologies and customer needs and requirements
Adamkiewicz-Drwiłło	Competitiveness of an enterprise, understood as a property, defines an enterprise's ability to continually create a development trend, growth of productivity (measured on the micro scale) and to effectively develop sales markets in the context of newer, better and cheaper goods and/or services offered by competitors

Source: the author's own.

A review of specialist literature points to a palpable evolution and ambiguity of the concept of competitiveness. It applies both to the ability to race against competitors by defining a competitive potential and determining a current competitive standing in the market.

Factors influencing competitiveness can be divided in accordance with various criteria (Hampoten, Tomer, 2000, p. 129):
– types of decisions made in an enterprise,
– market nature of factors affecting competitiveness.

Relative to the decision types, internal and external factors can be distinguished. Internal factors comprise, for example, nature of enterprise ownership, organisation and management system, marketing, staff qualifications or production decisions. External factors, on the other had, depend on enterprise decisions to a limited degree, i.e. legal, technical or ecological standards imposed by the state.

As far as their market nature is concerned, factors shaping competitiveness can be divided into market and other. Market factors include: quantities of goods and services available in the market, price, quality, terms of sale. Dependences among these factors are in direct proportion to competitiveness of enterprises. This is true not only of price of a given commodity or service. Major extra-market factors comprise technical progress, which impacts quantities and quality of goods, standard and scope of services provided. Such factors also include state interventions.

Fundamental characteristics of competitiveness:
– domestic and international sales at a profit,
– ability to maintain and expand market shares,
– capacity for long-term sustainable growth.

The most comprehensive theory of enterprise competitiveness has been proposed by M.J. Stankiewicz. He treats enterprise competitiveness as an aggregate (system) of four elements. Structural elements, and thus subsystems of the 'enterprise competitiveness' system, affected by the overall environment and interacting with the competitive environment, are (Stankiewicz, 2005, p. 89):
– competitiveness potential, that is, all tangible and intangible assets necessary for an enterprise to compete in the market,
– competitive advantage, defined as an effect of utilising competitiveness potential of an enterprise (including environment conditions) to effectively generate an attractive market offer and effective instruments of competing,
– instruments of competing which can be defined as some means consciously created by an enterprise to find partners for current or planned (future) offer,
– competitive standing, understood as a result of an enterprise competing in a given sector compared to results of competitors.

The model accurately defines components of competitiveness and suggests cause and effect relations between them. An enterprise's competitiveness is affected by its environment. The starting point for building competitiveness is to develop competitiveness potential which affects competitive advantages determining instruments of competing that condition achievement of a specific competitive standing.

Competitiveness potential encompasses all resources necessary for an enterprise to operate in the market. They include the resources which bring specific benefits to

an enterprise and are commonly divided into tangible and intangible. The former are e.g. fixed or financial assets or inventories. Intangible assets comprise: competences, relations, functional systems, attitudes, and opportunities.

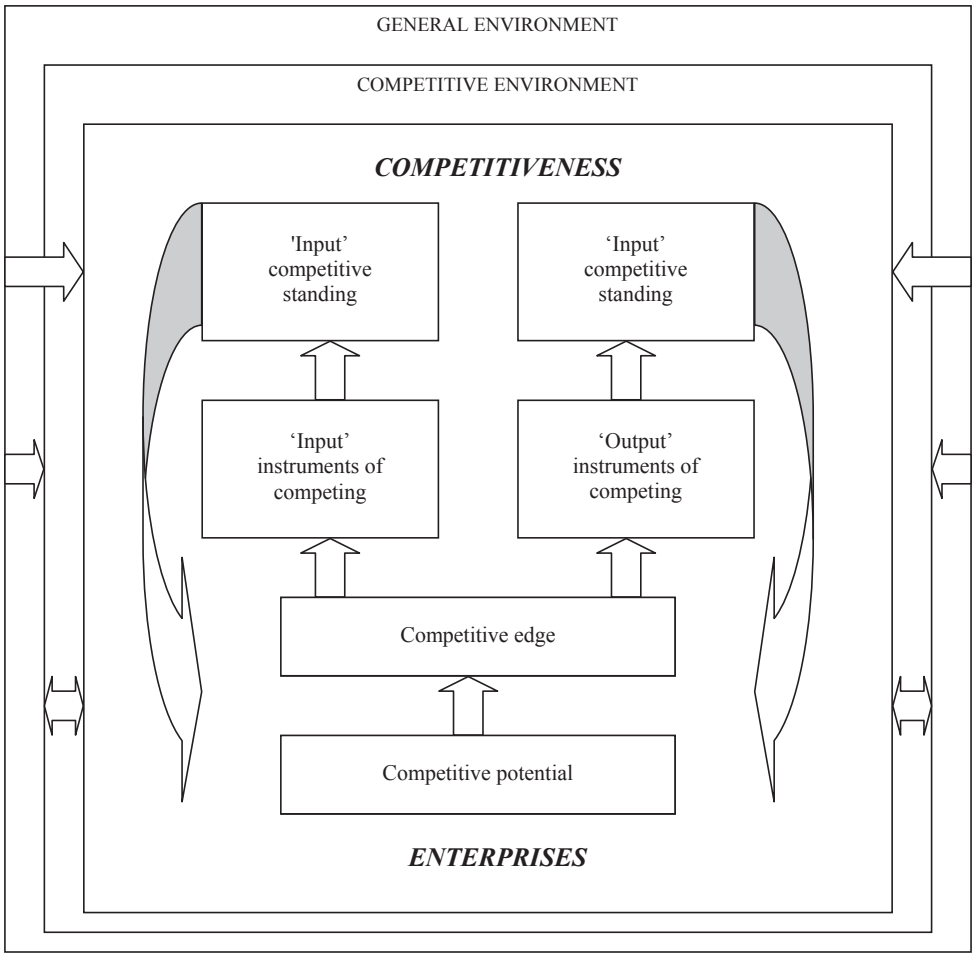

Figure 1. Model structure of enterprise competitiveness

Source: (Stankiewicz, 2005, p. 87).

The key areas that consist of elementary components of competitiveness potential which an enterprise should take advantage of in its operations have been determined by J.M. Stankiewicz in an examination of 500 largest enterprises in Poland, namely: research and development, production, quality management, purchasing logistics, marketing, finance, employment, organisation and management, overall invisible assets.

Competitive advantage is variously defined by authors. The definition: 'competitive advantage of an enterprise may finally be defined as its ability to utilise competitiveness potential in such a way as to generate attractive market offers and effective instruments of competing effectively enough to provide for added value (Stankiewicz, 2005, p.172) can serve as a summary of these discussions.

It should be emphasised that competitive advantage comprises such variables as costs, innovations, quality, human capital management and others, all of which jointly deciding that competitive advantage is attained. Competitive advantage comprises all strengths of an enterprise that condition its long-term effectiveness.

The resources providing for an enterprise's competitive advantage comprise 'hard' (measurable and concrete, both within a business and key elements of its environment) i 'soft' (variable, not fully foreseeable factors of competitiveness) resources. The former include: financial and tangible capital, institutional capital (legal system and its enforcement), strategies as long-term action plans, clear both to staff and markets, company structure (formalised division of roles and responsibilities). Soft resources of a company, on the other hand, encompass: social capital (people and their relations with the environment), culture, knowledge as information resources that are both formally recognised and latent, brand, company access to the market.

Instruments of competing are consciously applied means to find partners for an enterprise. The most common instruments are: product quality, pricing, terms of payment, close customer relations, timely deliveries, price discounts, product suitability to customer needs, company reputation, promotional pricing.

Competitive standing serves primarily to measure competitiveness of enterprises. It depends both on factors over which businesses have control and on external factors.

Competitive capacity of an enterprise is the greater the lower the risk of rivals bringing new production capabilities and substantial resources that could interfere with operations in line with an established patters entering a sector where such an enterprise functions. The threat of entering a sector depends on entry barriers combined with responses of existing competitors to be expected by a new rival. M.E. Porter distinguishes the following barriers (Porter, 1992, pp. 24-30):

- economies of scale – unit cost of a product falls as the production volume grows over a time unit. They force an entrant to operate on a large scale and be exposed to dramatic responses of existing enterprises or to operate on a low scale and accept a poorer cost situation,
- product diversification – companies in a sector have their reputations and loyal customers, which compels new enterprises in a sector to incur considerable expense to overcome existing loyalties,
- capital requirements – a major barrier to starting in a sector, since they imply high risks, giving advantage to existing business,
- access to distribution channels – a firm entering a sector must assure distribution of its products by means of discounts and rebates. The more limited number of distribution channels of a product, the harder it is to enter a sector,

– weaker cost situation regardless of scale – businesses in a sector may enjoy better cost positions regardless of their size and scale effects owing to exclusive access to know-how, patents, sources of materials, good location,
– state policies – the government may restrict entry to a sector using appropriate tools, e.g. compulsory licensing, restricted access to raw materials, standards of natural environment protection, etc.

Competition, a source of company success or failure, determines actions for innovation, cultural cohesion or operational excellence.

Sources of competitive advantage

Determining key sources of an entity's current and potential competitive advantage is the first step to evaluation of its competitiveness.

Competitive advantage is normally taken to mean an enterprise's standing that is better than of its competitors. Some economists claim, however, that this is merely a pre-requisite for competitive advantage which arises the moment a greater efficiency compared to competitors is attained. This allows for realisation of investor, management and employee expectations to a greater degree.

Table 2. Selected definitions of competitive advantage

Author	Definition
Fahey	Anything that positively distinguishes products of a company or the company itself from its competitors in the eyes of customers or end users
Aaker	Something owing to which a business performs better or just does something better than its competitors
Rue, Holland	Ability of an enterprise to do something its competitors cannot do or at least to do it better than they do
Stoner	Competitive advantages and disadvantages are strengths and weaknesses of an organisation compared to strengths and weaknesses of its current and likely future competitors
Barney	Ability to realise a strategy that cannot be realised by current and future competitors
STRATEGOR group of authors	Set of an enterprise's assets appreciated by the market or acquisition of certain competences which decide success in a given area of activity better than competitors
Stankiewicz	Ability to utilise competitiveness potential to effectively generate an attractive market offer and effective instruments of competition that provide for added value
Simon	Achievements higher than those by competitors
Porter	Summary results of a business operating in competitive markets, of sector competitiveness and determinants of national competitiveness

Source: the author's own.

In real terms, competitive advantage has its source in reduced costs on the one hand and increased product diversification, improved quality, product and process innovation on the other hand (Bossak, 2004, p. 40).

Competitive advantage is increasingly gained owing to factors which bring additional benefits from launching of new-quality and highly profitable products and services.

According to B. Godziszewski, competitive advantage boils down to the fact that an enterprise does something better and does generates better results (Godziszewski, 2001, p. 59). He distinguishes market advantage of a business that is attained by applying instruments of competing. It is not always equivalent to competitive advantage, the latter associated with resource advantages and manifested in results of an enterprise.

The author goes on to discriminate three characteristics of an enterprise's competitive advantage, namely, type, continuity and size. M.E.Porter mentions two types of advantage – cost and diversification. Nature of competitive advantages of businesses is the starting point for strategies of competing, i.e. strategy of cost leadership and of diversification (Porter,1985, p. 3).

Realisation of objectives makes private businesses desiring to enhance their competitiveness apply competitive advantages achieved by:
- having a unique product, technology, low price,
- high qualifications of enterprise management,
- effective strategy of an enterprise,
- effective innovation management,
- cooperation with trade partners.

Success of each market enterprise depends on the type of competitive advantage defined as a unique enterprise market standing in relation to its competitors. The fact that many businesses have the same competitive abilities means practical application of the same or similar strategies.

Competitive advantage denotes an enterprise reaching a supreme position over a number of competitors. It helps to offer services or products that match customer expectations, and above all better than those offered by competitors. It is reflected in better quality, lower price and better service. Three fundamental types of competitive advantage can be indicated (www. frr.olsztyn.pl):

➪ **Qualitative advantage**

This includes marketing actions and instruments that may be subject to qualitative changes, e.g. product, packaging, distribution, services and terms. By offering instruments of a greater or different quality than those offered by competitors and its adaptation to customer preferences, an enterprise may achieve qualitative advantage (high bargaining power in relation to buyers).

➪ **Price advantage**

This advantage is based on marketing instruments and actions directly connected to material interests of customers. It requires lower pricing and more intensive instruments of interesting customers (e.g. promotion) than those of competitors.

➪ **Information advantage**
It is associated with information creation processes.
An enterprise's skills and resources on which its competitive advantage is based should constitute key competences, that is, special, limited and difficult to imitate or replace.

The emerging need for social responsibility means that the image of a socially responsible business can be taken advantage of. The core characteristic of social responsibility is that emphasis shifts from unique products to unique businesses offering products. Strategies of a socially responsible business can also be treated as a new way of controlling an unstable environment by positively impacting both resources and skills of an enterprise and deciding its competitive advantage.

CSR and enterprise competitiveness

Corporate social responsibility maybe another excellent marketing tool raising competitiveness of an enterprise in the local market. It may not only boost sales or keep existing customers of an enterprise but also contribute to finding new custom.

In a dynamically growing economy, continual search for and taking advantage of unique (internal and external) factors for an enterprise to distinguish itself and occupy a better position than its competitors become a source market success. In response to escalating expectations of the environment, enterprise incorporate ever new aspects of social responsibility in their strategies. It can be assumed, therefore, that the concept of social responsibility is a major source of competitive advantage, an innovative contribution not only to gaining competitive advantage but also to providing good conditions for social and economic growth. Operation of an enterprise in such a competitive market is dependent on social acceptance of its activities and impact by both the social environment and its participants. Social acceptance of an enterprise and its business objectives determines existence of an organisation. Enterprise striving only to boost their financial profits trigger a range of side effects, such as: social inequality, unemployment, degradation of the natural environment, monopolisation, as well as excessive consumption, expansion of the grey market and unfair competition.

The principal reason why enterprises set their strategies is their drive for profitability and continuity. Economic dimensions may prove a necessary but insufficient condition for a strategic advantage, which arises primarily from unique and inimitable resources available to an enterprise. These resources may come in a variety of forms (Allaire, Firsirotu, 2000, pp. 264-265):

– Physical assets (distribution network, system of information, financial resources, production technology);
– Especially talented or experienced personnel;

- Outstanding organisational skills in the field of management, planning, control, coordination;
- Extensive interpersonal relations based on mutuality, trust and commitment of organisation members.

The theory of social responsibility is treated as a tool for winning competitive advantage in the global market where customers, workers as well as investors attach considerable weight to other than economic values. Firms desiring to build trust of the environment in their business decisions develop strategies of social responsibility.

CSR affects competitiveness of enterprises by (Nowak, 2011):

- **Improving loyalty of stakeholders and satisfaction with services and products of a firm**. Consumers make conscious choices and often select a product or service guided by trust in a business, its image and perception by the environment. A contemporary customer pays attention not only to pricing and quality but also to company reputation.
- **Positive company image with employees**. CSR enhances motivation and loyalty of staff, which translates into their increased creativity, innovativeness and activity for an enterprise, as well as recognition for directors and management. This also contributes to attractiveness of a firm in the job market, drawing new, good staff.
- **Growing interest of investors**. Firms pursuing socially responsible ideas can count on recognition and interest of investors, which means e.g. easier access to sources of finance. A lender will be more willing to extend a loan to a business that shows not only good financial performance but also a positive social image.
- **Boosted company recognition by improved reputation**. Realising CSR assumptions, a business acquires some popularity, wins awards and thus becomes more familiar to its environment.
- **Building of a positive company image**. CSR strengthens standing of a business in the job market, facilitates cooperation with business partners and state administration, which translates into:
  - **Improved relations with the public and local authorities**. By applying CSR principles, a business creates its positive image with the community, gains support of local authorities, which in turn facilitates access to public funding.
  - **Cost savings and profit growth**. Palpable, measurable benefits that improve competitiveness of an enterprise.
  - **Boosted sales**. This is owing to the competitive advantage arising from the above factors.

Social responsibility of a business must relate to its everyday operations and profile, which improves its reputation and image. Enhanced reputation and a good image improve customer satisfaction, which results in growing sales and profits of an enterprise. Profit, on the other hand, is the objective of each action and an effect of rising competitiveness. As a result, corporate social responsibility raises competitiveness of a firm, with the benefit of greater profits. In addition, realisation of a social

responsibility strategy distinguishes an enterprise from its competitors, thus becoming a source of competitive advantage.

A relatively stable competitive advantage is often insufficient for an enterprise to attain high effectiveness. Strategic leadership and its impact are required, whereby members of an organisation influence long-term prospects of an enterprise and ensure short-term financial efficiency. Strategies of social responsibility may become a way for an enterprise to generate its competitive advantage. Success of an enterprise's strategy is determined by four elements (Adamczyk, 2009, p.116):

1. Reputation – building of such attributes as e.g. solidarity, quality, honesty, trust, responsibility to stakeholders.
2. Relations – closely associated with reputation and denote relations of an enterprise with key and secondary stakeholders.
3. Sensitivity to needs of the environment – ability of an enterprise to understand and respond innovatively to market trends, future challenges, stakeholder needs.
4. Effective utilisation of resources and raising of their value – closely associated with reputation of an enterprise and its competitiveness. Access of an enterprise to human, natural, tangible and financial resources and their adoption in the management process helps to boost value of these resources in an effective and responsible fashion.

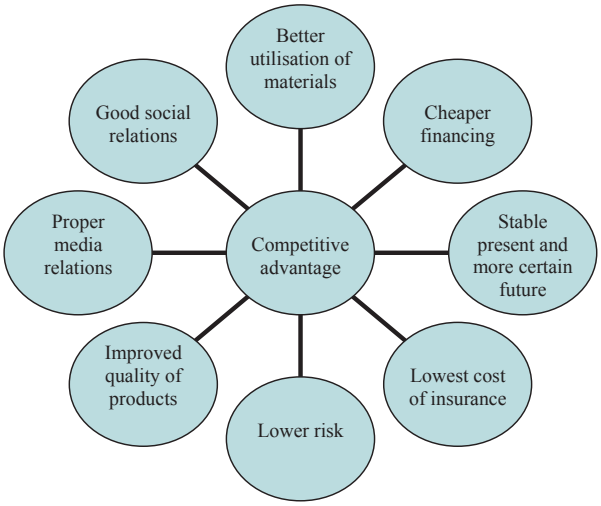

Figure 2. Factors of enterprise's competitive advantage
Source: (Adamczyk, 2009, p. 119).

The contemporary notion of corporate social responsibility is increasingly often considered as an element of competitive advantage. Realisation of CSR is a strength

of an enterprise and distinguishes it from competitors, and thus is a source of competitive advantage. Introduction of CSR standards chiefly contributes to improvement of enterprise image in the market, boosted staff involvement in operations and internal affairs of an organisation. Added to all that, enterprises achieve increased customer satisfaction and loyalty to products or services and, over a longer term, a gradual reduction of some costs.

Conclusion

Corporate social responsibility is a concept according to which enterprises voluntarily consider social interests, environment protection and relations with various stakeholder groups in their development strategies.

Enterprises that have implemented CSR foster social initiatives, solve global problems and establish aid and remedial programmes. Economic globalisation compels firms to find new distinguishing features that would win competitive edge. The latter is understood as an enterprise occupying a better position in a sector, improving its performance, becoming able to do something better than its rivals. Declining performance, on the other hand, should be regarded as loss of such an advantage and, in effect, of competitive standing.

In present-day economy, price is no longer the sole factor determining a customer's choice of a given product. Enterprises have begun to compete with reference to quality (of products, services, customer service).

Development and propagation of technology have equalised quality standards, however. Negligible differences between products makes customers pay added attention to other factors, not immediately associated with manufacturing of products. Corporate social responsibility may be one of them.

A competitive business attempts to strengthen its market standing and application of CSR contributes to generation of profits and staff motivation and drives further positive actions.

References

Aaker D.A. (1989). *Managing Assets and Skills: The Key to a Sustainable Competitive Advantage*, „California Management Review", Vol. 31, No. 2.

Adamkiewicz-Drwiłło H.G. (2002). *Uwarunkowania konkurencyjności przedsiębiorstwa*. Warszawa: PWN.

Allaire Y., M.E. Firsirotu M.E. (2000). *Myślenie strategiczne*. Warszawa: Wydawnictwo Naukowe PWN.

Barney J.B. (1991). *Firm Resources and Sustained Competitive Advantage*. Journal of Management, Vol. 17, No.1.

Bossak J.W., Bieńkowski W. (2004). *Międzynarodowa zdolność konkurencyjna kraju i przedsiębiorstw. Wyzwania dla Polski na progu XXI wieku*. Warszawa: SGH.

Cyrkon E. (2000). *Kompendium wiedzy i gospodarce*. Warszawa-Poznań: PWN.

Fahey L. (1989). *Discovering Your Firm's Strongest Competitive Advantages*. In *The Strategic Planning Management Reader*, ed. L. Fahey, Prentice-Hall, Englewood Cliffs.

Flejterski S. (1984). *Istota i mierzenie konkurencyjności międzynarodowej*, Gospodarka Planowa No 9.

Godziszewski B. (2001). *Zasobowe uwarunkowania strategii przedsiębiorstwa*. Toruń: UMK.

Gorynia M. (2000). *Koncepcja i metodyka badania konkurencyjności przedsiębiorstwa*. w: *Konkurencyjność gospodarki Polski w dobie integracji z Unią Europejską i globalizacja*. Warszawa: Instytut Gospodarki Światowej SGH.

Hampoten Ch., Tomer A. (2000). *Trompenaars: Siedem kultur kapitalizmu*. Kraków: Dom Wydawniczy ABC.

Jantoń-Drozdowska E. (2004). *Strategia fuzji przedsiębiorstwa a konkurencja*, Ruch Prawniczy, Ekonomiczny i Socjologiczny No 2.

Lubiński L. (1995). *Konkurencyjność gospodarki. Pojęcia i sposób mierzenia*. In *Międzynarodowa konkurencyjność gospodarki Polski – uwarunkowania i perspektywy. Raporty. Studia nad konkurencyjnością*. Warszawa: IPiSS.

Nowak J. (2011). *Wpływ CSR na konkurencyjność małych i średnich firm. Mali, ale odpowiedzialni – przykłady dobrych praktyk w sektorze MŚP regionu śląskiego*. www.odpowiedzialnybiznes.pl, [Access 30.12.2013].

Porter M.E. (1990). *The Competitive Advantage of Nations*. New York: Free Press, New York 1990,s.71-72

Porter M.E. (1992). *Strategia konkurencji. Metody analizy sektorów i konkurentów*, Warszawa: PWE.

Porter M.E. (1985). *Competitive Advantage, Creating and Sustaining Superior Performance*. New York: The Free Press.

Rue L.W., Holland Ph. G. (1986). *Strategic Management: Concepts and Experiences*. New York: McGraw-Hill Book Company.

Simon H. (1999). *Tajemniczy mistrzowie. Studia przypadków*. Warszawa: Wydawnictwo Naukowe PWN.

Sołoma A. (2010). *Kryteria wyboru banku preferowane przez właścicieli mikro i małych przedsiębiorstw na Warmii i Mazurach*. Toruń: TNOIK.

Stankiewicz M. J. (2005). *Konkurencyjność przedsiębiorstwa. Budowanie konkurencyjności przedsiębiorstw w warunkach globalizacji*. Toruń: Dom Organizatora.

Stoner J.A.F. (1982). *Management*, New Jersey: Prentice-Hall, Inc., Englewood Cliffs.

STRATEGOR (1996). *Zarządzanie firmą*. Warszawa: PWE.

Jakubik W. (2001). *Konkurencyjność gospodarki polskiej. Stan i perspektywy*, Materiały VII Kongresu Ekonomistów Polskich, No 7.

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Pantelis F. Kyrmizoglou*

INVESTMENT INCENTIVES: THE CASE OF NORTHERN GREECE

Abstract

The paper focuses on investment incentives provided by the Greek government to investors in Northern Greece. The area includes three regions consisting of prefectures with differences with each other, regarding the respective GDP per capita and the composition of the Gross value added. We discuss the existing legal framework and point out some reasons of the lack of efficiency of the investment incentives.

JEL Classification Code: **O9 , O11**

Keywords: Investment Incentives, Northern Greece.

Introduction

Despite the problems with the Greek economy, Greece is an attractive destination for investment, due to its strategic geographical location and its competitive advantages. However the country does not take advantage of these favorable conditions. Investment laws are enacted frequently, but their impact on investments and the growth of the Greek economy, is doubted.

In the frame of this paper we will focus on the incentives provided for investors in the area of Northern Greece and discuss some of the reasons for the lack of their efficiency. This area includes three regions:

- Region of Central Macedonia
- Region of Western Macedonia
- Region of Eastern Macedonia and Thrace.

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The legal framework for investments

According to a law enacted in 2010, the administrative division of Greece has been reformed. The administrative structure includes 13 regions and 325 Municipalities. The law promotes transparency and improves the business environment by establishing new institutions and expanding the use of Internet and new technologies.

The investment law enacted in 2013 aims at modernizing and improving the institutional framework for investments. New elements are introduced concerning 1) liquidity and acceleration of the grant disbursement procedures and 2) increasing transparency and upgrading the auditing procedures. All the areas of the country are classified in zones. Areas characterized as more self-sufficient belong in zone A (i.e. Attiki) whereas areas with problems in attracting investments, belong in zones B and C.

The main elements of the investment law can be summarized as follows:

a) All licensing procedures will be handled exclusively through a new Institution (General Directorate of strategic investments)
b) The role of the Interministerial Committee of strategic investments is upgraded
c) Tax incentives are provided (including a stable tax regime, tax exemption and 10% discount on the special duty imposed in some of the licenses).
d) Abolishment of the previously required letter of guarantee
e) Issuance of the installation and operation permits within one month by the responsible Minister of Growth. In cases of delays the Minister of Growth is authorized to issue the permits within one month
f) Foreign strategic investors are granted residence permits. Citizens from third countries are given residence permits of they buy property valued more than 250 000 euro.
g) For the first time a centralized mapping of licensing procedures is introduced.

Legislation enacted tried to accelerate and simplify the licensing process by:

1. Shortening the deadlines into new and exclusive deadlines (the public administration should comply with them.)
2. The consecutive commencement of all the necessary procedures.
3. Avoiding administration acts, considered as needless.

The problem of overregulation, the bureaucratic obstacles and the overlapping of responsibilities of different ministries are some of the main problems often mentioned as reasons of preventing the attraction of investments in the Greek economy.

The Region of Western Macedonia

This region includes four prefectures (Kozani,Grevena,Florina and Kastoria). In the table 1 we can see the CDP per capita for each prefecture and the respective GDP as percentage of the country.

Table 1. Region of Western Macedonia

	Kozani	Grevena	Florina	Kastoria
GDP per capita	21207	11711	19123	11425
GDP as % of country	1,5	0,2	0,5	0,3

Source: Hellenic Statistical Authority.

Kozani is the strongest prefecture of the Region, both in terms of population and economic strength. The Gross value added of this area refers to a Primary Sector of 2,6%, a Secondary, Sector of 60,8%and a Tertiary Sector of 36,6% (2010). The high figures of the Secondary Sector are connected with the big scale of the production of electricity in this area. In the table 2 we can see the respective percentages of aid given for the investments in each prefecture of the Region.

Table 2. Percentages of aid given for the investments in each prefecture of the Region Western Macedonia

Prefecture	Zone	PERCENTAGE OF AID [%]		
		Large Enterprises	Medium sized Enterprises	Small and Micro Enterprises
Kozani	B	30	35	40
Grevena	C	30	40	50
Florina	C	30	40	50
Kastoria	C	30	40	50

Source: Law 4146/13.

The Region of Eastern Macedonia and Thrace

This Region includes five prefectures (Kavala, Drama, Xanthi, Rodopi and Evros). In the table 3 we can see the GDP per capita for each prefecture and the respective GDP as percentage of the country.

Table 3. Region of Eastern Macedonia & Thrace

	Kavala	Drama	Xanthi	Rodopi	Evros
GDP per capita	16.578	11.556	15757	14069	15691
GDP as % of country	1,0	0,5	0,8	0,7	1,0

Source: Hellenic statistical Authority.

Kavala is the strongest prefecture of the Region, in the terms of its GDP per capita. The Gross value added of Kavala refers to a Primary sector of 5,2% a Secondary Sector of 20,1% and a Tertiary Sector of 74,6% (2010).

The other prefectures have a similar composition of Gross value added. It is evident in all case that there is a huge Tertiary sector, showing the weaknesses of the specific Region, which are weaknesses of the country as a whole. In the table 4 we can see the respective percentages of aid given for the investments in each prefecture of the Region.

Table 4. Percentages of aid given for the investments in each prefecture of the Region Eastern Macedonia & Thrace

Prefecture	Zone	PERCENTAGE OF AID [%]		
		Large Enterprises	Medium sized Enterprises	Small & Micro Enterprises
Kavala	C	40	45	50
Drama	C	40	45	50
Xanthi	C	40	45	50
Rodopi	C	40	45	50
Evros	C	40	45	50

Source: Law 4146/13.

The Region of Central Macedonia

This Region includes seven prefectures (Thessaloniki, Halkidiki, Kilkis, Pella, Imathia, Pieria, Serres). In the table 5 we can see the GDP per capita for each prefecture and the respective GDP as percentage of the country.

Table 5. Region of Central Macedonia

	Thessaloniki	Halkidiki	Kilkis	Serres	Pella	Imathia	Pieria
GDP per capita	16975	17161	12850	10499	13169	13015	13477
GDP as % of country	8,9	0,8	0,5	0,9	0,9	0,8	0,8

Source: Hellenic Statistical Authority.

Thessaloniki is the strongest prefecture of the Region, both in terms of population and economic strength. Halkidiki has a higher GDP per capita due to the developed tourism sector, but its weight in the entire Greek economy is very low. The Gross value added of Thessaloniki refers to a Primary Sector of 1,4%, a Secondary Sector of 19,4% and a Tertiary Sector of 79,2%(2010). In the table 6 we will see the respective percentages of aid given for the investments in each prefecture of the Region.

Table 6. Percentages of aid given for the investments in each prefecture of the Region Central Macedonia

Prefecture	Zone	PERCENTAGE OF AID [%]		
		Large Enterprice	Medium-sized Enterprice	Small Micro Enterprice
Thessaloniki	B	30	35	40
Halkidiki	B	30	35	40
Kilkis	C	30	40	50
Serres	C	30	40	50
Pella	C	30	40	50
Imathia	C	30	40	50
Pieria	C	30	40	50

Source: Law 4146/13.

From the data mentioned above we can conclude that the structure of the Gross value added is problematic in all the area of Northern Greece as the Tertiary Sector of the economy prevails with extremely high figures.

Unfortunately we find a similar condition in the rest of the country. Even the Region of Attiki, which is classified in Zone A, has a problematic structure of economic activity with Primary Sector 0,4%, Secondary Sector 12,6% and Tertiary Sector 87%. Therefore it is obvious that there is a need for spectacular change. Priority should be given to the Primary and Secondary Sectors of the economy.

By observing the respective figures we notice that all areas in the same prefecture are treated equally regarding the percentages of aid. But there are big differences even in the same prefecture. For example all areas of the Halkidiki prefecture are not the same. Areas located near the sea are privileged, whereas areas located near the mountains face a lot of difficulties.

Remarks and suggestions

Although the impact of investment incentives in the overall business environment of Greece is positive, there is a widely acceptable argument that they are not enough themselves to solve the problem of low investment figures. Indeed the majority of investors worldwide are influenced in their decisions (Solomon, Mao) by factors like:

- the stable taxation regime,
- political stability,
- social consensus,
- easy access to financing,
- flexible banking system,
- flexible labor market,

– low corruption,
– lack of bureaucracy,
– investors' protection,
– and any other factors that constitute elements of an investment friendly environment.

Unfortunately many of these factors do not exist to the required extent in the Greek economy and the periphery of the country (as Northern Greece) is more badly affected. As a consequence, governments could possibly make concessions and accept investments which otherwise would not be accepted because they are harmful for the environment.

Therefore what is urgently needed is:

– a determined government to proceed to the necessary reforms without considering the political cost of their decisions. The system should be able to work for long periods without political intervention (the recent case of Belgium without government for a rather long period is a characteristic example). Favoritism and nepotism are not compatible with an efficient public administration;
– a society welcoming entrepreneurship and not considering it as a more or less illegal activity (used to tax evasion, tax aversion and entanglement with the government);
– entrepreneurs who are aiming at the profit maximization but in the same time respect the society, the rules of the „game" and the environment;
– Justice served by judges committed to the right interpretation of the Law and not biased by the government's priorities;
– an educational system that encourages entrepreneurship characterized by business ethics and commitment to the prosperity of the society as a whole;
– unions which protect the interests of their members but they also know that these interests cannot have priority against the interests of the society as a whole.

Conclusions

From the aforementioned analysis we can conclude that investment incentives, although helpful towards the growth of the Greek economy, they are not themselves alone, able to change the image of the Greek economy. There is an imperative need for a series of reforms apart from the incentives provided.

The investment incentives used by the governments for many decades now, have not had the expected impact on the magnitude of the implemented investments and consequently on the required growth of the economy. Incentives should become stronger for some areas of Northern Greece. Even small prefectures have big differences from one area to another and parts of them need a special treatment with stronger incentives.

In general, priority must be given to changing the composition of gross value added, with more emphasis on the primary and secondary sectors of the economy. The fact that the Greek economy (and of course the economy of Northern Greece) is in a state of recession for six consecutive years, constitutes evidence that the investment incentives cannot attract investors unless all the other necessary reforms are implemented.

References

Barrios S-E Strobl (2009), *The dynamics of regional inequalities*. Regional Science and Urban Economics, Vol. 39, Issue 5, September, p. 575-591.

Benos N-S Karagiannis (2008), *Convergence and economic performance in Greece: Evidence at regional and prefecture level*. Review of Urban and Regional Development Studies, Vol. 20, Issue 1, March, p. 52-69.

Hellenic Statistical Authority.

Law 4146/2013.

Mao J. (1970), *Survey of Capital Budgeting: Theory and Practice*. Journal of Finance, Vol. 25, no. 2, pp. 349-360.

Petrakos G-G Saratsis (2000), *Regional inequalities in Greece*. Papers in Regional Science.

Psychanis G-O Papadaki (1996), *Investment Incentives and Regional Development in Greece*. 36th European Congress of Regional Science Association, Zurich.

Solomon M. (1966), *Uncertainty and its Effects on Capital Investment Analysis*. Management Science, Vol. 12, no. 8, pp. B334- B339.

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Wojciech Sońta*

CIVIL BUDGET AS A SYMPTOM OF DEMOCRACY AND INNOVATION IN THE LOCAL GEVERNMENT

Abstract

The idea of civil society is understood as a symptom of activity of independent citizens in public life. Beginning of this way of thinking in Poland was 1989 year when the old political and economic system was ended. One of tools which can be helpful in activating civil initiative is exactly the civil budget which can be classified as a theory of public choice. It includes in economy of public sector and it is connected with its financial trend. The presented article is analysis of an example of the civil budget based on Radom City. The article pays special attention on the procedure of its creating as well disadvantages and advantages connected with its functioning.

JEL Classification Code: **H61**

Keywords: Budget, local government, democracy, innovation, Radom city.

Introduction

The budget procedure for local government units is exactly defined in legal regulations. In spite of the fact, some local governments in Poland dispense specific finance recourses which are a basis to so-called the civil budget. So, what does the civil budget consist in? The civil budget is created as a result of social consultations as a spending of part of the commune's budget on indicated by the city's inhabitants propositions of tasks having local nature which include in its competences. Within the confines of the civil budget the inhabitants can engage personally in a choice of investment which according to them should be realised in a range of given to their disposal parts of the city's budget.

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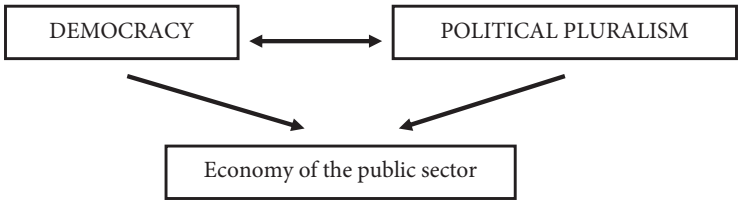

Figure 1. Three basic pillars of public choice's theory

Source: Own study based on Neubauerová, E. *Teória verejnej voľby* In Sivák R. a kolektív *Verejné financie*, Vydavateľstvo Iura Edition Bratislava 2007 p. 74 [5].

The drawing presents in the most general terms, that democracy and pluralism shapes economy of the public sector in broad sense as one of more important features of the post modernist culture showing itself in individualism of a product (Lotko, 2013, p. 16). The civil budget is a financial trend being a tool of civic activity.

Practise showed that more than once institution of the civil budget influenced on solving urgent problems of a city. In other way local matters are perceived from the state's point of view hence, process of the decentralisation (Žárska, 2008) but also the same problem can concern local community especially if it is a large city just like Radom which amount of inhabitants is 220 thousand (14th place as regard of inhabitants' number in Poland). Radom has experience with the civil budget for 2 years i.e. 2013 year's budget which is realised currently and 2014 year's budget which is worked out at present. Financial resources given to disposal of the civil budget in amount of 750 thousand EUR are not large but thanks to them some urgent needs can be covered.

The aim of the present article will be familiarisation of a Reader with using procedure of the civil budget in Radom as a symptom of some democracy and innovation in the local community. The moment of time is characteristic because one period of the UE 2007 – 2013 budget is ending and the second one 2014 – 2020 is beginning. We start to realise new projects which surely would affect on economic growth being richer with experiences gained in the previous period and thanks to the investments the financial and economic crisis will be mitigated. However, before we get to the civil budget there should be done summary of the ending European Union 2007 – 2013 plan in aspect of gained financial resources by city of Radom (Markowska-Bzducha, 2013; Wolak-Tuzimek, 2011).

Assessment of the gained European Union financial resources by city of Radom in years 2007-2013

Years 2007-2013 when there were granted European Union funds need to be considered as successful for Radom. In this time 95 projects submitted by The Municipal Office and municipal organisational units that is widely understood the government

received financing. In the table there were presented disciplines which were supported by the European Union subsidies.

Table. 1. Number and value in thousands of EUR of subsidised applications of Radom in years 2007 – 2013.

Subsidised sectors	Number of the subsidised application	Value of the subsidised application	Value of the European Union subsidies	Own contribution
Education	48	25 268	18 293	6 975
Water-sewage management	1	66 075	31 104	34 971
Computerization	2	3 998	3 779	219
Road infrastructure	10	71 070	36 598	34 472
Environment protection	5	16 572	8 500	8 072
Health protection	5	12 467	9 444	3 023
Social assistance	12	6 030	5 113	917
Entrepreneurship promotion	2	1 526	1 526	0
Revitalisation	3	6 797	5 671	1 126
Municipal transport	2	5 892	4 066	1 826
Territorial development	2	1 445	401	1 044
Economic promotion	2	287	155	132
Development strategy	1	648	582	66
Total	**95**	**218 075**	**125 232**	**92 843**

Source: Findings from Radom Municipal Office.

Total value of the projects amounts 218 075 thousand of EUR and the subsidies of European Union are 125 232 thousand of EUR. From the presented table 1 results that the commune of Radom City was financing all areas of social life. There were renovated and built from scratch many kilometres of roads, urban parks lived to revitalisation and many thousands of EUR were received for development of education. Obtaining financial resources for this aim is especially justified because rate of unemployment in Radom is high and amounts 23%. Many people especially young ones go to Warsaw which is 100 kilometres away from Radom and where getting a job is easier.

There is difficult to estimate whether the subsidies in amount of 125 232 thousand of EUR is satisfactory sum for this type of the city like Radom. The sum should be compared to amounts of subsidies received by other cities of the same size or scaling by 1 inhabitant. In this connection appears a question if all possibilities were used? It is necessary to suppose that no, because there was the first period of receiving the

financial resources after joining to European Union and everybody had to learn formalised procedures which they did not have any contact with so far.

Carried out opinion poll among inhabitants in streets of Radom showed that the city in the last years when Poland joined European Union changed its appearance for the better. This change surely was caused because of the realised projects from European Union financial resources. However, almost half of the realised projects concerned education which in indirect way influences on image of the city. Important role in this process had expenses on the infrastructure, revitalisation, municipal transport and water-sewage management. These are important disciplines which influence on functioning of each city. There is not always the case that an applied application which is important for a city is accepted because either there are some formal lacks in it or there is too large competition of beneficiaries applying for it. Currently we have experiences from the previous period and starting from 2014 we will apply for European Union funds again for different projects for the city. However, the problem is that new rules of granting subsidies from European Union discriminate such cities like Radom preferring large centres like in Mazowieckie Province is Warsaw. I think that in Slovakia can be the same problem too, for example Banská Bystrica will be numbered among cities, which will be able to use the Integrated Territorial Investments (ZIT) but for example Zwolen will be in worse situation. To gain money from the ZIT Zwoleń must prove functional connections of neighbouring communes with indigenous city that is Banská Bystrica. Therefore from the reasons, many government employees object the policy, which threatens balanced development of regions preferring more wealthy ones.

Procedure of the civil budget

The procedure of the civil budget includes the following stages of proceeding. In the first stage inhabitants submit their propositions to the budget filling in a special form and sending it on the given address to The Municipal Office. Applicants describe in the form among other things aims of the submitted project, its short description, justification of the project's realisation, range of activity and estimated calculation. Next all the submitted applications are studied by essential departments of the Office for legal possibilities of realisation of the investment, economy, and possibilities to protect financial resources to service the given idea in the next years. The submitted projects cannot exceed allocated financial resources in the budget for this aim. List of all the submitted projects (ones which fulfil the conditions as well ones which do not fulfil together with justification) is given to public information.

The second stage includes voting of the inhabitants for the submitted and verified projects on special cards to vote in appointed places. The inhabitants can vote after presenting identity cards. The projects which will have the largest amount of votes are introduced to the budget on the next year. Projects with the highest amount of

votes are chosen in turn till used up of the intended budget resources on realization of their aims.

The sum of the civil budget will amount together 750 000 EUR. It means that for projects of each from five constituencies to City Council allocated 125 000 EUR and the same amount of money on city-wide projects i.e. concerning the whole city.

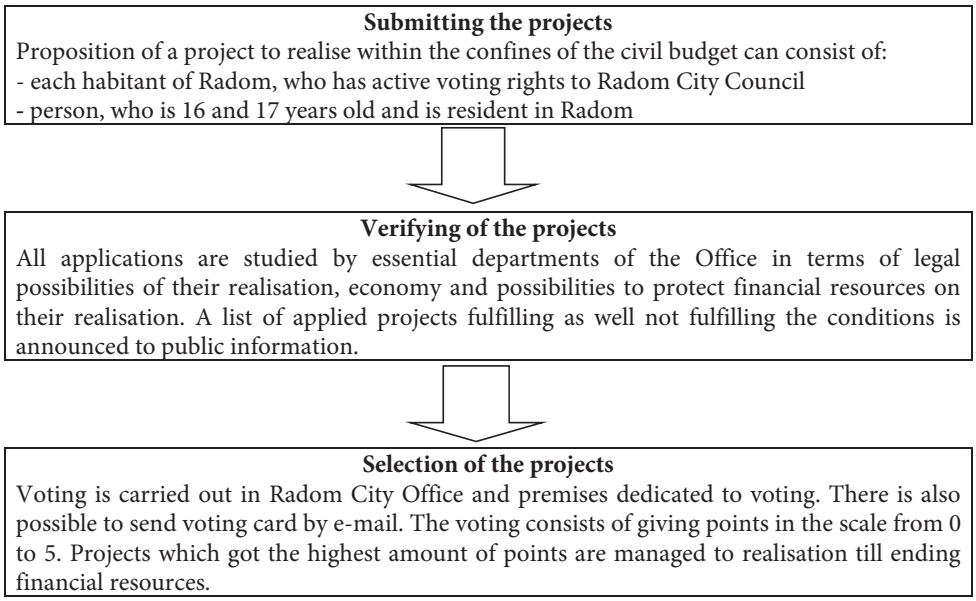

Figure 2. Procedure of passing the civil budget in Radom

Source: Own study based on Sześcidło (2012, p. 21).

All inhabitants above 16 years old will be able to present their propositions to take them into account in the budget. Forms to do it can be possible to download from web page of the city or in hard copy to take them from City Council Office, Inhabitant Service Office, Centre of Non-government Organizations and Society Communication Department where there will be also possible to apply them after filling in. In each constituency meeting of a president with inhabitants took place, where there was discussed aim of the civil budget and possible investment propositions. The propositions will be verified by essential departments of the office in terms of their feasibility, economy and possibilities of protection in the budget for the next years of likely costs which the project will generate in the future. Then positively verified propositions will be forwarded to Opinions Team consisting of the president, deputy president supervising municipal investments, city treasurer, director of the Investment Department, chairman of the city council, chairman of the budget committee and chairman of the city council's clubs. The Opinions Team will do final division

of the submitted projects in terms of classifying them to category of projects of individual constituencies or category of city-wide nature and the Team will work out their final lists to vote. The inhabitants from the lists will chose in a way of voting and evaluation of the project using scale from 0 to 5 points such projects which finally will be realised. It will be possible to vote using the Internet or by cards to vote in places which will be given to public information. There will be realised the projects which will have the highest amount of points. Consultations to the next year's civil budget have been started from April and the will be finished till 15th November. The discussed procedure can be presented graphically as it was showed on the draft no. 2.

Assessment of implementing the civil budget

The same as it was written before the civil budget is realised in Radom from 2 years, i.e. 2013 and 2014. There are a few reflections connected with its realisation. As regards the year 2013, there were chosen 15 projects in voting in total amount 750 thousand EUR. It follows that average amount of a project's realisation was 50 thousand EUR. Realisation of the civil budget proceeded without large disturbances.

As regards the year 2013, 5500 inhabitants of Radom voted to the civil project what is 3% of the entitled, however 7000 inhabitants voted to the 2014 project what is 3,9%. The voting in 2013 year took place from 10th June till 30th August 2013. A vote can be given in 4 places of The Municipal Office and 5 schools located in each from the constituencies from 8 a.m. till 3 p.m. Assessing this voting, it is necessary to claim that the time was enough but it was unfortunate owing to holiday and leaves in this period as also that time frame when there was possible to vote by people having a job was not well matched and the voting was difficult to do.

There was possible to vote with using the Internet however the procedure was quite complicated what means that a voting person had to print voting cards, fill in them, scan and send to the given address together with scan of identity card. It should be assessed as not the best solution. Firstly, it is waste of paper because the voting cards were a book having 20 pages, secondly there was lack of security of personal details, and thirdly not everyone is an owner of a printer and a scanner.

The above table shows large involvement of the inhabitants in the budget procedure. The approved and not approved projects as well the chosen ones were published on the Internet page of The Municipal Office. The most frequent reason to do not approve a project to vote was: lack of a ground's ownership or unclear legal status where the project had to be realised as well exceeding of the budget resources.

As regards to age range of the voting people there were as follows: 10% of youth being 16 and 17 years old, people from 18 to 40 years old – 25%, from 41 to 60 years old – 42% and more than 60 years old – 23%. There is necessary to precisely assess participation of school children doing assessment of the voting people years' range

probably because the fact that the voting points were located on terrains of schools. However there was noticed low involvement among young people between 18 and 40 years old.

Table. 2. Number of approved and not approved projects for voting and projects chosen to realisation in 2014

Constituency	Approved projects	Not approved projects	Chosen projects
0	26	14	3
1	18	26	2
2	8	15	1
3	22	38	2
4	23	47	2
5	7	12	1
Total	**104**	**152**	**11**

Source: Information received from the Office of Radom commune.

Next, as regards to preferences about a kind of individual investment tasks, the youth aged from 16 to 18 voted on such investments like running paths, bicycle paths, sport fields, skate parks, outdoors body building gyms, racks to park bicycles. In the age group from 18 to 40 years there was large diversity of investment propositions but no one was dominant. In the 41 to 60 years old group prevailed education programs because in this group there are the most amount of unemployed people. In more than 60 years old group definitely predominated health programs.

The information for the authorities of the city is essential. It is necessary to draw conclusions from it to more inhabitants of Radom want to vote in the next editions. A barrier in getting the expected benefits from implementing the civil budget can be inappropriate expectations of the local communities to financial possibilities of the local government's unit and the same distrust of the citizens to the authorities.

Conclusion

The civil budget can be especially valuable example for Polish as well Slovakian creators, what is worth to take further detailed study owing to similar social-economic realities:

- the countries are after transformation of the political system,
- they were included in the same time to European Union,
- the challenge which is for Poland before joining to the EUR zone,
- effective using of the structural funds.

Also noteworthy is that the both countries can be included among countries with moderate engagement in the innovation projects hence symptom of each novelty deserves attention (Orviská, Huňady, 2012).

The carried out analysis showed still occurring shortcomings and weak points of this form of innovation in public life owing to short period of applying of the civil budget. However, in the next years this form will be improving. It would be interesting a comparative analysis of the civil budget of Radom City and for example Banská Bystrica as a partnership city.

References

Lotko A., 2013, *Marketing wobec ponowoczesności*, Wydawnictwo CeDeWu.PL Warszawa.

Žárska E. a kolektív, 2008, *Komunálna a politika*. Vydavateľstvo Ekonóm EU v Bratislave.

Markowska-Bzducha E., 2013, *Participatory Budgeting as a Stimulant for the Development of Civil Society*, In: Lapinova E., Korimova G., *Determinanty sociálneho rozvoja: Sociálna ekonomika ako priestor podpory európskeho občianstva*, Zborník vedeckých štúdií, Univerzity Mateja Bela v Banskej Bystrici, Banska Bystricia.

Orviská M., Huňady J., 2012, *Rozpočet EÚ – vyzvy a perspektívy v kontexte Stratégie Europa 2020*, In: *The Budget for the period 2014-2020 in the context of the Europe 2020*. CDROM, UMB Ekonomická fakulta Banská Bystrica.

Sivák R. a kolektív, 2007, *Verejné financie*. Vydavateľstvo Iura Editon Bratislava.

Sześcidło D., 2012, *Uwarunkowania prawne budżetu partycypacyjnego w Polsce*. Finanse Komunalne nr 12.

Wolak-Tuzimek A., 2011, *The EU Structural Funds as a source for financing enterprises' development*, In: Wolak-Tuzimek A., Sieradzka K. (eds.), *Enterprises facing the challenges of the global economy*, Politechnika Radomska, Radom.

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Jozef Tvrdoň

TRH NEHNUTEĽNOSTÍ (REAL PROPERTIES MARKET)

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Public space of communes and towns is full of different real properties. There are except lands and natural things also ones created by human beings just like residential and public buildings, structures of land and water engineering. Their owners are different entities physical as well legal. Diversity of properties it means place and time where they are located or have been created causes that the real estates' market has their own principles and law, which will be brought closer by the reviewed textbook.

Influence on the real properties' market besides existing socio-economic conditions has also time factor i.e. the past when it was created, the present it functions currently as well the future. From time point of view the real properties' market is burdened various risks. There is possible to formulate research hypothesis that the longer is time horizon the risk is higher. It is not always the case that the time when a real property was created has positive influence on its usefulness and the same its value. More information in this subject is included in the part describing the brownfield issues (abandoned, unused in any given time real properties). Generally, the real properties have negative influence on the nearest surroundings by reduction of prices of neighbouring real properties, increasing unemployment, degradation of the environment, aesthetics of the surroundings, etc.

The reviewed textbook describes the subject from point of view of the current market situation. It is an interdisciplinary subject including different disciplines of science, among other things economics, finances, and management. It causes that the Author of the study must have quite large knowledge from the listed above disciplines and knows interactions existing between them.

The aim of the reviewed textbook is acquainting the Readers with basic concepts of the real properties' market, specific features of the market, functioning entities and basic methods of valuation and development of the market in Slovakia.

The structure consisting of nine parts has been conformed to the formulated aim of the study and it is as presented below.

The first part is devoted to the space the real properties' market functions. There are analysed basic economics factors which influence on development of settlement and the same on the real properties. There are presented also chosen theories describing development of the settlement where essential factor which

influences on formulating internal structure of clusters are conditions formed on the real properties' market.

The second part is devoted to the real properties' market as a sub-system. There can be found rich material devoted to isolating and factors influencing on the real properties' market, basic characteristics and specificity of the market. The Author treats a real property as specific commodity which price changes in time. In this part there were also discussed functions and also dysfunctions of the real properties' market and influence of ownership on the market. At the end of the part there was presented interventions of the state for development on the real properties' market (it concerns flat building industry) and also its segmentation. In my opinion it is very interesting depiction of the discussed issues.

The third and the fourth part are devoted to participants on the real properties' market it means the ones who creates supply and demand on real properties, i.e. buyers and sellers, people renting houses and occupiers, real properties' offices, banks, state, town and communes, market analytics, architects, technical supervision, contractors of investments, etc.

The fifth part is focused on investment in real properties on the market and its real as well financial aspect with special concentration of the investment in building and agricultural lands, flats and also real properties located abroad in attractive places in Europe, like the Alps, Azure Coast. There were also described in it real properties' funds and also leasing of the real properties taking into account disadvantages and advantages of this form of investment. These are new forms of investment which develop dynamically in Slovakia as well in other countries of the Middle-East Europe.

The sixth part is devoted to taxes of the real properties and it concerns especially lands, buildings and structures of land and water engineering. The Author takes notice that the system of real properties' taxing is similar in European Union countries and receipts from the tax are stable what proved my research Przegląd Podatków Lokalnych i Finansów Samorządowych, 2013, no. 5 as well OECD research.

Next, the seventh part is dedicated to valuation of the real properties. The Author in selective way presented more important problems connected with the issues, which are subject of separate, detailed studies in the literature concentrating on factors which influence on price of the real properties and using more important methods in procedure of their quantification.

In the eight part there was discussed revitalization of the real properties and especially much time was devoted to the brownfield mentioned at the beginning, what means deserted, undeveloped lands, buildings, structures of land and water engineering what from social and economic point of view is harmful. The problems with larger or less intensity occur in all European and out of European countries.

And finally the last part which mainly has nature of empirical research describes and analyses the real properties' market in Slovakia. From the presented material follows that the model of functioning of the real properties' market is typical and similar for many European countries afflicted with the economic crisis.

Starting from the fifth part the Author quotes practical examples, which illustrate contents included in them. The examples are not very complicated but well included in the presented issues. Thanks to that, a Reader can evaluate practical application of the presented contents. Sometimes it is an example describing some interesting event on the real properties' market; sometimes it is a numerical example presenting calculation of tax or presentation of calculation if e.g. lease of a flat or its sale is profitable for an investor.

Summing up, it is necessary to affirm that the presented issues were recognized in accordance with the principle of research from general to specific issue i.e. including theoretical consideration in the subject of the real properties' market through its segments from consideration of practical nature to its functioning supported by statistical material.

Although the textbook is dedicated for students but it can be recommended successfully for wide team of participants occurring on the real properties' market, city council employees and also people who are interested in purchase – sale of real properties because thanks to the reading material they can avoid risky transactions. Even though the Author's intention was not presentation of the dysfunctions existing on the market but he pays attention on them in a very general way.

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