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RESTRUCTURING AS THE IMPERATIVE OF DEVELOPMENTAL CHANGES IN ECONOMY

EDITED BY

RYSZARD BOROWIECKI, BARBARA SIUTA-TOKARSKA

RESTRUCTURING AS THE IMPERATIVE OF DEVELOPMENTAL CHANGES IN ECONOMY

CRACOW UNIVERSITY OF ECONOMICS
Department of Economics and Organization of Enterprises
FOUNDATION OF THE CRACOW UNIVERSITY OF ECONOMICS

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Edited by
Ryszard Borowiecki, Barbara Siuta-Tokarska

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Joanna Nowakowska-Grunt

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INTRODUCTION

The dynamics of numerous processes undergoing in the contemporary world is the reason for which a permanent need occurs for a comprehensive, full, and at the same time wise and sagacious view of the changes taking place, their possible effects and their significance not only for present but also for future generations.

In the spirit of the idea of sustainable development, the view of the world economy, including individual national economies as inter-related, indicates a necessity to implement changes which eventually could bring not only pro-growth but also pro-developmental effects, considering both the condition, the structure, the complexity and the dynamics of the environment.

In this context, in the new, global economy and in the (post-) crisis conditions, there is a requirement for the constant search for and the creation of ventures which would be creative, adaptational or anticipative to more and more volatile environment, but also for such system transformations and structural changes which can enable to acquire new features, procedures and actions necessary for transformations.

The changes, often fundamental and radical, which are commonly called "restructuring", are a tool of transformations and the creation of development, and are a response to challenges arising from the surrounding reality. In this sense, restructuring becomes the imperative for developmental changes occurring in economy itself and its entities.

This publication, consisting of thematically coherent papers by twenty-six authors, discusses the problems of restructuring, considering the following four research areas:

I. Place, significance and objective of restructuring in new economic conditions, entitled *"Restructuring in the Face of the Challenges of Contemporary Economy"*.

II. Indication of diversity, occurring trends and directions of changes in economic sectors, with special regard to industry, entitled: *"The Trends of Changes in the Sectors of Poland's National Economy in the Context of Restructuring"*.

III. Undertaking restructuring activities based on an analysis of selected empirical examples, entitled: *"Restructuring Processes - an Attempt of the View from the Angle of Selected Examples from Economic Practice"*.

IV. Teaching process, cooperation of universities with business, and so-called university entrepreneurship, entitled *"Restructuring for the Development of Higher Education"*.

Having regard to the fact that in the contemporary world the development of technologies in a sense tightens space and time, to some extent erasing their meaning, in more and more globalized dimension of human activity, there is a necessity for an individual approach which considers the specificity, non-repeatability and uniqueness of every entity.

Restructuring processes in economy, in an enterprise, as well as in other entities of the national economy are conditioned by such an approach because, in spite of the general rules of procedure, restructuring requires an individual view which would be adequate to the needs, capabilities and the vision of future of a specific entity. On the basis of these processes we can talk about developmental changes constituting the source of their transformation.

The publication is the outcome of long-term scientific and research cooperation conducted by the employees of the Department of Economics and Organization of Enterprises of the Cracow University of Economics with representatives of various scientific and research centres in Poland and abroad and economic practice. The publication has used the findings of the scientific research of the Department of Economics and Organization of Enterprises in respect of changes and volumes of the diversity of economic relationships concerning enterprise development from the point of view of their importance and significance for the economy of Poland.

Ryszard Borowiecki, Barbara Siuta-Tokarska

PART I

RESTRUCTURING IN THE FACE OF THE CHALLENGES OF CONTEMPORARY ECONOMY

Aleksander Maksimczuk
University in Bialystok, Poland
State School of Higher Vocational Education in Suwałki, Poland

Aleksander Prokopiuk
Bialystok School of Economics, Poland

GEOGRAPHICAL RESTRUCTURING OF FOREIGN TRADE AND CHALLENGES IN THE IMPROVEMENT OF INTERNATIONAL COMPETITIVENESS OF POLISH ECONOMY

Summary

The geographic reorientation of the Polish foreign trade, initiated together with transformation, resulted in that the EU is currently the main market and a significant place of purchase for Polish companies. Commercial relations with this partner were even more intensified following Poland's accession into the EU These changes were as well accompanied by gradual improvement of Poland's position in the international competitiveness of economies, although it still leaves a lot to be desired. Thus, this study focuses mainly the following: on the one hand, the analysis of the transformation in the geographical structure of the Polish trade at the moment of its integration with the EU, on the other – the shaping of Poland's position in the international rankings for the competitiveness of the world's economies in this period. The results from foreign trade measured as indexes for international competitiveness reflecting the position of a given country, have, but, a special meaning. There also exists a specific cause-and-effect relation between foreign trade and international competitiveness – even as feedback. And this is the reason why these issues need to be analysed on the basis of Poland in its break-through period - prior to and upon its accession to the EU as an example – in order to exhibit the co-existing relations.

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Introduction

Alongside the transformation of Poland's economic system, relevant transformations within various economic ranges took place. The geographical structure of the Polish foreign trade changed as well (geographical restructuring), through which the vast majority, if not all, of quality changes of domestic economy demonstrated themselves most visibly. With this regard, specific changes had to take place within international competitiveness of Poland's economy. It took an external reflection in the relevant evolution of the position of Poland in the international division of work expressed in rankings of international competitiveness.

The then initiated geographical reorientation of the structure of the Polish foreign trade was the cause of the current EU becoming the main sales market and an important purchasing area for the Polish entrepreneurs. Commercial relations with this partner intensified even more upon Poland's accession in the EU Alongside these changes, also Poland's position in the international competitiveness of economies gradually improved. With regard to this, the **aim** of this paper is: *on the one hand, to analyse the transformations in the geographical structure of the Polish trade at the moment of its integration with the EU, and on the other, to shape its position in the ranking of international competitiveness of global economies within this period.* The results of foreign trade in the index structure of international competitiveness are but of special significance, and between foreign trade (commercial exchange)[1] and international competitiveness there occurs a specific cause-and-effect relation – even in terms of feedback. Thus, it is worth analysing as exemplified by Poland in its break-through phase, i.e. within a relevant period of time – before and after the accession in the EU, so that it provides a basis for opening a debate concerning, as follows: after over a decade of its presence within the European Union structure, **what needs to be further done and what can be further done with it?**

General remarks on the situation of the Polish foreign trade – within geographical restructuring and integration within the EU

Adaptation processes with regard to the integration in many areas, including foreign trade, obviously began in Poland together with the transformation. They intensified in the late 1990s. The political transformation can be thus referred to as the beginning of the Polish pro-western reorientation as Poland opened its borders towards the world at that time. The country acknowledged that the key element of political changes as to trading with foreign countries meant all the more the liberation of rules governing international economic co-operation. The introduction of the rule of free business activity within foreign trade also became the source of expansion of private entrepreneurship[2]. In the preliminary phase of the transformation, the reorientation of Polish trade from the East towards the West consisted in fluctuating growth in the share exchange of developed countries, especially the EU This all took place at the cost of Central and Eastern European countries. Prior to the initiation of the political transformation, the Polish trade was dominated by the countries of the Council for Mutual Economic Assistance[3]. Nevertheless, its share in the crisis period of the 80s was significantly falling[4]. As late as in 1988, just before the political changes, it constituted 42.7% in exports and 41.8% in imports. For developed countries this was 39.7%

[1] From 1st May 2004, commercial exchange with the EU member states is already determined in terms of intra-community trade, whereas with the so-called third parties, it is referred to as foreign trade.

[2] *Transformacja społeczno-gospodarcza* w Polsce *[Social-economic transformation in Poland* - TN], Rządowe Centrum Studiów Strategicznych *[Governmental Centre for Strategic Studies - TN]*, Warszawa 2002, p. 49.

[3] A. Maksimczuk, L. Sidorowicz, *Polska granica wschodnia w warunkach transformacji (wybrane aspekty)[Polish Eastern border in the Times of transformation (selected aspects) – TN]*, Wydawnictwo Wyższej Szkoły Ekonomicznej w Białymstoku, Białystok 2008, p. 68.

[4] In 1970, the share of socialist countries was" 63.9% in export and 68.6% in import, Cf. Schaffer, *The National Economies of Europe*, Pearson Longman, Warszawa 1992, p. 242.

of Polish exports and 40.3% of imports, in this the EEC – 25.9% and 24.7% respectively. The developing countries constituted 11.9% of Polish exports, and these generated 11.2% of the imports[5].

Several years of the transformation resulted in the radical reversal of proportions. In 1993, as much as ¾ of the revenue from the Polish foreign trade (75.2% of the export and 76.3% of the import) fell to developed countries, including the EU countries (69.2% of the export and 64.8% of the import)[6]. Germany, among them, became the chief business partner (36.4% and 28.1% accordingly). Simultaneously, the share of Central and Eastern European countries (including the former Soviet Union) decreased to 13.8% in exports and 14.1% in imports. From 1994 till 1997, the share of developed countries, including the EU, started to drop gradually. This was the consequence of rapid restructuring of the position of Polish exporters in Central- and Eastern-European markets. The average annual pace of dollar-value growth in exports to the Commonwealth of Independent States and the Baltic states was at that time as high as 41.5%, to the remaining Central and Eastern European states – 22.9%, whereas to the EU member states – 14.0%[7].

The accession of Poland into the European Union and, consequently, the acceptance of the EU rules for commercial policies with respect to the third parties (including the treaty base) after 5 years of membership since May 2004 brought positive results in foreign trade. In the analysis of the change in Polish customs tariff in the context of its integration with the European Union, the countries need to be categorised in a two-fold manner, with respect to the changes that concerned them accordingly[8]:

- the first group comprises the CIS member states: Russia, Ukraine, Belarus, which did not apply for membership in the EU and their relations with the EU were based on partnership and co-operation;
- the second group comprises of Lithuania and Slovakia, which, according to the resolutions of the summit in Helsinki, initiated accession-related negotiations at that time.

It is worth mentioning that in the case of the latter two countries, even prior to the expected enlargement of the EU to the East, a free-trade area was to be created between them and the European Union, excluding some sensitive commodities[9]. In 2004, Polish export to these markets was estimated at over €12.5 bn and was by 36% higher than in the previous year. The pace of its growth with reference to 2003 turned out to be four times higher than in the previous year. The import from these markets (upon the EU enlargement) grew by 22%, i.e. by 14 pts slower than the export[10].

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5 *Rocznik Statystyczny RP [The Statistical Yearbook of the Republic of Poland – TN],* GUS *[Central Statistical Office – TN]*, Warszawa 1990, p. 398.

6 A. Maksimczuk, *Stosunki gospodarcze Polska - Wschód a rozwój przygranicznych regionów [Economic relations Poland – the East vs. the development of cross-border regions],* Jur Sa Print, Białystok-Grodno 2013, pp. 18-19.

7 *Rocznik Statystyczny RP[The Statistical Yearbook of the Republic of Poland – TN],*GUS *[Central Statistical Office – TN],* Warszawa 1995, pp. 453-454 and *Rocznik Statystyczny RP[The Statistical Yearbook of the Republic of Poland – TN],*GUS*[Central Statistical Office – TN]* , Warszawa 2002, p. 434.

8 A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem gospodarczym i wschodnie pogranicze Polski w dobie transformacji, integracji i globalizacji tom 2, Współpraca Polski z krajami Europy Wschodniej i problemy rozwoju jej wschodniego pogranicza (na przykładzie województwa podlaskiego) [The borders of the state, relations with the economic neighbourhood and Eastern borderland of Poland in the course of transformation, integration and globalisation Vol. 2, Polish co-operation with the Eastern European states and the problems of the development of its Eastern borderland (as exemplified by Podlaskie Voivodeship – TN],* Wydawnictwo Uniwersytetu w Białymstoku, Białystok 2013, pp. 80-81.

9 T. Paszewski, *Polska granica wschodnia granicą Unii Europejskiej [Polish border as the Eastern border of the European Union - TN]*, „Raporty i Analizy" 2000 *[Reports and Analyses 2000 - TN]*, no. 7, Centrum Stosunków Międzynarodowych *[Centre for International Relations – TN]*, p. 22.

10 In detail: A. Maksimczuk, L. Sidorowicz, *Polska granica wschodnia w warunkach transformacji (wybrane aspekty) [Polish Eastern border in the Times of transformation (selected aspects) – TN]*, Wydawnictwo Wyższej Szkoły Ekonomicznej w Białymstoku, Białystok 2008, pp. 69-70.

However, the pace of import growth in the previous year turned out to be approximately 5 times faster than in the year before, which, at relatively high import scale in the initial year (as compared to the export), brought the growth of general deficit in exchange with these markets by ca. € 1.7 bn. This growth, nonetheless, was compensated with interest by considerable deficit reduction in the exchange with the EU markets. High growth in exports to the markets outside the EU in the year prior to the integration with the EU was recorded with reference to all geographical groups of these markets, excluding the EFTA markets (where the export grew merely by 10%). The export to the CIS and several other Central- and Eastern-European countries, which did not access the EU, grew by approximately 43% (in terms of € rate). The growth in export to remaining markets, conventionally referred to as developing states, was about 42% in 2004[11].

With regard to former affiliations within Comecon, territorial and cultural proximity of more significant of the CIS markets, but also strong resource dependency of both Poland and other EU states on these markets (a considerable part of supply in petroleum and natural gas) – these countries remain Polish important economic partner. The revenue based on trade with these countries is characterised by relatively high, exceeding 30% growth in imports. As a result, the year-by-year lingering significant deficit in exchange with these markets deepened further in the previous year by over € 1.3 bn, to the amount of over € 6.5 bn and comprised approximately 60% of the general deficit in the Polish commodity exchange[12].

In the pre-crisis period, i.e. till the 2nd half of 1998, the Polish revenue with the CIS markets dynamically grew, also in terms of petrification of traditional commodity structure. At the outset of the crisis, commercial revenue drastically crashed, especially in exports. The export value in 1999, i.e. when it fell most rapidly, was barely 46% of its value two years before[13]. However, already starting from 2000, both the export and the import gradually revived. The causes for this growth are different for either of these, though. Some, or even significant, limitations of the Polish export were at that time caused by the Russian temporary ban on the imports of meat from the European Union member states, including Poland.

From May till December 2004, the export grew faster mainly due to the above doubled growth in exports to Russia, which is Poland's most important commercial partner among the third-party states. Another consequence for this fact is, among others, that Poland's accession to the European Union basically meant the reduction of customs rates on the goods imported by Poland from the CIS, including Russia, Ukraine, and Belarus. The rise in customs concerned in fact only some agricultural-grocery commodities. Also in the succeeding years after accession to the EU, the structure and the size of imports from the Eastern European countries did not undergo significant changes. It was basically complementary with regard to Polish products or commodities imported from the EU And upon Poland's accession within this structure, these had full access to the Polish market[14].

The commercial revenue in 2007 confirmed the above mentioned tendencies. However, a significant improvement in the revenue balance with the CIS markets was more significantly visible. The export's

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[11] Cf. *Integracja s Europejskim Sojuszom –gławnaja determinanta razwitija torgowych otnoszenij mieżdu Polszsej i Wostkom. Ekonomiczeskoje razwitije pogranicznych regionow i problemy obszczestwiennoj biezopasnsti,* Ed. byA. Maksimczuk, I. Pszichocka, Wydawnictwo „Jur Sa Print", Grodno 2013, p. 25 et seq.

[12] *Podsumowanie pierwszego roku członkostwa Polski w Unii Europejskiej [The summary of the first year of Poland's membership in the European Union – TN]*, Ministerstwo Gospodarki i Pracy *[Ministry of Economy and Labour – TN]*, Warszawa 2005, p. 41.

[13] A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem ... [The borders of the state, relations with the economic neighbourhood ... – TN],* op. cit., p. 81 et al.

[14] T. Paszewski, *Polska granica wschodnia granicą Unii Europejskiej [Polish border as the Eastern border of the European Union - TN]*, „Raporty i Analizy" 2000 *[Reports and Analyses 2000 - TN]*, no. 7, Centrum Stosunków Międzynarodowych *[Centre for International Relations – TN]*, p. 28.

growth rate by over 15 percentage points over the import resulted in the reduction of the deficit in commercial exchange with the CIS states by € 1 bn to the amount of € 3.3 bn[15]. It is to be emphasised that over 93% of the export and import was obtained in trade with the three countries: Russia, Ukraine and Belarus. Over 85% of export took place with Russia and Ukraine to the CIS markets, whereas the import reached 87%. Notwithstanding this fact, the situation on both of these markets was significantly different. Exports to Russia grew by over 25% in 2007, i.e. by nearly € 1 bn, whereas imports barely by 8%, i.e. by € 0.8 bn. As a consequence, the traditionally high deficit in sales with Russia decreased by € 0.2 bn to € 5.8 bn. The subsequent year brought also dynamic export trends to Ukraine. Following 2005, when export grew by over 27%, and nearly 52% in 2006, in 2007 an increase of 27.4% was observed. As a result of lower growth rate in imports as compared to exports from Ukraine (by 9 pp.), the positive balance of exchange with this market grew by € 0.7 bn up to € 2.8 bn. This accounted for the biggest surplus in Polish commodity trade among all markets[16].

To generalise the above reflections, it is to be noted that Poland's commodity trade, especially in the period 1990-2000, was characterised by clear asymmetry. The pro-export tendency of the Polish economy was nonetheless accompanied by even stronger pro-import inclination. This was a result of vulnerability of the supply side of the economy. The insufficient supply of competitive commodities on the so-far opening domestic market and on the already opened competitive foreign markets was at that time a sign of Poland's weak position with regard to the international competitiveness of other countries. On the basis of easily available statistical data[17] it can be observed that the years 2003-2004 were devoted to strengthening the long-term reorientation of trade to the markets of highly developed countries, especially EU markets (EU-15) and the countries accessing the EU at that time[18]. However, the year of 2005, being the first full year of Poland's membership in the EU brought significant quality changes in trade within EU-25, though minimal in the part of geographic reorientation[19], as distinctively stressed here – which shall be discussed in the subsequent parts of this paper.

Eastern European countries – however still crucial trade partners for Poland and other European Union member states

In 2005, when the European Union comprised 25 member states, it became obvious that trade grew significantly in terms of its absolute value. But simultaneously, the export of EU-25 grew by 10%, i.e.

[15] Cf. A. Maksimczuk, *Stosunki gospodarcze Polska - Wschód ... [Economic relations Poland – the East ... - TN],* op. cit., p. 20.

[16] *Polska 2008. Raport o stanie handlu zagranicznego [Poland 2008. Report on foreign trade – TN]*, Ministerstwo Gospodarki *[Ministry of Economy – TN]*, Warszawa 2008, pp. 31-32.

[17] Apart from: Statistical Yearbooks of the Republic of Poland, Central Statistical Office, Warszawa (separate years within that period) at the most there are also Statistical Yearbooks of Foreign Trade, Central Statistical Office, Warszawa (concerning years analysed in this paper).

[18] Cf. *Transformacja społeczno-gospodarcza w Polsce [Social-economic transformation in Poland - TN*], Rządowe Centrum Studiów Strategicznych *[Governmental Centre for Strategic Studies - TN]*, Warszawa 2002, p. 55 and *Koniunktura gospodarcza w państwach Unii Europejskiej w 2004 roku [Economic situation in the European Union member states in 2004 – TN],* Ministerstwo Gospodarki *[Ministry of Economy – TN]*, Warszawa 2005, p. 10 et al. and: A. Maksimczuk, L. Sidorowicz, *Polska granica wschodnia w warunkach transformacji (wybrane aspekty) [Polish Eastern border at the times of transformation (selected aspects) – TN]*, Wydawnictwo Wyższej Szkoły Ekonomicznej w Białymstoku, Białystok 2008, pp. 69-70.

[19] Detailed information within this area, with relevant description of causes can be found in: A. Maksimczuk, L. Sidorowicz, *Polska granica wschodnia w warunkach transformacji (wybrane aspekty) [Polish Eastern border in the times of transformation (selected aspects) – TN]*, op. cit., p. 70 et al.

by € 100.1 bn, and the import by 14%, i.e. by € 142.7 bn[20]. The growth in exports was observed in all commodity groups. The basic commodity group in foreign trade of the EU-25 states was industrial products. They comprised 85.9% of the entire EU export. The growth in exports in this commodity group was evaluated at € 73.3 bn. The EU-25 also recorded highest positive balance in trade amounting to € 148.2 bn in trading industrial commodities. The highest deficit is traditionally present in resource trade. In 2005, due to significant rise in prices of resources on global markets, mainly petroleum, this deficit grew by € 73.6 bn in this group of commodities[21].

Table 1. Poland's trade within 2004-2005 according to groupings and countries (in EUR mln)

	2004			2005			Dynamics of	
	Export	**Import**	**Balance**	**Export**	**Import**	**Balance**	**Export**	**Import**
Poland	59,698	71,354	-11,656	71,394	80,644	- 9,250	119.6	113.0
EU-25 incl.:	47,232	48,669	- 1,437	55,149	52,853	2,296	116.8	108.6
Germany	17,909	17,397	512	20,118	19,885	234	112.3	114.3
France	3,603	4,795	- 1,192	4,414	4,844	- 430	122.5	101.0
Italy	3,647	5,619	- 1,972	4,357	5,668	- 1,311	119.5	100.9
Great Britain	2,368	3,229	861	4,018	2,478	1,539	124.4	104.7
CIS, incl.:	4,686	7,117	- 2,431	6,204	9,458	- 3,255	132.4	132.9
Russia	2,299	5,166	- 2,866	3,160	7,211	- 4,051	137.4	139.6
USA	1,437	1,713	- 276	1,468	1,923	- 455	102.2	112.3
China	449	3,287	- 2,838	473	4,389	- 3,916	105.3	133.5
Japan	138	1,386	- 1,247	145	1,556	- 1,411	104.6	112.3

Source: *Koniunktura gospodarcza w państwach Unii Europejskiej w 2005 roku [Economic situation in the European Union states in 2005 – TN],* Ministerstwo Gospodarki *[Ministry of Economy – TN]*, Warszawa 2005, p. 30.

The USA was one of the most crucial trade partners of the European Union at that time. Exports to that country comprised 23.4% of the total export of the EU-25, and the positive trade balance amounted to € 88.1 bn and was higher than in the corresponding period of the previous year by € 11.8 bn. Every subsequent year brought a rise in trade with China, with exports much outweighing imports with reference to the pace of growth. The European Union recorded the highest trade deficit with China at that time. In 2005 it comprised € 106.2 bn. By comparison, in 2003 it comprised € 64.2 bn, and at the end of 2004 it amounted to € 79.3 bn[22].

[20] *Koniunktura gospodarcza w państwach Unii Europejskiej w 2005 roku [Economic situation in the European Union states in 2005 – TN],* Ministerstwo Gospodarki *[Ministry of Economy – TN]*, Warszawa 2005, p. 30 et al.

[21] Ibidem, p. 30 et al.

[22] Cf.: A. Maksimczuk, L. Sidorowicz, *Graniczny ruch osobowy i towarowy w Unii Europejskiej[Cross-border passenger and commodity traffic in the European Union - TN],* Wydawnictwo „AlmaMer" Wyższej Szkoły Ekonomicznej w Warszawie, Warszawa 2007, pp. 104-106.

In the period analysed in this paper, the third and increasingly more significant trade partner of the EU-25 (already including Poland), was already Russia[23]. Year by year, trade increased with this country, however, imports grew especially dynamically. This, in turn, brought systematic growth in trade deficit of the EU-25 in trade with this country. In 1999, the trade deficit of the EU-15 (the so-called "old fifteen") in trade with Russia amounted to € 17.6 bn, and in 2005 (enlarged by new 10 countries) was already € 50.3 bn[24].

To conclude this part of reflections, it needs to be noted that in case of Poland, the main trade partner prior to and upon accession was the EU member states. Trade with Poland's eastern partner, i.e. Russia is much different. Exports grow rapidly, but, at the same time imports grow even faster. In 2005, exports to Russia grew by 37.4% and at the end of the year amounted to € 3.2 bn. Whereas, imports grew by 39.9% and were € 7.2 bn. At the same time, negative trade grew from € 2.9 bn in 2004 to € 4.1 bn. It should be highlighted that no other country exhibits a more significant trade deficit. This growth in negative trade mainly resulted from the growth in value of the imports in mineral products (section V) by € 1.9 bn[25]. **Nonetheless, this unfavourable situation, as studied in a specific time frame here, prevails up till now with all its consequences – with no chances, even slightest, to reverse it in the nearest future.**

At the initial stage of transformations, the reorientation of the Polish trade from the East to the West underwent relatively rapid changes. It consisted in radical replacement of the share in terms of developed countries, especially the EU, at the cost of Central and Eastern European countries. In 1988, namely just before the beginning of the political transformation, Polish trade was dominated by the COMECON countries. Their share was 42.7% in exports and 41.8% in imports. The developed countries held 39.7% of Polish exports and 40.3% of the import, including the EC countries – 25.9% and 24.7% respectively. 11.9% of the Polish export was directed to the developing countries, and 11.2% of the import from these countries was recorded[26].

Several years of transformations resulted in the drastic reversal of these proportions. In 1993, already ¾ of the Polish foreign trade (75.2% of the export and 76.3% of the import) fell to the developed countries, including the EU member states (69.2% of the export and 64.8% of the import). Among these, Germany became the main trade partner (36.4% and 28.1% respectively). Simultaneously, the share of Central and Eastern European countries (including the former USSR) dropped down to 13.8% in exports and 14.1% in imports[27]. Within 1994-1997 the share of the developed countries, including the EU, began to fall gradually. This was a consequence of rapid revival of the situation of the Polish exporters on the

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[23] Within 2003-2004, The European Commission put forward a new foreign policy of the EU – „European Neighbourhood Policy (ENP), thus at the summit in Saint Petersburg in May 2003 it was agreed that the EU-Russia relations would become the so-called " strategic partnership", cf. A. Maksimczuk, A. Ejsmont, *Unormowania Schengen a Europejska Polityka Sąsiedztwa (na przykładzie polskiej granicy wschodniej*) *[Schengen vs. European Neighbourhood Policy (as exemplified by the Polish eastern border) – TN],* [in:] *Ruch graniczny* w *kontekście poszerzenia Unii Europejskiej [Cross-border traffic in the context of the European Union enlargement – TN],* Ed. by M. Adamowicz, A. Siedlecka, Państwowa Wyższa Szkoła Zawodowa im. Papieża Jana Pawła II w Białej Podlaskiej, Biała Podlaska 2007, p. 123 et al.

[24] Cf.: *Polska 2006. Raport o stanie handlu zagranicznego [Poland 2006. Report on foreign trade – TN]*, Ministerstwo Gospodarki *[Ministry of Economy – TN]*, Warszawa 2006, pp. 19-20 and *Koniunktura gospodarcza w państwach Unii Europejskiej w 2005 roku [Economic situation in the European Union states in 2005 – TN],* Ministerstwo Gospodarki *[Ministry of Economy – TN]*, Warszawa 2005, p. 30 et al.

[25] *Koniunktura gospodarcza w państwach Unii ...[Economic situation in the European Union ... – TN],* op. cit., pp. 30-31.

[26] *Rocznik Statystyczny RP [Statistical Yearbook of the Republic of Poland – TN]*, GUS *[Central Statistical Office – TN]*, Warszawa 1990, p. 398.

[27] A. Maksimczuk, L. Sidorowicz, *Polska granica wschodnia w warunkach ...[Polish Eastern border in the times of ... – TN]*, op. cit., p. 72.

Central- and Eastern-European markets. The average annual growth rate in dollars as to the export to the CIS and Baltic countries was at that time as much as 41.5%, to the other countries of Central and Eastern Europe – 22.9%, whereas to the EU countries – 14.0%[28].

Poland's accession to the European Union and the consequent acceptance of the EU rules for trade policy with regard to the third countries (including the treaty base) upon 5 years of membership from May 2004 brought positive results in foreign trade. In the analysis of the change in Polish customs tariff in the context of its integration with the European Union, the countries need to be put in two categories, with respect to the changes that concerned them respectively[29]:

– *the first group comprises of three CIS member states: Russia, Ukraine, Belarus, which do not apply for membership in the EU and their relations with the EU were based on partnership and co-operation;*
– *the second group comprises of Lithuania and Slovakia, which, according to the resolutions of the summit in Helsinki, started accession-related negotiations in winter this year.*

In the case of the last two countries, even before the anticipated enlargement of the EU, a free trade zone is to be created between them and the European Union, excluding sensitive commodities[30]. In 2004, the Polish export to these markets amounted to € 12.5 bn and was by 36% higher than in the previous year. The pace of its growth in 2003 appeared to be four times higher than in the year before. Imports from these markets (upon the EU enlargement) grew by 22 %, i.e. 14 pts slower than exports. Thus, the pace of growth in imports in the last year appeared to be 5 times faster than in the previous year, which, at a relatively high import rate in the initial year (as compared to the export) affected the growth of general deficit in exchange with these markets by approximately € 1.7 bn. This growth was, in turn, considerably compensated with a fair reduction of the exchange deficit with the EU markets.

The above described high growth in exports onto the markets outside the EU in the last year was recorded with reference to all geographical groupings of these markets, excluding the EFTA markets (to which exports grew merely by 10%). The export to the CIS member states and other countries of the Central and Eastern Europe, outside the EU, grew by approx. 43% (in terms of Euro). The growth in exports to the other markets, conventionally rated as a group of developing countries, approximated to 42% in 2004.

With reference to the former affiliations within the COMECON, the territorial and cultural proximity of the more significant CIS markets, but also strong resource dependency of both Poland and other EU states (nearly 100% supply in petroleum and natural gas) – these countries remain Poland's vital economic partner. In terms of trade with these counties, a relatively high, exceeding 30% growth in imports can be observed. As a result of this, a considerable deficit in exchange with these markets that has been present for years deepened further on by over € 1.3 bn, to the amount of € 6.5 bn and comprised about 60% of overall deficit in Polish commodity trade[31].

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[28] *Rocznik Statystyczny RP [Statistical Yearbook of the Republic of Poland – TN]*, GUS *[Central Statistical Office – TN]*, Warszawa 1995, pp. 453-454 and *Rocznik Statystyczny RP [Statistical Yearbook of the Republic of Poland – TN]*, GUS *[Central Statistical Office – TN]*, Warszawa 2002, p. 434.

[29] Issues referring to the role of the Eastern European member states as Polish and EU trade partners, and also other specific issues concerning commercial and economic co-operation with its eastern neighbours, were presented in detail in the latest monograph within that range (in Russian): *Integracja s Europejskim Sojuszom –gławnaja determinanta razwitija torgowych otnoszenij mieżdu Polszsej i Wostkom. Ekonomiczeskoje razwitije pogranicznych regionow i problemy obszczestwiennoj biezopasnsti,*Ed. byA. Maksimczuk, I. Pszichocka,Wydawnictwo „Jur Sa Print", Grodno 2013, pp. 9-29.

[30] T. Paszewski, *Polska granica wschodnia granicą Unii Europejskiej [Polish border as the Eastern border of the European Union - TN]*, op. cit., p. 28.

[31] *Podsumowanie pierwszego roku członkostwa Polski w Unii Europejskiej [The summary of the first year of Poland's membership in the European Union – TN]*, op. cit., p. 41.

In the pre-crisis period, i.e. till the second half of 1998, the Polish trade with the CIS markets grew dynamically and was accompanied by considerable petrification of the traditional commodity structure. At the time of the outbreak of the crisis, trade drastically collapsed, especially in terms of exports. The value of the export in 1999, i.e. within the year of most rapid fall, was merely 46% of its value two years before. However, already in 2000 a gradual revival both in exports and imports was observed, though the causes for this growth are different for each of them, which shall be described in detail in relevant parts of this paper. This was the effect of some (significant) limitations of the Polish export which resulted from Russia's temporary ban on imports of meat from the European Union member states, including Poland. From May till December 2004 the export rate grew faster as a consequence of almost double increase in exports to Russia, which is Poland's most important business partner among the third party states. It was also the result of the fact that Poland's accession to the European Union basically entailed the reduction of customs tariffs on commodities imported by Poland from the CIS, including Russia, Ukraine, Belarus. The rise in customs concerned only individual agricultural-grocery goods.

So far, the structure and the size in imports from the Eastern European countries did not change significantly, with regard to the fact that it was basically complementary to Polish products or goods imported from the EU, which, upon Poland's accession within this structure, have a full access to the Polish market[32]. In 2009, trade generally collapsed with regard to all more important markets. By analogy, on both general scale and in the case of most of these markets, the decrease in imports was bigger than in exports. The collapse in exports to the developed countries amounted to 14.8% and simultaneously appeared to be by 13.9% milder than the fall in export to the other markets. By this, the share of the first group in total Polish export grew by 2.4% in 2009, up to 85.4%, whereas the share of the other countries decreased accordingly[33].

The fall in export to the EU markets (15.6%) was slightly milder than the fall of Poland's total export. It is to be noted, however, that the collapse in exports to the Euro-zone (by 13.6%) in 2009 was significantly lower (by 6 ppts) than to the other markets of the Community, where the fall reached 19.9%. Especially the slump in exports was visible in trade with the CIS states, i.e. by 38.2%. As a consequence, their total share in Poland's export dropped significantly, i.e. from 10.4% to 7.8% in 2009. Among the most important markets within this region, exports to Ukraine fell most drastically, i.e. by 43.4%. Whereas to Russia and Belarus – by 40.7% and 20.6% respectively[34].

Moreover, basically the same tendencies, as with regard to the entire Poland's economy, are also present in individual regions (voivodeships) and their groups, for instance, the so-called Eastern Wall comprising Polish eastern borderland voivodeships. According to J. Grabowiecki[35], "trade in terms of Podlaskie voivodeship is dominated by highly developed countries, and within the EU – Germany as to exports (72.2% in 2009) and considerably lower in imports (49.9% in 2009)." It is to be emphasised here that a large part of Podlaskie enterprises, focused on the EU markets, were already present there

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[32] T. Paszewski, *Polska granica wschodnia granicą Unii Europejskiej [Polish border as the Eastern border of the European Union - TN]*, op. cit., p. 28.

[33] *Polska 2008. Raport o stanie handlu zagranicznego [Poland 2008. Report on foreign trade – TN]*, Ministerstwo Gospodarki *[Ministry of Economy – TN]*, Warszawa 2008, pp. 31-32.

[34] The changes in the Polish foreign trade (not only Poland vs. Russia, as it would follow from the title of this paper) in this period were described in detail in: A. Maksimczuk, *Przepływ towarów przez polsko-rosyjską granicę. Polsko-rosyjski handel zagraniczny w momencie integrowania się Polski z U.E. Wybrane aspekty ekonomiczne [The flow of goods through the Polish-Russian border. Polish-Russian foreign trade at the moment of Poland's integration with the EU – TN]* [in:]*Przyjazna granica niezbędnym elementem wzmacniania stosunków społeczeństw Polski i Rosji [Friendly border as an essential element of strengthening the relations between Polish and Russian societies – TN],* Ed. by M. Zdanowicz, „Białostockie Studia Prawnicze" 2011, Journal No. 9, Białystok 2011, pp. 159-166.

[35] *Wymiana handlowa województwa podlaskiego po akcesji do Unii Europejskiej, [Trade exchange by the Podlaskie voivodeship upon accession to the European Union – TN],* Ed. by J. Grabowiecki, Białostocka Fundacja Kształcenia Kadr w Białymstoku, Białystok 2012, p. 86.

in the pre-accession period. Separate regions of Poland, including Podlaskie voivodeship and all other voivodeships of the Eastern Poland, are of specific character in this trade, in particular specialising in regional products – e.g. Podlaskie in dairy, meat and timber industries. Still, foreign trade transactions in the entire Eastern Poland are performed in largest urban centres[36].

Comments on Poland's economic competitiveness at the moment of its integration and following several years of its presence in the EU

To begin with, at the threshold of Poland's integration with the European Union, low level of exports, its obsolete structure, lack of developed export infrastructure, high trade deficit were the main factors for the fact that the Polish economy was at that time little resistant to the external competition[37]. The insufficient competitiveness of the economy also influenced the growing deficit in the State budget[38].

As compared to the countries presented above, Poland's competitive position was still very weak[39]. In addition, what is even worse, there were no grounds for anticipating the improvement of this condition in the nearest future[40]. Such a weak Polish competitive position was to a large extent caused by a low level of effectiveness of the government's activity, low competitiveness of Polish entrepreneurs and still low level of development and inadequate quality of the economic, transport and social infrastructure of the country[41].

[36] For extensive reading: J. Grabowiecki, M. Fiedorczuk, *Struktura geograficzna wymiany handlowej Polski Wschodniej [Geographic structure of trade by the Eastern Poland – TN],* [in:] *Transgraniczność jako czynnik rozwoju regionu (na przykładzie województwa podlaskiego) tom 1, [Cross-borderland as a factor for regional develoment (as exemplified by Podlaskie voivodeship) vol. 1 – TN],* Ed. by A. Ejsmont, K. Kucab-Bąk, I. Przychodzka, Wydawnictwo Uczelniane Państwowej Wyższej Szkoły Zawodowej im. prof. Edwarda F. Szczepanika w Suwałkach, Suwałki 2014, pp. 99-114.

[37] M. Stefańska-Matuszyn, *Problemy transformacji gospodarki polskiej [Problems of the transformation of the Polish economy – TN]*, Wydawnictwo Wyższej Szkoły Ekonomiczno-Informatycznej w Warszawie, Warszawa 2001, p. 11.

[38] T. Radzymińska, *Nie ma czasu do stracenia [There is no time to lose – TN]*, „Nowe Życie Gospodarcze" 2001 nr 23 *[New Economic Life – TN]*, p. 29.

[39] The notion of competition, competitiveness, competitive position of a country and ranking presenting these data as compiled by various international institutions were presented in full detail in affiliation with the author of this paper, in: A. Maksimczuk, K. Kucab-Bąk, I.E. Wakuluk, M. Maksimczuk, *Konkurencyjność gospodarki Polski – stan i możliwości jej poprawy w następstwie integracji z Unią Europejską [Competitiveness of Poland's economy – the condition and chances for improvement in consequence of the integration with the European Union – TN],* [in:] *Transgraniczność jako czynnik rozwoju regionu (na przykładzie województwa podlaskiego), tom 1, Szanse i zagrożenia rozwoju współpracy wschodnich regionów przygranicznych, [Cross-borderland as a factor for regional development (as exemplified by Podlaskie voivodeship), vol. 1, Opportunities and threats for the development of the co-operation of the eastern borderland regions – TN],* Ed. byA.Ejsmont, K. Kucab-Bąk, I. Przychodzka, op. cit., pp. 19-44.

[40] Cf.: A. Wziątek-Kubiak, *Konkurencyjność polskiego przemysłu [Competitiveness of the Polish industry – TN],* Dom Wydawniczy Bellona, Warszawa 2003, pp. 23-36 and A. Zielińska-Głębocka, *Potencjał konkurencyjny polskiego przemysłu eksportowego w warunkach integracji z Unią Europejską [Competitive capacity of the Polish export industry in the light of integration with the European Union – TN],* Wydawnictwo Uniwersytetu Gdańskiego, Gdańsk 2003, p. 36 et al.

[41] Apart from the examples here, there are many other, available in professional literature, competitiveness rankings compiled and issued in reports made by widely recognised international institutions. With reference to the analysed years in this paper, these are issued successively (*World Competitiveness Yearbook 2002, 2003, 2004, 2005*) together with the factors shaping the competitive position of individual countries. Cf.: A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem .....op. cit., tom 1, Aneks, Załącznik 1.Polska w wybranych rankingach innowacyjności i konkurencyjności [State borders, relations with the neighbourhood ... op. cit., vol. 1, Annex, Appendix 1. Poland in selected rankings for innovation and competitiveness – TS],* table 7/A, pp. 490-491 and J. Borowski, *Globalizacja, konkurencyjność międzynarodowa i strategie przedsiębiorstw [Globalisation, international competitiveness and companies' strategies – TN],* Wydawnictwo Uniwersytetu w Białymstoku, Białystok 2008, pp. 95-99.

Table 2. Ranking of international competitiveness of selected countries under the scope of studies by the IMD

Items	1995	1996	1997	1998	1999	2000	2001
USA	1	1	1	1	1	1	1
Singapore	2	2	2	2	2	2	2
Finland	17	15	4	5	3	4	3
Luxemburg	-	8	12	9	4	6	4
Netherlands	8	5	6	4	5	3	5
Germany	6	10	14	14	9	11	12
Estonia	-	-	-	-	-	-	22
Spain	27	29	25	27	23	23	23
France	18	20	19	21	21	22	25
Japan	4	4	9	18	16	24	26
Greece	39	48	37	36	31	34	30
Czech Republic	38	34	35	38	41	40	35
Slovakia	-	-	-	-	-	-	37
South Africa	42	44	44	42	42	43	42
Argentina	29	32	28	31	33	41	43
Russia	45	46	46	46	47	47	45
Columbia	32	33	42	44	43	45	46
Poland	**44**	**43**	**43**	**45**	**44**	**38**	**47**
Venezuela	48	46	45	43	45	46	48
Indonesia	33	41	39	40	46	44	49

Source: J. Osiński, *Polska w przededniu członkostwa w Unii Europejskiej, nadzieje i obawy [Poland at the onset of its membership in the European Union – TN],* Szkoła Główna Handlowa, Warszawa 2002, p. 24.

Table 3. Ranking of Poland's competitiveness and selected EU member states in the period 2006-2011 according to the IMD index

Year	Great Britain	Germany	France	Spain	Lithuania	Czech Rep.	Italy	Slovakia	Poland
2011	20	10	29	35	45	30	42	48	**34**
2010	22	16	24	36	43	29	40	49	**32**
2009	21	13	28	39	31	29	50	33	**44**
2008	21	16	25	33	36	28	46	30	**44**
2007	20	16	28	30	31	32	42	34	**52**
2006	20	25	30	31	-	28	48	33	**50**

Source: personal compilation on the basis of the reports: *Polska – Raport o stanie gospodarki [Poland – Report on the condition of the economy – TS]*, years 2007-2011.

The World Competitiveness Yearbook 2011 issued by the International Institute for Management Development (IMD) evaluates the competitiveness of 58 states, based on 300 detailed criteria. According to the data included, the competitive position of Poland in the period of 2006-2011 became all the more favourable. Within 2006 and 2007 Poland was ranked 50th and 52nd accordingly (out of 55 ranked countries), a year later it advanced on the 44th position (however, it only outstripped Romania and Italy out of the EU-27 member states), whereas in 2010 it reached 32nd position (outstripping already 11 countries within the EU-27)[42]. In 2011 it was ranked lower with reference to the previous year, on the 34thposition. Within the EU-27 member states it took 17th position, however outstripping barely 10 countries[43].

According to the Global Competitiveness Ranking, which constitutes an element of the annual The Global Competitiveness Report, the World Economic Forum (WEF), Poland was not and still is not perceived as a strongly competitive country. The latest Report 2011 states that Poland improved its ranking by 7 positions, advancing from 46th to 39th position among 139 states. Thereby, it outstripped barely 13 EU member states: Cyprus, Spain, Slovenia, Portugal, Lithuania, Italy, Malta, Hungary, Slovakia, Romania, Latvia, Bulgaria and Greece. Among 12 categories that were taken into consideration, these were evaluated as worst: infrastructure (72nd), macroeconomic surrounding (61st), innovations (54th) and others. Conversely, such criteria as the size of the market (21st), higher education and trainings (26th) and the development of financial markets (32nd) were valued the most. Over the years Poland's changing competitive position could be observed; this position appeared to be favourable on the basis of the 5-year period within the scope of the study. Within 2006-2007, Poland was placed 48th out of 125 examined countries in the GCI ranking. In the period 2007-2008, its position was made worse, which led to the degradation to 51st position out of 131 examined countries. In the subsequent period (2008-2009), Poland was ranked barely 53rd (out of 134 examined countries), whereas in 2009-2010 it improved its position, advancing to 46th position, and in the following years – to the 39th position. Poland gradually improves its competitive position, nonetheless, the growth in competitiveness, especially within such areas as innovation, macroeconomic stability and the effectiveness of product and services markets is still insufficient[44].

The analysis of individual indexes of specific categories for competitiveness as presented in the World Competitiveness Report of the WEF indicates that Poland holds a distant position with regard to innovation (52nd), and particularly in terms of the State's expenditures on technologically advanced products. In this respect, Poland is ranked on the 100th position out of 139 evaluated countries and on the 23rd position out of the EU member states. The largest expenditures on advanced technology are made by such EU states as: Luxemburg, Finland and Sweden. The largest innovative capacity is shared by: Germany (1st place among the EU member states), Sweden (2nd), Finland (3rd), France (4th) and Denmark (5th). With this respect Poland is ranked 21st out of 27 EU member states. It is in a similar situation in terms of the availability of scientists and engineers, but also the applicability of obtained patents, where Poland is placed on the 21st and 26th position accordingly. Poland also holds a weak position in terms

[42] Detailed information with regard to the factors shaping the course of changes in the competitive positions in: K. Włodarczyk-Śpiewak, *Konkurencyjność przedsiębiorstwa a współczesne zachowania konsumpcyjne [The competitiveness of an entrepreneurship vs. modern consumption behaviour – TN],* [in:]*Co decyduje o konkurencyjności polskiej gospodarki,[What decides on the competitiveness of the Polish economy – TN],* Ed. by M. Noga, K. Stawicka, CeDeWu, Warszawa 2008, p. 13 et al.

[43] Cf.: A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem gospodarczym i wschodnie pogranicze Polski w dobie transformacji, integracji i globalizacji, tom 1, Transformacja systemowa i kształtowanie się nowej jakości polskich granic [State borders, relations with the economic neighbourhood and Eastern borderland of Poland in the course of transformation, integration and globalisation, Vol.1, Political transformation and shaping new quality of the Polish borders– TN],* Wydawnictwo Uniwersytetu w Białymstoku, Białystok 2014, p. 203 et al.

[44] A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem…, tom 2, …[The borders of the state, relations with the economic neighbourhood… , vol. 2, …–TN],* op. cit., p. 212.

of macroeconomic surrounding. In 2011, it was ranked on barely 22nd position out of the EU member states, with reference to the balance of the State budget, where Estonia and Sweden scored highest ranks, and 18th (ex aequo with France) with regard to the growth in national savings, where the Netherlands and Austria were leading countries.

Table 4. Ranking of Poland's competitiveness and selected EU member states within the years 2006-2011 according to the GCI

Item	Great Britain	Germany	France	Spain	Lithuania	Czech Rep.	Italy	Slovakia	Poland
2010-2011	12	5	15	42	47	36	48	60	**39**
2009-2010	12	7	16	33	53	31	48	47	**46**
2008-2009	12	7	16	29	44	33	49	46	**53**
2007-2008	9	5	18	29	38	33	46	41	**51**
2006-2007	10		19	28	36	29	42	37	**48**

Source: personal compilation on the basis of the reports: *Polska – Raport o stanie gospodarki [Poland – Report on the condition of the economy – TS]*, years 2007-2011.

Poland took a worryingly low position - 100th on the global scale and 24th in the EU with reference to the application of technologies by companies. It is similarly low in terms of the availability of advanced technologies, where Poland holds merely 88th position on the global scale and 25th position in the EU In comparison, the European leaders in these areas are: Sweden (1st place in Europe and in the world), Denmark (9th place globally) and the Netherlands (flowingly: 21st and 6th place globally). Poland occupies a relatively high position (37th place globally and 15th in the EU) with regard to direct foreign investments and the transfer of technologies. The quality of the Polish educational system is evaluated very low, as Poland took 19th position out of the EU member states. In terms of the availability of research and educational services, it is ranked higher (27th place globally and 14th in the EU), but also the number of high school students it holds 28th and 15th place correspondingly. Poland occupies a relatively high position within domestic and international market (6th and 7th place in the EU). The EU member states that possess largest markets are: Germany, Great Britain and France.

Conclusions

The post-war years and the subsequent political changes had a strong impact in the lowering of the competitiveness of the Polish economy. In order to reduce the distance with regard to the better developed countries but also to improve the negative competitive situation of the country, the Polish Government undertook adequate trials to act. Among others, its fruits were: The Poland Economic Promotion Programme till 2005 *[Polish: PPGP - TN]*, which was created in 2003, and the National Development Plan for 2007-2013 *[Polish: NPR – TN]*, which was created in 2004. The latter referred mainly to solving a problem of low competitiveness of the Polish economy.

The chief PPGP guidelines were[45]:

– improving the international competitiveness of Polish industrial and agricultural products;
– effective promotion of Polish commodities;
– constant supply of foreign direct investments, particularly within innovation and pro-export measures;
– expansion in Polish investments abroad.

These measures were to contribute to the increased share of trade policy in the international economic relations. The National Development Plan took the growth in the economic competitiveness as a key target. It should ensure the improvement of social, economic and special cohesion, but also guarantee the growth in employment. Thus, it encompasses the following 4 areas[46]:

– entrepreneurship – creating new areas of economic activity, improving work efficiency, product and services expansion;
– innovation – developing scientific research as sources for innovation, inclusion of science into economic development, organisational innovations, innovations within marketing and management, creating innovative foundations in the society;
– liberalisation of network markets – eliminating the threat of unfair business practices;
– national marketing – promoting Poland as an attractive country for investors, promoting tourism and exports.

In 2007, the guidelines of *the Strategy for Promotion of the Polish Economy 2007-2015* were approved. This, in turn, provided a basis for the strategy, whose main aim was to strengthen the significance of the Polish economy on the global scale and to acquire its uniform image. The strategy accounted for the government's activity, among others within: *promotion of exports, supporting Polish investments abroad and attracting FDI*. With this, the document assumes the improvement of the functioning of the Polish trade agencies abroad within promotion of Poland as an investment and tourism area. The source of financing these measures within the strategy was the funds from the Operational Programme Innovative Economy[47].

In the age of globalisation and dynamic transformations, an extremely vital factor for the growth in economic competitiveness is scientific-technological progress. It is present in the growth in technological and product innovations that accelerate the development of such leading sectors as: telecommunications, biotechnology and computer sciences. The scientific-technological progress has a long-term impact on social-economic processes. Thus, Poland, still as a country on a low position in terms of innovation and the application of modern technologies, ought to perceive the technical and technological progress as an opportunity to improve economic competitiveness. Technical progress may reflect in minor, though frequent facilitations, but also product and process modernisations. It should manifest itself in the implementation of radical innovations within technologies and products. Technological innovations, mutually stimulating, may become the core for the creation of new industrial branches and products[48].

[45] Cf.: *Narodowy Plan Rozwoju na lata 2007-2013[National Development Plan for 2007-2013 – TN]*, Rada Ministrów, Warszawa 2005.

[46] M. Raftowicz- Filipkiewicz, *Strategie rozwoju atrakcyjnej i konkurencyjnej gospodarki Polski [Strategies of Poland's attractive and competitive economy – TN],* [in:] *Konkurencyjność gospodarki Polski [Competitiveness of Poland's economy – TN],* Ed. by A. P. Balcerzak, E. Rogalska, Wydawnictwo Adam Marszałek, Toruń 2008, p. 42.

[47] M. Raftowicz- Filipkiewicz, *Strategie rozwoju atrakcyjnej i konkurencyjnej gospodarki Polski [Strategies of Poland's attractive and competitive economy – TN],* [in:] *Konkurencyjność gospodarki Polski[Competitiveness of Poland's economy – TN],* Ed. by A. P. Balcerzak, E. Rogalska, op. cit., p. 43.

[48] B. Ślusarczyk, *Międzynarodowa pozycja konkurencyjna Polski. Teoria i praktyka [Poland's international competitive position. Theory and practice – TN],* CeDeWu, Warszawa 2011, p. 119.

The development of telecommunication industry and the expansion of the Internet access infrastructure, being already an indispensable element of economic, political, cultural and social life, constitute the accelerator for internationalisation processes. Fast information flow based on modern technologies at the same time enables the coordination of enterprise and corporation activities – especially transnational ones. These are the Internet system and modern information technologies considerably that affect the international competitiveness of economies operating in the 21st century. New technologies enable rapid intensification of absorption-adaptation activities of enterprises. This, in turn, enables geographical expansion of these enterprises. The consequence of these activities are: growth in supply, assortment diversification, changes in the production system and structure, growth in the share of innovative and modernised products, and changes in the ownership structure and special allocation of economic activity.

In the contemporary, all the more globalised world, the biggest benefits from the international co-operation are achieved by countries and enterprises that shape their specialisation directions in such a manner so that they can be adjusted to the constantly changing competitive dominance. Thus, one of the main features of the technical-economic system is flexibility resulting from the possibility to apply automatized and software-designed appliances. It manifests itself in the integrity of all stages of creative process: R&D works, production and distribution. Technical-economic system of flexible specialisation is characterised by: production, personnel, organisation flexibility, but also capital intensity, absorption of technical, technological and organisational solutions, economy of material outlays and low demand for low-skilled work force. This system as well involves the growth in the substitution for production factors, advancements in automation and robotization, and the growth in work efficiency[49].

Still, it should be emphasised that the functioning of the system of flexible specialisation requires constant implementation of R&D works and high expenditures on science. This in mind, science is becoming a dominant factor for the country's development and growth in its competitiveness. The so-called "science-intensive economic activities" may to a large extent accelerate economic growth, as they are a source of acquiring one of the most significant resources – the knowledge. Competitiveness through the allocation into science-intensive sectors combines the drive for technological leadership with the structural reallocation that takes place between traditional and high-tech sectors. The interpretation of this competitiveness accounts for the relationships between high-tech sectors and the specifics of the relevant products manufactured through these sectors. That the enterprises have the capacity to conduct such R&D activity is fundamental. In effect, this leads to the creation of new products and reduction of production costs. Factors affecting the dynamics of the development of science-intensive sectors and innovation progress are presented as follows[50]:

– well-qualified work resources and their application,
– educational system,
– material and financial capacity,
– transfer of foreign production factors (knowledge, technology etc.),
– scientific and technological co-operation with other countries,
– efficiency of market mechanism,
– active macroeconomic policy of a country.

An extremely crucial factor and an opportunity to improve the Polish economic competitiveness are also human resources and all expenditures and investments comprising this capacity. Such

[49] B. Ślusarczyk, *Międzynarodowa pozycja konkurencyjna Polski. Teoria i praktyka [Poland's international competitive position. Theory and practice – TN],* op. cit., p. 120.

[50] Cf.: A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem ...[State borders, relations with the economic neighbourhood ... – TN],* op. cit., vol. 1, p. 210.

investments include means allocated for environment protection, culture and health. Thus, human resources are an accumulated resource of knowledge, qualifications, skills and talents to intensify economic capacity[51]. The development of innovation and the growth in economy's competitiveness necessitates the transformation of the economy into the direction of developing the production of modern, science-intensive items based on modern technology especially connected with computer sciences and telecommunication. However, these activities necessitate enormous financial expenditures on improving the level of education and the development of centres within the R&D sector.

It is to be noted that competition has for long been and currently is perceived as a market phenomenon. It is an element of rivalry as well. On the one hand, it supports economic advancement. On the other – it facilitates harmonisation of interests of entrepreneurs and investors with the consumer interest. It may concern the rivalry of various business entities – from entrepreneurships and branches through business sectors to regional and national economies.[52] Still, competitiveness denotes the capacity of these entities for effective competition, whose role is to lead to success in economic rivalry. Despite differences in the choice of factors shaping the competitiveness within the scope of study made by the afore mentioned international institutions (WEF and IMP), to little extent do both of these institutions refer to competitiveness of Poland's economy. They also identify the causes for this state of affairs in a similar manner. Poland is characterised by extraordinarily weak technical infrastructure and low level of innovation. To this end, political reforms including economic legislation, financial markets and public finances become indispensable. What is more, low position of the Polish competitiveness in terms of its economy mainly results from low expenditures on education and R&D sector.

Economic development in Poland may be stimulated through the European Union financial means. Financial capacity in the form of budget and extra-budget sources aims at eliminating (currently – at least still reducing) the distance between individual EU member states. Unfortunately, skilful use of the chance only at a specific moment does not guarantee a long-term success and economic advancement. One of the obstacles on the way may be posed by political activities, particularly in social spheres. Superfluous social expenditures, among others, at the cost of expenditures on scientific research or technological investments may lead to wasting these means. In the last decade of the 20th century, the Polish economy also faced the necessity to adapt to globalisation challenges, additionally strengthened with the perspective of Poland's accession into the European Union, where almost all barriers were eliminated on the way to the flow of capital, commodities, services and people. In this case, starting from 2004, in the conditions of free flow of manufacture factors, commodities and demand, it is the competitiveness of domestic producers that will decide about the demand for domestic goods, and not the size of domestic demand. Domestic demand can as well be satisfied through business activity out of the country. Especially in the conditions, when it is more competitive than domestic business activity. And conversely: given high competitiveness of domestic manufacturers, their production scale will be significantly shaped through external demand.

According to the Governmental Centre for Strategic Studies (GCSS), a still crucial obstacle to increased competitiveness of the Polish economy is, to a large extent, a weak access to modern technological infrastructure and the malfunction of resource market that impairs fast access to financial

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[51] Cf.: B. Ślusarczyk, *Międzynarodowa pozycja konkurencyjna Polski. Teoria i praktyka [Poland's international competitive position. Theory and practice – TN],* op. cit., p. 122.

[52] Cf.: A. Dzun, *Specjalizacja wewnątrzgałęziowa a międzynarodowa konkurencyjność polskiej gospodarki [Intra-branch specialisation vs. intrenational competitiveness of Polish economy – TN],* [in:] *Teoretyczne i praktyczne aspekty funkcjonowania gospodarki światowej i rynku pracy [Theoretical and practical aspects of functioning of the global economy and job market – TN]*, Ed. by A. Chmielaki, Wydawnictwo Uniwersytetu w Białymstoku, Białystok 2011, pp. 123-142.

means for the most effective investors within the production sector. Poland lags far behind with respect to the development of infrastructure, motorway construction, modern railways etc. The analysis presented by the GCSS indicates a 2-3-fold weaker competitive position of Poland measured in GDP per capita versus West-European economies. It is strongly connected with lower pace of implementing technological and organisational progress, and worse technical equipment.

The improvement of the competitive position, according to J. Borowski, will require the growth in investments in the fixed capital and improvements of the functioning of the system for allocating resources, which should trigger effective use of production factors[53]. According to the GCSS, a strong side of the Polish economy low cost of work with relation to work efficiency, a moderate level of GDP redistribution through public finances and high level of computerisation of the country. It is as well to be highlighted that the value of the Polish export within 2000-2010 grew by approximately 3.5 times, and of the import – 2.5 times. The Polish largest trade partner, both in terms of import and export value, is Germany. Its share in the export in 2011 was approx. € 30 bn.

With regard to other conditions for the improvement of the position of Poland's competitiveness, it is worth noticing that , e.g. in November 2011 inflation (growth in prices of consumption goods and services) equalled 4.8% annually. In comparison to the previous month, prices grew by 0.7%. The inflation index was above the inflation target set by the Monetary Policy Council at 2.5%. The annual inflation was influenced to a large extent by the growth in goods and services in terms of transport (by 11%), accommodation fees (by 61%) and food process (by 4.5%)[54].

In addition, if GDP per capita is to be referred to as measurement for economic growth, it is clear that Poland is an economically weaker country in comparison with other European Union member states, both the EU15, but also of the countries within the region. In 2009, GDP per capita in Poland was in terms of the purchasing power standard - lower by over 50% than in general in the OECD countries. Other countries within the region, i.e. the Czech Republic, Slovakia and Hungary "still reached better results at the same time". Poland with its GDP per capita amounting to 17,294 USD took 24th position. It overtook only Latvia, Romania and Bulgaria. The best results were achieved by such countries as: Luxemburg (84,713 USD), Ireland (41,493 USD) and the Netherlands (41,063 USD)[55]. In 2010, the pace of growth for Poland's GDP was 3.9% and was considered one of the highest in the EU In 2011 the growth in GDP in Poland was even better and comprised already 4.3%.[56] The latest years, yet, cannot confirm such favourable tendency. This entails fewer good opportunities to exercise changes also in this field. Thus, there can be no doubt that the problem of improving competitiveness in Poland, despite a number of unquestioned achievements in the last years, still remains one of the priority issues to be solved. There is even a common agreement, in this manner it would be difficult to challenge the validity of this statement, that these days: **the growth in the competitiveness of the economy has thus become a factor for the survival and development of economic activity in Poland.**

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[53] J. Borowski, *Globalizacja, konkurencyjność międzynarodowa ... [Globalisation, international competitiveness ... – TN],* op. cit., pp. 97-99.

[54] Cf.: A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem.....op. cit., tom 1 [State borders, relations with the neighbourhood ... op. cit., vol. 1 – TN],* p. 206 and E. Szymańska, *Procesy innowacyjne przedsiębiorstw* świadczących *usługi w zakresie organizacji imprez turystycznych [Innovation processes of the entrepreneurships providing services within the organisation of tourist events – TN]*, Rozprawy Naukowe nr 236 *[Scientific debates no. 236 – TN]*, Oficyna Wydawnicza Politechniki Białostockiej, Białystok 2013, pp. 229-236.

[55] Cf.: A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem*.....op. cit., tom 1*[State borders, relations with the neighbourhood*... op. cit., vol. 1 – *TN],* p. 206.

[56] Ibidem.

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Aleksander Prokopiuk
Bialystok School of Economics, Poland

Aleksander Maksimczuk
University in Bialystok, Poland
State School of Higher Vocational Education in Suwałki, Poland

CHANGES OF THE ECONOMIC STRUCTURE AND RESTRUCTURING OF THE SO-CALLED *PROBLEM SECTORS* IN POLAND AT THE ONSET OF THE TRANSFORMATION OF THE ECONOMIC SYSTEM

Summary

This article discusses the scope of the changes in the structure of Poland's economy in the first decade of the political transformation and suggests their relevant evaluation. Thus, it provides an analysis of the functioning of low-efficiency and inefficient sectors, and the issues of the influence of grants and subsidies on the efficiency of their operation. It follows that, not being pressurised in terms of efficiency, business units belonging to the demise sectors did not take into consideration the economic calculus while their operation. They also retained resources that could have been better (more efficiently) applied in other places. Thereby, this burdened the total capacity of the entire transformed economy in two ways. On the one hand, it artificially maintained inefficient entities. On the other, it deprived other entities of development opportunities. To conclude, ***in the analysed period, this article concerned the above stated, doubly harmful impact of this state of affairs****.*

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Introduction

From the historic perspective of the Polish transformation, in particular the first half thereof, there arises an issue concerning: *the existence of outdated economic structure, inherited after the former several-dozen-year economic system and, thus, the necessity for its profound restructuring with regard to making thorough changes – to an unprecedented scale so far*. The following research hypothesis was thus made: **The restructuring of Poland's economy, exercised in the first decade of its political transformation, is in no way to be positively evaluated. This is due to the inefficiency of processes for the reallocation of low-efficiency resources to higher-efficiency sectors, and the presence of overly developed anti-effective mechanism for selective assistance.**

Hence, the execution of the research project connected with the verification of the above hypothesis aimed at *determining the relation between economic policy of the first decade of the transformation in particular, and the creation of Poland's economic potential*. The analysis entailed a certain cross-section of the mechanism for creating (enlarging) economic potential connected with the reallocation of economic resources. While studying the macro- and microeconomic aspects of this reallocation (shift), the question of negative (harmful) impact of the then applied practice of providing the so-called *selective assistance* was raised as well. In the journalistic literature referring to the questions regarding the Polish political transformation, there appears a shortage of papers that would extensively raise the significance of the effectiveness of these but break-through changes. In the literature and expertise prepared for economic practice, in the context of other issues, little attention is as well paid to the economy's effective structure and the its proper shaping in the course of political transformations, together with subsequent EU integration. Instead, more importance was to be assigned to competitiveness – more frequently raised and perceived in various references – rather than other important issues[1]. Poland's competitive position, at the moment of its applying for the EU membership, was precisely portrayed by the then IMD results and other rankings performed by international institutions. All countries applying for the EU membership, however, occupied low competitive positions at that time. Literature raising the changes in the structure (especially of the effective nature) of the economy and the scope of economic resource reallocation in Poland with reference to the transformation and accession into the EU was considerably scant in resourcefulness (both in terms of quantity and quality).

Therefore, **the author's aim of this paper** is to present: *general tendency of the changes in the structure of Poland's economy in the first decade of its political transformation – with their adequate evaluation and the attempt to indicate potential consequences that may occur in the future.* And, among others, information allowing, to enable to gather materials concerning: **What could not be done at that time?** Whereas, on this basis – to initiate a debate in order to reflect on the following issue: **is it still to be improved today?**

Several remarks on the structure of Poland's economy executing the transformation

The economic structure is an exceptionally significant category and, therefore, is commonly presented in scientific studies[2]. However, it may manifest itself in various relations. This paper basically focuses on the so-called *efficiency structure*. It may, with regard to its capacity, be deemed (the) most represented (synthesis) among all other possible ways of its expression. It was mentioned by foreign authors in their papers from the period significantly earlier than the time range of this paper, i.e. long before the political transformation took place in Poland[3]. Somewhat later, however prior to the transformation, the structural

[1] Questions concerning international competitiveness of Poland's economy shall be presented here in detail only further in: A. Maksimczuk, A. Prokopiuk, *Restrukturyzacja geograficzna handlu zagranicznego i trudności poprawy międzynarodowej konkurencyjności polskiej gospodarki w okresie integrowania się z UE. I co dalej dzisiaj? [Geographic restructuring of foreign trade and the difficulties concerning the improvement of international competitiveness of the Polish economy in the period of its integration with the EU What next today?- TN].*

[2] *Teoretyczne i praktyczne aspekty funkcjonowania gospodarki [Theoretical and practical aspects of economy's functioning – TN],*Ed. by T. Bernat, Wydawnictwo "PRINT GROUP", Szczecin 2009, pp. 7-54.

[3] In particular in the papers of: H. Leibenstein, *Poza schematem homo oeconomicus. Nowe podstawy mikroekonomii [Outside the homo oeconomicus scheme. New foundations for microeconomics – TN],* PWN, Warszawa 1988;

aspect of efficiency is gradually raised also in the Polish economic literature[4]. In the initial phase of the transformation, the Polish economists, following the representatives of other scientific disciplines, were fascinated by political changes. They would mainly raise the questions of political conditions for the managerial efficiency. Thus, they would study the relations of: *ownership vs. managerial efficiency*[5]. In that work, with regard to the required satisfaction of comparability criteria, they solely referred to administered economy. In another paper (the modern developed market economy), these relations would be formed as: *ownership and competitiveness vs. managerial efficiency*[6]. These two study schemes would suffice to refer these relations to the theory and practice of economic functioning and development of the countries that, at the end of 20th century, undertook to execute their political transformations of their inefficient economies[7]. In many Eastern and Central European countries, including Poland, the practice of executing transformations was ahead of theoretical studies of these transformations. Even up till now, there is not, formally, a working theory of transformation. After nearly 25 years of such executed transformations, there may be no need for polishing this theory. Still, there is no doubt that transformation executed within such scope, was only the beginning of the pathway to other, even further and deeper, transformations, i.e. to the integration with the European Union. The last stage of changes, however, did not discharge from the duty to conduct studies on efficiency structure of the integrating economies and related consequences[8].

The economic structure is usually perceived as: "a relation between the elements of a system comprising economy's components, and the integrity of this system, namely, economy as a system, but also mutual relation between these elements"[9]. The backwardness of the efficiency system is mainly reflected in strong differentiation in branch cross-section. It is also demonstrated in a large share of low-efficiency branches, i.e. at the efficiency lower than the average, in creating GDP[10]. With reference to

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K.J. Buton, *New Approaches to the Regulation of Industry*, The Royal of Scotland Review, December 1985; J.P. Shelton, *Allocative Efficiency vs. X-Efficiency,* "American Economic Review", 1967.

4 Inter alia in: A. Karpiński, *Restrukturyzacja gospodarki w Polsce i na świecie [Economic restructuring in Poland and the world – TN],* PWE, Warszawa 1986; R. Gajęcki, *Strategia rozwoju przemysłu. Prognozowanie zmian strukturalnych [The strategy for the development of industry. Forecasting structural changes – TN]*, PWN, Warszawa 1990. However, the earliest cross-functional relations of efficiency in Poland's economy from the period 1960-1976 were analysed and presented in: Z. Felbur, J. Tober, *Zmiany strukturalne produkcji a postęp efektywności gospodarowania [Structural changes in production vs. the progress of managerial efficiency – TN],*"Gospodarka Planowa" 1980, no. 2 (table 2, p. 93) and in the mesoscale arrangement (agriculture as a section of Polish national economy) [in:] W. Rembisz, *Efektywność i intensywność wzrostu produkcji w rolnictwie [Efficiency and intensity of production growth in agriculture – TN],* Monografie i Opracowania *[Monographs and Works – TN]* no. 185, Szkoła Główna Planowania i Statystyki w Warszawie, Warszawa 1986.

5 A. Maksimczuk, *Ustrojowe uwarunkowania efektywności gospodarowania [Political conditions for managerial efficiency – TN],* Wydawnictwo Uniwersytetu w Białymstoku, Białystok 1998; A. Maksimczuk, *Mieżdusiektornyje srownienija urowniej effektiwności w sielskom choziajstwie Polszi,* Wydawnictwo „Ekoperspektywa", Mińsk 2000.

6 Ibidem.

7 Ibidem.

8 Apart from many articles and earlier scientific monographs by A. Maksimczuk, the co-author of this paper, a comprehensive presentation of these issues may as well be found in the latest, extensive 2-volume monograph: A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem gospodarczym i wschodnie pogranicze Polski w dobie transformacji, integracji i globalizacji [State borders, relations with economic neighbourhood and eastern borderland of Poland at the time of transformation, integration and globalisation]* volume 1 and 2, Wydawnictwo Uniwersytetu w Białymstoku, Białystok 2013.

9 Cf.: A. Maksimczuk*, Ustrojowe uwarunkowania efektywności gospodarowania [Political conditions for managerial efficiency – TN],* op. cit., p. 65.

10 The incidence of this type of situations is characteristic of centrally planned economy, especially, as the then few empirical studies concerning Poland's economy of the period 1960-1976, presented in: S. Felbur, J. Tober, *Zmiany strukturalne produkcji a postęp efektywności gospodarowania [Structural changes in production vs. the progress of managerial efficiency – TN],* op. cit., (table 2, p. 93).

this, it is to be emphasised that in the Polish economy, industries of the primary section played a crucial role in the analysed period. Yet, developmental industries had a minor function. The backwardness of the economic structure resulted mainly from inefficient process of resource allocation from low-efficiency to the higher-efficiency sections. The fact that there existed a mechanism for selective assistance as a factor inhibiting the operation of market mechanism was of certain significance here[11].

It is possible to make comparisons of the industrial structure (according to categories of economic efficiency) in the first decade of the transformation of the Polish economy with the use of results from branch assessment available for that period. These were made by means of multi-criterion ranking. They were presented in the expertise of the former Ministry of Industry and Trade in 1995[12]. Their general characteristics are presented in the table below.

Table 1. Structure of Poland's and EU industry in terms of efficiency

Items	European Union 1993	Poland 1995
Industry's sold production	100.0	100.0
Share of higher-efficiency industries by above 60% than the average for industry	6.6	4.0
Share of higher-efficiency industries from 20% to 60% than the average for industry	45.4	46.1
Share of higher-efficiency industries up to 20% than the average for industry	15.1	8.3
Share of lower-efficiency industries up to 20% than the average for industry	15.9	10.9
Share of lower-efficiency industries from 20% to 60% than the average for industry	16.6	29.9
Share of lower-efficiency industries by above 60% than the average for industry	0.4	0.8
Share of branches of efficiency lower than the average for industry	32.9	41.6

Source: A. Karpiński, *Zmiany struktury gospodarczej w Polsce do roku 2010: Polska na tle U.E. [Changes in the economic structure in Poland until 2010: Poland against the EU – TN],* Komitet Prognoz „Polska w XXI wieku" przy Prezydium PAN, Warszawa 1998, p. 157 et alia.

In addition, the production structure of the EU member states was presented here by means of transferring efficiency results for branches of the Polish industries. There is no data that would present this structure with relation to the average level of this efficiency in the EU member states. Thus, the information in the table presented above provides a sole answer to the question: *what was the share of*

[11] More extensively in: J. Kaliński, *Transformacja gospodarki polskiej w latach 1989-2004 [The transformation of the Polish economy in the years 1989-2004 – TN],* Szkoła Główna Handlowa, Warszawa 2009.

[12] A. Karpiński, *Zmiany struktury gospodarczej w Polsce do roku 2010: Polska na tle UE [Changes in the economic structure in Poland until 2010: Poland against the EU – TN],* Komitet Prognoz Polska w XXI wieku przy Prezydium PAN, Warszawa 1998, p. 157.

Polish industries of certain efficiency level in the European Union production? However, there is no doubt that: *the general level of economic efficiency with relation to the average level was considerably higher in the EU* On this basis, it could be assumed that conclusions unfavourable for the Polish industry that result from this comparison, would be even more unfavourable if this comparison was made with reference to the average efficiency level in the EU

The structure of the Polish industry with respect to efficiency was obviously unfavourable. Industries of efficiency lower than the average comprised in total 41.6% in Poland, whereas the same industries in the European Union – 32.9%. Thus, industries of efficiency lower than or approximating the average were dominant at the cost of the most efficient industries[13]. Another example depicting the backwardness of the Polish economy was an essential role played by the primary industries. With regard to the decline of expansion of production branches and the change of their function, the scope of low efficient activity entailed other branches.

Low efficiency in decline sector and the necessity for changing the existing matter state of affairs with this respect

Poland's economic structure may be evaluated against its division into segments. And so, sector I entails agriculture and forestry, sector II – industry, sector III – services. According to K. Wietrzyk-Szczepkowska, apparently only Poland's economic structure as divided into sectors looks favourable enough[14]. Still, Poland specialised in the production of work-consuming articles at that time. Additionally, the share of high-technology sector in the sold production of industry was still very low. In the section regarding production activity it was barely 4.0% in 1998[15]. Domestic production was competitive neither on external, nor on domestic market, from which it was forced out by imports. This, in turn, accordingly shaped the changes in the specialisation structure with regard to the level of qualifications[16]. This gives a wider spectrum of the condition of the Polish industry. The level of qualification thus reflects the intensity of non-material expenditures connected with human resources being of key importance to innovation. Lower share of branches requiring high qualifications, in turn, is a sign of a technological gap[17]. It hinders the modernisation of the Polish production and the execution of rapid political changes.

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[13] J. Kaliński, *Historia gospodarcza Polski 1989-2004 [Poland's economic history 1989-2004 – TN],* Wydawnictwo Uniwersytetu w Białymstoku, Białystok 2009, pp. 17-22.

[14] K. Wietrzyk-Szczepkowska, *Struktura polskiej gospodarki w okresie transformacji [The structure of Polish economy during transformation – TN]*, „Nowe Życie Gospodarcze" 2003 *[New Economic Life – TN]* no. 7, p. 4.

[15] *Raport o stanie nauki i techniki w Polsce* [*Report on the state of science and technology in Poland – TN*] , Główny Urząd Statystyczny, Departament produkcji i usług [Central Statistical Office of Poland, Department of production and services – TN], Warszawa 2000, p. 135 and: M. Belka, L. Pietrewicz, *Przedsiębiorstwa w okresie dekoniunktury (wyniki II etapu badań)[Enterprises in the course of recession (results from the 2nd stage of studies) – TN],* Polska Akademia Nauk, Instytut Nauk Ekonomicznych [Polish Academy of Sciences, Institute of Economic Sciences – TN], Warszawa 2000, p. 26.

[16] Z. Wysokińska, *Konkurencyjność w międzynarodowym i globalnym handlu technologiami [Competitiveness in the international and global trade in technologies – TN],* PWN, Warszawa - Łódź 2001, p. 12; K. Bartosik, *Udział czynnika pracy w handlu zagranicznym Polski [The share of labour factor in Poland's foreign trade – TN],* „Gospodarka Narodowa" 2002 *[National Economy – TN]* no. 5-6, p. 22;T. Piekarec, P. Rot, E. Wojnicka, *Sektor przedsiębiorstw wysokiej technologii w Polsce [High-technology enterprise sector in Poland – TN],* Instytut Badań nad Gospodarką Rynkową *[Institute of Research on Market Economy – TN]*, Polska Regionów *[Regional Poland – TN]* no. 24, Gdańsk 2000, p. 21.

[17] Issues concerning the behaviour of Polish enterprises in the period as analysed in this paper, are discussed in detail in: *Zachowania rynkowe gospodarstw domowych i przedsiębiorstw w okresie transformacji systemowej w Polsce [Market behaviour of households and enterprisesduring political transformation in Poland – TN],*Ed. by D. Kopycińska, Wydawnictwo"PRINT GROUP", Szczecin 2006, part II*, Zachowania rynkowe przedsiębiorstw w Polsce [Market behaviour of enterprises in Poland – TN],* pp. 111-209.

The diversification of economic efficiency structure existed in Poland as a permanent phenomenon, at least from the period of the 2nd Republic of Poland. However, it was never a popular subject for scientific analyses. The research conducted by S. Tober and J. Felbur[18]during the former economic regime, did not make a considerable (or even no) impact in the times of centrally planned economy. The initial years of political transformations did not bring the renaissance of being up-to-date or meaningful, either. "The achievements of the former regime" were referred to with considerable caution (or even hostility), especially at the beginning of these changes. This included also the results of conducted pilot empirical research. Still, a number of new studies were undertaken at that time. These indirectly affected the issues discussed in this paper as well, particularly with respect to the research on the development strategies for industry and randomly (separately) other transformed branches of the national economy. Thus, within the scope of mesostructure at the most. Some other studies of the author of this paper were conducted in this research area at that time[19]. It would be still difficult to indicate complex empirical research within efficiency mesostructure[20]. History, thus, turns full circle within the former (and even not so distant in time) errors that were made. Again, the economic practice is not supported by solid empirical research. And even in a situation when such research was conducted through science, it would take no advantage out of this. In Polish reality it seems eternal that a social-economic problem is at variance with the economic theory (science) and practice. Unfortunately, it is especially visible (at least not fully used) with reference to the execution of the transformations of efficiency structure regarding the transformation[21].

One of the most significant problems of the last decade of the 20st century was the prolonged existence of the so-called "problem sectors" in Poland[22]. These include the extraction of hard coal, smelting industry, ship-building, textile, defence, fuel, energy and hard chemical synthesis industries. In the period of centrally planned economy, these were characterised by specific conditions of activity, in particular[23]: concentrating production in large State enterprises executing the strategy of extensive

[18] Cf.: S. Felbur, J. Tober, *Zmiany strukturalne produkcji a postęp efektywności gospodarowania [Political changes in Poland vs. progres in management efficiency – TN],* op. cit., pp. 91-99.

[19] A. Maksimczuk, *Ustrojowe uwarunkowania efektywności gospodarowania [Political conditions for management efficiency – TN],* Wydawnictwo Uniwersytetu w Białymstoku, Białystok 1998; A. Maksimczuk, *Mieżdusiektornyje srownienija urowniej effektiwności w sielskom choziajstwie Polszi,* Wydawnictwo „Ekoperspektywa", Mińsk 2000; A. Maksimczuk, *Mechanizm zawisimosti: Sobstwiennost, konkurencja i effektiwnost choziajstwowanija,* Wydawnictwo „Ekoperspektywa", Mińsk 1998; A. Maksimczuk, *Transformacja systemowa a problemy efektywności [Political transformation vs. efficiency problems – TN]*, Wydawnictwo „Ekoperspektywa", Mińsk 1999 and A. Maksimczuk, *Effektiwnost choziajstwowanija w ekonomiczeskich systemach,* Wydawnictwo IWC „Minfina", Mińsk 2010.

[20] Together with positive changes within domestic and international statistics, leading to better credibility of the presented statistical data, the structure of creating GDP is to be considered. It may be treated, obviously in a simplified and additional complementation, as a "simplified" efficiency structure of the economy. This, however, should not excuse the need for conducting even more detailed empirical research within consideration.

[21] These problems, were mentioned in an adequately argued manner, in (inter alia): A. Maksimczuk, *Zmiany systemowe końca XX wieku jako obiekt współczesnych badań ekonomicznych [Political changes at the end of the 20th century as an object of contemporary economic studies – TN]*, „Optimum. Studia Ekonomiczne" 2009 *[Optimum, Economic Studies – TN],* no. 4(44), pp. 63-82 and A. Maksimczuk, *Polskiej transformacji systemowej ciąg dalszy – najistotniejsze, z tym związane, dylematy oraz wyzwania badawcze w naukach ekonomicznych [Polish political transformations continued – the most crucial related scientific dilemmas and challenges in economic sciences – TN]*, „Optimum. Studia Ekonomiczne" 2011, pp. 32-60.

[22] T. Chrościński, *Przyszłość polskiej gospodarki [The future of Polish economy – TN],* „Nowe Życie Gospodarcze" 2003 *[New Economic Life – TN]*, no. 3 and E. Czerwińska, *Europejska polityka konkurencji. Wyzwania dla Polski [European policy of competition. Challenges for Poland – TN],* Informacja Biura Studiów i Ekspertyz *[Information of the Office for Studies and Expertise – TN]* no. 481, Warszawa 1998.

[23] Cf.: A. Maksimczuk, *Granice państwowe, relacje z sąsiedztwem gospodarczym i wschodnie pogranicze Polski w dobie transformacji, integracji i globalizacji tom 1 [Polish borderland, relations with the economic neighbourhood and Poland's*

development; easy sales on the domestic market in the conditions of permanent lack of supply and administrative defence against foreign competition; within an enterprise – a concentration of a number of social functions burdening the costs of activity; extensive share of administratively regulated prices[24].

The new political solutions, which were introduced already in 1990, radically changed the conditions of enterprises functioning and their financial situation. These changes were triggered mostly by[25]:
1. The introduction of restrictive monetary – credit policy;
2. The deregulation of most prices from the administrative control;
3. The elimination of most administrative barriers limiting the entrance on the market;
4. The limitation of grants and subsidies;
5. The introduction of partial exchangeability of the Polish zloty;
6. The limitation of trade with the COMECON member states;
7. The reduction of domestic demand.

At the beginning of the transformation, the Polish problem sectors were also characterised by[26]:
1. The existing disproportion between demand and supply;
2. Outdated production assets, requiring large expenditures on its modernisation;
3. Low and deteriorating competitive position;
4. The occurrence and intensification of financial difficulties;
5. Engaging high work resources.

It is worth mentioning that in the period of initial changes (1990-1997), there existed an exceptionally high number of enterprises characterised by negative yield[27]. The team of E. Mączyńska conducted research in order to study the financial situation of the enterprises in the demise sector and the remaining political changes that functioned in Poland in the first decade[28]. They focused on 200 enterprises, among of which 58 were categorised as problematic sectors. These included particularly numerous unprofitable companies (data presented in brackets). These companies comprised 29.0% of the entire sample, whereas the share of deficit companies at times reached as much as 50% of the sample.

In the analysed period, one of the most problematic sectors of economy was obviously mining industry. With the exception of 1991 and 1994, the revenue from the entire mining industry was at that time lower than the costs incurred in order to obtain them[29]. Within the entire period, i.e. from 1991 until 2000, both the gross and the net financial result of this sector were negative[30]. At that time, the mining sector incurred losses in sales and losses in financial activity. Apart from the years of 1991 and 1994, it also incurred losses in operational activity. The downward trend of coal extraction and employment

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eastern borderland at the times of transformations, integration and globalisation. Volume 1. – TN], Wydawnictwo Uniwersytetu w Białymstoku, Białystok 2013, pp. 128-137 and pp. 201-218.

[24] Cf.: M. Belka, L. Pietrewicz, *Przedsiębiorstwa w okresie dekoniunktury (wyniki II etapu badań*) *[Enterprises in the course of recession (results from the 2nd stage of studies) – TN],* Polska Akademia Nauk, Instytut Nauk Ekonomicznych *[Polish Academy of Sciences, Institute of Economic Sciences – TN],* Warszawa 2000.

[25] Loc. cit., chapter 4, item 4.1. *Plan Balcerowicza – główne założenia i niektóre aspekty jego współczesnej krytyki [Balcerowicz's plan – main assumptions and some aspects of his contemporary critique – TN]*, pp. 115-119.

[26] S. Krajewski, *Restrukturyzacja sektorów problemowych [Restructuring problem sectors – TN],* Friedrich Ebert Stiftung, Warszawa 1999, p. 6 et al.

[27] S. Krajewski, *Restrukturyzacja sektorów problemowych [Restructuring problem sectors – TN],* op. cit., p. 36.

[28] Cf.: E. Mączyńska, *Kondycja przedsiębiorstw [The conditio of enterprises – TN],* „Nowe Życie Gospodarcze" 2003 *[New Economic Life – TN]*, no. 3.

[29] K. Wietrzyk-Szczepkowska,*Struktura polskiej gospodarki w okresie transformacji [The structure of Polish economy –TN]* , „Nowe Życie Gospodarcze" 2003 *[New Economic Life – TN]*, no. 7.

[30] M. Mitręga, *Restrukturyzacja umiejscowiona. Socjalne i regionalne aspekty przemian w górnictwie węgla kamiennego [Located restructurisation. Socail and regional aspects of transformations in the hard coal mining industry – TN],* Wydawnictwo Uniwersytetu Śląskiego, Katowice 2001, p. 51.

in the years 1990-1993 was accompanied by rapid growth of liabilities. The net financial result was worse as well[31]. The reports made by the Supreme Audit Office [*Polish: NIK - TN*], indicated a rapid growth of financial liabilities and losses in the hard coal mining sector within 1991-2001[32]. This had to negatively influence political changes in the Polish industry in the days of political transformation and, accordingly, shape its transformations in the following periods – at the moment of its integration with the EU and Poland's functioning within the EU structures[33].

It is not uncommon that in many countries the demise sectors, often for political and social reasons, were supported by the State in some kind[34]. To put it bluntly, the State's aid means obtaining income higher than the economised one until that time. The indirect addressees of this support are the enterprises that pay and obtain market prices. Thus, theoretically, they totally rely on the market mechanism. If some branches of economy (mostly low-profit or stagnating ones) are to be privileged, these instruments yet maintain the outdated economic efficiency structure[35].

Grant system and other forms of the State aid vs. changes in the inefficiency scale in the first half of the transformation of the Polish economy

Specified-user subsidies, constituting the State aid, not only for commercial undertakings, but also for the execution of diverse out-of-business tasks, in the period analysed in this paper, were divided into three listings (groups)[36]: 1. Restructuring the indebtedness at the Social Insurance Office *[Polish: ZUS – TN]*[37]*;* 2. Restructuring the industry; 3. Agriculture.

Yet, the budget subsidies for enterprises being in default as to ZUS contributions were not of restructuring character. They consisted in that the enterprises burdened with financial problems did

[31] J. Kaczurba, *Dystans wydajności [Distance of efficiency – TN]*, „Nowe Życie Gospodarcze", 2001, *[New Economic Life – TN],* no. 6 and *Informacja o wynikach kontroli restrukturyzacji finansowej i organizacyjnej górnictwa węgla kamiennego w latach 1990-2001[Information on the results from the audit of financial and organisational restructuring of hard coal mining in the years of 1990-2001 – TN]*, NIK *[Supreme Audit Office – TN],* Katowice 2002, p. 23.

[32] Cf.: *Informacja o wynikach kontroli restrukturyzacji finansowej i organizacyjnej górnictwa węgla kamiennego w latach 1990-2001[Information on the results from the audit of financial and organisational restructuring of hard coal mining in the years of 1990-2001 – TN]*, op. cit., p. 23 et al. and M. Jaworska, A. Skowrońska, *Zmiany strukturalne w przemyśle polskim w okresie transformacji systemowej [Structural changes in the Polish industry during the political transformation – TN],* Akademia Ekonomiczna im. O. Langego we Wrocławiu, Wrocław 2001 and A. Karpiński, *Zmiany struktury gospodarczej w Polsce do 2010 roku. Polska na tle UE [Changes in the economic structure in Poland until 2010. Poland as compared to the EU – TN]*, Komitet Prognoz „Polska w XXI wieku" przy Prezydium PAN *[Foresight Committee Poland 21th cent. – TN]*, Warszawa 1998.

[33] *Informacja o wynikach kontroli restrukturyzacji finansowej i organizacyjnej górnictwa węgla kamiennego w latach 1990-2001[Information on the results from the audit of financial and organisational restructuring of hard coal mining in the years of 1990-2001 – TN]*, op. cit., p. 23 et al.

[34] A. Lipowski, *Studia nad restrukturyzacją sektorów przemysłowych w Polsce, elementy teorii i analiza empiryczna [Research on restructring industrial sectors in Poland, theoretical elements and empirical analysis – TN],* PAN, Warszawa 1998 and S. Krajewski, *Restrukturyzacja sektorów problemowych [Restructuring problem sectors – TN],* Friedrich Ebert Stiftung, Warszawa 1999.

[35] *Strategia Rozwoju Polski do roku 2020 [Strategy for the Development of Poland until 2020 – TN]*, Komitet Prognoz „Polska 2000 Plus" *[Forecast Committee „Poland 2000 Plus" – TN]*, Warszawa 2000.

[36] A. Lipowski, *Wspieranie przez państwo przedsiębiorstw a ich restrukturyzacja [Enterprises as supported by the state vs. their restructuring – TN],* ZIGGURAT, Warszawa 1999, p. 8.

[37] The subsidy for restructuring indebtedness at ZUS comprised the biggest part of specified-user subsidies. That was nearly 40% of subsidies in total that were disbursed in the budget in 1995. At that time the highest amounts were allocated in mines and smelting plants and some heavy-industry enterprises. Cf.: A. Lipowski, *Wspieranie przez państwo ... [Enterprises as supported ... – TN]*, op. cit., p. 24.

not pay contributions to ZUS. The state, in turn, tolerating this practice, transferred the burden of their payment upon the taxpayer. Indirectly, this reduced the possibility for development in the efficient sector. It should be highlighted that most beneficiaries within this subsidy group are included into the stagnant sector of economy. The biggest part of subsidies for restructuring the industry was allocated in mining[38]. The basic purpose of allocating these means was physical decommissioning of mines, social protection, satisfying claims of ex-employees, severance pays and elimination of mining damage caused by obsolete workings, i.e. pits already exploited in the past.

In the analysed period, no regulations, binding at that time, for granting subsidies were observed. The failures are particularly visible, as follows[39]:

1. In 1996, the subsidies were granted despite the failure to submit relevant applications by the mines;
2. The subsidies were granted for eradicating mining damage although they did not have a legal title to all of them;
3. The mines obtained subsidies for covering the overhead costs with no legal ground for these categories of costs being financed by these subsidies;
4. In 1996, the decommissioned mining plants obtained subsidies for financing the costs of technical projects and documentation connected with decommissioning.

To make things worse, the expenditures not connected with its course were wrongly credited towards the decommissioning costs. The biggest part of these expenditures – except for the overheads costs – constituted the so-called mutual (complementary) costs. These were wrongly credited towards decommissioning costs in the mines that continued coal extraction[40]. Therefore, the revenue from decommissioning was inappropriately planned. This consisted in lowering the amounts anticipated to be obtained[41]. According to NIK[42], it was connected with the fact that the basis for determining the amount of the subsidy was the planned cost of decommissioning subtracted by planned revenue. Six mines infringed the binding law. This resulted from the failure to credit some revenue in fact obtained from decommissioning towards income. The State's financial aid was unconditionally granted to hard coal mining. Thus, without forcing the reduction of costs under the pain of bankruptcy. The scale of the problem is illustrated by the fact that the mines at that time financed high pay rises, considerably above the country's average. The budget subsidies were also used to conduct investments that were frequently badly prepared[43]. As a result of the execution of

[38] In 1995, this sector was granted with subsidies in the amount of 370,809 k PLN (upon amendments – 371,509 k PLN, and in 1996 – 484,409 k PLN. Cf.: A. Lipowski, *Wspieranie przez państwo ... [Enterprises as supported ... – TN]*, op. cit., p. 24 and *Informacja o wynikach kontroli przyznawania i wykorzystywania dotacji budżetowych dla górnictwawęgla kamiennego [Information on the results from the audit on granting and applying budget subsidies for hard coal mining – TN]*, NIK *[Supreme Audit Office – TN],* Warszawa 1998, p. 4.

[39] Detailed information on this issue together with the amounts may be found in: *Informacja o wynikach kontroli wykorzystywania wybranych form pomocy publicznej przez państwowe podmioty gospodarcze [Information of the results from the audit on the application of selected forms of public support through state legal entities – TN]*, NIK *[Supreme Audit Office – TN],* Warszawa 2001, pp. 5-6.

[40] The estimated amount of these costs was 15 mln PLN in 1995, and even approx. 20 mln PLN in 1996. For more details: *Informacja o wynikach kontroli przyznawania i wykorzystywania dotacji budżetowych dla górnictwa węgla kamiennego [Information on the results from the audit on granting and applying budget subsidies for hard coal mining – TN]*, NIK *[Supreme Audit Office – TN],* Warszawa 1998, p. 8.

[41] Due exceeding the planned revenue by 40% in 1995 and 81% in 1996 in all controlled objects (except for hard coal mine "Jowisz") pointed to this fact in particular.

[42] In particular, the excerpted in this paper issued information, reports and results from the audits performer by NIK *[Supreme Audit Office – TN].*

[43] Cf.: *Informacja NIK o wynikach kontroli efektywności zakupów maszyn i urządzeń oraz technologii w górnictwie węgla kamiennego [The information of NIK on the results of the audit on the efficiency of purchasing machines and appliances*

failed investments, the mining industry lost the amount of at least 1,178.1 mln PLN[44]. In 2001, the value of the State aid granted to entrepreneurs, the Ministry of Economy being responsible for the execution of which, amounted to 1,267.6 mln PLN[45].

Apart from subsidies received by the above analysed entities from the demise sector (problem sectors), other forms of State aid were used. In particular[46]: tax concessions, recapitalisation, investment reliefs, customs and non-tariff protection, logistic aid, tolerating the enterprises appropriating and gorge feeding the State assets. In terms of tax concessions, it should be emphasised, that the Minister of Finance, tax offices and tax chambers had the power to[47]: discard fixing tax obligations and tax collection in part or in total, extinguish tax arrears and interest for default, defer deadlines for tax payment and spread the payment into instalments. Tolerating arrears referred to all main kinds of taxes[48]. The creditors' tolerating tax arrears, however, meant the actual covert subsidising of the mining industry[49]. The main cause for the growth of these arrears in 2000 was their accumulation in specific branches of industry. In particular, this concerned those that fell within restructuring processes or required full (or at least partial) restructuring. To large extent these were the arrears of four national economy sectors, i.e. hard coal mining, defence industry, smelting and light industry, and the Polish Railways. The results from the audits conducted by NIK *[Polish: Supreme Audit Office – TN]* concerning the activity of tax offices within the execution and protection of tax arrears indicate that the Ministry of Finance did not possess detailed and up-to-date information on tax arrears in these economy sectors. This also included tax arrears of the restructured units[50]. It is to be noted that (as the excerpted results from the audits indicate) some entities failed to meet the statutory conditions for restructuring their tax indebtedness[51]. The basic cause

*in hard coal mining – TN],*NIK *[Supreme Audit Office – TN],*Katowice 1998, p. 10.

44 This comprised 12% of the total investment expenditures within 1990-2001. In these circumstances, the permanently unprofitable mines stayed on the market through, among others, subsidies and the failure to perform obligations. Thereby, they constituted unfair competition for the mines that would be profitable, allowing for the situation of properly operating market mechanisms. *Informacja NIK o wynikach kontroli efektywności zakupów maszyn i urządzeń oraz technologii w górnictwie węgla kamiennego[The information of NIK on the results of the audit on the efficiency of purchasing machines and appliances in hard coal mining – TN],* op. cit., p. 10 et al.

45 Subsidies comprised the biggest share here – 95.4%. Subsidies for restructuring the iron and steel smelting made 2.0% of the total subsidy. However, the promotion of exports, being so crucial an undertaking – merely 2.1% of the total subsidies granted. Thus, this may prove the scale of incorrectness in disposing subsidies that arose in this period. *Informacja o wynikach kontroli restrukturyzacji finansowej i organizacyjnej... [Information on the results from the audit on financial and organisational restructuring ... - TN]*, op. cit., p. 50 et al.

46 A. Lipowski, *Wspieranie przez państwo.... [Enterprises as supported ... - TN],* op. cit., p. 8.

47 Loc. cit., p. 13.

48 For details: A. Lipowski, *Dualizm transformacyjny. Przypadek Polski 1990-1998 (Wstęp do problematyki) [Transformation dualism. Poland's case 1990-1998 – TN],* PAN, Warszawa 1999.

49 Cf.: *Informacja o wynikach kontroli działalności urzędów skarbowych w zakresie egzekucji i zabezpieczenia zaległości podatkowych [Information on the results from the audit on the activity of tax offices within the execution and protection of tax arrears – TN]*, NIK *[Supreme Audit Office – TN],* Warszawa 2001, p. 18 and *Analiza wykonania budżetu państwa i założeń polityki pieniężnej w 2000 roku [The analysis of the execution of the state budget and the guidelines of the monetary policy in 2000 – TN]*, NIK *[Supreme Audit Office – TN],* Warszawa 2001, volume 1, p. 50.

50 A. Lipowski, *Wspieranie przez państwo.... [Enterprises as supported ... - TN],* op. cit., p. 13 et al.

51 The list of taxpayers falling behind payments in terms of tax on goods and services as dated 31st December 2000 pointed to the fact that 586 entities fell behind payments in terms of tax on goods and services (above 569 k PLN) in the total amount of 3,547,371 k PLN (in 1999 – 865 entities in amounts from 401 k PLN up to 226,865 k PLN). The biggest debtors, according to the date at the end of December 2001 – were coal companies and the Polish Railways, similarly to the data from 1999. Cf.: *Informacja o wynikach kontroli działalności urzędów skarbowych w zakresie egzekucji i zabezpieczenia zaległości podatkowych [Information on the results from the audit on the activity of tax offices within the execution and protection of tax arrears – TN]*, NIK, Warszawa 2001, p. 21.

for the growth in arrears in terms of tax on goods and services was the accruing arrears in reference to VAT in the branches of the industry requiring restructuring[52].

The growth in tax arrears in mining industry indicates that restructuring indebtedness of hard coal mining took a different course than expected. It should be noted that the core basis for tax reliefs and exemptions granted in the period 1992-1995 were acts that dated back to the communist Poland. The first of them was the Act of 19th December 1980 on tax exemptions. The second – Act of 23rd December 1988 on business activity with the share of foreign entities. The Act of 19th December 1980 allowed the waiver to fix tax obligations in total or in part in cases that were economically or socially justified. Tax arrears or tax interest could as well be extinguished in total in the same cases. The deadline for tax payment could be deferred or spread into instalments at the taxpayer's request without additional limitations[53].

The State aid in the form of reducing tax arrears, apart from financial objective, should allow for the immediate improvement of the financial liquidity of a company that incurred losses. Thus, late tax payment had to mean the budget aid in the company's existence. In fact, it turned out to be a free-of-charge loan from the State budget that in reality maintained the inefficient enterprises-debtors. The aid itself, however, became at the same time the equivalent of interest rates on the commercial loan that were not paid to the budget.

Another form of supporting enterprises by the State was the State Treasury's sureties functioning from 1993. The conditions for granting the State Treasury's sureties determine that:

1. The State Treasury guarantees loans and interest rates up to 60%. Yet, there were exceptions to the rule of dividing the risk between the guarantor and the creditor, justified by specifically significant reasons;
2. The object of the sureties mainly became investment loans. They were allocated for such objectives as: development and maintenance of the infrastructure, environment protection, support in adaptation and developmental processes in the business entities, fast-yielding restructuring undertakings and mobilising governmental privatisation programmes[54].

The surety should be granted through concluding a civil-law contract between the guarantor and the creditor. The State Treasury's surety is usually fixed in terms of duration. It is most often secured by a blank promissory note. The State Treasury's sureties should in the first place account for the privatising aspect of restructuring traditional production areas. However, this was not always the case. The sureties, except from being too extensive in terms of their number[55], were generally directed towards the public sector without relation to privatisation scheduled by the Ministry of Privatisation.

It should be indicated that:[56] the sureties were too frequently granted for the loans in total, and not their 60% value. And this could not return to covert subsidies. It seems crucial that small and medium enterprises benefited from sureties to a small extent, which was the result of the lack of adequate number of investment applications. In addition, the system of the State Treasury sureties was uncontrollable. It, in fact, comprised sureties granted by such government agencies as: Industrial Development Agency, Agricultural Market Agency, Agricultural Property Agency of the State Treasury.

Another, somewhat controversial type of the State aid was tolerating the appropriation and gorge eating of the property by the public enterprises. Property appropriation was facilitated by the provisions on financial economy of the enterprises. According to them, the revenue of the enterprise from selling the assets was credited towards its overall revenue. Thus, they were treated on par with the inflows

[52] Cf.: U. Gołaszewska-Kaczan, *Społeczna gospodarka rynkowa – gospodarka społeczna – społeczna odpowiedzialność [Social market economy – social economy – social responsibility – TN],* „Optimum" Studia Ekonomiczne 2011, no. 4 (52), pp. 148-160.

[53] A. Lipowski, *Wspieranie przez państwo ... [Enterprises as supported ... – TN]*, op. cit., p. 14.

[54] Loc. cit., p. 38.

[55] A. Lipowski, *Wspieranie przez państwo ... [Enterprises as supported ... – TN]*, op. cit., p. 40.

[56] Loc. cit., p. 43.

from the sales of goods and services. Thereby, the enterprise, selling the public property and allocating the resulting means towards financing operational activity, could prolong its permanently inefficient existence, covering the losses resultant from this activity. As a consequence, some portions of revenue flowing from the previously invested public property were taken over by the enterprise. And this, in reality, led to the informal transformation of the public into group property[57]. However, gorge feeding in terms of the fixed assets concerned using the fixed assets in every uneconomical way, through its uncontrolled decapitalisation and resulting from allocating depreciation towards operational objectives. The share of remaining income, including income from the sales and lease of fixed assets and land, property lease and also the sales of accrued materials, reached 8.3% in 1992-1995. They should be referred to as additional State aid[58]. This kind of State aid mainly focused on the following industrial areas: hard coal mining, iron and steel smelting, oil industry, sugar industry and agricultural support[59].

Financial restructuring of mining enterprises may consist in: extinguishing obligations in total or in part, deferring deadlines for their payments by a specific period, spreading the payment of these obligations into instalments, exchanging the payable obligations into stocks and shares, or exemptions from the obligation to make the current payments and cover the cost of current penalties. The NIK *[Supreme Audit Office – TN]* reports[60] indicate that the external financial aiding towards hard coal mining from the public finances in the years 1990-2001 nominally constituted not less than 15,025 mln PLN. In terms of amounts, as referred to the year of 2001, it constituted 34,042 mln PLN[61]. In 2001, the Minister of Economy granted subsidies worth 1,123.2 mln PLN towards public aid directed to hard coal mining. These were allocated towards[62]: subsidies concerning physical decommissioning of the mines, subsidies for restructuring employment, coal allowances, compensatory pensions allowable from the mines totally decommissioned, co-financing the remedy for the mining damages, and investment expenditures. At the same time, it is to be highlighted that the subsidies granted towards investments did not, however, encourage to improve innovation and co-operation with the research-and-development sector[63].

In the years 1992-1993, the subsidies for the mining sector were gradually reduced, though the so-called "soft budget surrounding" was still applied. However, it relied on loosening the relations between the inflows and expenditures. In consisted in the protection by means of tax exemptions and non-performance of obligations towards the budget through various bodies. The decisions made in this respect did not internally create a coherent policy of the state towards the mines. These resulted from

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[57] A. Lipowski, *Wspieranie przez państwo ... [Enterprises as supported ... – TN]*, op. cit., p. 49.

[58] Loc. cit., p. 49.

[59] Thus, the costs of restructuring hard coal mining in 1990-2001 constituted, in the current amount, approx.. 19.5 bn PLN in total. Cf.: *Raport o stanie państwa i działaniach rządu w latach 1997-2001 [Report on the conditio of the state and the government activity in the years 1997-2001 – TN],* Kancelaria Prezesa Rady Ministrów *[The Chancellary of the Prime Minister – TN],* Warszawa 200l, p. 283.

[60] *Informacja o wynikach kontroli restrukturyzacji finansowej i organizacyjnej górnictwa węgla kamiennego w latach 1990-2001 [Information on the results from the control over the financial and organisational restructuring of hard coal mining in the years 1990-2001 – TN],* NIK *[Supreme Audit Office – TN],* Katowice 2002, p. 51.

[61] *Informacja o wynikach kontroli restrukturyzacji finansowej i organizacyjnej górnictwa węgla kamiennego w latach 1990-2001 [Information on the results from the control over the financial and organisational restructuring of hard coal mining in the years 1990-2001 – TN],* op. cit., p. 51 and *Polska 2002, Raport o stanie gospodarki [Poland 2002, report on the condition of Polish economy – TN],* Ministerstwo Gospodarki *[Ministry of Economy – TN],* Warszawa 2002, p. 84.

[62] Information on the values of subsidies, as divided into various kinds, may be found in: *Polska 2002, Raport o stanie gospodarki [Poland 2002, report on the condition of Polish economy – TN],* op. cit., p. 84 et al.

[63] Cf.: A. Grzybowska, *Determinanty współpracy przedsiębiorstw ze sferą B+R [Determiners for the co-operation of the enterprises with the R&D sphere – TN]* and A. Giegiel, *Mechanizm absorpcji wiedzy technologicznej i innowacji w warunkach gospodarki imitacyjnej [The absorption mechanism of technological konwledge and innavation in the conditions of imitative economy – TN],* „Optimum" Studia Ekonomiczne 2011, no. 2 (50), pp. 167-186 and 222-240.

uncoordinated activities by various organs within the State Treasury. For example, the Minister of Finance, in his letter of 30th March 1993 addressed at the head of the Tax Chamber in Katowice, offered not to charge the interest on overdue liabilities and withheld the execution of budget payables from hard coal mines. This, in effect, supported mines by mutually incoherent activities which additionally bore significant financial consequences. As a rule, this kind of behaviour induced mine management and personnel to anticipate tax abolition or even complete discontinuation of obligations. And this did not motivate to undertake activities leading to the (effectiveness) improvement of the economic situation of mines[64].

Iron and steel smelting sector received a significant financial support from the State in the years 1992-1996. Other State aid[65] concerned the State Treasury sureties for the payment of domestic loans, subsidies and from the ESFAL means, customs protection imposed on smelting goods, budget subsidy, exemptions from dividend payment for 1994, exemption from the payment the interest on capital for 1994 towards the budget, reduction of debt towards the budget. To evaluate this situation, the State aid may be said not to have contributed to its profound restructuring[66]. The arranged and banking proceedings, together with the reduction of indebtedness towards the budget, did not significantly improve the financial liquidity of this sector, either.

Conclusions

The administered (centrally planned) economy, as the practice of social-economic life proved, was characterised by chronic imbalance within the production sector and supply shortages. It manifested itself in, among others: accumulating unused production capacities and covert unemployment. Moreover, the factor for the reproduction process of the fixed assets was the model of investment asymmetry. It consisted in, among others, the preference for the extensive type of investments. These were focused on the growth of the assets at the expense of its reproduction and modernisation[67]. These factors and the over-concentration of production and fixed assets caused low efficiency of the economy and, consequently, its competitiveness. The economy, as exposed to the operation of the market mechanism, resulting from the initiated processes of political transformation, in some manner had to rationalise the application of production factors. Still, especially at the initial stage of political changes, the inefficient process of resource reallocation supported the inefficient use of resources. This made the volume of production reach a lower level than possible to achieve with more effective use of production factors[68].

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[64] *Informacja o wynikach kontroli sytuacji gospodarczej kopalń węgla kamiennego w fazie wprowadzania mechanizmów rynkowych [Information on the results from the audit of the economic situation of hard coal mines during the implementation of market mechanisms – TN],* op. cit., p. 18.

[65] For information on the value of financial aid with reference to separate kinds, cf. the reports issued by NIK *[Supreme Audit Office – TN]* as quoted in this paper, and for economic consequences of this fact: A. Lipowski, *Wspieranie przez państwo ... [Enterprises as supported ... – TN]*, op. cit., p. 56.

[66] Yet, it did not influence the interest in competitiveness. It neither brought the so-called competitive strategies of the enterprises that were adjusted to this phenomenon. Cf.: M. Gorynia*, Zachowania przedsiębiorstw w okresie transformacji. Mikroekonomia przejścia [The behaviour of enterprises during the transformation. Microeconomics of the transformation – TN],* Wydawnictwo Akademii Ekonomicznej w Poznaniu, Poznań 2000, pp. 95-114.

[67] Differences between the centrally planned (socialist-administered) and market (capitalist) economy, particularly on the efficiency scale, were presented in detail in: A. Maksimczuk, *Transformacja systemowa a problemy efektywności ... [Political transformation vs. efficiency problems... – TN]*, op. cit., chapter 2, item 2.1, *System ekonomiczny. Najistotniejsze cechy gospodarki centralnie kierowanej i rynkowej [Economic system. Most essential characteristics of centrally planned economy – TN]*, pp. 29-32.

[68] Cf.: A. Maksimczuk, *Ustrojowe uwarunkowania efektywności ... [Political conditions for managerial ... – TN],* op. cit., chapter 7, items: 7.4. System gospodarczy i przekształcenia systemowe a efektywność [*Economic system and political vs.*

Thus, the political reform of the Polish economy was to become the superior objective of its economic and industrial policy in the period analysed in this study. The core issue for the economic policy of that time was restructuring and privatisation of large state enterprises and finance institutions. Apart from privatisation, in some branches within heavy industry (coal mining, steel industry, shipbuilding and chemical industry) it became necessary to conduct programmes reducing the activity and shift production factors to modern and more efficient branches. This would enable to achieve higher economic efficiency as a whole[69]. Therefore, it would also improve the level of international competitiveness of the Polish economy and industry, which was an indispensable condition for the development of the Polish export.

It is beyond any doubt that the level of social efficiency of work in Poland was and remained definitely lower than in the European Union member states. Relatively low work efficiency became a basic factor for the fact that GDP per capita in Poland still remained at least 3 times lower than most of the EU countries at that time[70]. Numerous quality factors could be enumerated. These in total decided that, in Poland, the level of productivity of the so-called basic production factors (social efficiency of work, productivity of fixed assets) was still relatively low. But for the change of the situation in these areas, it will be difficult to rely on the significant and permanent elimination of the gap between Poland's and the EU economies[71].

The problem of the growth in work efficiency and productivity of the economy, including its competitiveness, became more significant in the conditions of approaching perspective for the Polish integration with the European Union member states[72]. Another, as well important, cause for which it became indispensable to start the process of reallocating resources is the fact that the stagnant sector, agriculture in particular[73], may expand only by way of growth in efficiency, i.e. without the growth in the production volume. However, as it follows from the commonly accessible statistical data, the Polish economy in this period was still characterised by intensive employment within agriculture (28.5% of employed in total)[74]. "Pumping out" the excessive employment from agriculture is , yet, a very difficult problem[75]. Some kind of psychological aspects are observed here, in particular: sentiment for the land, historically shaped family tradition and, even more significant, a relatively low level of education. The last one intensifies work-related problems in towns and cities. In 2000, merely 3.3% of rural inhabitants had a higher and 20.2% - secondary education. Still, there was a high percentage of people with primary and incomplete primary education – 45%[76].

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efficiency transformations-TN] and 7.5. *Zmiana formy własności a najważniejsze warunki wzrostu efektywności[Change in the form of ownership vs. most significant conditions for the growth in efficiency – TN]*, pp. 242-263.

69 Ł. Tomaszewicz, I. Świerczewska*, Czynniki wzrostu efektywności polskiej gospodarki [Factors for the growth in efficiency of the Polish economy – TN],* „Optimum" Studia Ekonomiczne 2011, no. 2(50), pp. 36-55.

70 *Produktywność – rozwój społeczno-gospodarczy [Productivity – social-economic development – TN]*, Ed. by J. Jagnas, Uniwersytet Opolski, Opole 1997, p. 16.

71 J. Lipiński, W.M. Orłowski, *Wzrost gospodarczy w Polsce perspektywa średniookresowa [Economic growth in Poland medium-term perspective – TN]*, Warszawa 2001, p. 53.

72 *Korzyści i koszty członkostwa Polski w Unii Europejskiej [Benefits and costs of Poland's membership in the European Union – TN]*, Ed. by J. Kotyński, Instytut Koniunktur i Cen Handlu Zagranicznego, Warszawa 2000.

73 A. Maksimczuk, *Transformacja systemowa a problemy efektywności ... [Political transformation vs. efficiency problems... – TN]*, op. cit., chapter 6, item 6.3. *Czy częściowo przekształcone polskie rolnictwo końca lat 90. jest w stanie spełniać już wymogi efektywnościowe? [Is the partly transformed Polish agriculture of the end of the 90s able to meet efficiency requirements yet?],* pp. 168-172.

74 K. Wietrzyk-Szczepkowska*, Struktura polskiej gospodarki w okresie transformacji [The structure of Polish economy during transformation – TN]*, „Nowe Życie Gospodarcze" 2003 *[New Economic Life – TN]* no. 7, p. 4.

75 For more information: J. Wilkin, *Transformacja rolnictwa – inna perspektywa [Agricultural transformation – a different perspective – TN],* [in:] *Studia nad reformowaną gospodarką. Aspekty instytucjonalne [Studies on reformed economy. Institutional aspects – TN],*Ed. by M. Okólski, U. Standerska, Wydawnictwo Naukowe PWN, Warszawa 1996.

76 B. Sosnowska, *Zmiany poziomu i struktury wykształcenia ludności wiejskiej w okresie przemian ustrojowych gospodarki polskiej [Changes in the educational level and structure of the rural population during the political transformation of*

Losses resulting from the inefficient process of resource reallocation can be analysed on the basis of e.g.: structural (relative) work efficiency[77]. It is measured in a relation of GDP sector structure to sector structure of the professionally active. It is used for evaluating GDP changes as a result of changes in sector structure of the professionally active. It may be assumed that the reduction of the professionally active in an *i* sector and its proportional increase in a *j* sector, *ceteris paribus,* imposes a change by B_j-B_i; where B_j, B_i are relative indexes for work efficiency in the *i* and *j* sectors. In case of Poland, if work efficiency indexes of the year of 1994 were to be maintained, the reduction of the professionally active in the original sectors and its proportionate increase in the professionally active in the services sector, it would make total GDP grow by 1.9 – 0.23 = 1.04%[78].

One of significant factors that accounted for improperly working mechanism of resource reallocation in Poland at that time was the inefficiently working capital market. Crediting investment expenses of the enterprises (accompanied by credits in foreign currencies) made barely 17% in Poland, whereas in other countries – 70%-80%[79]. The volume of credits in proportion to GDP in the then Poland were approximately four times smaller than in the Euro-zone states. It was a consequence of, among others, high level of real interest rates and disproportions within the activeness of banking system and crediting between Poland and other countries. As much as 39.6% among the analysed enterprises considered unfavourable crediting conditions as a barrier in their operation in Q1 of 2001[80]. The role of the Polish stock market as a key element of the allocation process was as well insufficient[81]. This seriously hindered proper operation of the mechanism of resource reallocation. And, simultaneously, it limited the possibility for growth in competitiveness[82].

Efficient, mobile labour market is immensely crucial for the absorption of workers shifting from agriculture and heavy industry to other economy areas. The dynamics for structural changes in economy were visibly inappropriate with reference to the dynamics of demographic processes[83]. The presence of long-term imbalance on the labour market is one of factors that weaken the competitive capacity of the economy. It entails, in fact, lame use of the basic production resource and threatens with permanent loss of qualifications. It may also exhibit inaccuracies in the evaluation of the labour cost. And this may as well impair the efficiency of the mechanism for resource allocation.

the Polish economy – TN], „Rynek Pracy" 2002*[The Labour Market – TN]*, no. 1-2, p. 9.

[77] For detailed information on these relations: H. Leibenstein, *Poza schematem homo oeconomicus*. *Nowe podstawy mikroekonomii [Outside the homo oeconomicus pattern. New foundations for microeconomics – TN],* PWN, Warszawa 1988.

[78] Z. Panasiewicz, D. Strahl, *Długookresowe wzorce transformacji strukturalnej [Long-term patterns for structural transformation – TN]*. Międzynarodowe wzorce dla Polski *[International patterns for Poland – TN]*, Warszawa 1997, p. 30.

[79] *Konkurencyjność polskiej gospodarki: analiza wybranych czynników ekonomicznych [Competitiveness of the Polish economy: analysis of selected economic factors – TN]*, Rządowe Centrum Studiów Strategicznych *[Governmental Centre for Strategic Studies – TN],* Warszawa 2002, p. 16.

[80] *Badania koniunktury, koniunktura w przemyśle, budownictwie i handlu [Research on market conditions, market conditions in industry, construction and trade – TN]*, GUS*[Central Statistical Office in Poland – TN],*Warszawa 2001, p. 64 and M. Dusza, *Problemy polskiego rynku kapitałowego[Issues of the Polish capital market – TN*], „Bank i kredyt" *[Bank and credit – TN]* 2001, no. 3, p. 33.

[81] J. Czekaj, M.J. Woś, J. Żarnowski, *Efektywność giełdowego rynku akcji w Polsce [The efficiency of the stock market in Poland – TN],* PWN, Warszawa 2001, p. 158.

[82] J. Dubisz, *Periodyzacja rozwoju polskiego rynku kapitałowego [Periodisation of the development of the Polish capital market – TN],* „Gospodarka Narodowa" *[National Economy – TN]* 2000 no. 4, p. 78.

[83] Cf.: J. Kaliński, *Historia gospodarcza Polski 1989-2004 [Economic history of Poland 1989-2004– TN],* op. cit., pp. 55-60.

The State's expenditures in the first decade of transformations that were incurred towards human capital should be regarded as definitely unsatisfactory[84]. Moreover, they were inaccurately allocated and ineffectively applied. The above comparison points to the obvious downward trend in terms of the State's expenditures in human resources in Poland (from over 10% of GDP in 1991 for this cause - down to 7.7% in 1996 respectively). The downward trend was most observable in the case of expenditures on science, where it was 0.7% of GDP in 1991, 0.6% in 1993 respectively, and 0.5% in 1996. And this state of affairs should require definite intervention form the State[85]. The relation of "investment in the knowledge", i.e. expenditures on R&D activity and expenditures on education against GDP is not favourable, either[86]. Although this index in the European Union was in fact approximately 6.3% in 1995, and in Poland 6.14%, it should be noted that GDP in the EU is much higher[87].

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[85] *Konkurencyjność polskiej gospodarki: analiza wybranych czynników ekonomicznych [Competitiveness of the Polish economy: analysis of selected economic factors – TN]*, Rządowe Centrum Studiów Strategicznych *[Governmental Centre for Strategic Studies – TN]*, Warszawa 2002, p. 16.

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Bogusława Bek-Gaik
AGH University of Science and Technology, Poland

Ewa Walińska
University of Lodz, Poland

RESTRUCTURING OF FINANCIAL STATEMENT AS A RESPONSE TO THE CHALLENGES OF GLOBAL MARKET

Summary

The subject of consideration, introduced in this article, is the key restructuring activities undertaken within a framework of financial reporting, as a response to the challenges of globalization. The article consists of three main parts which respectively present the role of financial statement in terms of the global market, the proposal for a new business formula of financial reporting and the evolution of the financial statement towards an integrated business report.

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Introduction

The globalization process has an effect on all spheres of life, but mainly affects the business activities. The new model of doing business globally induces necessity for changes in the enterprise information system, which is accounting. The changes appear both in management accounting and in financial accounting, because in the global economy the information generated by the two sub-accounting systems is the key for determining success in business.

The purpose of this article is to point out the main changes in the financial accounting system, which became the answers to the challenges of globalization. Many authors researched this topic and they undertook various aspects of the development of modern accounting resulting from increasing globalization. Undoubtedly the area of financial reporting is where the development is the most visible, this is where one looking for standards of preparation and communication of information, designed to meet the expectations of the global financial markets.

The article presents, as it seems, the key restructuring operation in this area - Project Staff Draft of Exposure Draft, IFRS X Financial Statement Presentation - developed by the International Accounting Standards Board (IASB) and the American Council of the Financial Accounting Standards Board (FASB), determined as the business concept of financial statement. What is more, the Management Commentary, which was a versatile "holistic" report about the results achieved by a company- both financial and non-financial as well as the integrated reporting, were considered to be the remaining elements of the restructuring of the accounting system.

The article is based on the results of literature study and the analysis of the regulation concerning financial reporting, mainly issued by IASB / FASB. The opinions were also based on the practical research, which included the financial reports of Polish public companies.

The role of the financial statement in terms of the global market

In recent years the process of globalization has forced massive changes in all spheres of business including the information system, which is accounting. In the global economy, it should be a source of reliable and comparable information about the companies' economic activities for all stakeholders.

The risks associated with globalization - especially the growing risk of doing business - posed new challenges for accounting "related to the quality of information contained in the financial statement of the entity, what determines the application of national and international accounting standards, which are adapted to the specific nature of the company's activities and to information, which is required by all its stakeholders".

The global environment expects reliable financial statement, which should:
- be the effect of an integrated system of accounting (financial and managerial),
- be a tool for the implementation of the company's strategy,
- meet the information needs of different stakeholders,
- reflect the business model of the company,
- show the current financial condition and profitability of the company,
- take into account the state of the environment and conditions of the business,
- include a possible warning for the future.

The objective of financial statement set out in the Conceptual Framework is to provide financial information about the reporting entity that is useful to potential investors, lenders and other users, for making decisions about providing resources for the entity. It is emphasized that they must rely on financial reports, because they cannot impose reporting entities to provide information directly to them. The financial statements are intended to help in assessing the value of the reporting entity. To make this possible the information contained therein must meet quality characteristics: to be comparable, verifiable, timely and understandable, because the information has a major impact on the financial assessments in the global market and often decide on the validity of these decisions.

The processes of globalization caused the increase of users expectations regarding the quality of information contained in financial statements, which are the final product of the accounting system and are an essential source of information about the activities of the entity. Their receivers expect transparency of financial information, which ensures the security of business transactions in the global market. What is significant is the fact, that in the age of globalization the aim of economic activities is the increase of the value of a company, what leads to changes in the rules of its measurement in the accounting system.

The modern accounting offers an answer to the challenges provided by the global environment and harmonizes and standardizes the rules thanks to which the financial statement is clear and accurate.

In the global economy one is looking for answers to a series of questions in relation to the reporting model. Is it necessary to improve the current reporting model or shall it be completely changed? Is it

necessary to develop other forms of financial and non-financial reporting and move towards integrated reporting? How should the final financial statement look like in order to meet the increasing expectations of stakeholders? Surely it must be emphasized that the role of the financial statements in the global economy is unquestionable, because, so far, no other form of presentation of achievements and financial situation of a company has been found. The financial statement remains an essential element of information policy for companies operating in the global environment. There is need for improvement of information's structure and content. It should be emphasized that today the financial statements are criticized, the criticism intensified after the last economic crisis. One could say that the crisis has demonstrated the weakness of present financial reporting. Among allegations mentioned by stakeholders concerning financial statements there were for instance:
- a high degree of complication of the financial statements, which caused difficulties in its interpretation,
- ambiguity of the structure of financial statements,
- incomplete inclusion of all resources of the enterprise (e.g. lack of recognition of intellectual capital),
- the financial statements do not reflect the business model of the company.

Criticism of the informational content of financial statement caused a global discussion about the new concept of the financial statement. A number of restructuring measures were undertaken in this direction and they have been in motion for a long time now. These include the extension of responsibility for the financial statement on supervisory boards, proposals for additional disclosures made by the board (Management Commentary, integrated reporting), and the most important - proposal of the new business formula of reporting, developed by the International Accounting Standards Board together with the American Financial Accounting Standards Board.

It should also be noted that the conviction about the need to integrate financial and management accounting becomes more and more common, which means "mutual interpenetration" of financial and management accounting in the financial statement, which results in an extension of the scope of information in the financial statement"

Another challenge for the financial statement in the global environment is to extend the use of modern technologies, such as XBRL.

J. Samelak, among the directions of the evolution of financial reporting, lists:
– seeking to establish a market value of entity on the basis of financial statement,
– the desire to create and use worldwide global standards for the preparation and presentation of financial statements,
– searching for tools to determine the level of risk and its consideration in the financial statement,
– creation of an international business language based on the financial statement, which is based on fair value,
– conversion of the financial statement into business report.

The proposal of a new financial reporting model as a key restructuring operation of the accounting system

The ongoing debate about the final shape of the financial statement led to the development made by the IASB and FASB Project Staff Draft of Exposure Draft, IFRS X Financial Statement Presentation, which proposes far-reaching changes in the structure and the informational content of financial statements . It should be emphasized that the project is undoubtedly a proposal for a financial reporting model adequate to the global market, as it aims to improve communication and to increase transparency of financial information for all users of financial statement. Three key assumptions were adopted in the Project. Firstly, the financial statement should present a coherent picture of the company. This means that every component of the financial statement (i.e. balance sheet, income statement, cash flow statement) should reflect the same economic categories. Secondly, the information presented in the financial statement should be disaggregated in order to ensure the possibility of forecasting future cash flows of the company. Thirdly, the financial statement should help users in assessing the liquidity of the company and security of their funds . Under such assumptions the IASB and the FASB have developed a proposal of changes of the presentation of financial statement, based on separation in the financial statement section, categories and subcategories. This means that there will be an obligation of presenting the assets, liabilities, equity, revenues, expenses and cash flows in the individual sections, categories and sub-categories, which are the same for the balance sheet (statement of financial position), income statement (statement of comprehensive income) and cash flow statement.

The Project defines the following components of the financial statement:
– a statement of financial position at the end of period (balance sheet),
– a statement of comprehensive income for the period (profit and loss account),
– a statement of cash flows for the period,
– a statement of changes in equity for the period,
– notes, including a summary of significant accounting policies and other explanatory notes.

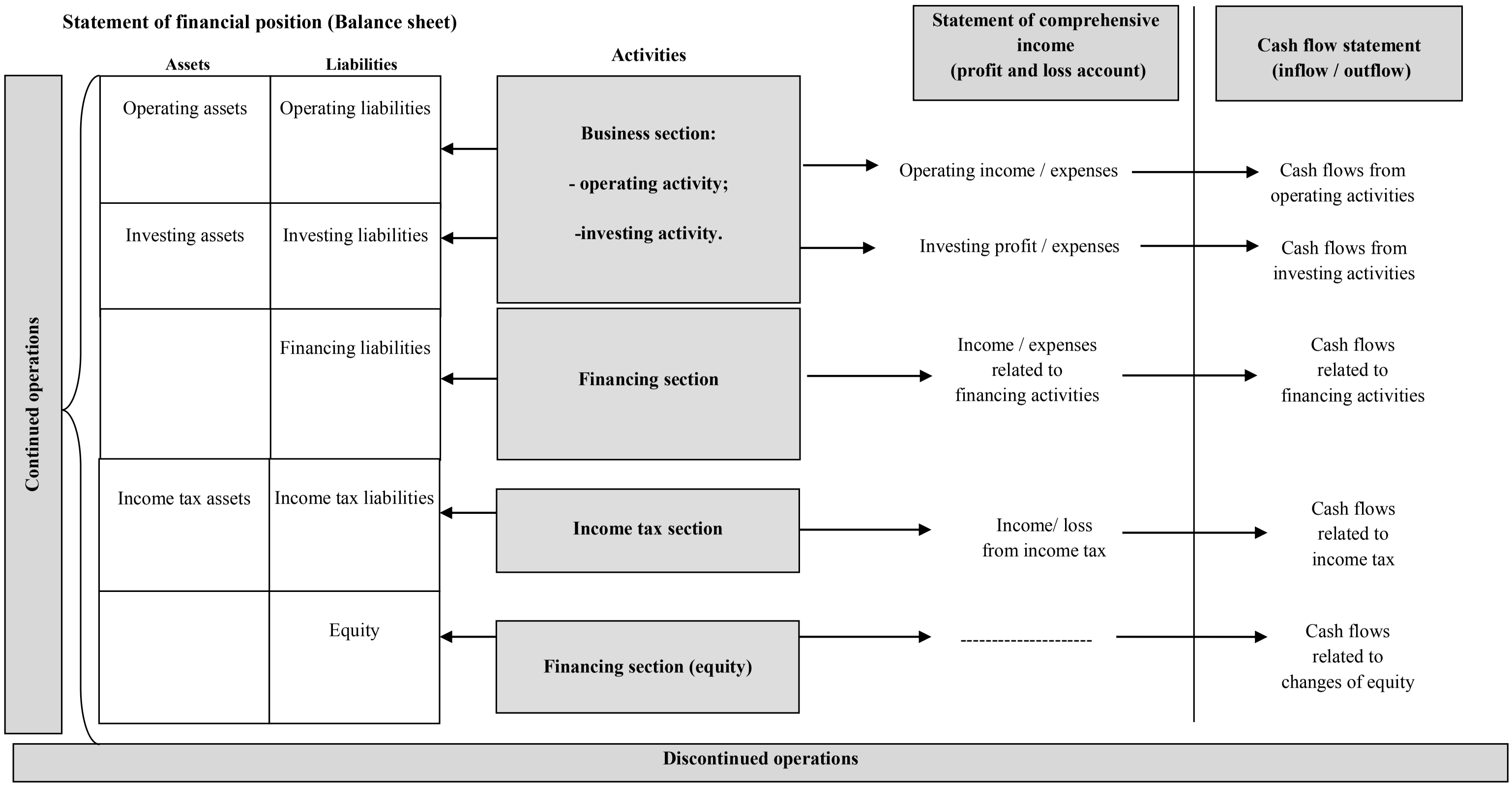
In all of these components of the financial statement, except notes, the following sections have been distinguished:
(a) section of business activity including the operating activities category and sub-category of financing operations and category of investment activity;
(b) financing section including debt and equity category;
(c) section of the income tax,
(d) section of discontinued operations;
(e) section of the transactions affecting a number of different categories (multi-category transaction section).

In the business section the unit should divide their business transactions into those that generate income from operations (operating activities category), and those that generate a return (profit) on individual items of assets (category of investment activity). The category of operating activities includes the assets and liabilities relating to the current daily business operations of the entity. Operating activities generate sales revenues that arise as a result of the process that requires the joint use of the entity's resources. Within the category of operational activities the project stands a subcategory of financing operations (operating finance subcategory) - it relates to the operations, which simultaneously provide long-term sources of finance for the entity.

As a part of the business section one should further distinguish investment activities, which should include such business assets / liabilities, where exploitation - according to executives –is not directly linked to operational activities. The investment category include, for example, assets that generate interest, dividends or benefit from the growth of their market value. The financing section includes all items that are a part of the entity associated with the acquisition and return of capital. It aims to present clear information about the capital structure of the entity and financing activities (financing performance), in which the company is involved. Category debt includes liabilities that are loan agreements made to obtain (or repay) the capital. Equity category includes all components of equity. Income tax section includes all assets and liabilities associated with both current tax and deferred. Discontinued operations section encompasses the assets and liabilities relating to discontinued operations according to the definition of that term contained in IFRS.Under the transaction section, which are affecting many categories (multi-category transaction section), the net impact of the acquisition / disposal of another unit, resulting in inclusion / deletion of assets and liabilities in more than one section or category in the statement of financial position, are recognized.

The classification of the elements of financial statement by type of activity are shown in Figure 1.

Figure 1. Classification of elements of financial statement by type of activity



Source: *Staff Draft of Exposure Draft, IFRS X* ..., op. cit., pp. 72-74.

In summary, the Project will contribute to the overall change in the structure of the key elements in the financial statement, thus presenting a new information structure, which seems to reflect the business activities better and is accountable for two major concerns about decision making - decisions related to investments and decisions on how to finance, which means the two most important decisions that the manager has to make.

Other restructuring activities in the financial reporting

In order to meet the challenges of the global environment it is essential to search for other than financial statements forms of information about the activities of the company. Modern theories of the company (e.g. theory of social responsibility, stakeholder theory, the theory of legitimacy and so on) justify the need for greater transparency of the company activities, emphasize the location of companies in society and its responsibility to the wider-ranging audience[1].

The Management Commentary is also in the area of interest of contemporary financial reporting[2] and since 2002 has become a subject of interest to the IASB[3]. It is a classic example of the evolution of the financial statements in the direction of a business report, a response to the expectation of greater transparency of reporting information about companies activities.

The Management Commentary[4] is defined as a "narrative" report, which goal is to provide information that allow better understanding of the financial position, results of operations and cash flows. Furthermore, it should include the objectives taken by the management and strategies to achieve them. This report is particularly useful for the providers of capital, due to the generated information that help to assess the prospects of companies action and the associated risks, as well as assessment. The Management Commentary is currently a part of the annual report of the company and an integral part of the information to investors. It should explain the main trends and factors that have a direct impact on earnings generated in the future, therefore, it refers not only to the present but also to the past and future –it must represent the opinion of the board in terms of operating results, financial position and development, as well as it must complement the information presented in the financial statement. The Management Commentary is divided into the following parts[5]:

Part 1 - the essence and nature of the companies' operations (nature of the business) - presentation of the industry's core markets with competitive position, significant features of the legal, regulatory and macroeconomic environment, the main products, services, business processes, distribution methods, structure and individual model of business;

Part 2 - objectives and strategy of the Board;

1 G. Borys, *Środowiskowe aspekty zawartości rocznego raportu i rocznego sprawozdania finansowego spółki* [in:] *Rachunkowość w zarządzaniu jednostkami gospodarczymi,* Ed. by T. Kiziukiewicz, Uniwersytet Szczeciński, Akademia Rolnicza, Szczecin 2005, p. 353.

2 In the preface to International Financial Reporting Standards, there are mentioned scope and obligation to apply International Financial Reporting Standards (IS), Volume I, the AAP, the IASB 2011): "(...) Other forms of financial reporting includes information provided outside financial statement, the information assist in the interpretation of all parts of the financial statements or improves users' ability to make effective economic decisions (*Międzynarodowe Standardy Sprawozdawczości Finansowej (MSSF)*, Tom I, SKwP, IASB 2011).

3 8 December 2010, the IASB published an International Financial Reporting Standard (IFRS) - *Practice Statement Management Commentary. IFRS Practice Statement Management Commentary. A framework for presentation*, IASB, Londyn 2010.

4 http://www.ifrs.org/Current-Projects/IASB-Projects/Management-Commentary/IFRS-Practice-Statement/Documents/Managementcommentarypracticestatement8December.pdf, date read: 30.03.2013.

5 See: *IFRS Practice Statement Management Commentary. A framework for presentation*, op. cit.

Part 3 - information about the resources and relations with the environment, including information on intellectual capital, information on the basic sources of risk, and relations with stakeholders; analysis of the relations with customers, suppliers, investors, contractors and cooperators to determine how these relations may affect the business and the value of the company, analysis of risks: strategic, commercial, financial and operational;

Part 4 - results of operations and future prospects, including information on:

- the relations between the results of the entity, management objectives and their strategies,
- significant changes in financial position, liquidity and the result compared with the previous period or periods,
- financial and non-financial objectives planned to achieve in the future as a basis for understanding the long-term strategy of the company and determine its value,
- risks and assumptions that will allow users to estimate the probability of achieving its objectives;

Part 5 - basic measures in terms of results and the indicators that will evaluate the performance of the individual in the context of its objectives, including key factors for the company's success.

Analyzing the Management Commentary one may conclude that it is a response to the growing needs of investors and focuses on the business model of the company, its resources and relations, which are used and shaped, called "capitals": human, intellectual, natural, social and financial.

Another element of the restructuring of the financial reporting activities is integrating financial and non-financial data into a single document known as integrated reporting. The integrated reporting is next to the Management Commentary a new area of financial and non-financial data reporting. Currently the most important institution dealing with reconstruction of the reporting model towards integrated reporting is the IIRC (International Integrated Reporting Council)[6].

Integrated reporting is an example of the evolution of the financial report towards business report, from which, as it seems there is no turning back. Today it is well known that the financial statement does not meet the information needs of stakeholders and, therefore, business report become necessary and would include 'a description of the environment, (...) a list of the key factors benefiting to the creation of value, disclosures regarding the strategic and operational plans, analysis of the competitiveness of the company, analyzes and reports on risk"[7]. The general structure of an integrated report is as follows:

1. General description of the company and its business model,
2. The management structure, remuneration policy,
3. Conditions of operation, business risk, business opportunities,
4. Summary of results from operations and assessment of the objectives,
5. The strategic objectives for the future (plans / assumptions).

As it is outlined by the structure the primary objective of integrated reporting is to combine financial information with the report of activities (Management Commentary) and other non-financial information,

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[6] IIRC (International Integrated Reporting Council) - was established in August 2010 and its main objective is to create a universally acceptable framework for integrated reporting. The aim is to investigate innovations of the business reporting processes (internal and external) and take into account all aspects of the creation of value (financial, tangible and intangible). On 12 September 2011 a discussion paper entitled "Integrated Reporting - Towards Integrated Reporting - Communicating Value in the 21st Century" was published. There were presented proposal for the development of an international integrated reporting model, which is clear and simple and would combine basic information about the company's strategy, business model, corporate governance, performance and prospects, reflecting the economic, social and environmental conditions of the company's activities and facilitate decision-making.

[7] G. K. Świderska, *Wyzwania dla ekspertów rachunkowości wobec nowych koncepcji raportowania* [in:] *Rachunkowość wczoraj, dziś i jutro*, SKwP, Warszawa 2007, p. 330.

such as social and environmental information, information on corporate governance. Integrated reporting focuses on the future by providing information on the future successes of the company, providing information about the organization's ability to create and sustain value in the short, medium and long term[8]. It is a comprehensive report that includes the most important elements of information currently reported in separate documents (financial report, management report, the statement on corporate governance, sustainability report) into one coherent report. It should be emphasized that integrated reporting is a part of the concept of corporate social responsibility[9] and the concept of sustainability reporting[10].

Conclusions

Improving the financial statement is particularly important in the modern economy, in which the processes of globalization are on the rise and there is a growing demand for reliable and transparent financial information. Free movement of capital, particularly its allocation to the global financial markets, increases the risk of decision-making, hence the ever-increasing role of financial statements, which are the basic tool of a company's communication with the environment. The need for more and more information about the company's activities resulted in the need to search for a new model of global reporting. The work of two major global regulators in the area of financial reporting (IASB / FASB) is still in progress and results in new projects. Emphasis on transparency and comparability of reporting on a global scale is placed on the proposed solutions, because that the users expect, such a report will certainly strengthen the integration of capital markets, reduce the costs of preparing, facilitating analysis of the condition of enterprises, and thus facilitate the management decision-making in the global market.

Restructuring activities in the field of financial statements has been ongoing for a long time[11]. The joint work of the IASB / FASB became the key element of that and resulted in a revolutionary new Project suggesting the business concept of financial statement, so different from the one currently in force, aiming towards reflecting the entity's business model. One may whether the global environment expects such transparency of financial statements? Thus, the direction of change, a radical reconstruction of the reporting model is correct? Today, the question of what is the "ideal" model of the financial statements remains unanswered. But certainly there is need for improving the current reporting model to meet the requirements of all stakeholders and a new perspective, which is based on the value of the company and should be reflected in financial report.

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8 *Towards Integrated Reporting – Communicating Value in the 21st Century,* IIRC, 2011, http://theiirc.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011_spreads.pdf (20.02.2014).

9 The role of accounting in creating the social responsibility of business is emphasized by many authors for instance: E. Burzym, *Społeczny i ekologiczny aspekt współczesnej ewolucji rachunkowości w gospodarce rynkowej*, „Zeszyty Naukowe A.E." nr 401, Akademia Ekonomiczna w Krakowie, Kraków 1993, p. 5; E. Burzym, *Rachunkowość jako podstawa rozrachunku z tytułu społeczno – ekonomicznej odpowiedzialności przedsiębiorstw*, „Zeszyty Naukowe A.E." nr 329, Akademia Ekonomiczna w Krakowie, Kraków 1990, p. 12; M. Stępień, Z. Wydymus, *Rola rachunkowości w kształtowaniu społecznej odpowiedzialności jednostki gospodarczej*, „Zeszyty Naukowe A.E." nr 750, Akademia Ekonomiczna w Krakowie, Kraków 2007, pp. 79-99. M. Marcinkowska, *Roczny raport z działań i wyników przedsiębiorstwa*, Oficyna Ekonomiczna, Kraków 2004, p. 51.

10 J. Michalak, *Standardy sprawozdawczości zrównoważonego rozwoju. Stopień ich zastosowania na świecie i w Polsce. Perspektywy rozwoju na podstawie wyników badan empirycznych* [in:] *Perspektywy rozwoju rachunkowości, analizy i rewizji finansowej w teorii i praktyce*. Tom 2, Ed. by B. Micherda, Uniwersytet Ekonomiczny w Krakowie, Kraków 2010, pp. 26-38.

11 An important date in this restructuring is the year 2009, from which came into force the revised IAS 1, introducing a number of changes in the current reporting model, and above all, introduced the concept of comprehensive income.

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Iryna Storonyans'ka
Lviv Institute of Banking
University of Banking of the National Bank of Ukraine, Ukraine

Nazariy Popadynets
Institute of Regional Research of the NAS of Ukraine, Ukraine

THE VALUE OF REGIONAL STRUCTURAL POLICY IN MODERN CONDITIONS OF RESTRUCTURING AND REGIONAL DEVELOPMENT IN UKRAINE

Summary

The paper presents the essence and principles of regional structural policy. It was shown its main components and strategic objectives. Were established control subjects of structural policy in the region. Was determined that the goal of regional structural policy is to create conditions for entry into the market of all interested entities, communities and citizens considering territorial and economic specifics strategic direction of the country.
Key words: interregional relations, regionalization, regions, restructuring, regional structural policy development.

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Introduction

Global goal of socio-economic development of Ukraine, is to improve the quality of life. To achieve it is necessary to ensure a decent standard of living for the entire population, to build a democratic unitary state, an effective competitive economy in the world community.

In modern, complex, socio-economic and political conditions of Ukraine, under calls for federalism and the split of the state and the struggle of region to extended its rights, the political and economical formation, restructuring and development of the state and regional structural policy is important.

Problems of regional structural policy were examined by local researchers like S. Bila, J. Zhalilo, M. Kobzystyj, O. Luckiv, M. Maksymchuk, L. Fedulova, A. Cherevko, T. Shinkorenko S. Schultz et al.

However, despite the large number of publications in this area, in the national theory and practice of structural formation processes of the regions there is no comprehensive strategic approach to the realities and prospects of the development of region.

The value of regional structural policy

The aim of the study is to establish the merits of regional structural policy in terms of economic restructuring and regional development in Ukraine.

Regional structural policy includes a set of legal, administrative, economic and social activities undertaken by regional authorities[1].

Change of the content of regional structural policy sets in front of the regional economy new theoretical and practical problems.

The transition to a market economy has led to deep social and economic failures due to various conditions of the region to adapt to market conditions. In our view, particularly vulnerable regions are:

- highly concentrated industries that were unprofitable at market prices or sharply lost demand for their products,
- obtained earlier from the state budget significant subsidies and suddenly lost them.

Existing socio-economic differences of regions and the current structure of the state does not provide effective reform. Since the restructuring of regions is carried out in line with the strategic direction of the country and accounting for general economic trends, the need for economic restructuring has to clever combine two trends – regionalization and integration.

The essence of regionalization is accounted for in the all-region-specific structural, investment, financial policy; transferring a number of areas of reforms at the regional level (for example, reform in the residential sector); developing special programs for reforming regions with special conditions of development.

We believe that the spatial integration of the economy of the state and the regions should be directed to:

- stabilization of infrastructure integrating systems (main and regional transport links, energy and water systems),
- improve the mechanism of vertical and horizontal interactions of regions in market conditions[2],
- a unified foreign economic and interregional policy creates for all regions of the general conditions for entry into foreign markets.

Thus, state and regional structural policy must take into account combine the regionalization and integration as objective factors of dynamic economic development of the region and state.

Main directions of regional structural policy

Regional structural policy must be shown in the management of economic and social development defining inter-relationships, and must be a part of the strategy for socio-economic development of the region and the state as a whole. It should include the following main areas[3]:

- formation of the ratio of driving forces of regional development and ensure their cooperation;

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[1] S.O. Bila (edited by Prof.), *Mechanisms of formation of regional development priorities,* NISS, Kyiv 2013, p. 53.

[2] P. Dudkin, A. Dudkina, *Structural transformation of the regional economy development and its institutional support,* Galician Economic Journal, 2010, p. 95.

[3] N.M. Popadynets, *Structural policy of the region: trends and goals*, Materials of the conference, 2014, p. 370.

- determination of the ratio of the regional aspects of development and management of the economy;
- formation of a system of tools implementing structural policy in the region;
- support for depressed regions through the use of legislative and financial instruments;
- the development of underdeveloped areas, restructuring depressed industries;
- decentralization of agglomerations and areas of concentration of industrial production;
- the formation of technopark not associated with existing centers of industry;
- development and implementation of innovative projects in promising sectors of the economy;
- the creation of a vertically integrated manufacturing and industrial complexes;
- effective development of natural and human resources;
- an effective conversion of the military-industrial complex;
- rational distribution of innovative projects.

Without restructuring of structural policy distortions in both the region and across the country will grow. For Ukraine the regional structural policy is crucial and has specific meaning.

Due to the huge local, natural and geographical differences, national demographic, socio-economic and other conditions of a unified approach to the regions is impossible. During the formation of market relations role of regional structural policy is further increased for the following reasons:

- necessary to account for specific regions in the course of economic and structural reform;
- transfer of a number of powers from the national to the regional level, accounting differences at regional economy[4];
- inconsistency of long transformation of the national polity and the distribution of powers of government and regional authorities in the administrative reform;
- increasing the exploitation of raw materials and natural resources;
- high dependence on imports of high-tech and high-tech products;
- a significant proportion of industries with the moral and physical deterioration.

Strategic goals and objectives of regional structural policy

Given this, the strategic goals of regional development should be[5]:

- the formation of structural policy in market conditions with a high degree of competitiveness;
- diversification of the economy of industrial regions and major metropolitan areas through conversion of defense and civilian industries, infrastructure upgrades;
- revival of small towns and villages, restoring livelihoods in rural areas, the development of the municipal economy industrial and social infrastructure, restoring degraded agricultural lands;
- the formation of clusters by investment and production of integrated use of local raw materials and natural resources;
- development of export and import industries in regions with this most favorable conditions;
- formation of free economic zones and technology parks as regional centers of science;
- the preservation and further development of regional and inter-regional infrastructure networks (transport, communications), providing incentives and regional structural changes and efficiency of the regional economy;
- reduction and alignment gap on the level and quality of life of individual regions.

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[4] S.O. Bila, (edited by Prof.), *Regional dimension of socio-economic development and foundations of a new regional policy,* NISS, Kyiv 2013, p. 19.

[5] N.M. Popadynets, *Regional structural policy in strategic management of region* [Internet resource], [in:] http://www.conf.inem.lviv.ua/?page_id=142.

Regional structural policy, in our opinion, should consider how features of the socio-economic situation in the country and production dynamics are inherent in a particular region.

Hence, the purpose of regional structural policies is to create conditions for market entry of all interested entities, communities and citizens on the basis of territorial and economic specifics, the strategic direction of the country.

The strategic objectives of regional structural policy should include:

- implementation of major regional programs in terms of mutual participation of private investors and public investment;
- a combination of principles of the new economic mechanism of regional relations and the development of effective economic mechanism in the emerging market economy[6];
- development and adoption of the program bringing the economy of Ukraine and its regions from the economic crisis with maximum use of existing opportunities and benefits from specialization and updating of economy;
- identification of regional advantages of economic and social development that should be considered when implementing innovation, financial, investment and foreign policy[7];
- implementation mechanism of state and market regulation of regional economic development.

According to this, it is necessary to create the concept of long-term socio-economic development of Ukraine and provide a balanced socio-economic development of regions that require synchronization of three regional structural policy areas:

- stimulate economic growth by creating new centers of growth in the regions on the basis of competitive advantage,
- coordination of infrastructure investments and investment strategies of the state of business in regions with spatial development priorities and resource constraints, including demographics,
- reduction of differentiation in the level and quality of life in different regions and the territory of each of them through effective mechanisms of social and fiscal policies that support the expansion of human potential in all regions of Ukraine.

Implementation of these areas should be aimed at creating optimal conditions for the potential development of the region by addressing infrastructural and institutional constraints, improve coordination of government agencies, local government, business, people.

Basic principles of state policy aimed at regional development should consist of the following:

- coordination of adoption at the regional and local level measures to create conditions for economic and social sphere, their restructuring[8];
- formation of advanced centers of economic growth in the regions on the basis of competitive advantage;
- providing financial support to the regions in terms of reduction of differentiation and transformation;
- use mechanisms to encourage public authorities of regions and local authorities to effectively carry out their responsibilities;
- creating favorable conditions for complex socio-economic development.

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[6] M.O. Kobzystyy, *Institutional conditions of realization of structural changes in the transformation economy*, Scientific and Technical Information, 2005, p. 35.

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An innovative component of regional structural policy

To ensure the competitiveness of the regional economy structural policies should take into account the innovation component.

We need to work out the Concept of innovation and social vector of long-term socio-economic development of Ukraine in a regional perspective, the essence of which should be the following:

- restructuring of scientific, technical and educational potential of large urban agglomerations with a high quality environment and human potential, dynamic innovation and educational infrastructure (Kyiv, Kharkiv, Donetsk, Dnipropetrovsk, Odessa, Lviv regions);
- formation of territorial-industrial clusters focused on high-tech industries in the priority sectors of the economy of the state, the concentration of clusters in urban regions (all regions of Ukraine);
- formation of territorial-industrial clusters in less developed (poorly mastered) areas targeted for deep mining and processing of raw materials, energy production using modern technology (mechanized, resource and environmental) (Donetsk, Luhansk region, etc.);
- development of tourist and recreational areas with high levels of service delivery service in unique climatic conditions (Ivano-Frankivsk, Lviv, Zakarpattya and Chernivtsi regions, Crimea, etc.);
- the development of large transport and logistics and production units within the formation of core national transport network, which has the necessary potential of bandwidth and provides a holistic relationship centers of economic growth, with its gradual integration into the global transport system (Volyn, Dnipropetrovsk, Donetsk, Kiev, Lviv, Kharkiv region, etc.);
- reducing inter-regional and intra-regional differentiation in the level and quality of social protection and income, living standards convergence between the capital region and the provinces, cities large and small, urban and rural settlements (all regions of Ukraine);
- preservation of cultural diversity, traditional ways of life and employment of different nationalities in different regions of Ukraine (all regions of Ukraine).

Figure 1. Composition of the Regional structural policy

Summary of regional structural policy

Institutional frameworks for innovation development:	The development of competitive advantages:
• the adoption of a set of innovative legislation; • development of mechanisms for cooperation between government, business and the community; • the development of a competitive environment; • the development of the land market and real estate; • promotion of small and medium enterprises; • priorities for fiscal policy; • development of financial markets; • development of the banking sector; • improve the efficiency of public administration, etc.	• the development of high-tech enterprises and complexes; • a competitive transport system; • energy efficiency program; • a program of deep processing of wood; • program involvement in the economy of water resources; • the development of rural areas; • establishment of sectoral and cross-sectoral clusters; • the formation of associations of clusters and associations of employers; • application of agro-industrial complex; • development of vertically integrated structures, etc.

Source: own elaboration.

Figure 1 shows the components of regional structural policy, including a number of directions for their implementation.

An innovative component of regional structural policy, in our view, involves the formation of a regional innovation system.

Innovative direction of regional development includes not only a set of relevant laws, but also a new relationship between the key stakeholders: government, business and community with permeate economic life of the region and the role of locomotive in innovation given medium and small businesses, the development of which is necessary to form adequate infrastructure through innovative structural policies.

Conclusions

Structural policy in the region should include the modernization of the economy with the creation of high-tech enterprises, increasing energy efficiency, development of communications of all kinds, rational use of natural resources in the region, the formation of clusters in new and traditional sectors.

Structural policy of regions is realized through the interaction of government, business and the community, providing reforming and restructuring the economy and economic system based on innovation. Thus, the regional structural policy emphasis moved from extensive problem solving approach to the use of intensive methods; to limit the growth of large cities - the revival of small cities, satellite towns and rural settlements.

Thus, the content of structural policies can be represented as a set of legal, economic, organizational and administrative institutions designed to implement the goals and objectives of the regional government to manage political, economic and social development of the subject, to form innovative competitive economic system.

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PART II

THE TRENDS OF CHANGES IN THE SECTORS OF POLAND'S NATIONAL ECONOMY IN THE CONTEXT OF RESTRUCTURING

Stanisław Chomątowski
Cracow University of Economics, Poland

THE VARIETY AND THE TRENDS OF CHANGE IN THE BASIC ECONOMIC RELATIONS IN SMALL, MEDIUM-SIZED AND LARGE ENTERPRISES IN POLAND IN THE YEARS 2007 AND 2012

Summary

The paper presents the results of the measurement and assessment of the variety of the trends of change in the basic economic relations which shaped the development of small, medium-sized and large enterprises in Poland in the years 2007 and 2012. Their analysis proves the existence of a considerable variety in the sizes, directions and trends of change in technical devices,the productivity of fixed assets and work efficiency in individual kinds of business activities conducted by small, medium-sized and large enterprises. The quantitative and descriptive characteristics of the measurement results of the variety and the trends of change in the basic economic relations indicates not only their causes but also an influence on the factors shaping the development of small, medium-sized and large enterprises.

The results of the assessment of the variety and the trends of change in the basic economic relations are a premise for the research aiming at the quantification of the factors of development of small, medium-sized and large enterprises.

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Introduction

Among numerous changes characterizing the economic development of Poland during so-called system transformation, which, in the first place and to a great extent, influence the economic and the social situation of the country and all business entities, fundamental are the ones which have occurred in the sector of enterprises[1]. They are visible when we analyze the dynamics and the directions of development included in the mentioned functional sector of the national economy of business entities in all structural cross-sections by forms of ownership, legal and organizational forms, kinds of business activities (sections and divisions of the Polish Classification of Activities - PKD), as well as sizes[2]. Such analyses enable to become acquainted with and assess the variety and directions of changes which have been shaping and characterizing the development of enterprises in the mentioned cross-sections, starting from 1990s[3] to date.

The research findings included in the paper enable to learn the degree of variety and trends of change in the basic economic relations which not only characterized but also shaped the development of small, medium-sized and large enterprises in Poland in the years 2007 and 2012[4]. They also create a basis for the preliminary analysis and assessment of the impact of the mentioned changes in the studied values and basic economic relations on the development of the isolated groups of enterprises in Poland in the years 2007 and 2012.

The object of the study were three groups of enterprises isolated by their size measured with the number of people working in them. The first group includes enterprises in which the number of workers was 10 - 49 people, the second one includes firms employing 50 - 249 workers and the third one - employing more than 249 workers.

Changes in three economic values characterizing and shaping the development of the studied enterprises were analyzed and assessed, namely:
– the number of workers,
– the gross value of fixed assets,
– the values of sales revenues in the period from 2007 to 2012.

The three mentioned economic values were used not only as the measures of enterprise sizes and measures of the structure by type (by PKD sections) of the business activities conducted by them but they also served to calculate the basic economic relations (average technical devices, productivity of fixed assets, value of revenues on the entirety of the conducted business activities). On the basis of the figures being the quantitative and value-based characteristics of the three measures of the size and structure of business activities conducted by the analyzed and assessed groups of enterprises, the three basic economic relations were calculated. Then, the indicators of the dynamics of their changes in the years 2007 and 2012 were calculated by kinds (PKD sections) of the conducted business activities. Due to this, a possibility occurred to compare not only the changes in each of the three values but also three economic relations calculated on the basis of them in the years 2007 and 2012. It enabled to determine the impact of the degree of changes in the size of employment, fixed assets, sales revenues per each economic relation, as well as to compare and assess their variety characterizing the totality of enterprises included in the small, medium-sized and large enterprises and the trends of change in individual sections

1 R. Borowiecki, *The Challenges and Dilemmas in Corporate Management in the Conditions of Economic Uncertainty and Instability* [in:]*Contemporary Economies in the Face of new Challenges. Economic, Social and Legal Aspects*, Ed. by R. Borowiecki, A. Jaki, T. Rojek, Foundation of the Cracow University of Economics, Cracow 2013, pp. 17-28.

2 *Dynamika i kierunki zmian wielkości i struktury sektora przedsiębiorstw w Polsce w latach 1990-2005*, Ed. by S.Chomątowski, Foundation of the Cracow University of Economics, Cracow 2009, pp. 11-36. See also: K. Poznańska, *Zarządzanie małym i średnim przedsiębiorstwem* [in:] *Przedsiębiorczość, Jak założyć firmę?*, Ed. by H. Godlewska, Oficyna Wydawnicza SGH, Warszawa 2009.

3 B. Siuta, *Przedsiębiorczość w Polsce w świetle uwarunkowań działalności gospodarczej w latach 90.,* Zeszyty Naukowe A.E. nr 631, AkademiaEkonomiczna w Krakowie, Kraków 2003, pp. 290-295.

4 They were obtained during the implementation of the statutory research project entitled "*The Variety of Basic Economic Relations Shaping the Development of Small, Medium-Sized and Large Enterprises in Poland in the Years 2007–2013"*, S. Chomątowski, K. Kolegowicz, P. Krzemiński and W. Szymla, The Department of Economics and Organization of Enterprises of the Cracow University of Economics, Cracow 2014.

of business activities. And that enabled an analysis and assessment of changes in the level of varietyat the beginning and at the end of the analyzed period, and the determination of trends of change in the analyzed values and economic relations. In turn, the results of the calculations of the structure of the studied enterprises' activities by kinds of conducted business activities (the structure of employment, the structure of the value of fixed assets and sales revenues) enable to find out not only which kinds of business activities influenced the development of small, medium-sized and large enterprises to the greatest extent and determined their place in the national economy of Poland[5].

Their comparison in the first and the final year of the analyzed period facilitated the preliminary assessment of the relationship between the kind and the scale of the conducted business activities and the variety and dynamics of changes in the values and the basic economic relations shaping the development of small, medium-sized and large enterprises in total and conducting the same kinds of business activities.

Technical devices, productivity of fixed assets and work efficiency in small, medium-sized and large enterprises in the years 2007 and 2012

The results of the calculations of the first of the three assessed basic economic relations indicate a considerable variety of their value in small, medium-sized and large enterprises, both in the first and in the final year of the analyzed period of their development. The value of the average technical devices presented in Table 1 was bigger in 2012 than in 2007 almost in all section of business activities in both small, medium-sized and large enterprises. The value calculated based on the data characterizing the totality of small, medium-sized and large enterprises, as well as the majority of enterprises characterizing small, medium-sized and large enterprises conducting business activities qualifying them to the same PKD sections was most frequently biggest in large enterprises. In three sections it was like the one in 2007 and 2012 (the enterprises of processing industry, water supply, sewage and waste management and remediation activities, as well as those conducting their activities in retail sale and wholesale, repair of motor vehicles, including motorcycles).

In 2007 in three, and in 2012 in four sections of business activities, the order of enterprises with regard to the value of technical devices was corresponding to their sequence settled according to the criterion on the basis of which they were included in the group of small, medium-sized and large enterprises (the number of employees). In three cases those were enterprises conducting the same business activities. In the group of enterprises employing from 10 to 49 people, the smallest value of technical devices was characteristic for and shaping business entities conducting activities in healthcare, social work and education. The situation was similar in this class of enterprises in 2012, but the order of enterprises with the lowest workplace equipment was reverse. The biggest value of average technical devices was

[5] In numerous publications devoted to the development of small, medium-sized and large enterprises, a lot of attention was paid to their place in the economy of Poland, their impact on the economic and social development of the state, the conditionings of their development. There are many more works devoted to the identification of the conditionings, including the barriers to the development than the works in which there is quantification of the factors of development and indication of causes which would bring about an increase in the level of the use of the conditions created by the hitherto development of small, medium-sized and large enterprises and the rise of the effectiveness of the economic potential of small, medium-sized and large enterprises. The development of the directions of the research fit in the other of the mentioned research streams in not only purposeful but also possible due to extensive factual material and quantitative characteristics of the development of small, medium-sized and large enterprises in doctoral, habilitation theses, books, articles, papers, as well as studies and statistical information published by the Central Statistical Office of Poland. The last of the mentioned sources of figures was used in the research the aim of which was the assessment of the variety and the trends of change in the basic economic relations in small, medium-sized and large enterprises in Poland in the years 2007 and 2012.

Table 1. Technical devices[1)]in small, medium-sized and large enterprises in Poland in the years 2007 and 2012 (in thousands PLN)

Kinds of business activities (PKD sections 2007)	2007			2012		
	Enterprises					
	small	medium-sized	large	small	medium-sized	large
Agriculture, forestry, hunting and fishing	149.8	144.8	413.2	258.8	247.3	487.2
Mining and quarrying	181.7	205.3	182.0	303.0	314.6	364.0
Processing industry	71.5	85.2	184.2	121.9	126.7	288.3
Electricity, steam, hot water and air conditioning manufacturing and supply	488.6	1722.2	1018.0	888.7	820.2	2086.6
Water supply, sewage and waste management and remediation activities	209.2	249.2	470.0	315.4	433.6	799.7
Construction	141.7	55.8	227.3	208.5	108.9	117.2
Wholesale and retail sale, repair of motor vehicles, including motorcycles	73.6	93.7	160.0	113.9	127.5	174.6
Transport and warehouse management	182.2	100.0	151.0	170.5	135.3	251.5
Accommodation and food service activities	110.4	210.6	142.8	240.3	264.0	216.3
Information and communication	115.9	159.5	763.0	179.6	177.8	829.0
Financial and insurance activities	5608.2	5191.6	141.9	1624.2	2106.1	496.3
Real estate activities	1487.3	1393.9	1100.4	1530.5	1147.7	333.0
Professional, scientific and technical activities	151.9	87.9	106.9	338.3	198.2	333.0
Administering and support activities	456.9	111.7	34.3	197.4	174.2	36.1
Education	43.8	•	102.2	63.8	•	•
Health care and social work activities	27.8	48.6	48.1	73.9	89.5	84.3
Culture, amusement and recreation activities	251.6	150.1	104.8	267.0	336.3	142.6
Other service activities	178.4	52.6	38.5	89.6	•	•
Total	**199.4**	**176.7**	**224.6**	**229.7**	**202.3**	**350.5**

[1)] calculated as a quotient of the gross value of fixed assets and the number of workers (as of 31 December).

Source: own study and calculations based on the detailed research findings obtained during the implementation of the statutory research entitled "*The Variety of Basic Economic Relations Shaping the Development of Small, Medium-Sized and Large Enterprises in Poland in the Years 2007–2013*", authors: S. Chomątowski, K. Kolegowicz, P. Krzemiński, W. Szymla, The Department of Economics and Organization of Enterprises of the Cracow University of Economics, Cracow 2014.

characteristic for the activities of enterprises conducting financial and insurance activities, as well as real estate activities. Also in the group of medium-sized enterprises, enterprises conducting the same kinds of business activities were similar in respect of the value of the biggest and smallest number of technical devices. In firmsqualified as large enterprises, the smallest number of technical devices was characteristic for the state of development of enterprises conducting administrative service activities, other service activities and health care and social work activities. The biggest number of technical devices was characteristic for electricity, steam, hot water and air conditioning manufacturing and supply enterprises (in 2007), as well as water supply, sewage and waste management, as well as remediation enterprises (in 2012).

In five kinds of business activities conducted by small enterprises, the number of technical devices was smaller than average in all enterprises included in this group of enterprises. In 2012, it was smaller in six sections of business activities, in four cases they were the same sections as in 2007.

In the group of medium-sized enterprises, in seven sections of business activities in 2007 and in six in 2012 the value of technical devices was smaller than the average characterizing the totality of medium-sized enterprises.

In enterprises employing more than 249 workers, in sixteen sections of business activities the value of technical devices was smaller, and in two it was larger than the average in all large enterprises in 2007, and in 2012: in fifteen and one, respectively, with no data available in two PKD sections.

The indicated differences between the average value of technical devices in small, medium-sized and large enterprises in total and in individual sections partially explain differences between the average value of technical devices characterizing the state of development of small, medium-sized and large enterprises in 2007 and 2012 and the value of its change in each group, which occurred in the period of 2007 and 2012. The economic relation analyzed here in 2012 was bigger than its value in 2007 by over 30 thousand zlotys in small enterprises, by 256 thousand zlotys in medium-sized enterprises and by almost 126 thousand zlotys in large enterprises. Tables 2 and 3 include the results of the calculations of the productivity of gross fixed assets and the value of sales revenues per one employee. The productivity of fixed assets calculated for the totality of enterprises in both years was the biggest in small enterprises, and in medium-sized enterprises it was bigger than its value in large enterprises (Table 2).

In small and medium-sized enterprises, the value of productivity of fixed assets was bigger in 2012, and in large enterprises it was smaller than in 2007. The analyzed groups of enterprises also differ in respect of the number and kinds of business activity sections, in which productivity is bigger than its average value characterizing the totality of small, medium-sized and large enterprises. In 2007, the productivity of fixed assets was bigger than its average value characterizing the totality of small enterprises, those were the ones which conducted activities in wholesale and retail sale, repair of motor vehicles and motorcycles, processing industry, education, health care and social work activities, electricity, steam, hot water and air conditioning manufacturing and supply and conducting information and communication activities. In 2012, in the group of medium-sized enterprises with productivity higher than average, there were five enterprises with the same sections of business activities as in 2007. There were not any enterprises included in the following PKD sections: healthcare and social work activities in this group.

Table 2. Productivity of fixed assets[1)]in small, medium-sized and large enterprises in Poland in the years 2007 and 2012 (in PLN/PLN)

Kinds of business activities (PKD sections 2007)	2007			2012		
	Enterprises					
	small	medium-sized	large	small	medium-sized	large
Agriculture, forestry, hunting and fishing	1.20	1.16	0.68	1.17	1.26	0.95
Mining and quarrying	1.80	1.41	1.21	1.14	1.11	1.02
Processing industry	3.99	3.06	2.75	3.40	2.89	2.72
Electricity, steam, hot water and air conditioning manufacturing and supply	3.04	0.88	0.70	3.52	1.60	0.66
Water supply, sewage and waste management and remediation activities	0.73	0.68	0.38	0.88	0.55	0.36
Construction	2.20	5.31	1.54	2.00	3.41	4.24
Wholesale and retail sale, repair of motor vehicles, including motorcycles	10.46	9.10	4.64	8.43	7.95	5.11
Transport and warehouse management	2.13	2.89	0.98	3.14	2.71	0.77
Accommodation and food service activities	1.13	0.64	0.82	0.74	0.57	0.68
Information and communication	2.77	2.00	0.80	2.42	2.11	0.78
Financial and insurance activities	0.39	0.25	1.09	1.62	0.31	0.46
Real estate activities	0.17	0.17	0.22	0.23	0.30	0.38
Professional, scientific and technical activities	2.25	3.14	1.94	1.06	1.69	0.67
Administering and support activities	0.66	1.20	1.32	1.49	1.21	2.14
Education	3.84	•	1.61	2.83	•	•
Health care and social work activities	3.58	1.88	2.02	2.30	1.55	1.57
Culture, amusement and recreation activities	1.53	4.47	9.18	1.83	2.47	7.50
Other service activities	0.81	3.04	5.81	2.08	•	•
Total	**2.39**	**2.23**	**1.84**	**2.67**	**2.39**	**1.72**

[1)] calculated as a quotient of sales revenues and the gross value of gross fixed assets.

Source: as in Table 1.

Table 3. Work efficiency[1)] in small, medium-sized and large enterprises in Poland in the years 2007 and 2012 (in thousands PLN)

Kinds of business activities (PKD sections 2007)	**2007**			**2012**		
	Enterprises					
	small	**medium-sized**	**large**	**small**	**medium-sized**	**large**
Agriculture, forestry, hunting and fishing	179.9	167.8	281.8	302.1	311.3	464.5
Mining and quarrying	326.4	290.1	220.8	346.6	348.5	371.1
Processing industry	285.5	261.1	505.8	414.7	365.6	783.3
Electricity, steam, hot water and air conditioning manufacturing and supply	1484.1	1516.4	716.8	3128.5	1311.2	1367.9
Water supply, sewage and waste management and remediation activities	153.7	170.5	180.9	278.0	238.4	288.9
Construction	312.1	296.0	350.6	416.7	370.6	496.6
Wholesale and retail sale, repair of motor vehicles, including motorcycles	769.9	853.3	667.0	960.3	1014.2	891.9
Transport and warehouse management	387.6	262.5	147.7	535.6	366.0	193.6
Accommodation and food service activities	124.2	134.2	116.5	178.7	151.8	146.9
Information and communication	321.4	318.8	611.4	435.4	374.4	648.4
Financial and insurance activities	2209.9	1287.9	154.2	2633.2	650.4	229.2
Real estate activities	258.4	242.2	239.9	359.1	341.6	371.3
Professional, scientific and technical activities	341.2	275.8	207.0	359.2	334.2	221.9
Administering and support activities	299.9	133.6	45.4	294.2	210.0	77.3
Education	167.9	•	164.7	180.7	•	•
Health care and social work activities	99.7	91.5	97.4	170.3	138.6	132.0
Culture, amusement and recreation activities	384.0		961.4	487.9	829.2	1069.7
Other service activities	144.1	•	223.7	186.3	•	•
Total	**477.37**	**393.7**	**412.3**	**613.2**	**483.2**	**602.7**

[1)] calculated as a quotient of sales revenues and the number of workers (as of 31 December).
Source: as in Table 1.

In 2007, in the group employing over 249 workers, there were enterprises conducting business activities related to culture, amusement and recreation, other service, retail sale and wholesale activities, and related to repairs of motor vehicles and motorcycles, processing industry enterprises and enterprises qualified into the professional, scientific and technical activities section. In 2012, the productivity of fixed assets was bigger than the average in the group of large enterprises, also including the ones which conduct activities connected with culture, amusement and recreation, enterprises of wholesale, retail sale and service provided in them, as well as enterprises included in the sections of construction, processing industry, administering services and support activities. The change in the productivity of fixed assets in each of the compared groups of enterprises in the analyzed period is characterized by an upward trend.

The average work efficiency measured by the value of revenues on the entirety of business activities in the initial and the final year of the analyzed period of the development of small, medium-sized and large enterprises, as it is indicated by the results of the calculations included in Table 3, was biggest in small enterprises. In large enterprises it was bigger than in medium-sized ones, but in the first group in was smaller in 2012 than in 2007, and in small medium-sized enterprisesit was bigger. The comparison between the values of economic relations characterizing small, medium-sized and large enterprises similar in respect of conducted activities and the value of the average relation in each of the mentioned groups indicates that in small and medium-sized enterprises in the same PKD sections it is bigger than the average efficiency for the total number of enterprises qualified as the mentioned groups. The sections are: electricity, steam, hot water and air conditioning manufacturing and supply, wholesale and retail sale, repair of motor vehicles, including motorcycles, financial and insurance activities, both in2007 and in 2012. Also in the group of large enterprises in the same four PKD sections, work efficiency was bigger than the average characterizing the totality of those enterprises in 2007 and 2012. The sections were the same as the three mentioned in the first place in the group of small and medium-sized enterprises, and the enterprises of processing industry, construction, and information and communication in 2012.

The presented results of the comparisons prove that the assessment of the values of the basic economic relations characterizing the totality of small, medium-sized and large enterprises is insufficient to explain the reasons for the variety of their sizes and trends of change. Moreover, the analysis of the compared groups of enterprises by kinds of conducted business activities is also insufficient, as it was presented in the paper. Additional explanation of the reasons for the variety of the values of employment, fixed assets and sales revenues, and the basic economic relations calculated on their basis is possible owing to the analysis and assessment of the research included in the subsequent parts of the paper.

The dynamics and trends of change in the size of employment, the value of fixed assets and sales revenues in small, medium-sized and large enterprises in the years 2007 and 2012

Small, medium-sized and large enterprises differ not only in the size of conducted activities whose most often applied measure and at the same time the criterion of the classification of enterprises is the size of employment measured by the number of people employed in them[6]. Size classes which include the enterprises of the analyzed and assessed group are determined arbitrarily and defined in legal regulations governing business activities. Also statistical offices, based onreceived statements, apply the mentioned criterion in the elaborations published on their basis and including data about enterprises. It is a reason

[6] K. Poznańska, *Małe i średnie przedsiębiorstwa w Unii Europejskiej* [in:] *Eurobiznes*, Ed. by M. Nowakowski, Oficyna Wydawnicza SGH, Warszawa 2008.

for which an analysis and assessment of the development of an enterprise are most frequently made on the basis of only one of the measures of its size, at the same time being the measure of the potential of work involved in the development of enterprises. Its size and its structure considerably influence the use of the remaining components of enterprise production potential[7], being, just like employment, a factor of production, thus, the values and the structures of possessed fixed assets, ground (land) and natural resources, as well as technical infrastructure located on its surface. Therefore, in the analysis and assessment of the development of enterprises, it is not enough to apply one measure of their size, but also the two other measures assumed in the business activity regulations as the criteria on the basis of which they are included in small, medium-sized and large enterprises. These are the value of fixed assets and sales revenues.

Enterprise development is a multidimensional process. The measurement and the assessment of enterprise development on the basis of numerous changes, or at least the basic values, provide us with additional data which enable not only more comprehensive assessment of development but also learning the factors which shape the development and influence its economic and financial effects[8]. By having data about the three values shaping enterprise development it is possible to calculate quantitative proportions among the following values: the number of workers, the value of fixed assets and sales revenues. The results of such calculations are presented in Tables 1, 2 and 3. They include data about the three basic economic relations which characterize those proportions and at the same time constitute the quantitative characteristics of the factors shaping enterprise development and its effects. Each of the relations is an economic category and enables to determine the impact of the changes in the values of technical devices, the productivity of fixed assets and work efficiency on enterprise development measured with them.

The results of the calculations included in Table 4 not only enable to explain the reasons of changes in the economic relations calculated on their basis but also to conduct a preliminary analysis and assessment of the impact of changes in the size of employment and the value of fixed assets on the changes in sales revenues which, as it is known, are a commonly used measure of the summary economic effect of enterprise development. Only in four sections of business activities conducted by small enterprises, the dynamics of employment was bigger than the dynamics of fixed assets: transport and warehouse management, financial and insurance activities, administering and support activities, other service activities and the dynamics calculated for the totality of enterprises.

In the remaining sections of business activities, the dynamics of the value of fixed assets was bigger than employment, which indicates that technical progress had a bigger impact on their development than in previously mentioned kinds of business activities. In ten sections of business activities conducted by small enterprises, the dynamics of fixed assets was bigger than the dynamics of sales revenues (agriculture, forestry, hunting and fishing, mining and quarrying, processing industry, construction, wholesale and retail sale with services included in it, accommodation and food service activities, information and communication, professional, scientific and technical activities, education, health care and social work services).

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[7] B. Siuta-Tokarska, *Zasadnicze aspekty pomiaru przedsiębiorczości*, Organizacja i Kierowanie no. 3 (156), 2013, pp. 99-102.

[8] R. Borowiecki, A. Balcerek-Wieszała, *Restrukturyzacja a zarządzanie zmianą – próba uporządkowania pojęć* [in:] *Dylematy współczesnych przedsiębiorstw w procesie restrukturyzacji. Dywersyfikacja – integracja – rozwój*, Ed. by R. Borowiecki, A. Jaki, Foundation of Cracow University of Economics, Cracow 2011, pp. 15-32.

Table 4. The dynamics of economic values shaping and characterizing the development of small, medium-sized and large enterprises in Poland in the years 2007 and 2012 (2007=100)

Kinds of business activities (PKD sections 2007)	**Enterprises**								
	small			**medium-sized**			**large**		
	Z	**M**	**Ps**	**Z**	**M**	**Ps**	**Z**	**M**	**Ps**
Agriculture, forestry, hunting and fishing	84.4	145.7	141.7	77.9	132.0	143.4	92.2	108.7	152.3
Mining and quarrying	171.2	285.7	181.8	110.6	160.4	132.8	93.5	187.0	157.1
Processing industry	110.4	188.4	160.4	93.6	139.1	131.0	89.2	139.6	138.2
Electricity, steam, hot water and air conditioning manufacturing and supply	100.1	183.0	212.1	87.7	41.8	75.8	100.0	205.5	191.3
Water supply, sewage and waste management and remediation activities	131.2	197.8	237.3	116.3	202.3	162.6	108.3	184.3	173.0
Construction	134.5	197.9	179.5	98.8	173.3	111.2	97.2	45.0	123.6
Wholesale and retail sale, repair of motor vehicles, including motorcycles	107.0	165.5	133.4	94.4	128.3	112.1	112.7	137.0	150.7
Transport and warehouse management	148.8	139.2	205.7	112.8	167.8	157.3	93.6	156.0	122.8
Accommodation and food service activities	126.9	276.1	182.6	132.8	166.5	150.2	98.4	149.0	124.0
Information and communication	156.3	242.3	211.8	129.0	143.7	151.4	116.6	126.7	123.6
Financial and insurance activities	162.6	47.1	193.7	198.0	80.3	99.0	105.2	368.0	156.3
Real estate activities	114.6	118.0	159.3	99.9	81.7	139.9	105.2	93.1	162.9
Professional, scientific and technical activities	144.9	322.7	152.5	112.3	253.2	136.0	116.6	363.1	125.0
Administering and support activities	142.5	61.6	139.8	115.2	179.7	181.0	113.0	118.9	192.2
Education	157.3	229.1	169,3	•	•	•	•	•	•
Health care and social work activities	126.0	334.7	215.3	150.2	276.6	227.5	159.2	453.9	351.5
Culture, amusement and recreation activities	167.4	177.7	212.7	157.5	252.7	194.4	93.4	127.1	104.0
Other service activities	103.9	52.2	134.3	•	•	•	•	•	•
Total	**117.5**	**135.5**	**151.0**	**98.4**	**112.7**	**120.8**	**98.6**	**154.0**	**144.0**

Explanation: Z – employment, M – fixed assets, Ps – sales revenues.
Source: as in Table 1.

In the other sections of business activities, the dynamics of sales revenues is bigger than the dynamics of the value of fixed assets. It proves more the proper and effective development of the enterprises of the mentioned PKD sections than the ones whose names were mentioned before. The effects of their development measured by sales revenues are determined not only by the changes in the value of the possessed and used fixed assets. In small enterprises, the dynamics of changes in sales revenues and the dynamics of employment (changes in the number of workers) shaped favourably. The dynamics of sales revenues was bigger than the dynamics of employment. It proves that the growth of sales revenues achieved by those enterprises in the years 2007 and 2012 was influenced by the growth of work effectiveness.

The detailed data characterizing the dynamics of the basic economic values concerning medium-sized enterprises, owing to an analysis conducted on their basis in a similar way, enable to claim that their development indicates a favourable, from the economic point of view, trends of change in the size of employment, fixed assets and sales revenues. Only in enterprises conducting activities included in other service activities and their totality, the dynamics of the value of fixed assets was bigger than the dynamics of employment. The dynamics of sales revenues was bigger than the dynamics of fixed assets in the following sections: agriculture, forestry, hunting and fishing, electricity, steam, hot water and air conditioning manufacturing and supply, information and communication, financial and insurance activities, real estate activities, administering and support activities, and the average for the totality of enterprises.

In medium-sized enterprises conducting other kinds of business activities, the dynamics of the value of fixed assets in the analyzed period was bigger than the dynamics of sales revenues. In the analyzed size class of enterprises, only those which conducted activities in electricity, steam, hot water and air conditioning manufacturing and supply, information and communication, financial and insurance activities, the dynamics of employment was bigger than the dynamics of sales revenues. In enterprises conducting other kinds of business activities the situation was opposite. The dynamics calculated based on the value characterizing the totality of medium-sized enterprises was the same as in the majority of them.

The dynamics of the basic economic relations in small, medium-sized and large enterprises in Poland in the years 2007 and 2012

The changes in the variety and the directions of changes in the value of the basic economic relations presented in the first three tables occurred under the influence of the variety of the values and the directions of changes in employment, the value of fixed assets and sales revenues. The data included in Table 4 are their detailed quantitative characteristics. Table 5 includes the results of the calculations of the dynamics of changes in technical devices, the productivity of fixed assets and work efficiency.

On their basis we can find out:

– what the variety of the value of each of the three relations, thus, technical devices, productivity of fixed assets and work efficiencywas in small, medium-sized and large enterprises conducting the same kind of business activities in the initial and final year of the analyzed period of their development, as well as the variety of their dynamics characterizing the totality of the studied small, medium-sized and large enterprises,
– what the variety of the value of the three mentioned basic economic relations in each enterprise size class, thus in small, medium-sized and large enterprises,was in the same PKD sections and in total.

It turned out that in seven PKD sections the dynamics of the value of technical devices was biggest in enterprises employing 10–49 workers: agriculture, forestry, hunting and fishing, processing industry, wholesale, retail sale and repair of motor vehicles and motorcycles, accommodation and food service activities, information and communication, real estate activities andhealth care and social work activities. The dynamics of the average value of technical devices in the period from 2007 to 2012, calculated based on the data concerning the totality of small enterprises, was slightly bigger than in medium-sized, but smaller than in large enterprises.

In one section of business activities conducted by enterprises in which the number of workers was 10 – 49, the dynamics of the value of technical devices was smaller than in medium-sized enterprises and in three sections it was smaller than in large enterprises. In four large enterprises, the economic relation analyzed here was bigger than in small and medium-sized ones.

Table 5. The dynamics of the economic relations shaping and characterizing the development of small, medium-sized and large enterprises in Poland in the years 2007 and 2012 (2007=100)

Kinds of business activities (PKD sections 2007)	Enterprises								
	small			medium-sized			large		
	M/Z	Ps/M	Ps/Z	M/Z	Ps/M	Ps/Z	M/Z	Ps/M	Ps/Z
Agriculture, forestry, hunting and fishing	172.7	97.2	167.9	170.8	108.6	185.5	117.9	140.0	165.2
Mining and quarrying	166.8	63.7	106.2	153.2	78.4	120.1	200.0	84.0	168.0
Processing industry	170.6	85.1	145.2	148.7	94.2	140.0	156.5	99.0	154.9
Electricity, steam, hot water and air conditioning manufacturing and supply	181.9	115.9	210.8	47.6	181.6	86.4	205.0	93.0	190.8
Water supply, sewage and waste management and remediation activities	150.8	120.0	180.9	174.0	70.4	139.9	170.1	93.8	159.7
Construction	147.2	90.7	133.5	195.0	64.2	125.2	51.5	274.8	141.6
Wholesale and retail sale, repair of motor vehicles, including motorcycles	154.7	80.6	124.7	136.0	87.4	118.9	121.5	110.0	133.7
Transport and warehouse management	93.5	147.7	138.2	148.7	93.8	139.5	166.6	78.7	131.1
Accommodation and food service activities	217.6	66.1	143.9	125.4	90.2	113.0	151.4	83.2	126.0
Information and communication	155.0	87.4	135.5	111.5	105.4	117.4	108.6	97.6	106.0
Financial and insurance activities	29.0	411.4	119.1	40.6	124.5	50.5	349.8	42.5	148.6
Real estate activities	102.9	135.0	139.0	82.3	171.3	141.2	88.5	174.9	154.8
Professional, scientific and technical activities	222.7	47.2	105.3	225.5	53.8	121.2	311.5	34.4	107.2
Administering and support activities	43.2	227.0	98.1	156.0	100.7	157.1	105.2	161.7	170.2
Education	145.6	73.9	107.6	•	•	•	•	•	•
Health care and social work activities	265.5	64.4	170.9	184.2	82.2	151.4	175.0	77.4	135.6
Culture, amusement and recreation activities	106.1	80.3	127.0	223.9	55.1	123.4	136.0	81.8	111.2
Other service activities	50.3	257.2	129.3	•	•	•	•	•	•
Total	**115.2**	**111.5**	**128.5**	**114.5**	**107.2**	**122.7**	**156.0**	**93.7**	**146.2**

Explanation: M/Z – technical devices, Ps/M – productivity of fixed assets, Ps/Z – work efficiency
Source: as in Table 1.

In seven sections of business activities conducted by the compared groups of enterprises, the dynamics of changes in the productivity of fixed assets was biggest in large enterprises, in four sections it was the biggest in medium-sized enterprises and in four sections of business activities conducted by small enterprises.

The largest increment in the value of sales revenues falling to one worker in the period from 2007 to 2012 took place in seven sections of business activities conducted by large enterprises (mining and quarrying, processing industry, construction, financial and insurance activities, wholesale and retail sale, repair of motor vehicles, including motorcycles, real estate activities, administering and support activities). The sections of business activities in which the dynamics of work efficiency in medium-sized enterprises was the biggest and bigger than in small and large enterprises were: agriculture, forestry, hunting and fishing, transport and warehouse management andprofessional, scientific and technical activities. In the remaining six PKD sections the dynamics of work efficiency was biggest in small enterprises.

What results from the indicator of the dynamics of technical devices and work efficiency is that in ten sections of business activities conducted by small enterprises, the dynamics of changes in technical devices was bigger than work efficiency, in the remaining sections it was the opposite. A bigger dynamics of changes in technical devices than efficiency was also in eleven sections of business activities conducted by medium-sized enterprises and in the same number of sections of business activities of large enterprises. In four the same sections both in small, medium-sized and large enterprises the dynamics of technical devices was bigger than the dynamics of work efficiency (mining and quarrying, processing industry, accommodation and food service activities, professional, scientific and technical activities, health care and social work activities).

In three sections of business activities of small enterprises, in two sections of medium-sized enterprises and in one section of large enterprises, the dynamics of changes in the productivity of fixed assets was bigger than the dynamics of work efficiency.

Conclusions

The presented results of the comparisons of the dynamics of technical devices and work efficiency, as well as the dynamics of the productivity of fixed assets and the dynamics of work efficiency, indicate considerable differences in the degree of the use of the factors of production (human labour and fixed assets), the directions and the dynamics of changes in factors of production, (changes in the size of employment, changes in technical devices, a change in the productivity of fixed assets) which shaped the totality of the studied small, medium-sized and large enterprises, and the comparison of the development of individual kinds of business activities in each of the studied groups of enterprises, the isolation of direct and indirect factors of the development of business activities of small, medium-sized and large enterprises.

The continuation of the research into the factors shaping the dynamics and the effects of the development of small, medium-sized and large enterprises would enable the quantification of the factors of development of the mentioned enterprises and more thorough explanation of the causes of thevariety and trends of change in the basic economic relations revealed during the research,the findings of which are presented in the paper.

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Renata Biadacz, Elżbieta Wysłocka
Czestochowa University of Technology, Poland

RESTRUCTURING ACTIVITIES IN THE STEEL INDUSTRY AS A RESPONSE TO THE GLOBAL ECONOMIC CRISIS

Summary

Difficult and uncertain economic situation in which companies found themselves after the start of the global crisis meant that the majority of businesses undertaken a variety of activities leading to the optimization of the production process, or the reorganization of the company. Enterprises modify policies and reduce employment. The market has become the verifier of businesses, forcing the correct response of companies, the price thus became the verifier of inputs (an indicator of the cost-effectiveness of incurring them). The market economy therefore requires flexibility of the company and its ability to adapt not only to changes already occurring in the market, but also to projected or anticipated changes.

The current activity of enterprises is more determined by what happens in the environment than what happens within the company. Orientation of enterprise on situations and changes that occur in its environment, subordination to the present and future needs is a requirement of its existence. Every economic decision must be supported by a thorough analysis of not only the enterprise environment, but also the internal analysis. The decision making process should in fact occur in a situation where the complete picture of the internal factors affecting the operation of the enterprise and the relevant external factors is prepared. Reliable information makes it possible to adjust management, and thus protect the company against the crisis and bankruptcy.

The aim of this article is to analyze and assess the main effects of the crisis widely understood and the problems faced by companies in the decision making process. The analysis was made on the example of the steel industry with particular emphasis on the situation of ISD Huta Czestochowa Sp. z o. o.

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Introduction

The crisis is a phenomenon neither positive nor desirable. The concept of the crisis lies in both the economic collapse caused by erroneous decisions of the monetary authorities, governments, or due to the actions of speculators and natural recessions associated with the business cycle. They can be defined as economic fluctuations closed within a specific frames, that is, as a period from one bull market (i.e. the maximum growth), through maximum recession - called bear market, and then to the other bull market[1].

The crisis can be defined as the economic downturn leading to a significant drop in production, and thereby reduction in the rate of economic growth[2]. Depression can also be called a sudden change, the collapse of which was founded in the financial market related to illiquidity and insolvency of individuals participating in this market, forcing public authorities to intervene[3]. It may appear in different sectors and can be found in a greater or lesser area. The reasons for the emergence of the crisis are different, as well as its course and consequences.

The global financial crisis that took place in 2008-2009, was one of the biggest if not the biggest financial crisis in the history of the world economy. It began in the United States, but rebounded on economies around the world. The effects of the crisis are being felt today. Its reasons are seen in a number of factors that appeared on the American market, starting with the loosening of mortgage lending by mistakes in fiscal policy, to the acceptance of market development of uncertain mortgages and securities issued on their basis[4]. As a result, the international economy has been shaken. This resulted in a global economic slowdown.

The effects of the crisis were particularly severe for both the US economy, as well as for other countries. Many large banks and financial institutions went bankrupt. Stock markets collapsed. Market securities based on mortgages ceased to function[5]. These negative consequences for the global economy were also reflected at the micro-scale, i.e. households and businesses that have suffered due to the collapse of production, rising unemployment, reduced income, difficult access to credit, particularly mortgages[6]. There is no doubt that the global economic crisis has had and still has significant impact on the current situation of Polish companies. It caused a reduction in foreign and domestic investment, reduced production, and thus-demand and income of businesses. This situation poses a serious challenge for businesses. Some of them have to modify the management strategy in order to adapt to the new environment. The crisis forces the search for effective solutions to crisis, in future, in order to make companies better mitigate its negative effects.

The factors that are most noticeable in companies during the crisis include inter alia[7]:

- difficulties in financing current operations,
- a decrease in the value of the company,
- adverse changes in the structure and dynamics of sales
- reducing the share of companies in the market,
- deterioration of the image of the company and conflicts within the organization.

One of the most visible effects of the economic crisis was to limit access to finance, for example bank loans. Costs of obtaining loans increased. The reduced scope of financing of economic activity affected mainly the small and medium-sized enterprises, but the crisis also had its impact on large companies, which work together with entrepreneurs from other countries affected by the global economic downturn.

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1 D. Filar, A. Rzońca, G. Wójtowicz, *Ekonomia po polsku,* CeDeWu, Warsaw 2007, p. 237.

2 E. Chrabonszczewska, *Międzynarodowe organizacje finansowe,* Wydawnictwo SGH, Warsaw 2005, p. 315.

3 S. Miklaszewski, *Międzynarodowe stosunki gospodarcze u progu XXI wieku,* Difin, Warsaw 2003, p. 99.

4 H. Zadora, T. Zieliński, *Pieniądz współczesny a kryzysy finansowe,* Difin, Warsaw 2012, p. 296.

5 J. Czekaj, *Wpływ światowego kryzysu gospodarczego na polską gospodarkę* [in:] *Globalizacja, kryzys i co dalej?* Ed. by G. W. Kołodko, Poltext, Warsaw 2010, p. 193.

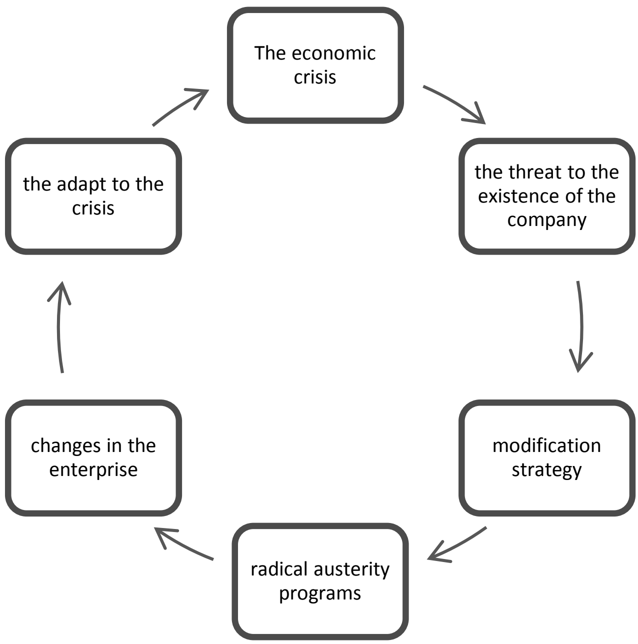
6 W. Nawrot, *Globalny kryzys finansowy XXI wieku. Przyczyny, przebieg, skutki, prognozy,* CeDeWu, Warsaw 2009, pp. 18-19.

7 E. Urbanowska-Sojkin, *Zarządzanie kryzysem*, PWE, Warsaw 2005, p. 15.

Despite the fact that Poland, in contrast to most Western European countries recorded growth, however, that the downturn in foreign partners also resulted in the deterioration of the situation of Polish companies.

It should be noted that the consequence of the financial crisis was also a reduction in investment by Polish companies in the years 2009 and 2010. Only in 2011, there was an increase in these expenditures. The symptoms of the economic crisis were also a decrease in sales volume, a smaller market share, lower profitability and deteriorating liquidity. Because of rising unemployment as well, as a result of consumers' uncertainty as to the further development of the situation, there was a reduction in domestic consumer demand. The crisis has also destabilized the foreign exchange market, leading to a significant depreciation of the zloty and the high volatility of exchange rates[8]. Figure 1 shows a simplified diagram of existence of the company during the economic crisis[9].

Figure 1. Management of the company during the crisis - the schematic approach



Source: B. Gajdzik, *Zmiany pokryzysowe w krajowym hutnictwie,* Hutnik – Wiadomości Hutnicze, no 9/2013, p. 669.

Restructuring often helps companies that are struggling. During these activities the company can reduce the cost of business, as well as make changes aimed at increasing market share, finding market niches, the introducing innovation or diversifying production. There is no doubt that the restructuring should be an ongoing process in any modern enterprise.

[8] A. Zelek, *Zarządzanie kryzysem w przedsiębiorstwie. Perspektywa strategiczna*, Orgmasz, Warsaw 2003, p. 139.
[9] B. Gajdzik, *Zmiany pokryzysowe w krajowym hutnictwie*, Hutnik. Wiadomości Hutnicze, no 9/2013, p. 669.

Restructuring of enterprise in destabilized environment on the example of the steel industry

Transformation of the economic system in Poland - from a central planning economy to a market economy - has forced the company to make changes in all of the areas of their operation. This is the only way that they can adapt to the new management system. Generally, changes made in enterprise since 1989, were described as restructuring[10]. The typical enterprise restructuring activities were:

- ✓ legal - ownership changes (privatization and commercialization of enterprises),
- ✓ financial changes (investigation of enterprise financing from the state budget, the diversification of capital, the introduction of cost accounting),
- ✓ production – technology changes (reducing the volume of production, change in the mix of production, withdrawal of obsolete technology),
- ✓ consultancy changes (adjust the number of employees to the production volume, improve labor productivity, qualitative changes in the qualifications of employees)
- ✓ organization changes (separation of ancillary activities and distribution companies pretensions in the organizational structures of companies, recently more frequent mergers and acquisitions)
- ✓ marketing changes (building products distribution networks, construction of systems sales and customer service, promotion of business)[11].

Each of these ranges of restructuring activities was an important repair component of businesses, allowing them to function in the new reality. The characteristics of the transformation of the restructuring in the steel industry are presented in Table 1.

Domestic steel industry and related industries represent huge real value, providing indispensable contribution to the development of the entire national economy. Good economic standing and technical industries is desirable by cooperating sectors, as a base for their competitiveness.

Polish steel industry in the nineties had excessively large production capacity in relation to needs. With the adoption of the Law on the restructuring of the Polish steel industry[12], began the transformation of the organizational - structural steel works in Polish. Most of the foundries changed its legal status, while on the basis of the assets of foundries, production companies and service providers have been established[13].

The level of industrialization of the country at the beginning of the twentieth century was measured by volume of production of coal and steel. Then, with the development of modern technology, the stress was put on production of products, using modern technology.

[10] *Zarządzanie restrukturyzacją procesów gospodarczych. Aspekt teoretyczno-praktyczny*, Ed. by R. Borowiecki, Difin, Warsaw 2003, p. 73 and next.

[11] More on the topic in: C. Suszyński, *Restrukturyzacja polskich przedsiębiorstw. Skala procesu w pierwszym etapie transformacji*, Zeszyty Naukowe Uniwersytetu Gdańskiego, Organizacja i Zarządzanie no. 13, Sopot 1999, pp. 147-151; Z. Sapijaszka, *Restrukturyzacja przedsiębiorstwa. Szanse i ograniczenia*, Wydawnictwo Naukowe PWN, Warsaw 1997, p. 44; W. Gabrusewicz, *Restrukturyzacja finansowa jako metoda przywracania równowagi przedsiębiorstwa* [in:] *Restrukturyzacja a konkurencyjność przedsiębiorstw*, Ed. by R. Borowiecki, Cracow 1997, pp. 43-47.

[12] *Restructuring (Iron and Steel Industry)* Act of 24 August 2001 (Journal of Laws, No. 111, item 1196).

[13] B. Gajdzik, *Analiza strategiczna uwarunkowań wewnętrznych i zewnętrznych przedsiębiorstwa hutniczego podstawą wyboru strategii działań rynkowych*, „Hutnik – Wiadomości Hutnicze”, no. 5/2005, p. 306.

Table 1. Stages of restructuring of the steel sector in Poland

Period	Characteristics of transition period of restructuring in the steel industry
First 1992-1995	Time of formulation and approval of the first restructuring programs repair (study of the Canadian government to develop a recovery program of metallurgy).
Second 1996-1997	Period of construction of new functional strategies of steel companies in the perspective of free trade.
Third 1998-2000	Crisis in all Polish steel foundries as a result of the unfinished restructuring programs and delay (delayed privatization, consolidation in the steel sector). A review of the repair assumptions of foundries has been performed and new programs developed, which marked the beginning of the sector emerging from crisis
Fourth 2001-2005	Period of emerging from the crisis, the first positive effects of the restructuring process - companies are liquid, accompanied by a steady increase in demand for steel reported by the Chinese market. In 2004, there was a significant increase in the production of steel and steel products in Poland. An important event was the acquisition of Polskie Huty Stali by a foreign investor (L. N. Mittal).
Fifth 2006-2008	Further mergers and acquisitions strengthen companies in the steel sector in Poland. Mittal Steel Capital Group enters into an agreement with a Arcelor group (June 2006 year). The new holding company is a leader in the Polish steel market. Metallurgical company Arcelor Mittal Poland SA invests in the development, setting standards and procedures, allowing it to compete in the global steel market.
Sixth 2008-2010	Verification of pro-development strategies of enterprises, the introduction of management-oriented savings and minimization of operating costs as a result of their adaptation to the market downturn and the effects of the economic-financial global crisis.

Source: B Gajdzik, *Przedsiębiorstwo hutnicze po restrukturyzacji*, Wydawnictwo Politechniki Śląskiej, Gliwice 2009, p. 35.

Very good production and economic results were reported in the domestic steel industry in the period January - September 2008. From the fourth quarter of 2008, market has changed for the worse. Orders decreased by 40 - 60% compared to the annual average. Prices for steel products also decreased. Investors have taken a number of decisive actions to reduce costs - including redundancies. The situation in the environment of foundries also deteriorated (banks tightened lending conditions, some countries have introduced subsidies for local producers as the so-called anti-crisis packages). To make matters worse the price of electricity drastically increased in Poland, which significantly worsened moods before the entry into the realities of 2009[14].

In 2009, the situation on the steel market has worsened dramatically. The negative impact of the global crisis was wider and larger than assumed in the projections. As a result, the recession in the steel consuming industries for the production of investment goods has left a stigma on the production of steel foundries. Domestic steel consumption decreased by 30% compared to 2008. As a result, steel production fell by about 26%. Market difficulties have forced manufacturers to reduce costs even deeper and to find new opportunities for the future.

[14] www.hpih.org/Analizy_Raporty/plikpps 2009 (28.06.2014).

In 2010, in Poland, there was a revival of economic activity. Successful realization of projects co-financed by the Cohesion Fund made a positive contribution. Domestic steel consumption increased by 20% relative to that recorded in 2009. This is reflected in the increase in production by about 12% (year on year). There has also been an increase of 22% to the Polish steel imports, in comparison to 2009.

Despite the economic downturn in 2011 inside the EU market, manufacturers in Poland managed to overcome the challenges caused by fluctuations in the market and increased domestic steel production. Steel consumption in Poland has increased by nearly 11%. The increase in steel consumption had a positive impact on its production, which increased by 10%. Thanks to that, bankruptcies and production shutdowns have been avoided, which allowed to improve the capacity utilization rate in steel production from 65% to about 70%.

Domestic steel foundries also felt the effects of the global economic downturn in 2012. Steel production was 5% lower compared to 2011, which was clearly reflected in the attitude and condition of the recipients. Distributors refrained from increase in inventories and carefully observed the changes in the market. The foreign trade showed a slight increase in imports.

Anti-crisis management in steel companies

The basic reason for the decrease in steel goods production was the overproduction of steel and steel products globally. In the markets of individual countries, there was an imbalance between the demand for steel and its supply. The decline in demand for steel caused the need for changes in the management of steel companies.

Effects of the economic crisis grew gradually in enterprises. The symptoms of the economic crisis were[15]:

- ✓ decrease in sales volume,
- ✓ smaller market share,
- ✓ reduction in profitability,
- ✓ worse liquidity.

A way out of the current crisis is difficult, because it was not possible in a short time. Meanwhile, the crisis escalated, and the crisis took the “creeping” form. Some signs of recovery from the crisis could be seen in 2010. During this year, a clear trend in the dynamics of production and consumption of steel products has been noticed. Unfortunately, in subsequent years, there was again a decline in production and use of steel products. After five years of steel foundries operating in the economic crisis, companies have taken radical actions in order to get out of the crisis.

Foundries initiated activities aimed at generating savings in all areas of operations to achieve a reduction in operating costs. Enterprises radically streamlined management processes by adopting assumptions of concept of searching savings. Foundries significantly restructured strategic objectives, opting for cost reduction. Manufacturers introduced changes in the organizational structures of companies, withheld investments, proceeded to the sale of redundant facilities and equipment, and above all reduced their production and range of steel products, as well as restructured debt.

The changes were intended to improve the efficiency of their operations. The cost control was tightened and labor discipline strengthened. Management of foundries during the economic crisis has become a strategy aimed at countering the negative effects of market imbalances.

[15] B. Gajdzik, *Zmiany pokryzysowe w krajowym hutnictwie*, op. cit., p. 670.

Restructuring activities in ISD Huta Czestochowa Sp. z o.o. in time of crisis

In the course of business operations, companies often find that the existing management system is not optimal and does not guarantee a satisfactory level of productivity, competitiveness, profitability or is not modern enough. Then it is advisable to use a number of mechanisms, generally called restructuring. Such actions have also been taken in the company ISD Huta Czestochowa.

ISD Huta Czestochowa Sp. z o.o. continues more than 100 years of steel tradition in Czestochowa, and is also one of the largest and most modern producer of heavy plates and steel structures. It works closely with the foundry in Alczewsku in the Ukraine, Gdańsk Shipyard and the global sales network of steel products Duferco.

Huta Czestochowa, which entered in the twenty-first century with the threat of liquidation, in 2005 found a strategic investor. Ukrainian concern ISD, which bought the foundry, has committed to invest in PLN 44 million and maintain employment over the next 10 years. The new owner of the plant announced that to 2008 it will invest in the company a total of PLN 400 million. According to plans, the upgraded plant was to increase production to 1.2 million tons. The crisis has reviewed these plans. In 2009, it achieved only 60.2% of the production from the previous year. ISD corporation began to look for opportunities to defend against a market downturn. Although restructuring allowed to lower variable costs, it did not result in improvements in the field of fixed costs, which accounted for a substantial part of the salaries of the crew, which as part of the social package were guaranteed employment until 2015.

Already in 2009, ISD management board attempted to heal the situation by selling more departments of Huta. First the coking plant was carved-out, growing today as Koksownia Częstochowa Nowa. A year later, in 2010, Alchemia bought the Zakład Produkcji Rur.

In 2013 the situation in Huta Częstochowa somewhat improved, at least from the point of view of manufacturing activity. The unfavorable market conditions and low margins were still higher than the increase in the volume of production - foundry remained in deficit, and without the support of the ISD group could not exist. In February of 2013 the owner had provide PLN 33 million in capital.

Soon after, the situation turned around dramatically - ISD company announced that if 1.5 thousand people, which is almost half of the crew, not leave willingly until the end of June, the company will announced bankruptcy in August. Voluntary redundancy program slowly began to gain in attractiveness. People who left were assured additional 16 or 14 salary (in addition to the 3 months salaries associated with the termination), depending on how soon they make decisions after the conversation with the consultant will decide. Those who decided got their money before mid-August of 2013. A total of 1 450 people gone.

The fate of the steel smelter seemed to be known. Starting in December 2013 the vast majority of the production of heavy plate in rolling mill is based on imported feedstock from belonging to the ISD Huta Alczewsku Ukraine. Due to the high cost of electricity and other utilities in Poland, even after adding the cost of transport, a ton load is PLN 300 cheaper. Monthly Huta receives 80 thousand tons of Ukrainian input. Częstochowska Stalownia operates within a limited range, complementing the supply of certain types of feedstock for specialty orders.

In July 2013, a letter sent to employees by ISD Poland, for who there will be now work in the new structure of Huta, you can read[16]: "... Huta as a result of the global economic crisis was in an extremely difficult situation. Decreasing number of orders and the reduction in the price of steel on world markets at constant fixed costs meant that Huta not only failed to generate income, but also brings a multimillion-dollar losses. This is a situation that forces us to limit activity...". Later in the letter read, "...We are

[16] *Restrukturyzacja zatrudnienia. Dla wielu osób nie będzie pracy,* Głos hutnika, Tygodnik ISD Huty Częstochowa no 31.

determined to make the restructuring process assuming reduction of employment by more than 500 employees to completion. This is the only way to save Huta from bankruptcy...”.

In the first half of 2014 Huta prepares for the second phase of the restructuring of employment. Currently there are about 1,600 people working in Huta.

The main goal of downsizing is a significant reduction in the cost of the enterprise by reducing employment and it can be achieved in a relatively short time. This enables rapid and efficient response in the event of adverse market conditions and negative forecasts for the growth and development of the company. It is not surprising therefore, that in a crisis, this type of activity is considered as the first and often the key to the future of the company.

To summarize, we can conclude that, despite the measures taken and work accomplished so far, the company’s situation continues to be uncertain. This is mainly due to the continued uncertainty about the future of the steel industry in Poland.

Conclusions

The activities of enterprises are now burdened with high risk, resulting from the still ongoing global economic crisis. The decision making process is so much more difficult, as companies face problems in taking important decisions of management, leadership and planning, and even define their own, long-term sales and employment policies.

Each of these problems is significant especially because usually refers to the various spheres of business activity, and hence affects other areas of business. It is important to realize how serious is the economic barrier which is encountered by all countries, and thus almost all business players. Observations of the global economic situation shows that the changes are forcing businesses to pay special care, perform accurate analysis and consider the decision in both short and long term. The year 2009 was a year of economic decline, and thus caused inhibition, or resignation of the aims of earlier investments, and financial turmoil, causing major import and export restrictions. This state of affairs has not remained unnoticed and did not spare companies. Many of them limited the size of production and sales. Consequently, this has resulted in a reduction in employment and rise in unemployment.

ISD Huta Czestochowa, inter alia, was put in a difficult situation. The company has now overcome many challenges trying to survive and saved its position in the market. Of course, decisions such as downsizing or sale of part of assets can not be assessed in the short term, because their positive or negative effects will be noticeable at a later time. However, the decision on dismissal of employees and downsizing is the only right decision acceptable by the unions and the management board. By analyzing this decision in the context of the existing crisis, still a lot of concern and questions arise due to the existence of possible financial consequences. As we know, only downsizing is the answer to the existing economic situation of the Company. The decline in orders, production and sales has forced this type of solution. As a result, ISD Huta Czestochowa submitting financial statements and notes not only presented a loss, but also, what is more dangerous, a decrease in sales revenue and an increase in other operating expenses. In the face of the existing crisis, this situation almost entirely limits the possibilities for the company to obtain a positive assessment by financial institutions and closes the way to obtain funds in the form of external financing.

The current economic crisis has accelerated and in a very short period causes a loss of liquidity, and therefore the ability to timely meet obligations. Ironworks is threatened with insolvency. Streams of cash flows from operating, investing and financing activities in the majority of cases are negative. All the liquidity ratios indicate a congestion payment, together with the shortage of investment in enterprise development and accumulated stocks pose a serious threat to the continuation of business.

To summarize, once again it should be underlined that the economic crisis are not a few weeks of market fluctuations and economic instability. It is a global, often difficult to overcome situation with which each entity has to cope alone through the proper, accurate decisions always backed up by precise analysis. Otherwise, any, even the most powerful company can expect difficulties, losses and even bankruptcy.

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Wojciech Szymla
Cracow University of Economics, Poland

THE DYNAMICS AND THE DIRECTIONS OF CHANGES IN ECONOMIC VALUES CHARACTERIZING THE FUNCTIONING AND DEVELOPMENT OF ENTERPRISES OF THE ELECTRIC POWER INDUSTRY IN POLAND IN THE YEARS 2007–2013

Summary

The paper is an attempt to measure and assess the condition and changes in the number and the basic economic values characterizing the functioning and development of the population of electric power enterprises in the division into size classes by the number of employees. The study included the years 2007-2013 and was carried out on a group of electric power enterprises employing above 9 workers. The dynamics and the structure of the number of enterprises, the values of investment outlays and net fixed assets, the number of employees and revenues were analyzed. The study enabled the identification of distinct trends setting directions for both the existing and future development of electric power enterprises.

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Introduction

The electric power sector is defined as a part of fuel and energy sector related to the production, transmission and distribution, as well as trade of electricity. According to the description in the Polish Classification of Activities (PKD), today the electric power engineering is included in group: 35.1, section D, PKD symbol 35, namely “Production, transmission, distribution and trade of electricity”. The electric power engineering is so-called “base sector”, thus, it has significant impact on the development and competitiveness of other areas of economy, particularly industry[1]. Such an important role of the

[1] A. Daniluk, *Demonopolizacja, restrukturyzacja i prywatyzacja sektora elektroenergetycznego w Polsce* [in:] *Charakterystyka wybranych sektorów infrastrukturalnych i wrażliwych w gospodarce polskiej oraz możliwości ich prywatyzacji*, Ed. by B. Błaszczyk, A. Cylwik, The Centre for Social and Economic Research Reports, No. 27, Warszawa 1999, p. 53.

electric power sector has been prompting to undertake repeated attempts of analysis and assessment, both in the dynamics of changes in the economic values characterizing the conditions of functioning and opportunities for the development of the sector enterprises and transformations in the structure of the values by size classes of entities making up the population of electric power firms. Studying changes undergoing in the business breakdown structure of the electric power sector is particularly important due to a specific character of this population with a relatively small and stable number of entities with very big economic potential and a growing number of small entities entering the energy market in recent years. In the conducted analyses, the enterprises were divided into small, medium-sized and large entities, taking into consideration the criterion of the number of employees. Within this division, small entities are firms employing from 10 to 49 people (so-called micro-enterprises, that is firms employing fewer than 10 people, not being subject to statistical reporting obligation, were not included in the study), medium-sized entities - employing from 50 to 249 people, and large entities employing more than 249 people. Such a selection of the group of entities enabled to use real data about enterprises, based on financial statements submitted within the framework of the statistical reporting obligation (and not estimated on the basis of a representative sample). The data come from published and not published sources of the Main Statistical Office of Poland.

The study applied 4 basic economic values referring both to outlays and the factors of production (investment outlays, net fixed assets, number of workers) and to the effects of the conducted activities (net revenues). The values enable, in a simplified way, to assess the condition and the changes in the scale of the conducted activities and the intensity of development processes of both the whole population of electric power enterprises and its individual groups[2]. The study was preceded by an analysis of the dynamics of changes and the structure of the studied population of enterprises with regard to the number of entities.

The study comprised the years 2007–2013. The commencement of the study in 2007 was important because exactly in that year the process of vertical consolidation of electric power enterprises, companies wholly owned by the State Treasury, started based on the "Programme for Electric Power Engineering"[3]. In its assumptions, the programme was to result in the significant concentration of the activities of electric power enterprises in order to create strong entities guaranteeing the safety of power supplies and capable of competing on the international energy market.

Other significant external conditionings which could influence the directions and the dynamics of changes in the business breakdown structure of the sector and the basic economic values characterizing the population of electric power enterprises in Poland in the studied period primarily included the events having its source in the necessary implementation of the assumptions of the climate and energy policy and the EU law and changes in the domestic legislation arising from them[4]. The legislation tackled such spheres of activity as, for example, the business breakdown and institutional structure of the sector[5], introduced the necessity to raise the share of energy from renewable sources in the "energy mix" of electric power enterprises, and guaranteed support for the entities producing energy from those sources[6].

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[2] To study the dynamics and the directions of changes in the values and the structure of the sector of enterprises, similar measures are also used by S. Chomątowski, M. Dziura, K. Kolegowicz, P. Krzemiński, B. Siuta-Tokarska [in:] *Dynamika i kierunki zmian wielkości i struktury sektora przedsiębiorstw w Polsce w latach 1990–2005*, Ed. by S. Chomątowski, Foundation of the Cracow University of Economics, Cracow 2009.

[3] *Programme for Electric Power Engineering*, The Ministry of Economy, Warsaw, 27 March 2006.

[4] For more see: W. Szymla, *An influence of Climate and Energy Package on the condition of functioning of the power sector enterprises in Poland* [in:] *Contemporary Economies in the face of new challenges*, Ed. by R. Borowiecki, A. Jaki, T. Rojek, Foundation of Cracow University of Economics, Cracow 2013, pp. 751–761.

[5] A necessity of legal separation of individual types of energy-related activities – unbundling.

[6] The obligations were imposed by individual parts of so-called "energy and climate package" which included six legislative acts out of which two were presented by the European Commission as early as in 2007 and the other four in January 2008.

A significant factor in the selection of the study period was also a necessity to guarantee the data comparability, possible owing to the use of the uniform layout of the Polish Classification of Activities of 2007.

The dynamics of changes and the structure of the number of business entities in the studied population of electric power enterprises by size classes in the years 2007–2013

The studied population included the entities of group 35.1 section D of the Polish Classification of Activities, thus, conducting activities in production, transmission, distribution and trade of electricity, which in the studied years were subject to the statistical reporting obligation and submitted financial statements. In the studied group of enterprises in the years 2007-2013 no important change in their overall number took place, however, there were distinct shifts within the size classes of the entities. Detailed data on the dynamics of the changes in the number of electric power enterprises by size classes in the years 2007–2013 are presented in Table 1.

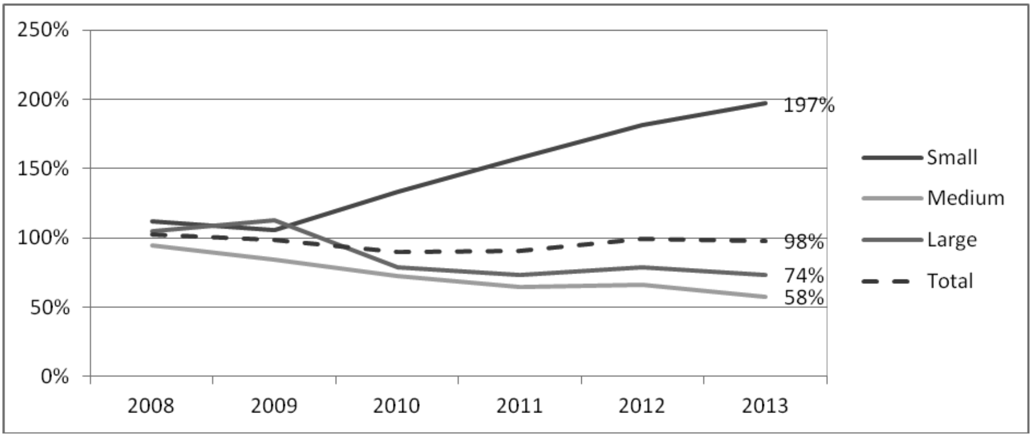
Table 1. The dynamics of changes in the number of electric power enterprises by size classes in the years 2007–2013 [in %]

Specification	Dynamics, previous year = 100						2007=100
	2008	2009	2010	2011	2012	2013	
Small	112.1	94.6	125.7	118.2	115.4	108.3	197.0
Medium	94.9	89.3	86.0	88.4	102.6	87.2	57.6
Large	105.3	107.5	69.8	93.3	107.1	93.3	73.7
Total	**102.3**	**96.2**	**91.4**	**100.9**	**109.3**	**98.4**	**97.7**

Source: own study and calculations based on unpublished data of Central Statistical Office of Poland.

In the years 2007–2013 the overall number of the studied entities dropped by more than 2%. Within that scope, the highest dynamics of changes was characteristic for small enterprises - employing from 10 to 49 people. In the whole studied period the number of those enterprises almost doubled. The constant decline in the population (except for 2012) was, on the other hand, characteristic for medium-sized enterprises - employing from 50 to 245 workers. In 2013, their number was less than 58% of the number from 2007. Quite big fluctuations were characteristic for the dynamics of changes in the number of large enterprises, however, at the end of the studied period their number was smaller by over ¼. The dynamics of changes in the number of electric power enterprises by size classes in the years 2007-2013 with respect to 2007 is presented in Figure 1.

Figure 1. The dynamics of changes in the number of electric power enterprises by size classes in the years 2007–2013



Source: own study and calculations based on unpublished data of Central Statistical Office of Poland.

Different directions of changes in the number of business entities in individual groups of enterprises brought about significant changes in the structure. The data characterizing the structure of the number of entities by size classes are included in Table 2.

Table 2. The structure of the number of electric power enterprises by size classes in the years 2007–2013 [in %]

Specification	2007	2008	2009	2010	2011	2012	2013
Small	25.4	27.8	27.3	37.6	44.1	46.5	51.2
Medium	45.4	42.1	39.1	36.8	32.2	30.2	26.8
Large	29.2	30.1	33.6	25.6	23.7	23.3	22.0

Source: as for Table 1.

In 2007, in the population of electric power enterprises employing more than 9 workers and submitting obligatory financial statements, medium-sized enterprises prevailed. Entities employing from 10 to 49 workers constituted over 45% of all studied electric power enterprises. Large enterprises constituted almost 30%, and small ones over 25%. The downward trend with regard to the number of entities in the group of medium-sized and large enterprises, prevailing in the studied period, which was accompanied by the growing number of small entities, resulted in the reversal of the hitherto prevailing structure. In 2013, as many as over a half (51.2%) of all the studied firms were small enterprises. The shares of medium-sized and large entities dropped to 26.8% and 22%, respectively.

The dynamics and the structure of investment outlays, fixed assets, number of employees and revenues in electric power enterprises by size classes in the years 2007-2013

As it was mentioned before, to illustrate changes in the scale and the directions of the development of the studied group of enterprises, the dynamics and the structure of the basic economic values characterizing the outlays incurred in this way, the used factors of production and the effects of activities were analyzed and assessed.

An economic value helpful in the study of the intensity of enterprise development, indicating the scale and the speed of creating enterprise assets, is the value of investment outlays. In the years 2007-2013 significant changes in the value of investment outlays took place in all groups of enterprises. The data illustrating the dynamics of changes in the value of investment outlays in the studied group of enterprises are included in Table 3.

Table 3. The dynamics of changes in the value of investment outlays in electric power enterprises by the size classes of business entities in the years 2008–2013 [in %]

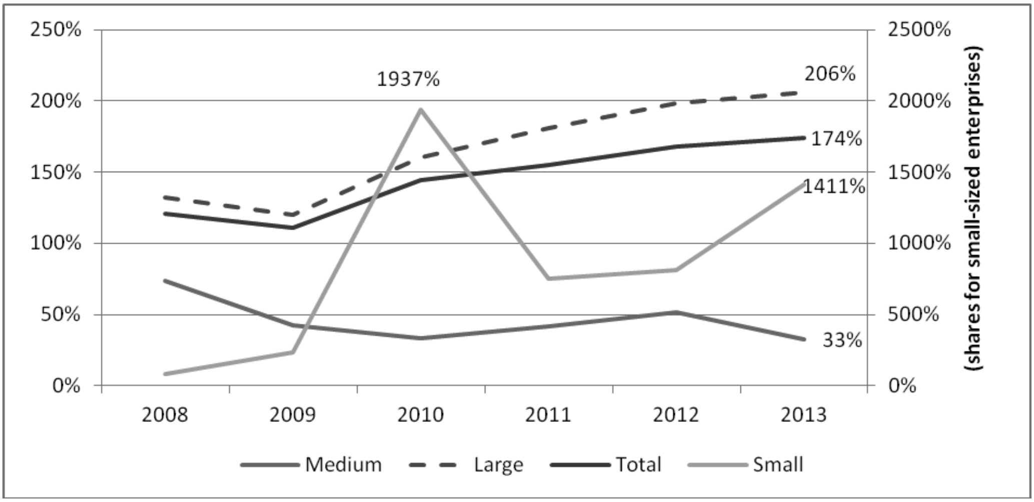
Specification	Dynamics, previous year = 100						2007=100
	2008	2009	2010	2011	2012	2013	
Small	84.3	273.3	840.3	38.8	108.5	173.2	1411.2
Medium	73.9	57.4	78.9	123.7	124.3	63.7	32.8
Large	132.2	91.1	133.3	112.7	109.7	103.7	205.7
Total	120.5	91.8	130.6	107.0	108.5	103.7	174.0

Source: as for Table 1.

The value of investment outlays for all the studied entities in 2013 constituted 174% of those of 2007. The changes in this economic value in small enterprises were particularly intense. In the years 2009 and 2010 the outlays grew by 173% and 740% respectively, and although in the following year they dropped by over 60%, in 2013 they were over 14 times higher than the ones from the beginning of the studied period. Moreover, the investment outlays in the group of medium-sized enterprises were also subject to significant though not so large fluctuations. At the end of the studied period, the outlays constituted one-third of their values of 2007. In the group of large enterprises, there was successive growth of investment outlays (with the exclusion of 2009). The constant but smooth growth brought in the studied period the doubling of the investment outlays in enterprises employing more than 249 workers.

The dynamics of changes in the value of investment outlays in electric power enterprises by size classes of business entities in the years 2008–2013 is presented in Figure 2.

Figure 2. The dynamics of changes in the value of investment outlays in electric power enterprises by size classes of business entities in the years 2008–2013



Explanation: 2007=100%.
Source: as for Figure 1.

The discussed changes in the value of investment outlays in the studied period significantly influenced the structure of expenditure for these purposes among electric power enterprises.

The data characterizing the structure of the value of investment outlays in electric power enterprises by size classes in the years 2007–2013 are included in Table 4.

Table 4. The value structure of the investment outlays of electric power enterprises by size classes in the years 2007–2013 [in %]

Specification	2007	2008	2009	2010	2011	2012	2013
Small	0.4	0.3	0.8	5.1	1.9	1.9	3.1
Medium	6.9	4.2	2.7	1.6	1.9	2.1	1.3
Large	69.5	76.3	75.6	77.2	81.3	82.2	82.2

Source: as for Table 1.

In 2007, the share of small enterprises in the investment outlays of the studied population of enterprises was only 0.4%, of medium-sized enterprises less than 7%, and of large enterprises almost 70%. In the years 2008–2013, the situation changed considerably. The shares of small and large enterprises increased to 3.1% and 82.2%, respectively, whereas the share of medium-sized enterprises declined to only 1.3%, which means even lower share than of small enterprises.

Investment outlays are a direct source of the formation of the basic factor of production, namely fixed assets. In electric power enterprises included in the study, the value of net fixed assets in the years 2007–2013 was characterized by variability in all groups of enterprises. In the whole studied period, the summary value of these assets increased by 7%. The data illustrating the dynamics of changes in the value of net fixed assets in the studied group of enterprises are included in Table 5.

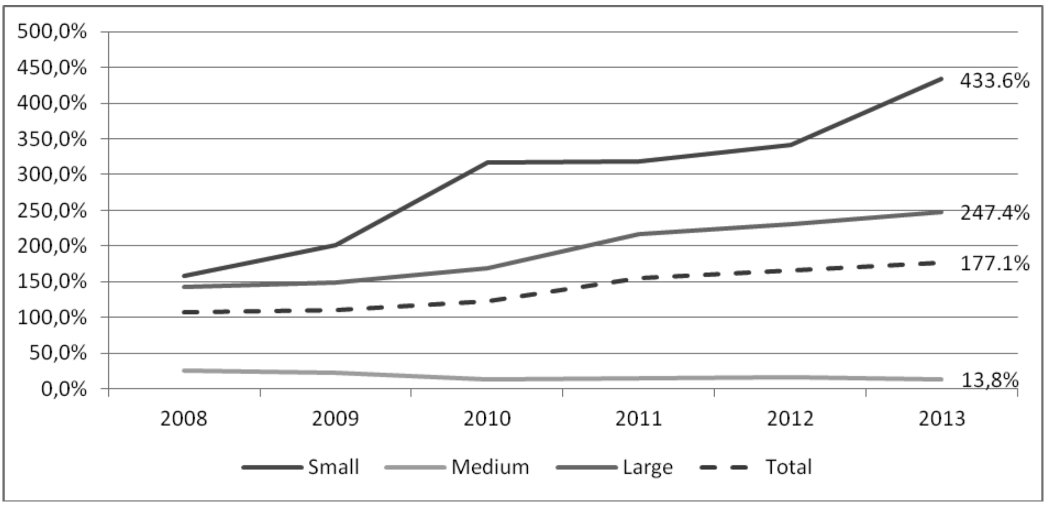
Table 5. The dynamics of changes in the value of fixed assets in electric power enterprises by size classes of business entities in the years 2008–2013 [in %]

Specification	**Dynamics, previous year = 100**						**2007=100**
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	
Small	158.2	127.1	157.4	100.8	107.1	126.9	433.6
Medium	25.7	88.0	58.6	114.3	106.2	85.6	13.8
Large	143.0	104.0	113.8	128.1	106.0	107.6	247.4
Total	**107.0**	**103.1**	**111.0**	**127.1**	**106.1**	**107.3**	**177.1**

Source: as for Table 1.

Among enterprises employing more than 9 workers, in the years 2007–2013 there was over a 4-fold increase in the value of fixed assets. The value was growing in the whole studied period. The biggest dynamics of growth was characteristic for the years 2008 (158%) and 2010 (157%). In enterprises employing from 50 to 249 workers, the value of assets was subject to considerable fluctuations, which finally translated into a drop in the value of assets by as much as 86% in comparison with 2007. The changes of 2008, leading to a decrease in the studied value by 74% in comparison with 2007 had the biggest impact on that situation. In enterprises employing more than 249 people, the value of fixed assets grew each year. The biggest increases took place in 2008 and 2011, by 43% and 28%, respectively. In the whole studied period, the value of fixed assets rose in that group of enterprises by 8%. The dynamics of changes in the value of fixed assets in electric power enterprises by size classes of business entities in the years 2008–2013 is presented in Figure 3.

Figure 3. The dynamics of changes in the value of fixed assets in electric power enterprises by size classes of business entities in the years 2008–2013



Explanation: 2007=100%.
Source: as for Figure 1.

High variability of the value of fixed assets in the studied period contributed to significant changes in the structure of this value by size classes of enterprises. The data characterizing the structure of the value of fixed assets in electric power enterprises by size classes in the years 2007–2013 are included in Table 6.

Table 6. The structure of the value of fixed assets of electric power enterprises by size classes in the years 2007–2013 [in %]

Specification	2007	2008	2009	2010	2011	2012	2013
Small	0.8	1.2	1.5	2.1	1.7	1.7	2.0
Medium	30.8	7.4	6.3	3.3	3.0	3.0	2.4
Large	68.4	91.4	92.2	94.5	95.3	95.3	95.6

Source: as for Table 1.

In 2007, the share of small enterprises in fixed assets did not exceed 1%, medium-sized enterprises concentrated almost 31% of the assets, and large ones - over 68%. Within 8 years the structure was subject to considerable polarization. In 2013, the share of small enterprises doubled - to 2% and the share of medium-sized enterprises decreased to only 2.4%. The remaining 95.6% of the value of fixed assets of the studied group of electric power enterprises fell to large enterprises.

In addition to fixed assets, labour is the second basic factor of production illustrating the incurred outlays. The labour input can be expressed by the number of workers. Among the electric power enterprises employing more than 10 people and included in the study, in the years 2007-2013 there was almost a two-percent increase in the number of employees. In the division into enterprise size classes, however, great differences both in the intensity and the directions of changes in this number could be observed. The data illustrating the dynamics of changes in the number of workers in the studied group of enterprises are included in Table 7.

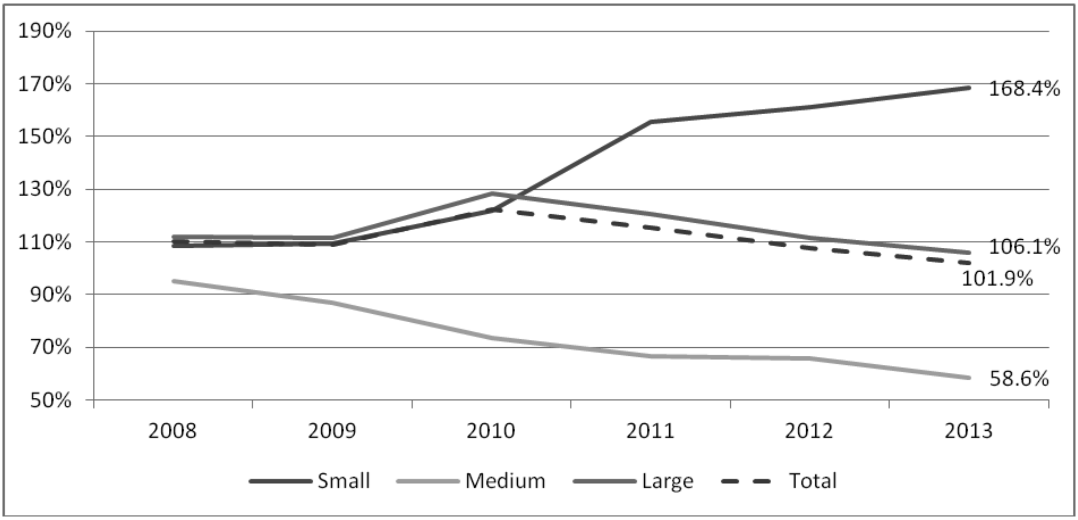
Table 7. The dynamics of changes in the number of workers in electric power enterprises by size classes of business entities in the years 2008–2013 [in %]

Specification	Dynamics, previous year = 100						2007=100
	2008	2009	2010	2011	2012	2013	
Small	108.5	100.6	111.6	127.5	103.8	104.4	168.4
Medium	95.0	91.3	85.0	90.4	99.0	88.8	58.6
Large	112.1	99.4	115.1	94.0	92.7	95.0	106.1
Total	**110.3**	**98.7**	**112.6**	**94.1**	**93.2**	**94.8**	**101.9**

Source: as for Table 1.

In the years 2008–2013, each year the number of people working in entities employing from 10 to 49 people increased. In 2013, the number of people working for these entities was by over 68% higher in comparison with 2007. The reverse trend was characteristic for enterprises employing from 50 to 249 people, the number of which was decreasing each year. The biggest drop took place in 2010 and was equal to 15%. In the whole studied period, the number of employees in this group of enterprises went down by 41%. On the other hand, considerable fluctuations could be observed in large enterprises. In spite of drops by 6%, 3% and 5%, respectively, and lasting from 2011, high dynamics of an increase in the number of workers in the years 2008 (by 12%) and 2010 (by 15%) brought about the growth of the number of people working in enterprises employing more than 249 in the whole studied period. In 2013, the number was higher than in 2007 by 5%. The dynamics of changes in the number of workers in electric power enterprises by size classes of business entities in the years 2008–2013 is presented in Figure 4.

Figure 4. The dynamics of changes in the number of workers in electric power enterprises by size classes of business entities in the years 2008–2013



Explanation: 2007=100%.
Source: as for Figure 1.

The discussed changes in the number of workers contributed to some transformations in the structure of workers in individual groups of entities. The data characterizing the structure of workers in electric power enterprises by size classes in the years 2007–2013 are included in Table 8.

Table 8. The structure of the number of workers in electric power enterprises by size classes in the years 2007–2013 [in %]

Specification	2007	2008	2009	2010	2011	2012	2013
Small	1.0	0.9	1.0	0.9	1.3	1.4	1.6
Medium	10.2	8.8	8.2	6.2	5.9	6.3	5.9
Large	88.8	90.2	90.9	92.9	92.8	92.3	92.5

Source: as for Table 1.

In 2007, only 1% of all employees working in electric power enterprises employing more than 9 people worked in small entities. In the same year, 10.2% worked in medium-sized enterprises, and 88.8% in large ones.

Although in the years 2008–2013 the dynamics of growth of the number of workers in small enterprises was considerable, it translated into the growth of the share in the total number of workers in the electric power sector by as little as 0.5 percentage point. On the other hand, the changes in the structure were significantly influenced by the fall of the number of workers in medium-sized enterprises. It caused a decrease in the share of medium-sized enterprises in the total number of workers from over 10% to less than 6%. In the studied period, the share of large enterprises in the number of workers grew from almost 89% to more than 92.5%.

Although the financial result is the most synthetic measure for the measurement of the effects of business activities, yet at the same time the measure does not reflect the scale of the activities. Revenues is the economic value which refers both to the effects of the activities and to its scale. The net revenue value in electric power enterprises included in the study in the years 2007–2013 increased by 65%. The dynamics of changes in revenues by enterprise size classes differed substantially in individual groups of entities. The data illustrating the dynamics of changes in the value of net revenues in the studied group of enterprises are included in Table 9.

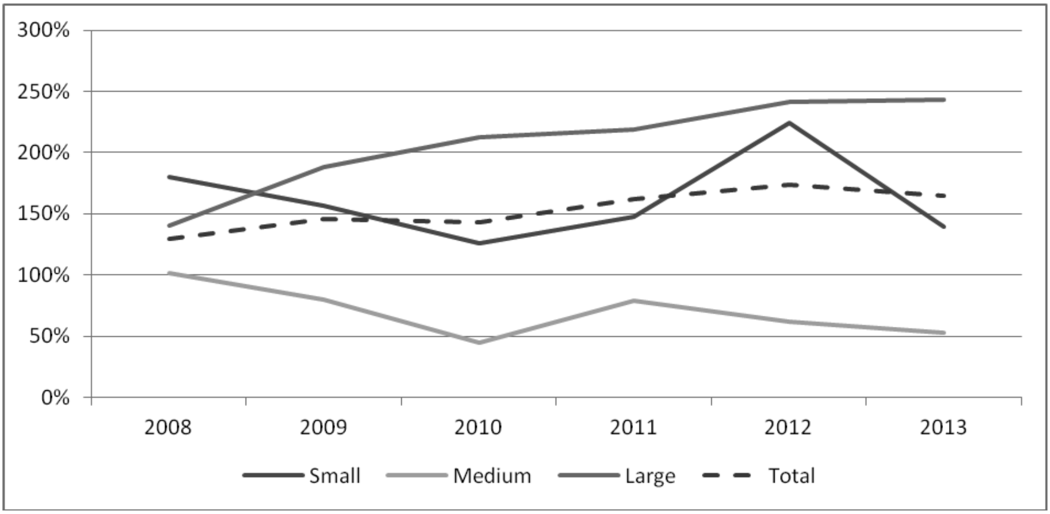
Table 9. The dynamics of changes in the value of net revenues in electric power enterprises by size classes of business entities in the years 2008–2013 [in %]

Specification	Dynamics, previous year = 100						2007=100
	2008	2009	2010	2011	2012	2013	
Small	179.8	87.0	80.7	116.9	152.2	61.9	139.1
Medium	101.8	78.4	55.7	178.1	78.1	85.1	52.7
Large	140.5	133.6	113.0	103.2	110.4	100.7	243.2
Total	129.5	112.4	98.6	112.7	107.7	94.6	164.6

Source: as for Table 1.

In small and medium-sized enterprises in the studied period there were major fluctuations in the dynamics of changes in revenues. Thus, subsequent years were characterized by alternate occurrence of decreases and increases in revenues without a noticeable trend - also within the mutual comparison of the groups of enterprises. In 2013, the revenues of small enterprises were by 39% higher than the ones of 2007, whereas in medium-sized enterprises the value was by 48% lower than the one of 2013. The value of revenues in large enterprises shaped differently. In this group of entities the revenues went up continuously. The biggest increases took place in 2008 and 2009, by 41% and 34%, respectively. In the whole studied period, the value of revenues in enterprises employing more than 249 people rose by 65%. The dynamics of changes in the value of revenues in electric power enterprises by size classes of business entities in the years 2008–2013 is presented in Figure 5.

Figure 5. The dynamics of changes in the value of revenues in electric power enterprises by size classes of business entities in the years 2008–2013



Explanation: 2007=100%.
Source: as for Figure 1.

Big changes in the value of revenues in the studied period influenced significant transformations in the structure of revenues of electric power enterprises by size classes.

The data characterizing the structure of the value of net revenues in electric power enterprises by size classes in the years 2007–2013 are included in Table 10.

Table 10. The structure of the value of net revenues in electric power enterprises by size classes in the years 2007–2013 [in %]

Specification	2007	2008	2009	2010	2011	2012	2013
Small	8.1	11.3	8.8	7.2	7.4	10.5	6.9
Medium	36.8	29.0	20.2	11.4	18.1	13.1	11.8
Large	55.0	59.7	71.0	81.4	74.5	76.4	81.3

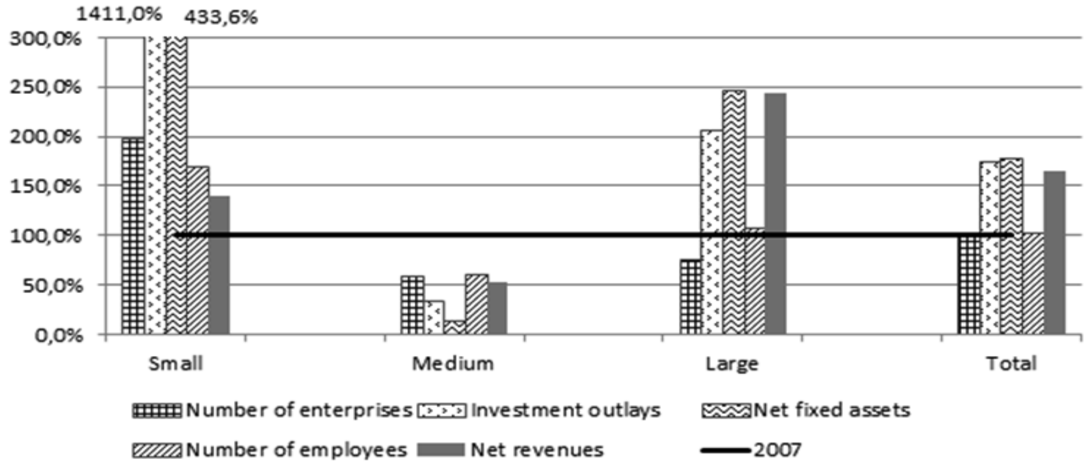
Source: as for Table 1.

In 2007, the shares of small, medium-sized and large enterprises were at the level of 8.1%, 36.8% and 55%, respectively. In the studied period, the share of small enterprises dropped to less than 7% (although it is necessary to emphasize that still in 2012 it exceeded 10.5%). The share of revenues of medium-sized enterprises was successively falling. In 2007, the revenues of medium-sized enterprises constituted over one-third of the revenues of all studied electric power enterprises, in 2013 it was only a little more than one-tenth (11.8%). The change was taking place with the simultaneous yearly growth of the share of large enterprises from 55% in 2007 to 81.3% in 2013.

Conclusions

The conducted study enabled to notice a number of regularities concerning the condition and the directions of changes in the size and the structure of the studied population of enterprises. In spite of insignificant, over two percent drop of the number of enterprises, in the studied period there were substantial increases in the value of investment outlays, net fixed assets and net revenues by 74%, 77% and 65%, respectively. The only economic value which did not go up so significantly was the number of employees - an increase by as little as 2%. However, the changes both in the number of enterprises and the basic economic values were very diverse in the division into the groups of entities by size classes. The synthetic summary of the dynamics of changes in the studied economic values in the graphic form is shown in Figure 6.

Figure 6. The dynamics of changes in the studied economic values in electric power enterprises by size classes in the years 2007–2013



Source: own study based on the data included in Tables: 1,3,5,7,9.

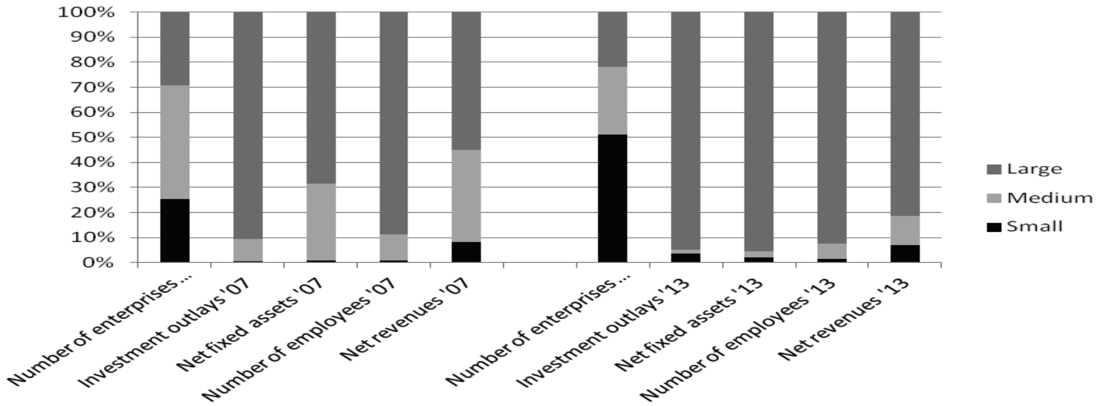
An analysis of the data based on the above division proved that only small and large enterprises were responsible for the growth of the aforementioned economic values. The number of small enterprises doubled in the studied period, and the value of investment outlays multiplied as many as 14 times. In the entities, also as a result of the incurred investment outlays, the value of net fixed assets increased by 334% and the number of workers went up by 68%.

In large enterprises, in spite of a decline in their number by 26%, the value of investment outlays increased over two times, the value of fixed assets was bigger than the one of 2007 by 174%, and the revenues grew by143%. Although with regard to the number of workers, the growth was only 6%, taking into consideration that in 2007 almost 90% of all the workers employed in the studied population fell on large enterprises, we can claim that it was significant.

Meanwhile, medium-sized enterprises shrank in the studied period, both with regard to their number (a decrease by 42%), and the value of investment outlays (a decrease by 67%), the value of net fixed assets (a decline by 86%), the number of workers (a decline by 41%) and net revenues (a drop by 47%).

The outlined trends of the changes in the number of entities and economic values stamped a distinct influence on the structure of the studied population. Figure 7 is the graphic presentation of changes in the structure of the number of enterprises and the basic economic values in the years 2007 and 2013.

Figure 7. The structure of the studied economic values in electric power enterprises by size classes in the years 2007 and 2013



Sources: own study based on the data included in Tables: 2,4,6,8,10.

In the years 2007–2013, year by year, there was a distinct trend to marginalize the significance of medium-sized enterprises in the studied population, and this regards all studied economic values. The trend brought about substantial polarization, both within outlays and the effects of activities in electric power enterprises. In 2013, as much as 95% of investment outlays, 96% of fixed assets, 93% of the number of workers and 81% of revenues made fell to large enterprises, constituting 22% of the studied population. It should be noted down that the growth of the importance of large enterprises was accompanied by the simultaneous decrease in the number of these entities in the whole studied period.

Such distinct trends of changes, delineating both in the dynamics and the structure of the studied economic values to a great extent seem to be an effect of the progressing transformation processes of the electric power sector. The conducted study clearly indicates the deepening concentration of the sector enterprises. The fall of the number of large and medium-sized enterprises and the reduction of investment outlays and the production potential (the value of assets, the number of workers) in medium-sized entities, with the simultaneous growth of the scale of activities of large ones, mark the progressing consolidation processes, compliant with the assumptions of the implemented directions of transformations.

However, we cannot attribute the changes in the dynamics and structure of the basic economic values characterizing the functioning and development of electric power enterprises only to administrative process of enterprise consolidation, arising from the implementation of governmental programmes. What is also noticeable in the study is also an intensive development of small entities, measured, for example, with the growth of investment outlays. The trend indicates clear revival of the private sector and its entering the industry reserved so far for medium-sized and large enterprises - inheritors of state-owned enterprises. An unquestionable cause of such a state is a resiliently developing subsector of the production of electricity from renewable sources. However, it should be stressed that investment in this sector depends considerably on the current legal situation and still uncertain conditions of subsidizing the producers of the "green" energy.

To sum up, it seems that in the years to come the developmental trend concerning small entities will be maintained. At the same time, due to the finishing consolidation activities, rapid growths of the potential of large enterprises (being a result of external development - mergers of enterprises), will give way to the processes of internal, organic development, characterized by much smaller dynamics.

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Krzysztof Zamasz
Academy of Business in Dąbrowa Górnicza, Poland

INVESTMENTS IN THE POWER GENERATION SECTOR AND CAPACITY REMUNERATION MECHANISMS

Summary

The paper discusses the main sources of risk that affect the decision making process with regard to investments in the power generation sector. The issue of the "missing money" is highlighted and themotivations for the introduction of capacity remuneration mechanisms (CRM) are discussed. Particular attention is paid to the UK forward centralised capacity market since a similar instrument is being considered for the Polish power generation sector. The outcome of the 1stUK capacity auction is then analysed. The paper concludes that the implementation of a CRM in Poland would substantially reduce the investment risk by ensuring predictable revenues from the capacity market.

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Introduction

For a very long time the generation capacity of most EU member states remained sufficient for meeting the demand for electricity regardless of economic growth or weather conditions. To a very large extent this was the result of the monopolised structure of the electricity markets in Europe. Such markets favoured energy security over the production costs. Therefore, prior to the liberalisation of the electricity sector, the most important issue had been to ensure secure supplies of energy carriers, including electricity. Consequently, the key objective of the governments and power companies was to ensure development of the transmission and distribution grids together with power generation units at a level minimising the probability of a blackout. As the monopolistic structure of the power sector ensured secure revenues from electricity sales, the investment risk was not substantial, and the capital and operational costs of each and every power plant (even unprofitable) were covered by the customers.

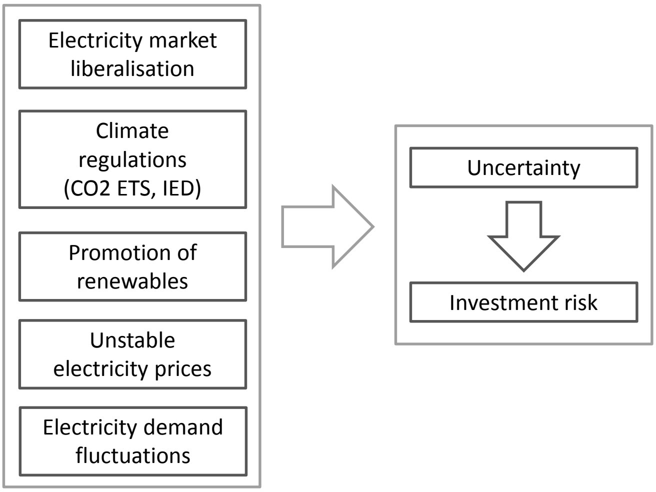
Liberalisation has brought about a significant degree of uncertainty to the power generation sector. Therefore, in the current structure of most electricity markets investment decisions are risky and complex. While there are many commercial sectors in which it would not be a significant problem, when it comes to electricity this issue is of utmost importance to the entire economy. Whenever there is insufficient generation capacity, this may lead to – in the extreme case –a rolling blackout. As regards Europe, this problem has already been recognized by several EU member states as well as by the European Commission which published a communication on public intervention in the EU energy market entitled "Delivering the internal electricity market and making the most of public intervention”[1], along with guidance on specific forms of public intervention entitled ”Generation Adequacy in the internal electricity market guidance on public interventions”[2].

In order to avoid potential problems of supply shortages, energy policy instruments could be applied to reduce the investment risk and improve the functioning of the power markets. Those instruments fall under the category of capacity remuneration mechanisms (CRM). As Poland is currently considering the implementation of such instruments, the key objective of this paper is to discuss the issue of investment risk in the power generation sector in the context of a possible introduction of capacity remuneration mechanisms.

Investment risk in the power generation sector

There are many sources of uncertainty when investments in the power generation assets are considered and this issue has already been addressed in international literature[3,4,5,6,7]. When long-run investment decisions are concerned, one of the key problems seems to be the appropriate choice of a profitable power generation technology. As it is obviously either costly or virtually impossible to change fuel once a power plant has been commissioned, all the factors that affect investment decisions are of crucial importance. A general scheme describing this issue is presented in Figure 1.

Figure 1. Key factors that affect investment decisions in the power generation sector



Source: own elaboration.

1 COM C(2013)7243.

2 SWD(2013) 438.

3 L. J. De Vries, P. Heijnen, *The impact of electricity market design upon investment under uncertainty: The effectiveness of capacity mechanisms*, Utilities Policy, Volume 16, Issue 3, September 2008, pp. 215-227.

4 K. Neuhoff, L.J. De Vries, *Insufficient incentives for investment in electricity generation*, Utilities Policy 12, 2004, pp. 253-267.

5 D. Finon, *Incentives to invest in liberalised electricity industries in the North and South. Differences in the need for suitable institutional arrangements,* Energy Policy, Vol. 34, No. 5, 2006, pp. 601-618.

6 M. Cepeda, D. Finon, *Generation capacity adequacy in interdependent electricity markets*, Energy Policy, Volume 39 (2011), pp. 3128–3143.

7 P. Cramton, S. Stoft, *Forward reliability markets: Less risk, less market power, more efficiency*, Utilities Policy 2008, Vol. 16, No. 3, pp. 194-201.

Currently, there are several environmental- or climate-related sources of uncertainty that affect the profitability of investment projects. In this context, the factor which should be immediately pointed out is the implementation of the CO_2 Emissions Trading Scheme[8], a market economic instrument aimed at reducing the CO_2 emissions. Although such instruments are usually supported by economists, in this particular case its fundamental assumptions were distorted. As the price of CO_2 emission allowance was too low to change investment patterns, the European Commission decided to undertake actions aimed at withdrawing a certain number of allowances from the market, hence manually increase prices. Furthermore, the European Union Emissions Trading System Market Stability Reserve (EU ETS MSR) is currently being introduced in order to ensure higher prices. As further development of prices of the CO_2 emission allowances is difficult to predict this source of uncertainty considerably complicates the right choice of power generation technology.

Another risk-related issue that should be identified in the context of investment decisions in the power generation sector is the recent development in electricity prices of selected EU member states (e.g. Germany). Very low electricity prices caused, *inter alia*, by the EU policies aimed at increasing the share of renewable energy production in the electricity generation-mix result in conventional power generation investment projects becoming unprofitable. The Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources[9]imposes relevant obligations upon the EU members states, hence one can expect an increased share of renewable generation in Europe. However, further integration of large volumes of renewable electricity might lead to problems with ensuring the required generation due to insufficiently flexible capacity of the conventional units. Moreover, intermittent technologies keep forcing conventional power plants to accept much lower or even negative prices of electricity[10]. This contributes to the investment uncertainty leading to withdrawal from investment projects.

The problem of low electricity prices is directly linked to the liberalisation of the electricity market. As already mentioned above, the liberalisation results in a significant increase of investment risk. Revenues are not guaranteed any more since long-term power purchase agreements (PPAs) are not permitted. Moreover, it is very difficult to secure financing of capital-intensive and uncertain power generation investment projects. This has been one of the reasons why many power companies in Europe postponed a number of projects.

Since the return on investment expenditures is uncertain under the current structure of the electricity market a decision on the construction of a new power generation unit is very complicated. In a market where there are poor incentives to invest in the conventional power generation units, their contribution to the security of the power system is very important, as they guarantee both flexible and stable power production. In order to avoid the problem of underinvestment, energy policy instruments aimed at ensuring an appropriate level of power generation capacity have been designed and implemented in several countries.

[8] Directive 2003/87/EC amended by Directive 2009/29/EC.

[9] 2009/28/EC.

[10] K. Zamasz, J. Kamiński, P. Saługa, *Rynki mocy w warunkach krajowego sektora wytwórczego*, Rynek Energii Nr 6(115), 2014, pp. 10-15.

Capacity remuneration mechanisms – a solution to the problem?

There have been several reasons for the implementation of the capacity remuneration mechanisms (CRM). The literature provides the following reasons for introducing the CRMs[11]:

- to ensure an adequate capacity (which means a capacity sufficient to meet certain techno-economical requirements) in a market with non-state-owned stakeholders (as in the USA in the 1970s);
- to resolve the problem of the so-called 'missing money' (insufficient revenues from the "energy only market" to allow the capital costs to be financed). Usually this is a direct result of increased penetration of renewable-based power generation and, consequently, a decrease in the number of operating hours of fossil fuels-based power generation. (An interesting study on the impact of the electricity market design upon investment under uncertainty with a particular attention being paid to the capacity mechanisms has been carried out by De Vries and Heijnen[12]). Also, this can be a side effect of the introduction of price caps;
- to overcome problems linked with environmental policy support mechanisms aimed at increasing the share of renewable energy sources in the generation-mix. As certain technologies (renewables) are subsidised or even over-subsidised, it is very difficult for the conventional technologies to compete with them in the same electricity market;
- to increase the market share of certain technologies in order to change consumption patterns (for instance, to allow demand side resource (DSR) technologies to profit from the CRM with the intention of reducing electricity consumption peaks, as in the case of the French system).

In this study the following argumentation supporting the introduction of the CRMs is proposed. The main objective underlying the introduction of the capacity remuneration mechanisms is to ensure an optimal level of power generation capacities by ensuring predictable revenues to finance (at least in a substantial part) the capital costs of a power generation company. Such a mechanism reduces investment risk, therefore contributing to energy security by supporting the construction of new and the refurbishment of the existing power plants. The proposed approach stems from the fact that in the event of insufficient generation capacity, electricity prices soar, and in the extreme situation rolling blackouts or even blackouts follow causing immense losses in the economy.

In principle, there are several categories of the CRMs which have already been implemented or are considered for implementation in the EU member states, as follows[13,14]:

- Capacity Payments;
- Strategic Reserves;
- Forward Centralised Capacity Markets (also called Capacity Auctions);
- Forward Decentralised Capacity Markets (in some cases referred to as Capacity Obligations).

As far as capacity payments are concerned, each existing or planned power generation unit that is included in this system is rewarded for the available capacity. The payment, usually expressed in monetary value per MW of the available capacity, is determined in advance and paid to the generators either by

[11] CREG 2012 – Study (F)121011-CDC-1182 on 'capacity remuneration mechanisms', Regulatory Commission for Electricity and Gas (CREG) 11 October 2012, p. 9.

[12] L. De Vries, P. Heijnen, *The impact of electricity market design upon investment under uncertainty: The effectiveness of capacity mechanisms*, op. cit., pp. 215-227.

[13] *ACER 2013 – Capacity Remuneration Mechanisms and the Internal Market for Electricity,* The Agency for the Cooperation of Energy Regulators (ACER). 30 July 2013. p. 5.

[14] CREG 2012 – Study (F)121011-CDC-1182 on 'capacity remuneration mechanisms', Regulatory Commission for Electricity and Gas (CREG). 11 October 2012, p. 10.

the Transmission System Operator (TSO) or a state authority. The level of remuneration may differ depending on the power generation technology, fuel, age, etc. Such an instrument has been introduced in Spain and Portugal. Currently, both the existing and new generation capacities are rewarded. There is a significant difference in the level of payments depending on whether it is a new, upgraded or operational unit. New units may be provided with capacity payment guarantees for up to 10 years. Payment is made on a monthly basis, provided that the capacity commitment is met during peak capacity demand periods. As the system of capacity payments in Spain was severely criticised for its overcompensation, it was reformulated at the end of 2013. However, from the point of view of a power generation company such a system seems to be the most profitable. As revenues are stable, the investment risk is significantly lower.

Another instrument, i.e. strategic reserves, is mostly targeted at obsolete written-off capacities that instead of being decommissioned, are used in exceptional situations. The remuneration received for the maintenance of those units on a stand-by basis, cover the fixed costs plus a reasonable premium. Such solutions have been implemented in Finland and Sweden. Strategic reserves are used only when the available capacity of operational units is insufficient to cover the demand for power. However, from the point of view of new investment projects this instrument is of no great importance, as it does not encourage the construction or modernisation of power generation units. As a result, for a power company that considers an investment project, this instrument cannot be seen as a reliable instrument leading to a decrease in investment risk.

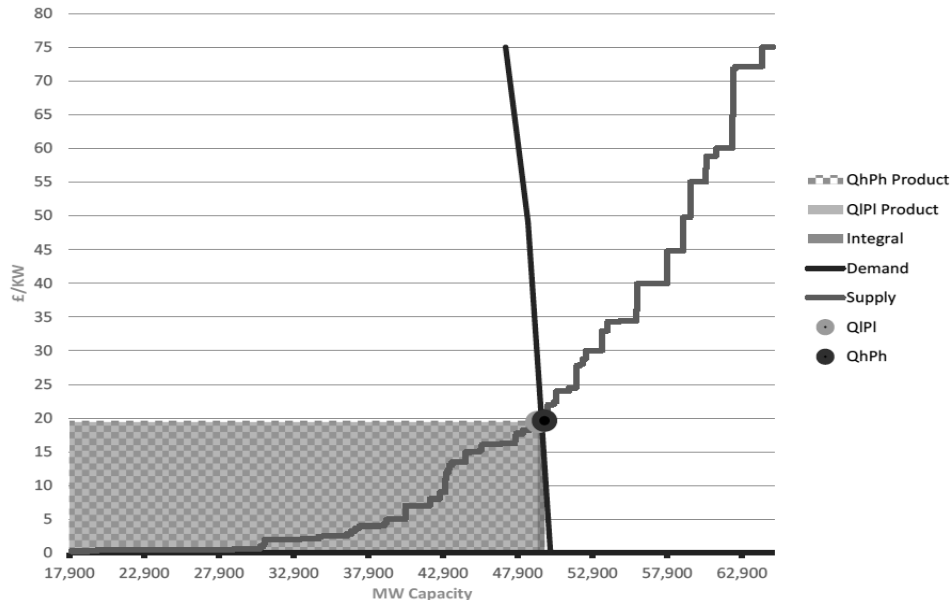
An instrument which has attracted substantial attention due to its successful implementation in the US is the forward capacity market. As far as the EU member states are concerned, such solutions had not been applied for many years. In fact, the UK was the first country to introduce an advanced forward centralised capacity market. The main reason for its implementation was the substantial underinvestment due to risk aversion of privatised power generation companies that resulted in predicted shortages of reliable generation capacities. In this mechanism, revenues are received by power producers that succeeded in an auction for sold capacity that is available during peak electricity demand periods.

The key issue in the design of a forward centralised capacity market is the determination of the power demand curve. The shape of the demand curve is established so that it ensures higher revenues when capacity shortages are expected. On the other hand, if a capacity surplus is expected, the price of capacity plummets. In this system the forward period was agreed to be four years. The standard contract duration is one year, while in the case of new capacities it may be extended up to 15 years and in the case of upgrades – up to three years. The British government's target level for the delivery year of 2018/2019 is 48.6 GW. The first capacity auction started on 14 December and ended on 18 December 2014. In this auction 49.26 GW of capacity was procured and the clearing price was GBP 19,400/MW (approx. PLN109,610/MW; GBP 1= PLN 5.65)[15] (Figure 2) which is far lower than the price cap set at the level of GBP 75,000/MW. The market clearing price was much lower than expected by most analysts.

As regards the types of generation units that were awarded contracts, as expected, mostly existing power generation units succeeded in the auction – 68% of the total purchased capacity. Approximately 14% of winning capacities committed refurbishment of the existing units. Twelve per cent of capacities were classified as Pre-Refurbishment units. Five per cent of the successful capacities (2.6 GW) are New-Build Generating Units that unexpectedly offered lower prices than many existing units that did not succeed in the auction (Figure 3).

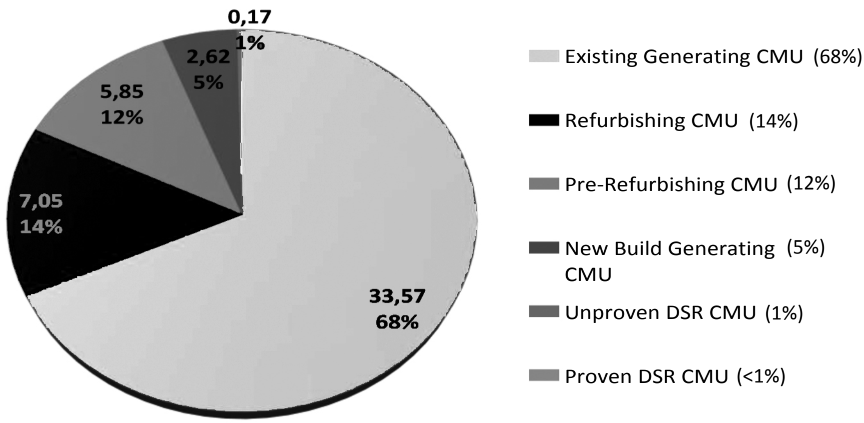
[15] Provisional Auction Results, T-4 Capacity Market Auction 2014, National Grid. 2014.

Figure 2. Supply and demand functions intersection in the UK's 1st capacity auction



Source: Provisional Auction Results, T-4 Capacity Market Auction 2014, National Grid. 2014, p. 4.

Figure 3. Awarded generation capacity, breakdown by the type of Capacity Market Unit (CMU)

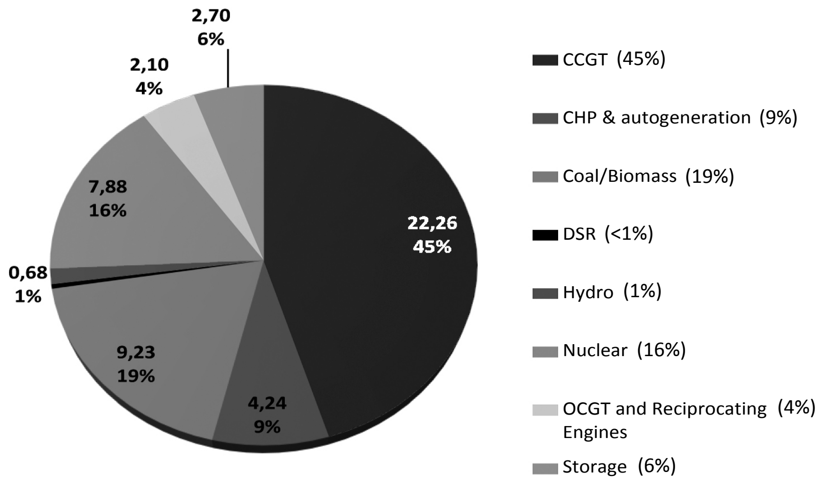


Source: own based on the report: Provisional Auction Results, T-4 Capacity Market Auction 2014, National Grid. 2014, p. 7.

Due to the current technology-mix of the British power generation sector and its expected development, the CCGT (45%), Coal/Biomass (19%) and Nuclear (16%) technologies were the most successful in the 1st capacity auction. It is worth pointing out that CHPs&Autogeneratorsshared9% while

Storage technologies – 6% (Figure 4). In the long run, it might be expected that those technologies will be increasingly important players in the capacity market.

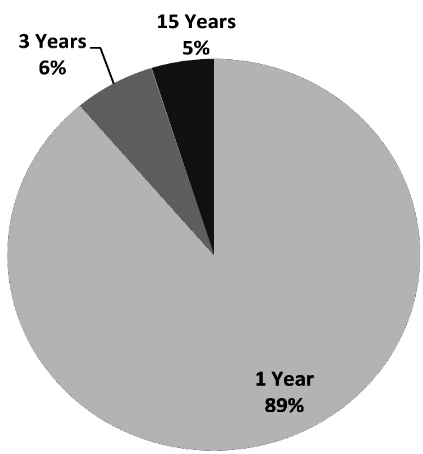
Figure 4. Awarded generation capacity, breakdown by the technology of the CMU



Source: own based on the report: Provisional Auction Results, T-4 Capacity Market Auction 2014, National Grid. 2014, p. 8.

The breakdown by contract duration (Figure 5) provides interesting insights. It turns out that 89% (43.7 GW) of capacities wining the auction are to sign a one year-long contract. Those units will have to participate in the 2015 capacity auction for the delivery year of 2019/2020 in order to ensure further revenues for their capacities. As regards the remainder, 6% of purchased capacity will be contracted for 3 years, while 5% for 14-15 years.

Figure 5. Awarded generation capacity, breakdown by the duration of the contract with the CMU



Source: own based on the report: Provisional Auction Results, T-4 Capacity Market Auction 2014, National Grid. 2014, p. 9.

The last instrument considered in this paper, the forward decentralised capacity market, has been introduced in France. The main reason for its implementation stems from the fact that the available capacity plus the expected investments are forecast to be insufficient to cover peak power demand (it has to be remembered that 70% of heating in France is electricity-based). The general methodology underlying the forward decentralised capacity market mechanism is very similar to the centralised one. However, in this case ensuring the required level of power generation capacity takes place by way of trading in the so-called Capacity Obligations or Capacity Certificates. In this system, the end consumers are obliged to purchase a certain number of Obligations/Certificates in a forward market. Bilateral trade is preferred. In the case of France, the forward period is four years prior to the delivery year. It is expected that as a result of the implementation of this CRM the DSR systems will be activated.

Conclusions

As in the current organisation of the electricity market nothing can be guaranteed and power producers must accept investment risk, targeted incentives are required in order to ensure an appropriate level of reliable generation capacity. A properly developed and correctly implemented capacity remuneration mechanism can substantially reduce investment risk.

There are several solutions that could be applied, and while some of them have demonstrated their usefulness (e.g. capacity markets in the US), others have been severely criticised (see Spain). A competitive forward capacity market has been introduced in the UK. The results of the first capacity auction have shown that introducing such a mechanism can ensure forward contracting of capacities at a competitive price and simultaneously provide sufficient incentives to power companies, through a reduction of the revenue-related uncertainty. From the point of view of a power generation company such an instrument is of utmost importance when it comes to investment decisions.

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PART III

RESTRUCTURING PROCESSES – AN ATTEMPT OF THE VIEW FROM THE ANGLE OF SELECTED EXAMPLES FROM ECONOMIC PRACTICE

Jan Stachowicz
The General Tadeusz Kościuszko Military Academy of Land Forces (MALF), Poland
Silesian University of Technology, Gliwice, Poland

Sławomir Olko
Silesian University of Technology, Gliwice, Poland

NETWORK ORGANIZATIONS AND CLUSTERS. THE INSTRUMENTATION OF BUILDING CIVIL SOCIETY

Summary

In the paper the role of clusters (especially creative clusters) have been presented, in building and supporting civil society on the local and regional level. Up to now a wide range discussion have taken place in last few years in the literature and in the practice of social and economic life about the role of cluster in the regional development. Clusters are real examples embodying network paradigm in the management science. The role of clusters in creative and cultural industries (CCI) have been discussed as the newest element of development regional economies. The role of innovation in the society is building of the externalities – the positive effects for other actors in the society that benefits form the innovation. Process of creation and development of creative clusters positively influence the society by support of development of civil society and by social inclusion of specific social groups. Effective and rational process of developing creative clusters depends on the nature of knowledge management process for the network of actors.

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Introduction

The purpose of the paper is to introduce role of the institutional networks and clusters and in the process of building the civil society in the regions. In the article the consequences of implementing the network paradigm in clusters was analysed especially in creation effects for the external environment (externalities), and on that basics one of the expected externality – the civil society factor have been presented. This factor was applied in a dynamic evaluation in the regions of Poland. Nowadays, development of civil society, is assumed as the basic condition of the wealth creation in regions and countries but there are no simple methods how to stimulate social commitment and trust in local and regional environments. Involvement of different kind of actors in the activities oriented on benefits of society rather than individuals is very positive practical factor stimulation the civil society emergence. Regional and local clusters being the social and institutional networks where these types of activities take place, among many other externalities, also add to the society very positive value of strengthening the local civil society. Moreover, clusters and the joint projects for the cluster members are supported by public funds, much more than in the previous programming period in European Union (2007-2013). For these reason the mechanism of civil society empowerment in clusters (especially in creative clusters) have been considered in these paper.

Civil society and social capital in local environments

There is no doubt that contemporary social and economic development of regions is de-pendent on social phenomena. They have a much more stronger impact on the functioning of societies than availability of unique resources. Strategic documents defining trends of social and economic development, which should include: Strategy of social capital development, National Development Strategy 2020, stress the role of social capital, interpersonal trust as well as social activity as a basis for the development of civil society. It is written in the vision of social capital development, which expresses the need and ability of the citizens to shared commitment for the common good, the citizens also have an access to the credible and reliable information about public affairs as well as necessary competence helping them to join the public debate rationally (based on facts) and take an active part in decisions concerning them[1]. From the other hand we have to be aware of the low level of social capital and trust in Poland. On the base of the research of the Polish Public Opinion Research Centre (CBOS) we can find that the general level of trust in Poland have not changed since over 6 years[2].

Above considerations lead us to the following proposition:

Proposition

P1. Low level of the social capital in local communities is the important factor limiting the development of the civil society

For the correctly interpretation of the dependence above it is important to stand out basic premises of civil society. The essence of civil society phenomena consist of values, attitudes and behavioural patterns enhancing the prime and active role of citizens (of the state, region and local community) in defining and executing the functions for the society. According to Wnuk-Lipiński the foundations of the citizenship lays in *"some special attitude of individuals towards whole society, and towards it's individual members as well as conviction about importance of certain values — in other words* **«civic virtues»** *(ex. brotherhood, solidarity, acceptance of equal rights, trust, respect for the common good, cooperation, respect commonly agreed rules, subjective treatment of fellow citizens). Cultivation of civic virtues creates community from a loose collective of people. From the other hand, sense of citizenship is a necessary condition for the emergence of civil behaviours, which in practice determines the actual level of civil culture in the specified community"*[3].

Thomas Carothers emphasize the emergence of civil behaviours in social sciences and public life, indicating 1990 when the term "civil society" the term has become a mantra for many: form presidents

[1] *Strategia Rozwoju Kapitału Społecznego 2020* (Strategy of Social Capital Development 2020), Załącznik do uchwały nr 61 Rady Ministrów z dnia 26 marca 2013 r. (poz. 378), Ministerstwo Kultury i Dziedzictwa Narodowego, Warszawa 2013, p. 37.

[2] A. Cybulska, *Zaufanie społeczne. Komunikat z badań,* Centrum Badania Opinii Społecznych, Warszawa 2012.

[3] E. Wnuk-Lipiński, *Socjologia życia publicznego,* Wydawnictwo Naukowe Scholar, Warszawa 2005, p. 105.

to the representatives of political sciences[4]. In the same year Derek Heather in the same vein argues the citizenship has become a buzzword overused by the thinkers representing the whole political spectrum[5].

In the works of the many western researchers we can find considerations about civil society (Cohen, Arato 1994, Keane 1988, Walzer 1998). The idea of civil society in the West is determined by two main directions of contemporary politics. Firstly, by the new sense of identity (national, regional, racial, ethnic, religious), which, although is a prerequisite for the formation of civil society, but in practice many times connected with etatist demands. Secondly, the direction connected with "new social movements": the most important among them are feminist and ecological movements, but next to them appear a broad spectrum of social movements acting towards solving specific social problems (ex. abortion, restricting access to firearms, prayer in schools or the death penalty). Just because of such movements, formerly passive citizens becomes a social activist[6]. In case of activities of clusters the main idea actuating people is cooperation in business, social work and research and development.

The idea of civil society, although has a non-political character, is present in many ideologies and cultural traditions. D. Pietrzyk-Reeves shows the role and understanding of civil society in American republican tradition, liberal tradition, and theoretical and ideological disputes over civil society. The controversies concern the scope of competence of state and society influence, especially in case of economic sphere and the freedom of establishment[7].

The leading idea that activates the citizen attitudes in creative clusters and networks is dissemination of cultural products in society. Distinctive feature of creative clusters and networks, distinguishing them form their equivalent network in business is their dual: commercial and non-commercial character. Business entitles undertake the networking or cluster activities commercial reasons (acquisition of new knowledge, technology, access to new market possibilities). Entitles in creative sectors in many cases carry out a mission of dissemination of cultural goods. Commercial activities, however present and essential in the creative sectors are treated by many actors as ancillary to the main process of delivering cultural goods to the society. Looking at this phenomenon from a broader perspective, we can distinguish thee structural components in life world: culture, society and personality[8]. As emphasized by the author life world includes *"a treasure trove of tradition, resources embedded in language and culture, being the form of knowledge used by individuals every day. Reproduction of these components, as well as cultural background is done by the medium of speech, which implies the processes of integration and socialization. Such reproduction requires the presence of many institutions, therefore Cohen i Arato on the institutional level of life world locate the conception of institutional society consists all forms of associations, which for their reproduction require interactive communication, and for the integration of activities relay primarily to integration processes*[9].

Featured above integration and communication, so characteristic for network and clusters in creative sectors convinces us that clusters gave a new formula of activities being in the scope of actors in creative and cultural industries for a long time. Functioning of clusters and network in creative industries differs from industrial clusters the range of social integration. The effects of creative clusters activity concern almost the whole of society. Moreover the products of creative sectors are always connected with some emotions. The emotional value in mature markets is possible to transform into economic value, that is

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4 T. Carothers, *Civil Society,* Foreign Policy, Carnegie Endowment for International Peace 1999, p. 18.

5 D. Heater, *Citizenship: The Civic Ideal in World History, Politics and Education,* Longman, London 1990, p. 293.

6 M. Walzer, *Toward a Global Civil Society*, Berghahn Books, Providence 1998, p. 1.

7 D. Pietrzyk-Reeves, *Idea społeczeństwa obywatelskiego. Współczesna debata i jej źródła,* Fundacja na Rzecz Nauki Polskiej, Wrocław 2004.

8 D. Pietrzyk-Reeves, op. cit., p. 289, after J. Cohen and A. Arato (1994).

9 D. Pietrzyk-Reeves, op. cit., p. 290.

why network and clusters of creative industries can attract other business environments, being perceived by the society as unattractive or incomprehensible.

The praxis of the social life convinces us that we can talk about the social development on the following levels:

- local level — small communities where the integration concerns the problem of housing, supply of media and general use goods, protection of the natural microenvironment, education, health, and the cultural activity. This level does not exceed the limits of village, community, residential complex or small town,
- regional level — of regions and provinces, where the problems extend beyond the social or housing, relate more to regional economy, education, ecology, culture and long term development strategy,
- national level — being a platform for elite's dialog on national level and discussion with the regional civil society representatives. The scope of issues, where the community involvement occurs, concern the formulation of rules and long term policy for the state and its regions, debate on reason of State and national values.

Interaction ranges in case of individual actors are often intermingled, e.g. the same persons are active in social affairs on regional and national level. However there are no grounds to conclude that the mechanisms of civil society functioning on the national level are a simple resultant of social activities of civil society on the regional level.

Kaźmierczak and Rymsza (2005) postulate of implementation of active social policy in order to increasing the active role of society in operation of the State and public administration. The authors perceive the main factor of activating the social actors in the linkage between social benefits system (for the persons able to work) and participation in professional activation programs, development of social economy and third sector. This is completely different character of activities, focused on the excluded societies, than passive activities focused on social protection. There is no doubt that passive activities sustain the state of inactivity of the excluded, moreover the resources for the passive activities are always insufficient. The authors give an example of the unemployment benefits in Poland, in the beginning of political changes, in the nineties, included a very large group of registered people. In 2005 there were only 15% of registered people entitled to benefits. The situation persists to the present: according to Central Statistical Office (GUS) in 2013 only 13.8% of registered unemployed receives benefits.

Network and clusters in creative sectors can be an interesting, supporting form of actuating excluded, not always connected with taking the risk of individual economic activity. Although the self-employment is perhaps the most desirable effect of active social policy, some other externalities are noteworthy: increase awareness and individual knowledge of the excluded, increase in social capital and creation of social leaders in these kind of activities. This kind of activities we can observe in social cooperatives and social enterprises, coordinated by non-profit organizations whose purpose is social inclusion by art and culture activity. The development of social economy, which is able to create a workplaces for the people unattractive for the traditional labour markets, may have a significant support in the cultural sector. This is due to the deep inveteracy of activities, people and cultural institution in local societies and the opportunity of fulfilment two social functions simultaneously: activation of the excluded and dissemination of culture. Cultural institutions naturally operate in network environment and can obtain public and private funds for their activity. The process of activating excluded using the means of social economy requires establishing the network of institutions supporting the social economy sector: from technical consultancy, through consulting and training in management, to financial support (credits and loan guarantees)[10].

[10] T. Kaźmierczak, M. Rymsza, *Aktywna polityka społeczna. Stan obecny i szanse upowszechnienia koncepcji,* Analizy i Opinie nr 48/2005, Instytut Spraw Publicznych, 2005, p. 6.

The role of the institutional network in formation of regional innovative potential have been the subject of the research project entitled "Intellectual Capital Management in Regional Pro-Innovative Networks"[11]. The network structures have been developed in the Śląskie region around initiatives of a diversified character (clusters, consortia, entrepreneurship incubators, advanced technologies centres and innovation centres as well as informal networks and associations). There certainly exists a great regional potential of initiatives, the majority of which will be continued in the future. Innovative networks of cooperation and clusters are based on the knowledge potential of scientific units but most important for their practical effectiveness is social capital.

Based on described facts we can assume that building civil society in local communities is the process rationalizing the building civil society on national level.

Civil society in creative clusters

Currently, the most often cited definition of the cluster is formulated by M. Porter, who defines the cluster as "geographically proximate group of interconnected companies and associated institutions in a particular field linked by commonalities and complementarities. Clusters encompass an array of linked industries and other entities important to competition including governmental and other institutions – such as universities, standard setting agencies, think tanks, vocational training providers and trade associations"[12].

What was meant by Porter when speaking of improving the competitiveness through co-operation, are various sources of competitive advantage, including the costly and conditioned by access to unique resources. There are many features identifying cluster, among which we can emphasize the following:

- **Creating knowledge externalities** – this factor highlighted by modern authors (Sölvell, Henning, Moodysson and Nilson) was indicated as an important phenomenon in the works of A. Marshall and M. Porter. Creating knowledge externalities in every envi-ronment serves different parties, at which it was not originally aimed. There is no doubt, that the benefits coming from the formed knowledge are useful for the cluster, but also for the environment of the local society and the region,
- **Industry specialization** – cluster links entities within the same branch, which want to cooperatively compete in the supra-regional market. The factor influencing such a relationship between the entities is the possibility of sharing the costs of research and development, technology transfer and logistics,
- **Complementarity** – clusters gather transactors offering complementary products. Practice shows that agreement-based clusters rely on permanent trust with regard to mutual demand of transactors creating a coherent, wide range of products. The best example are tourist regions, which form clusters offering complementary hotel, food, entertainment, sports and cultural services,
- **Geographical proximity** – it is not only the condition for cooperation related to logistics cost, but also the condition for the involvement of local/regional authorities, business institutions and scientific entities.

Creative cluster is a special kind of cluster defined by speciality (representatives of creative sector) but also the need of real participation of administration (role in the delivering culture) and the highest role of civil society in cluster activity within all types of clusters. Simplifying the way of defining the creative cluster we can say that creative clusters are in general the agglomeration of creative enterprise, where "creative enterprise" is "any company for which the primary value of its products or services is rooted

[11] Research project „*Intellectual Capital Management in Regional Pro-Innovative Networks"* realized in 2005-2006 by Systems Research Institute Polish Academy of Sciences, project manager: Jan Stachowicz.

[12] M. E. Porter, *On Competition,* Harvard Business School, Boston 1998.

in their emotional or aesthetic appeal to the customer" — according to Rosenfeld[13]. The simplification in is disregarding of other institution involved in the creative cluster development (administration, universities), and not to mention about the role of civil society, although not institutionalized but crucial in the creative cluster activity.

Proposition

P2. Clusters are the instruments increasing dynamics of civil society creation in region

The experiences of cluster creation in all kind of industries convinces us that every kind of mutual collaboration gives the effect of strengthening civil society but this effect is much more enhanced in creative clusters. This is due the following reasons:

- clusters and networks are based on existing in the environment social capital, which is the beginning of network activity and an important requirement of network effectiveness. Establishing formal structure of the cluster should be secondary to the development of social relations within the network,
- the functioning of civil society is based on trust in the social network. Social relation of trust within the network enhancing the efficiency and accelerate the process of civil society creation.

Table 1. The employment in CCI in the regions of Poland

No.	Regions	Number of employees	Number of creative clusters*
1	Mazowieckie	90 159	2
2	Śląskie	22 483	5
3	Małopolskie	21 863	4
4	Wielkopolskie	18 671	3
5	Dolnośląskie	13 266	1
6	Pomorskie	12 264	3
7	Łódzkie	11 032	2
8	Podkarpackie	9 123	1
9	Kujawsko-Pomorskie	8 065	0
10	Lubelskie	6 869	2
11	Zachodniopomorskie	6 440	2
12	Warmińsko-Mazurskie	4 462	2
13	Świętokrzyskie	4 067	1
14	Podlaskie	3 906	1
15	Opolskie	3 171	1
16	Lubuskie	2 720	0
Total		**238 561**	**30**

*including not active clusters.

Source: www.clusterobservatory.eu (the most actual data represent the year 2010 and 2011) and own research.

[13] S. Rosenfeld, *The Economic Power of Creative Industries,* States & Innovation, National Governors' Association, Regional Technology Strategies 2011, p. 3.

In Knowledge Based Economy innovations are the main area of building competitive advantage. Traditional model of innovation places the searching and finding new solutions as a domain of R&D, marketing, and process/technology. More and more sources of innovations refers to notice the value for the customers in the non-technological areas. In modern approaches to innovation we can point out the two most interesting fields: focus on the role of non-technological innovation: innovation in the field of artistic activity and culture, economic innovation and social innovation) as well as network and open character of innovation.

Table 1 shows the potential of creative clusters development in Poland based on full time employment in creative sector and the number of identified creative cluster in the research project *"The models of knowledge management in networks and clusters of creative industries in Poland and the EU countries"*.

Conclusions

The literature analyses, undertaken scientific discussion regarding the role of creative clusters in creation of civil society and consideration regarding methodology of knowledge management in creative clusters and networks enable to formulate the following conclusions:

1. Presented literature models demonstrate a greater and greater role of creative industries in modern economy and society. The activity in this sector tends to be more related to inter-connections between the actors of the network than in traditional industries. Growing share of creative industries in GDP and the value of creativity impacting other sectors are key factors making the creative clusters very important to public policy practitioners and scientist.
2. Another important externality of creative clusters for the local environment is support in building civil society. Examples of creative cluster operating in Poland shows an interesting field of research regarding new areas of creativity, open innovation, social innovation and impact for another industries.
3. The program of the research carried out within the project "Models of knowledge management in creative clusters in Poland and EU" includes the analysis of network structure with ties corresponding to knowledge exchange and social relation (familiarity, trust). High density of the network correspond to the higher social activity and social commitment.

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Sylwia Kowalska, Sylwia Łęgowik-Świącik
Częstochowa University of Technology, Poland

ANALYSIS AND EVALUATION OF THE ACTIVITY OF ENTERPRISES IN TERMS OF OBTAINING EUROPEAN UNION FUNDS IN THE CONTEXT OF RESTRUCTURING

Summary

Polish accession to the European Union requires enterprises to adapt to the growing competition both in the domestic and international market. In order to finance investments reducing the technological gap between Poland and other countries, it is necessary to raise funds both domestically and from the EU. Restructuring of many SMEs helped to stabilise the way they function and to achieve a positive balance. In addition, it improved work organisation, employment and financial performance. Undoubtedly, smooth restructuring was possible thanks to funds obtained from the EU, which accelerated and supported introduction of changes. The aim of the article is to present the activity of enterprises related to obtaining funds from the European Union in 2007-2013, showing the ways EU funds were used and the effects achieved through them.

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Introduction

Polish membership of the European Union plays an important role in the development of small and medium-sized enterprises because of, among other things, the financial support in the form of structural funds, which Poland began to use on the first day of the membership. As EU acknowledges the importance of small and medium-sized enterprises for economic and social development, it undertakes initiatives to ensure better conditions for SMEs and their development[1].

[1] S. Kowalska, *SMEs and business development assistance from the EU* [in:] *Restructuring. Theory and practice in the face of new challenges. Commemorative book to celebrate the 45th anniversary Jubilee scientific and educational work of Ryszard Borowiecki*, Ed. by A. Jaki, J. Kaczmarek, T. Rojek, Foundation of the University of Economics in Cracow, Cracow 2011, pp. 673-684.

In addition, the changing economic environment poses continuous challenges, which entrepreneurs need to face on a daily basis. Restructuring-related actions are taken so as to boost growth and expansion. In other situations, the aim is to maintain the existing market position or attempt to protect the company from bankruptcy[2].

The aim of the paper is to show the way EU funds were used and effects achieved through them. In addition, the author has attempted to outline the activity of enterprises in terms of raising European Union funds in the years 2007-2013.

The concept and characteristics of small and medium-sized enterprises

Small and medium-sized enterprises play a very important role in the Polish economy as well as in the European Union. The aim of their activities is not only to self-develop and generate profit - they also affect the development of local entrepreneurship. The entities in question are involved in production, services and trading, which is supposed to meet the needs of individual and institutional customers. Companies in the SME sector play an important role in the creation of the labour market, especially in Poland[3].

A characteristic feature of people working in the SME sector is continuous improvement of skills and development, resulting in much greater efficiency and flexibility of a small company. Small and medium-sized enterprises can gain advantage over big businesses, especially in the following situations[4]:

- rapid response to changing environment;
- openness to using innovations that can be easily verified by market needs;
- entering co-operative agreements easily by creating new workplaces rapidly;
- entrepreneurial use of different types of chances and market opportunities;
- rapid information flow in the company;
- activities based mainly on meeting the specific needs of the local market;
- greater competitiveness which is achievable through strict control and cost reduction.

Legal regulations on small and medium-sized enterprises in Poland were established at the time of rapid development of the SME sector itself, which occurred after 1989, when Poland introduced a free market economy. Polish efforts to join the European Union led to the adaptation and standardisation of the law related to small and medium-sized enterprises.

The resolution of the Sejm of Poland of 26 November 2004, which was passed in connection with the Polish accession to the European Union, introduced amendments to the Act of 2 July 2004 on Freedom of Economic Activity[5]. The amendments concerned the definition of micro, small and medium-sized enterprises. The introduced concepts were consistent with the standards adopted by the European Union and defined the category, which an enterprise falls into, primarily through three aspects: turnover size, balance amount of total assets held and employment status (Table 1).

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[2] R. Borowiecki, E. Wysłocka, *Economic analysis and expert judgment in the process of restructuring,* Difin, Warsaw 2012, p. 54 and more.

[3] *Management of small and medium-sized enterprise in Poland and in the European Union. Theory and practice, Part 2,* Ed. by A. Buzan-Bulanda, P. Bartkowiak, Publisher Częstowska University, Czestochowa 2003, p. 5.

[4] M. Strużycki, *The SME in the region's economy,* PWE, Warsaw 2004, p. 20.

[5] *The Act of 2 July 2004 on Freedom of Economic Activity* (Journal of Laws of 2004, No. 173, item 1807) art. 104–106.

Table 1. Criteria for categorising enterprises

Specification:	**Enterprises:**		
	Micro	**Small**	**Medium**
Employment	up to 10 employees	up to 50 employees	up to 250 employees
Net sales turnover	up to 2 mln Euro	up to 10 mln Euro	up to 50 mln Euro
Balance total assets	up to 2 mln Euro	up to 10 mln Euro	up to 43 mln Euro

Source: *The Act of 2 July 2004 on Freedom of Economic Activity* (Journal of Laws of 2004, No. 173, item 1807) art. 104–106.

Table 2. Characteristic features of small, medium and large enterprises

Small and medium enterprises	**Large enterprises**
Taking actions based on the owner or manager's intuition	Applying new management methods and techniques
A relatively low level of personnel education	A high level of managers' education
Dominance of operational decisions	Dominance of strategic decisions
Frequent combination of the function of the owner and manager	Managing by the hired management staff
Decisions significant for the company are taken by the owner(s)	Decisions are taken on the basis on the opinion of a team of advisors
Conducting a low-scale, mostly local activity	A large sales volume and at least nationwide coverage
A company is independent from other entities	Numerous capital & organisation-related connections
Lack of access to sources of financing inherent in capital market	A possibility to use various instruments available in capital market
A relatively low market share	A significant market share
Considerable capital needs	Development & large-scale investment
Neglect of the company's image due to a lack of knowledge of marketing	Application of modern techniques to create the company's image
Minimal export-related activity	Well-developed export-related activity
No tendency to form local groups for protection of own interests	Membership of numerous economic organisations and business clubs

Source: Z. Dach, *The SME sector in the light of accession to the European Union*, Scientific Journals of University of Economics, Published by CUE, Cracow 2001, p. 8.

Publications on the topic include the lists of positive factors of small and medium enterprises, which are presented below[6]:
- an ability to rapidly respond to market needs,
- openness to technological and organisational progress,
- a potential ability to create new workplaces,
- low workplace cost,
- ease of adapting to place, time and resources,
- occurrence in all sectors of the economy.

Therefore the SME sector is flexible and capable of a quick adaptation to its environment. It also serves important social functions involving the levelling of social tensions which arise as a result of the ongoing transformation processes. This aim is achieved through the absorption of surplus workforce, as well as promoting entrepreneurial attitudes and showing opportunities and possibilities for self-employment.

In addition to the social functions, the SME sector also performs very important economic functions, which include active participation in the change process of the industrial structure of the country, an important role in the formation of private ownership of production means, absorption and utilisation of available labour resources released as a result of streamlining the operation of the whole economic system, building economic infrastructure necessary for the efficient operation of the entire economic system, especially the development of cooperation and outsourcing system as well as legal changes in the regulations conducive to the development of entrepreneurship and efficiency of small and medium-sized enterprises. Small and medium-sized enterprises play an important role in terms of the economy, as well as due to bringing positive social benefits[7]. The SME sector is of great importance not only in the Polish economy, but also in the developed economies of Western countries, including the member states of the European Union.

The way EU funds were used and the effects achieved through them

Poland's accession to the European Union forces enterprises to adapt to the increasing competition both in the domestic and international market[8]. In order to finance investments reducing the technological gap between Poland and other countries, it is necessary to raise funds both domestically and from the EU[9]. Polish membership of the European Union plays an important role in the development of small and medium-sized enterprises. With the introduction of EU regulations, the business environment of SMEs has improved considerably. Companies received support for their activities from structural funds, which Poland began to use on the first day of membership.

According to the 2013 report ‚Polish SMEs on the road to modernity. Classification on the basis of size classes', the greatest number of companies which applied for EU funding were medium-sized companies - more than 55%. Micro companies were least interested in EU funds, among which only 12.5% of entrepreneurs sought to acquire EU funds.

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[6] Z. Dach, *The SME sector in the light of accession to the European Union*, Scientific Journals of University of Economics, Published by CUE, Cracow 2001, p. 8.

[7] MSP Sector, www.nbportal.pl (as for 15.01.2014).

[8] A. Lewandowska, *The impact of Poland's membership of the EU on the increase on business innovation* [in:] *Political and economic development of Poland in the EU structures*, Ed. by B. Jagusiak, Military University of Technology, Warsaw 2007, p. 274.

[9] A. Lityńska, *Institutional forms and techniques of supporting the development of small and medium-sized enterprises* [in:] *Business management in the conditions of European integration*, part 2, Ed. by M. Czyż, Z. Cięciwa, Academic Didactic & Scientific Publishing House, Cracow 2004, p. 33.

Additionally, medium-sized companies prepared best applications for EU funding, which resulted in obtaining financing - this applied to 40% of companies. In contrast, this number was only 8% in case of micro companies (see Table 3).

Table 3. Did the company apply for financing from EU funds?

Specification	**Enterprises:**		
	Medium	**Small**	**Micro**
Company submitted an application and received financing	40.5	15.5	7.8
Company submitted an application and did not receive financing	14.9	9.1	4.7
Company did not submit an application	44.5	75.4	87.5

Source: B. Wyżnikiewicz, *Polish small and medium enterprises on the road to modernity,* The Gdańsk Institute for Market Economics, Lewiatan Confederation, Warsaw 2013, p. 46.

Table 3 also shows that medium-sized enterprises were the most successful in raising funds, with 75% of companies which submitted an application being granted funds. Micro companies were the least successful in obtaining EU funds. It should be added that there is still a very large number of companies that have not applied for EU funds yet.

The study of the way EU funds were used in the SME sector shows that most companies used obtained funds to invest in machinery and equipment. Much less often funds were used to invest in new technologies, staff training and consultancy on company development (see table 4).

Table 4. Ways of using EU funds in the SME sector

Specification	**Enterprises:**		
	Medium	**Small**	**Micro**
Investing in machinery & equipment	86.7	78.8	78.9
Investing in new technologies	59.9	41.4	29.3
Staff training	28	24.1	22.6
Consultancy on company development	14.6	8.4	25.1

Source: B. Wyżnikiewicz, *Polish Small and medium enterprises on the road to modernity,* The Gdańsk Institute for Market Economics, Lewiatan Confederation, Warsaw 2013, p. 48.

Medium-sized companies used as much as 86% of EU funds for the purchase of new machinery and equipment. 59.9% of the received EU funds were invested in new technologies, 28% in staff training and only 14.6% in consultancy on the development of the company.

Small businesses allocated most of the obtained EU funds, exactly 78.8%, to the purchase of new machinery and equipment. 41.4% of the obtained money was invested in new technologies, 24.1% in staff training and only 8.4% in consultancy on the development of the company.

Similarly to small enterprises, micro companies allocated 78.9% of the EU funds to the purchase of new machinery and equipment. The second way of using EU funds was investing in new technologies (29.3%), followed by expenditure on consultancy services related to business development (25.1%). The least popular way of spending EU grants was staff training (22.6 %).

The effects achieved thanks to the EU funds, which entrepreneurs in the SME sector mentioned, include sales growth, increased employment, increased innovation, production and sales of new products or provision of new services (see Table 5).

Table 5. The effects achieved thanks to EU funds

Specification	**Enterprises:**		
	Medium	**Small**	**Micro**
Sales growth	60.8	61	58.7
Increased employment	29.9	32.5	57
Increased innovativeness	47.2	49.8	41.7
Production and sales of new products or provision of new services	47.0	32.7	43.1

Source: B. Wyżnikiewicz, *Polish small and medium enterprises on the road to modernity,* The Gdańsk Institute for Market Economics, Lewiatan Confederation, Warsaw 2013, p. 50.

Almost 60% of the SME sector entrepreneurs declared that the use of EU funds brought about an increase in sales. Further analysis of the data showed that 57% of micro companies revealed that the effect of the use of EU funds was an increase in employment, which was indicated by a significantly smaller number of medium and small companies, nearly 30%. Thanks to the obtained EU funds, almost every other small company has increased its innovativeness. However, EU subsidies have contributed least to the increase of innovativeness in micro enterprises. In addition, thanks to the obtained EU funds, over 41% of SMEs began the production and sales of new products or services. This effect was indicated by most medium-sized and micro-enterprises. In turn, fewer small companies - less than 1/3 in the sector - claimed that the use of EU subsidies caused the introduction of new products and services.

The involvement and efficiency of Polish enterprises in terms of obtaining funds from the European Union in the years 2007-2013

The year 2013 was a difficult period for the Polish economy due to the economic crisis, which the country had been going through for several years. Small and medium-sized companies encountered many business-related problems and many of them closed down. Studies of the situation of small and medium-sized enterprises in recent years indicate that almost all areas of the business were suffering from recession.

The report, "*What is it like to run own business in Poland? The whole truth about the most important sector of the Polish economy. Market sentiments among micro and small enterprises in the second half of 2013 and the first half of 2014'*", which was drawn up by Firmy.net and published by the Institute of Research and Analysis, describes the situation of micro and small companies based on research conducted on more than 2000 micro entrepreneurs.

At the report's beginning, the use of EU structural funds in the years 2007-2013 was presented, which is shown in Table 6.

Table 6. Activities related to obtaining EU funds in the years 2007-2013 [%]

Specification		
1	Yes	17.24
2	No	82.76
3	Total	100.00

Source: *Report*, *What is it like to run own business in Poland? The whole truth about the most important sector of the Polish economy. Market sentiments among micro and small enterprises in the second half of 2013 and the first half of 2014'* Ed. by D. Śledź, The Institute of Research and Analysis, Olsztyn 2014, p. 30.

Obtaining EU structural funds is an opportunity to develop the company. The information in the report showing that very few SMEs have taken advantage of this form of support (17.24%) is a cause of concern and should make us search for the reasons of this phenomenon. In general, the use of EU structural funds in 2007-2013 was low, because the largest group of entrepreneurs did not make use of funding for business development (82.76%).

The further analysis of activities related to raising funds from the European Union in 2007-2013 shows that entities in the sector of agriculture, forestry, hunting and fishing were the most active (25.0%), while construction companies were the least active (11.0%) (see Table 7).

Table 7. Activities oriented towards obtaining European Union funds
in the years 2007-2013 according to sector [%]

Specification		**No**	**Yes**	**Does not apply**	**Total**
1	Services	75.8	7.7	16.5	100.0
2	Agriculture	45.8	29.2	25.0	100.0
3	Industry	75.0	8.8	16.2	100.0
4	Trade	72.2	13.9	13.9	100.0
5	Construction	79.3	9.7	11.0	100.0

Source: *Report, What is it like to run own business in Poland? The whole truth abo*ut …, op. cit., p. 30.

The analysis of the most common sources of obtaining funds in 2007-2013 shows that the funds included a variety of programmes to support the development of the economy and they were closely linked to the type of conducted business activity, because of the criteria for the access to most support programmes in 2007-2013. SMEs which operate in agriculture, forestry, hunting and fishing took advantage of support under the Rural Development Programme (8.33%), the Regional Operational Programme specific to each province (4.17%), the Human Capital Operational Programme (4.17%) and other sources of financing, which research participants could not indicate (8.33%).

Industrial enterprises most often used the Innovative Economy Operational Programme (6.76%) as the source of financing development in the years 2007-2013.

All small and medium-sized enterprises that received EU funds made use of co-funding projects under the Human Capital Operational Programme (9.11%). Overall, companies operating in all sectors of the economy took advantage of the support under this programme, which is shown in detail in Table 8.

Table 8. Sources of financial support obtained by entrepreneurs in the years 2007-2013

Source of obtained funds	Sectors:					Total
	Construction	Trade	Industry	Agriculture	Services	
1	2	3	4	5	6	7
Infrastructure & Environment Programme	0.00%	0.00%	0.68%	0.00%	0.07%	0.10%
Innovative Economy Operational Programme	0.85%	1.39%	6.76%	0.00%	1.36%	1.69%
Human Capital Operational Programme	6.78%	6.94%	4.73%	4.17%	10.11%	9.11%
Technical Support Programme	0.00%	0.00%	0.68%	0.00%	0.14%	0.15%
Rural Development Programme	0.00%	0.00%	0.68%	8.33%	0.75%	0.72%
Development of Eastern Poland Programme	0.85%	0.00%	0.00%	0.00%	0.00%	0.10%
Regional Operational Programme (specific for each province)	0.42%	1.39%	2.70%	4.17%	1.76%	1.69%
Other	2.12%	4.17%	0.00%	8.33%	1.97%	2.00%
Does not apply	*88.98%*	*86.11%*	*83.78%*	*75.00%*	*83.85%*	*84.44%*

Source: Report, What is it like to run own business in Poland? The whole truth about …, op. cit., p. 31.

Moving on to the subject of the way EU funds were used by SMEs in 2007-2013, it should be pointed out that the obtained financial support contributed to establishment and development of companies. The obtained funds were also allocated by enterprises to the development of tangible and intangible assets, including the purchase of fixed assets for the company and increasing competence of personnel. The funds obtained from the EU were also used to increase employment, conduct research and development activities and introduce innovative process solutions in the enterprise, as shown in Table 9.

Table 9. The ways which enterprises spent obtained funds in the years 2007-2013

Please define the way EU funds were spent	[%]
Does not apply	84.44
Establishment and development of the company	8.55
Introduction of innovative organisational & marketing solutions	2.71
Purchase of fixed assets for the company	1.43
Increase in personnel competence	0.97
Other	0.92
Increase in employment	0.41
Research and development	0.31
Introduction of innovative process solutions in the company	0.26

Source: *Report, What is it like to run own business in Poland? The whole truth* about …, op. cit., p. 32.

The examination of the plans for activities related to raising European Union funds in the period 2014-2020 shows that the largest group of entrepreneurs could not say whether they will apply for support in the future or not (68.5%). Other entrepreneurs more often declared they won't take such actions in the future (17.8%) rather than willingness to take advantage of the support (13.7%), as presented in Table 10.

Table 10. Plans for undertaking activities in order to obtain European Union funds in the years 2014-2020

Specification		
1	cannot say	68.50%
2	no	17.80%
3	yes	13.70%
4	Total	100.00%

Source: *Report, What is it like to run own business in Poland? The whole truth about …*, op. cit., p. 33.

The ways which small and medium-sized companies plan to spend the EU funds raised in the period 2014-2020 are mainly related to the modernisation and restructuring of enterprises and increase in employment. Most often entrepreneurs plan to allocate the funds to the purchase of fixed assets for the company and implementation of organisational, marketing and process innovations. The surveyed companies also declared they will allocated the EU subsidies to increase personnel competence and increase employment, which is a positive factor in the light of the high unemployment rate in Poland (Table 11).

Table 11. The ways which enterprises plan to spend funds in the years 2014-2020

Please define the way the obtained EU funds will be spent	**[%]**
Does not apply	86.39
Purchase of fixed assets for the company	6.14
Increase in personnel competence	2.10
Introduction of innovative organisational & marketing solutions	1.74
Increase in employment	1.23
Introduction of innovative process solutions in the company	0.77
Cannot say	0.72
Research and development	0.51
Others	0.31
Changes to professional competence of personnel	0.10

Source: *Report, What is it like to run own business in Poland? The whole truth about …*, op. cit., p. 35.

Small and medium-sized entrepreneurs declared that the most common causes of not applying for external financing sources for the development of the company, namely funds from the European Union for the period 2014-2020, include:
1) very poor access to information about the EU programmes,
2) a lack of faith in the possibility of obtaining support from the institution which allocates funds,
3) inability to obtain financing for a particular industry,
4) lack of funds for the required minimum own contribution,
5) lack of adequate assistance in the form of counselling or provision of information,
6) lack of such a need among entrepreneurs.

To sum up, obtaining EU funds has greatly influenced the development of enterprises, their level of innovativeness and has increased their market share, which has strengthened their competitive position.

Conclusions

The accession of Poland to the European Union in 2004 marked the beginning of a period of dynamic development of the country and catching up with Western Europe after several decades of stagnation. The deficiencies which Poland had to overcome primarily related to inefficient, often obsolete infrastructure, or often a total lack of it, as well as not fully exploited potential of citizens. The Polish accession to the European Union opened up an opportunity to accelerate the development of the sector of small and medium-sized enterprises, either through actions taken towards restructuring, aimed at accelerating growth and expansion, or through retaining the existing market position or even an attempt to protect the company from bankruptcy.

The article points to the diversity of European funds, which are often perceived as one of the sources of external financing. The division of funds shows how many areas are supported by them and how many various goals can be achieved through them. Within each fund there is a number of financial programmes focusing on supporting different areas of life - science, economy, environment protection and social issues such as education, culture or heritage protection.

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Teresa Myjak
The State Higher Vocational School in Nowy Sącz, Poland

COMPANY RESTRUCTURING PROCESS IN THE CONTEXT OF THE LEVEL OF EMPLOYMENT

Summary

Restructuring of employment is an indispensable part of restructuring a company that is introducing changes. The article presents the problem of changes within the environment and within the company which contribute to the restructuring of employment. In addition the concept of employment rationalization has been presented as well as actions that the company should undertake in this regard.

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Introduction

Nowadays it is difficult to imagine a company that did not undergo, is not in the process of or is not faced with having to restructure itself. The concept of "restructuring" may be interpreted broadly and narrowly. In terms of the narrow understanding, restructuring is treated separately in relation to privatization, it is assumed that it is done with the unchanging nature of the particular form of a companies' ownership. The broad meaning of restructuring, it should be understood as ownership transformations occurring in different areas[1]. The restructuring within business is a form of change, whose rate is still increasing, resulting in the company's constant change both in terms of quantity as well as quality of human resources[2]. Corporate restructuring may involve areas such as[3]:
– change of legal form (commercialization),
– ownership restructuring (privatization),
– level of employment rationalization,

[1] A. Lipowski, *Uwagi o restrukturyzacji przemysłu* [in:] *Tworzenie zatrudnienia a restrukturyzacja ekonomiczna,* Ed. by S. Golinowska, M. Walewski, Centrum Analiz Społeczno-Ekonomicznych, Warszawa 2000, p. 131.

[2] J. Strużyna, *Wyzwania restrukturyzacji zasobów ludzkich w polskich firmach* [in:] *Restrukturyzacja przedsiębiorstw. Analiza procesu przemian ekonomiczno-społecznych,* Ed. by K. Kowalska, Wyższa Szkoła Biznesu w Dąbrowie Górniczej, Dąbrowa Górnicza 2004, p. 86.

[3] A. Szewc-Rogalska, *Efektywność restrukturyzacji własnościowej przedsiębiorstw w Polsce,* Uniwersytet Rzeszowski, Rzeszów 2004, pp. 18-19.

– scope of the action rationalization,
– financial restructuring,
– organizational restructuring.

Restructuring seen as the introduction of a radical change is a process that takes place in a specified order[4]. In the economy of our country we have to deal with the ongoing process of restructuring of individual sectors and companies[5]. It should be noted that restructuring is not a transitional process but a repeated or even continuous phenomenon. Therefore companies, institutions and their employees must be prepared to reduce the negative social effects of the restructuring process[6].

The exterior changes as a cause of employment rationalization within the company

External changes lead to changes within the internal structure of a company, while the more stable it is, the harder it is to introduce the changes. A perfect adaptation to the requirements of the environment is often a difficult task due to its turbulence and the pace of change.

As a result of external changes some companies hire employees to carry out specific projects, rather than hiring them on a permanent basis as in the case of some trade entities. The traditional commitment of employees to the company and the employee working there disappears. Thus the employee works in an enterprise that provides him with a specific task to perform for which he receives a satisfactory salary[7]. The reasons for this type of a decision should be searched for within the external environment which creates a subjective enterprise environment (referred to as a closer) and a macro-environment (referred to as continued). Within the components of the environment that affects the conversion of the company, one should include : activity of the competitors, customer requirements and the decisions made by governmental institutions. The macro-elements create, among others economical, technical, social or legal determinants[8].

The literature presents us with a statement that "the regulations suppress the creation of jobs by stopping employers from hiring workers due to the high costs or difficulty of tasks such as the dismissal of unnecessary workers"[9]. One must agree with this opinion because the changes within the environment that generates a variety of problems, threats and difficulties, forces the companies' decision-makers to undertake a variety of changes within the nature of the restructuring, which must adapt the business to the exterior conditions[10].

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[4] M. Baran, *Strategie restrukturyzacyjne w sferze produkcji przemysłowej,* Księgarnia Akademicka, Kraków 2004, p. 64.

[5] J. Stachowicz, J. Machulik, *Proces restrukturyzacji w okowach barier organizacyjnego uczenia się* [in:] *Globalizacja i integracja gospodarcza a procesy restrukturyzacji i rozwoju przedsiębiorstw*, Ed. by R. Borowiecki, A. Jaki, Akademia Ekonomiczna w Krakowie, Towarzystwo Naukowe Organizacji i Kierownictwa, Europejskie Stowarzyszenie Zarządzania – CECIOS, Warszawa – Kraków 2003, p. 325.

[6] J. Strużyna, *Wyzwania restrukturyzacji zasobów ludzkich w polskich firmach* [in:] *Restrukturyzacja przedsiębiorstw. Analiza procesu przemian ekonomiczno-społecznych,* Ed. by K. Kowalska, Wyższa Szkoła Biznesu w Dąbrowie Górniczej, Dąbrowa Górnicza 2004, p. 87.

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[10] R. Borowiecki, E. Wysłocka, *Analiza ekonomiczna przedsiębiorstw jako narzędzie zarządzania zmianami o charakterze restrukturyzacji* [in:] *Informacja w zarządzaniu procesem zmian,* Ed. by R. Borowiecki, M. Kwieciński, Zakamycze, Kraków 2003, p. 15.

Internal company development in the form of employee restructuring

Nowadays, the ability to respond quickly to a change is much more important than perfection asset of organizing and functioning of a company [11]. Restructuring is often a matter of a vision, which should not be communicated just once, but gradually disseminated in every action and every decision. Furthermore while introducing the change, many aspects connected with the culture of the organization, such as values, norms or rules, must be modified, what obviously requires extensive work and commitment of individuals within the process[12].

B. Gąciarz and W. Pankow emphasize that the restructuring of employment, most often associated with the reduction in the number of employees (rather than the opposite), should aim to rationalize the structure of employment, which increasingly means a reduction in the share of the direct-production workers in favor of the workers engaged with market-oriented activities (e.g. market research, marketing activities in the processing of the databases)[13]. The decrease in employment may raise objections against restructuring because to both managers and employees it can be a serious threat[14].

The restructuring of a company must take into account the close relationship which exists between the "aims of the enterprise" and "objectives of restructuring the company", not only because of the substantial similarity or even identity but also due to a more or less detailed character. Considering the goals of the company and its restructuring one should pay attention to certain features of the company and its business conditions. The main aim of restructuring of a company should be to create a situation where it is in a better position than ever to carry out their tasks, and thus be better at meeting the expectations of its stakeholders[15].

Market competition for gaining and maintaining a competitive edge forces the management to optimize operations in each area in such a way as to achieve the best economic results[16]. Managing change and human resources is an essential element of transforming and adapting the company to environmental conditions[17]. Thus the role of the human factor in the implementation of changes is dependent on how committed they are to adapting to the introduced changes, or even to creating them[18].

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[11] B. Grouard, F. Meston, *Kierowanie zmianami w przedsiębiorstwie. Jak osiągnąć sukces?,* Poltext, Warszawa 1997, p. 14.

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The conditions of employment as a form of rationalization of changes in a company

Within the process of company restructuring an essential element is the issue of employment. Restructuring in the area of employment that focuses on the quantitative and qualitative changes concerns and changes within the structure of employment and the improvement of the qualifications of employees' who work in a company[19].

The increasing variability in a country's economy is becoming an important condition for employment verification, the scope and type of activities undertaken within a company in the HR function, which includes all the matters related to the employee as well as his work in the company. It is increasingly emphasized that "decision-making and consequently conducting changes within this sphere, should not exclude those who are directly concerned with the consequences of such decisions ". For this assumption to be feasible, employees should be treated as a company's special group of internal stakeholders, and during the process of restructuring to take into account their needs and expectations of the work and the conditions of its execution[20].

Before undertaking action to restructure a company one must first identify all the internal and external options of structural changes that would lead to an increase in its market value by increasing profitability of the company[21]. One should be aware that "the deeper and more radical the change, the greater the need to prepare the company as an organization, and as an entity representing a specific structure, systems, human resources, leadership styles and finally organizational culture"[22]. Change management refers directly to the competitiveness of a company as a management objective and need of a continuous restructuring and development of company resource or its competitive potential. Sustainable development of economical entities is associated with a constant overcoming of their weaknesses and the use of strengths within the company; and in its environment - transforming threats into opportunities[23]. The rationalization of the level of employment is thus dependent on the influence of various factors such as: efforts that lead to employment restructuring- especially the technical and auxiliary services, employment or natural diminuition layoffs[24].

Conclusions

The restructuring of employment should be a thought-out action of the executive personnel in the area of introducing changes in a company. To allow for this process to be successful, the participants in the organization must be adequately prepared to meet the challenges of functioning in the new conditions.

To achieve the desired results in terms of shaping a stable and yet flexible employment is dependent on the strength of the impact of internal and external factors, especially the changing conditions on the

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[19] W. Tłuchowski, *Podstawy restrukturyzacji przedsiębiorstwa* [in:] *Restrukturyzacja, prywatyzacja i wycena przedsiębiorstwa,* Ed. by H. Sobolewski, Akademia Ekonomiczna w Poznaniu, Poznań 2004, p. 51.

[20] A. Cierniak-Emerych, *Partycypacja pracownicza wyznacznikiem zmian w sferze personalnej przedsiębiorstw* [in:] *Zmiany w zarządzaniu zasobami ludzkimi,* Ed. by J. Puchalski, Wyższa Szkoła Handlowa we Wrocławiu, Wrocław 2010, p. 11.

[21] M. Kowalik, *Restrukturyzacja jako czynnik kreowania wartości dla akcjonariuszy* [in:] *Przedsiębiorstwo w procesie transformacji. Efektywność – restrukturyzacja – rozwój*, Ed. by R. Borowiecki, Akademia Ekonomiczna w Krakowie, Towarzystwo Naukowe Organizacji i Kierownictwa Europejskie, Stowarzyszenie Zarządzania – CECIOS, Warszawa – Kraków 2003, p. 52.

[22] C. Suszyński, *Restrukturyzacja przedsiębiorstw. Proces zarządzania zmianami*, PWE, Warszawa 1999, p. 76.

[23] B. Kowalak, *Konkurencyjna gospodarka. Innowacje – infrastruktura – mechanizmy rozwoju,* Instytut Technologii Eksploatacji – Państwowy Instytut Badawczy, Warszawa – Radom 2006, p. 21.

[24] S. Krajewski, *Samokontrolujący się monopolista (Zespół Elektrociepłowni „Łódź" SA)* [in:] *Restrukturyzacja przedsiębiorstw w procesie transformacji gospodarki polskiej*, Tom II, Ed. by E. Mączyńska, Instytut Nauk Ekonomicznych Polskiej Akademii Nauk, Warszawa 2001, p. 120.

external labor market. This situation is reflected in the functioning of Polish companies which have recently felt the impact of volatility on the employment of labor markets and thus - the management of human capital[25].

The main activities that the company should achieve in terms of rationalization of employment are mainly[26]:
– the analysis of the status and structure of employment and the conducted tasks and functions, which aims to carry out any changes of jobs of great importance to the company, including the modification of the content of the work;
– reduction of employee variability;
– financial and non-financial motivation for achievements at work;
– apart from traditional methods of employment, the usage of flexible forms of work as by using one's own staff for part-time or other types of contracts;
– the use of so-called double and multiple employees activities;
– cooperation with local institutions that deal with the matters of employment.

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[26] L. Berliński, H. Gralak, F. Sitkiewicz, *Przedsiębiorstwo. Zarządzanie zasobami,* Oficyna Wydawnicza AJG, Bydgoszcz 2003, p. 204.

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Grzegorz Kinelski
ENEA Capital Group, Poland

DEVELOPMENT OF SHARED SERVICES CENTRE AS A KEY ELEMENT OF COMPANY RESTRUCTURING – CASE STUDY OF THE ENEA CAPITAL GROUP

Summary

This case study presents the process of implementation of mechanisms execution aimed at increasing the ENEA Capital Group's efficiency. They include implementation of corporate governance and centralisation of support functions concentrated in the Shared Services Centre, in order to ensure better efficiency. The major stages, elements and activities of the shared functions centralisation process are presented against the background of global solutions and the Polish energy market. Implementation of the project marks the beginning of development of an efficient organisation, able to effectively provide support services to companies, members of the Capital Group. The advantages and opportunities offered by the centralisation of support services are also elucidated.

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Introduction

A term "restructuring" has a negative connotation in Polish industry. It is primarily associated with employee layoffs and closing companies. On the other hand, however there are many positive examples which offer an opportunity to change these bad associations. Restructuring refers to all the changes which are introduced in order to improve company's efficiency. These changes must be thoroughly planned. They are not a sudden response to the surrounding situation but rather a long and slow process of change.

Since 1997, a competitive electrical energy market has been developing in Poland at an increasing pace. This reform is a result of far broader liberalisation of the European electricity market. As a result it is indispensable for power companies to introduce changes in their organisations and in the method of operations. These companies are energy groups integrating such areas as electricity generation, distribution and trade.

In this context, the aim of the paper is to carry out an analysis of one of the key elements of restructuring of an energy company, namely the introduction of the shared services centre.

Shared Services Centres – global trends

The idea of the Shared Services Centres is not new. Over centuries, some forms of shared entrepreneurship have been developed. Yet, with no doubt, it was the development of technology that pushed these ideas to the forefront. The present growth of shared services is being achieved owing to new technological solutions and rapid development of electronic communication.

Shared Services Centre projects were initiated several years ago in Europe and in the US. Their purpose was to centralise and optimise logistics, administrative, accounting, payroll, HR and IT functions as well as customer-supplier transactions. These projects proved to be very efficient, resulting in an improvement of the quality of services, increased management efficiency and cost reduction.

Nowadays, shared services centres are centralised business units with a huge development potential, both for the organisation and for its employees. A shared services centre is a dedicated structure whose purpose is to provide services to a large number of business units. It allows generating benefits thanks to specialisation, improved efficiency and synergy of competition. Shared services centres, are a part of the organisation to which they provide their services. Yet, they may also be based on an outsourcing, mixed or entirely insourcing model. Regardless of the model, shared services centres ensure maintaining relations, provide opportunities for employees' development as well as control and responsibility for work results. Centralisation of services does not mean concentrating employees at one place. Precisely designed processes and modern cutting-edge IT tools available nowadays easily solve the problem of operation of several locations within one structure. For this reason, they are a good solution for companies whose business activity is territorially dispersed, including international activity.

Shared services centres should be focused on cost optimisation. However, cost motivation is not an absolute priority. Shared services centres also improve the quality and speed of the services they provide.

The market of shared services centres is growing rapidly. According to the Association of Business Service Leaders (ABSL), at the end of 2013 over 1000 shared services centres with a diversified offer operated in Central and Eastern Europe, employing approximately 300 thousand people. In 2012, 56 shared services centres were created in the region. The functions which most often are transferred to the shared services centres include finance, HR, IT and purchases (according to Deloitte). A rapid growth of shared services centres in this part of Europe and in Asia is to a large extent associated with still lower labour costs, but also with increasingly higher qualifications of employees, professionalism and permanent increase of service quality, e.g. ABB Group has thirty-six share service centres around the world employing 3,000-4,000 people who provide services in seventeen countries dedicated to the service vision of being competitive with external services both in quality and price. They are offering a 10% improvement in productivity and price year on year[1]. SSC solutions are mainly used by international corporations, such as Shell, Hewlett-Packard, Coca-Cola, PepsiCo, McDonald, Citigroup, Boeing and many others. The availability of new third party suppliers and complementary information technology makes outsourcing more attractive than in the past[2].

[1] B. Quinn, R. Cooke, A. Kris, *Shared Services – Mining for Corporate Gold*, Pearson Education Limited, Harlow, Essex 2000, p. 4.

[2] Ibidem, p. 100.

Table 1. Development of CCS areas

Mature entrants	Middle age entrants	New wave entrants
Payroll	Information systems	Logistic
Facilities	Disbursement accounting	Material management
Food services	Human resources	Sales and marketing
Management services	Travel and expenses rep.	Human resources
Document processing	Mailroom services	Accounting
Pension and benefits adm.	Property management	Engineering
Travel service		Manufacturing
Telecomunication		Legal services
		Research

Source: B. Quinn, R. Cooke, A. Kris, *Shared Services – Mining for Corporate Gold*, Pearson Education Limited, Harlow, Essex, 2000.

These trends are still the same, nowadays. Outsourcing development still increases services market share.

Research carried out by Hays Polska indicates that there are over 400 shared services centres in Poland employing in total 120,000 people. They include, among others, Electrolux, Philip Morris, Credit Swiss, Google, IBM, Siemens, MAN, Unilever, Oracle, and Bridgestone. As far as the fuel and energy sector is concerned, the following companies have established their shared services centres: Lotos, Katowicki Holding Węglowy, Tauron, KGHM, ENERGA, Dalkia, RWE, and EDF.

The Polish energy market development and its impact on the SSC

The inflow of foreign capital to Poland in the 1990s, accompanied by the experience and organisational models of western companies, resulted in the development of some „shared service"- type solutions in our country. In the 1990s, some shared services centres were located in Poland, including, for example, billing centres for Austrian heat operators, or help lines of those companies. Certainly, language barriers were encountered, but locally, for example in Silesia, it was not difficult to find Polish employees relatively fluent in German. Customers from Austria or Germany phoned to Gliwice or Opole to report failures or other problems not even realising that they were contacting Poland. The costs of labour were significantly lower in Poland than in Western Europe. Therefore, companies from the IT sector also started to offer their services to customers: Hewlett-Packard established a branch in Poland which was in charge of the IT infrastructure management of large Polish manufacturing companies. In this way, by outsourcing of services, it took from them the burden of maintaining and continually developing IT personnel.

Figure 1. Division and functions of a shared services centre

Source: own elaboration based on: Periodic Report of ENEA Group.

Experience of foreign corporations and their low operating costs achieved owing to the centralisation of shared services encouraged Polish economic operators to use such solutions. The private sector was a leader in this area, however Polish state-owned companies or joint stock companies transformed in the course of the privatisation process also started to look for competitive solutions. This was mainly due to the end of monopolies as a result of the introduction of free market in banking, insurance or energy carriers sectors. The leader in the banking market was Bank Śląski which, relying on the experience of its Dutch shareholder, ING, established a strong shared services centre in Poland. In the Polish insurance sector, a shared service centre was established by the sector leader, PZU. In the energy carriers sector, the first undergoing liberalisation market was the electricity market. This was possible thanks to the promulgation of the Energy Law Act in 1997, which for the first time set out the roles of certain actors and relationships between them in the Polish energy market. Between 1990 and 1999, there were 33 power enterprises, providing services locally, to customers in their geographical areas.

These firms operated as joint stock companies fully owned by the State Treasury, or they just started to prepare for privatisation. In a majority of them, similar organisational structures could be found, based on the historic layout dating back to the times of functioning of the so called Union of Energy Enterprises, which in the 1980s was a state umbrella organisation associating individual power enterprises. These enterprises had vertical management structures, which were based on field units, the so called 'power regions' and smaller 'power supply posts'. Energy enterprises started to differentiate their business models. ENEA, which was established on the basis of the combined assets of Energetyka Poznańskia, Zielona Góra, Gorzów, Bydgoszcz and Szczecin Enterprises, was one of such dynamically developing groups in the Polish energy market. Enea also acquired the assets of Kozienice Power Plant, an owner of 8 power units of 200 MW and 2 power units of 500 MW, using hard coal as the fuel.

Figure 2. ENEA Group – figures

Generation	Figures
Electricity generation	12,9 TWh
Share in electricity generation in Poland	ok. 8%
Total installed capacity, whereof:	3 169 MW
- Kozienice Power Plant	2 845 MW
- Białystok Heat and Power Plant	203,5 MW

Distribution	Figures
Power distribution lines	113 505 km
Total transformers stations	36 tys. szt.
Quantity of delivered electricity	17,3 TWh
Number of customers	2,4 mln
Distribution grid coverage of Poland	20%

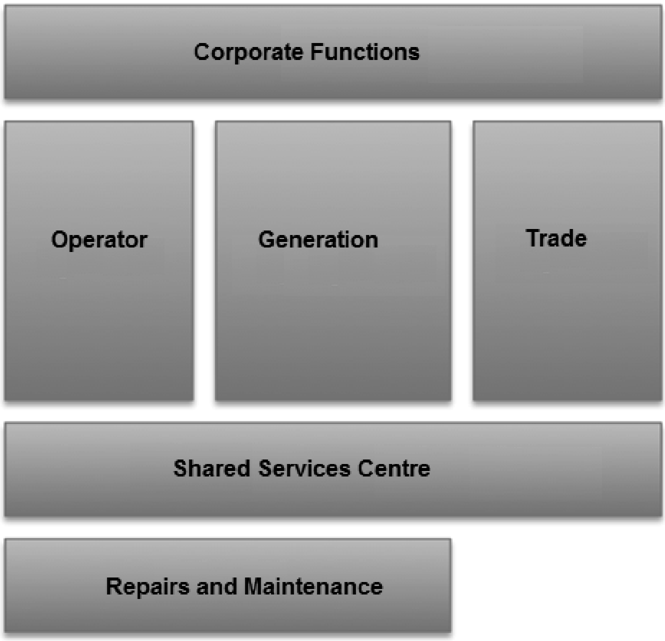
Trading and Sales	Figures
Sale to end customers	13,2 TWh
Number of end customer	2,4 mln
Share in electricity sales in Poland	11%

Source: Annual Report of ENEA Group, information for market and analysts.

The Group's strategy provides companies restructurization whose business is not connected with the core business of the ENEA Group, i.e. with generation, sale and distribution of electricity. The strategic objective of the ENEA Capital Group is to increase value for its shareholders. In order to achieve this objective, a number of initiatives is undertaken aimed at increasing the efficiency of the individual companies and of the entire Group. In line with the agreed assumptions concerning the business model of the ENEA Capital Group, its target capital structure reflects the adopted direction of the individual companies focusing on the core business. Ultimately, the ENEA Group will comprise only of companies which either pursue or support the core business of the Group.

The ENEA Group combined its distribution assets by establishing a dedicated distribution company ENEA Operator. Another established company, the one in which wholesale electricity trade and purchase of fuels were centralised is ENEA Trading. The next pillar of the Group is a dedicated business area related to power or heat and power generation, which covers the assets of Kozienice Power Plant and Białystok Heat and Power Plant as well as the assets generating renewable energy from water, wind and biogas. According to this model, the sales division has remained with the company's head office, together with all the functions pertaining to the strategic management of the Group. Corporate governance was implemented, and in 2013, divestment and transformation of non-core assets have begun. One of ENEA subsidiaries was transformed into a shared services centre. Between 2012 and 2014, the company Enea Centrum centralised shared services for the entire ENEA Group in the following areas: customer service, personnel and payroll, accounting, IT, legal services and logistics, including joint purchases.

Figure 3. Business model of the ENEA Group in 2014



Source: own elaboration based on: Periodic Report of ENEA Group.

Development of the Shared Services Centre at the ENEA Capital Group

Commencement of the development of the Shared Services Centre (SSC) at the ENEA Group marks a key stage in the process of building a strong power group in Poland, a group that is able to effectively compete in the domestic market. The development of the SSC started in mid-2013 on the basis of an existing Group's company. The development process had been preceded by the accurate and comprehensive analyses, as a result of which areas to be centralised were identified and the entire transformation process was thoroughly planned. As a consequence of the intense work, at the end of 2013, a 'Framework Agreement' was signed setting out the principles and the method of transferring individual support functions to the Shared Services Centre, and determining the method of calculation of the remuneration for services provided by the SSC. In future, internal SSC will be increasing CVI (Customer Value Index) which in directly connected with profits and probability of sales.[3]

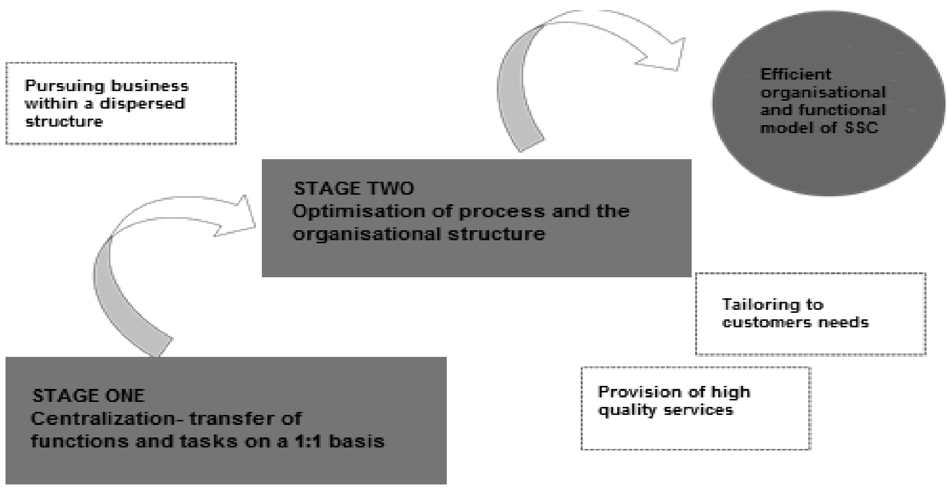
3 *Zarządzanie wartością klienta. Pomiar i strategie,* Ed. by B. Dobiegała-Korona, T. Doligalski, Poltext, Warszawa 2010, p. 93.

Centralisation and standardisation of the support function

The development of the SSC of the ENEA Capital Group in regard of each support function follows a similar pattern. In the first stage, the centralisation involves transfer of the functions and tasks (together with the employees who have performed them so far within the current organisational structure of individual companies) to the company performing the function of the SSC. Concentrating support functions of different companies at one place greatly facilitates standardisation and optimisation of processes, which is another stage of the SSC development at the ENEA Capital Group. As a result, a new process and operation model of the SSC is created with regard to a given function (Finance and Accounting SSC, Customer Service SSC, IT SSC, HR SSC, Logistics SSC).

According to the process approach, for each centralised function a set of interrelated processes is identified and their course is projected, with a particular emphasis put on the points of interface with the companies served by the SSC. The course of each process is described in the form of process maps using ARIS software. The processes yield products which form a tree of the products offered to the companies served. In order to ensure the required quality and to establish an effective efficiency improvement system, key performance indicators (KPI) are determined.

Figure 4. Development stages of the target organisational model of the SSC



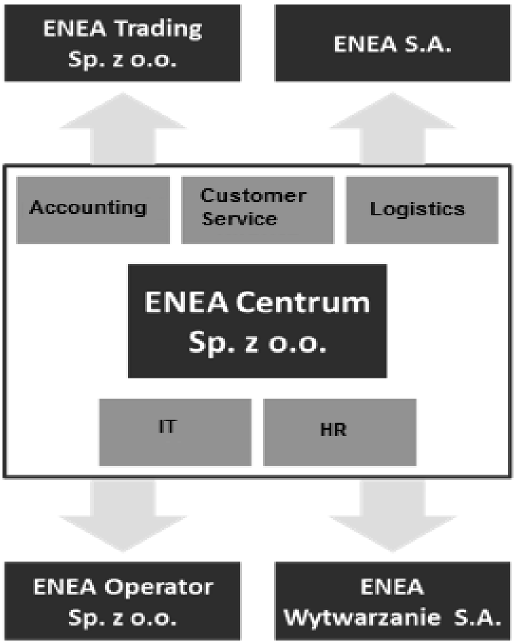
Source: own elaboration based on: Periodic Report of ENEA Group.

Facilitating and improving operations

Among the reasons for implementing a shared services centre, acceleration and improvement of processes as well as improvement of service quality seem to be most commonly mentioned. Other objectives include higher effectiveness, reduced red tape, unified management standards and uniform procedures, IT infrastructure and tools. This means a better use of the existing resources and gathering expert knowledge at one, uniformly managed place, which in the end will contribute to strengthening the market position and obtaining a competitive advantage. The benefits will be felt both by the organisation itself and by the employees, thanks to the unification of remuneration systems, introducing transparent incentive schemes, or creating precise paths of development and promotion within a structure broader than so far. The aforementioned benefits were among the premises underlying the development of the

Shared Services Centre at the ENEA Capital Group. Within the business model of the ENEA Capital Group, the Shared Services Centre will perform support functions in the following areas: IT, customer service, finance and accounting services, personnel and payroll services and logistics to the Group's companies. Based on the conducted research it was decided that initially, the Shared Services Centre will be providing services to the largest Group's companies from the generation, trade and distribution segments.

Figure 5. Centralisation of support functions at the ENEA Capital Group



Source: own elaboration based on: Periodic Report of ENEA Group.

IT systems support

IT systems are an indispensable element to improve the efficiency of the processes carried out at the SSC. Standardised processes facilitate more efficient determination of IT needs, their faster implementation and reduction of the implementation cost. Simultaneously with the work on standardisation and optimisation of processes, functional requirements are determined and IT systems supporting the work of each of the SSC areas are implemented at the ENEA Capital Group.

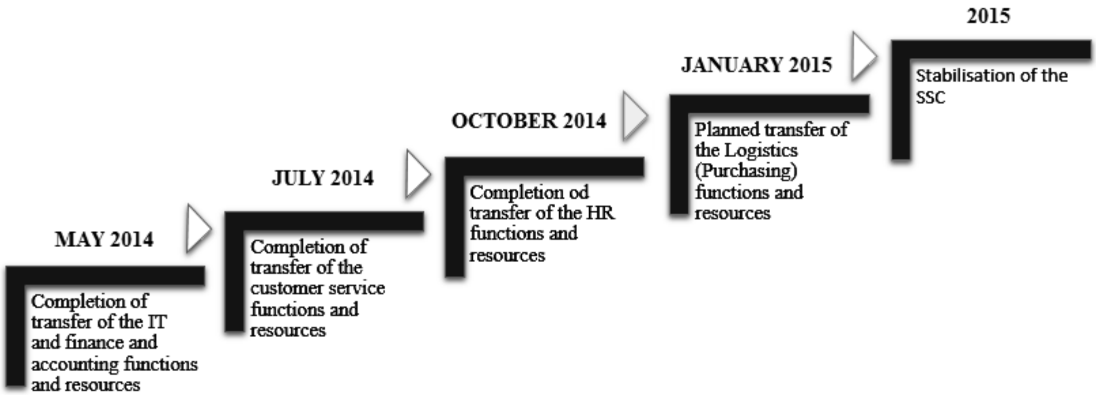
Transparent organizational structure

Process analysis is also a starting point for the next step, optimisation of the organisational structure. Simplification of complex structures is the next stage of improving the efficiency of the centralised support functions. The new structures at the SSC of the ENEA Capital Group will be flattened in the individual areas. The designed structure is based on competence centres. The new organisation will bring numerous benefits, including improvement of the management process (reducing the decision-making processes), greater flexibility as regards human capital management, eliminating repeating the same tasks by different organisational units, establishing a clear-cut division of competencies and responsibilities. Staffing of the new structure will be preceded by reviewing the skills and abilities of individual groups of employees. The purpose of those actions is to ensure the most effective matching of resources in order that the organisation could efficiently operate, and employees could fully use their potential.

Schedule of development of the Shared Services Centre

The process of development of the Shared Services Centre at the ENEA Capital Group has been spread over a relatively short time. In early 2014, four functions were centralised at the SSC: IT, finance and accounting, customer service and HR. Launch of the Logistics SSC is planned to take place in January 2015. At the beginning of the year, implementation of new operational models in IT, finance and accounting and customer service is also planned.

Figure 6. Process of transferring the support functions at the ENEA Capital Group



Source: own elaboration based on: Periodic Report of ENEA Group.

Key elements of the SSC development

There is no universal model for efficient implementation of a shared services centre, as every organisation has its own specificity. However, there are several major success factors indicated by experts. First of all, it is necessary to precisely determine the vision of the functioning and development of the SSC in a many years' perspective and to ensure that it is deeply rooted in the long-term strategy of the organisation. Of paramount importance is also engaging employees in the process of change through reliable and open communication and by taking advantage of their initiatives. The significance of provision of efficient information systems must not be underestimated either, as they play a key role in function integration. Besides, a precise implementation schedule must be planned, accounting for the specificity of the areas to be integrated and the experiences of the organisation.

In the process of implementation of the Shared Services Centre of the ENEA Capital Group, the following factors play an important role:

- an unambiguously defined and efficiently implemented strategy – development of the Shared Services Centre is reflected in the corporate and area strategy. It includes clearly determined objectives, the

initiatives to be undertaken together with their completion deadlines and concrete target measures. The strategy has been communicated to the organisation and its implementation is continually monitored;
- clearly identified stages and deliverables – development of the Shared Services Centre is based on two Programmes. Within each Programme, projects are implemented where the stages of the works, milestones to be achieved and the expected deliverables have been precisely determined. Work stages together with their results require approval of projects' Steering Committees;
- unambiguously determined and pursued optimisation projects – both individual strategic initiatives and the aforementioned Programmes - are implemented through optimisation projects. Within the projects, their targets, deliverables and responsibility for their implementation are determined in an unambiguous way. The portfolio of the company performing the function of the SSC includes several dozen projects. The introduced project management methodology enables their efficient performance and management. Simultaneous implementation of such a large number of projects requires discipline and perseverance;
- open and regular communication with stakeholders - good communication proved to be an exceptionally important factor for the introduction of changes. Communication is pursued using different channels, in order to reach each and every employee. Relevant information brochures have been published, a new website dedicated to the SSC development has been created, and articles concerning the subsequent activities, purpose thereof and the scope of changes have been published on a regular basis. A special mailbox has been established to answer employees' questions. In addition, the Company's Management Board and key managers participated in over 70 meetings in 18 towns attended by approximately 1,000 employees. Communication with the social stakeholder is also conducted in an open way;
- committed managers and employees at the ENEA Capital Group – upon implementation of so numerous and significant changes, entrusting the process to the employees with a potential, who are able to pursue the targets set, is a key to success. A review of the available human capital has shown that there are such persons. For many of them it is a unique opportunity of developing their skills and the possibility of self-fulfilment;
- good organisation, management and persistence in the process of development of the SSC – adequate planning of the process of development of the SSC, with simultaneous implementation of management tools (such as project or process management) as well as allocating responsibilities and systematic accountability for work results have made it possible to develop the SSC in line with the planned schedule.

Benefits of support functions centralisation within the Shared Services Centre

The effects of SSC implementation at the ENEA Capital Group will become evident gradually in the subsequent periods of stabilisation of the SSC. Research conducted by Deloitte confirms that 80% of companies have analysed the profitability of implementation of a shared services centre. Average return on investment (ROI) has been 20%, and an average period of return has been 3 years.

Nevertheless, some benefits of implementation of the SSC at the ENEA Capital Group may be noticed already at this stage. They include:
- reduction of the unit cost of mass mailing,
- increased contact centre response rate,
- reduction of average contact centre waiting time,
- increase of sales volume through low-cost contact channels,
- increase of the number of problems sorted out during the first contact,
- improvement of information systems implementation,

- reduction of banking services costs,
- reduction of license purchase costs,
- improvement of the debt recovery process.

Implementation of a Shared Services Centre is a complex task and a great challenge for an organisation. Not every organisation has sufficient resources to implement it. However, the benefits derived from shared services centres are worth the effort. The market continually verifies the implemented management tools and the organisational and process changes. Shared services centres stand this test: they proved to be not only an efficient business solution but also a strong weapon in the struggle for the customer. Thanks to gathering expert knowledge in one place, process standardisation and automation, transparent and efficient management (based on results associated with quality, timeliness and efficiency), the SSC of the ENEA Capital Group will strive towards process excellence and cost efficiency, bringing tangible benefits to the entire Capital Group.

Conclusions

The development process of the Shared Services Centre at the ENEA Capital Group indicates that there is a significant potential for the efficiency improvement of the power group functioning, which may be obtained through an adequate restructuring based on the three pillars:

- Group companies' focus on their core business,
- transfer of all support functions to a dedicated entity,
- centralisation, standardisation and automation of processes, possible owing to allocation of their performance within one company.

By supplementing the above pillars with a uniform policy as required by the Group management (corporate governance), major business benefits may be achieved over a relatively short time. They include, among others:

- reducing process time,
- reducing unit costs,
- improving quality of services,
- improving the efficiency of business processes,
- better and more efficient use of the resources held.

The hitherto experience of the ENEA Capital Group clearly indicates that the decision to establish the Shared Services Centre was a step towards the right direction. Therefore, the Group intends to continue the process and to gradually transfer subsequent support functions to the SSC, thus taking advantage of the economies of scale and synergies and significantly improving the efficiency of its functioning. This corporate governance should allow us to o achieve the planned visions. Visionary company does not have to be gentle and devoid of self-discipline. Visionary companies are aware of what they are, why there are and what they want, there are no places for people who do not want or are not able to sign up to the standards of their demanding[4].

As a result, the ENEA Capital Group will get closer to the implementation of the main strategic objection, mentioned at the beginning hereof, i.e. **to increase value for its shareholders**.

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[4] J. Collins, J. I. Porras, *Wizjonerskie organizacje. Skuteczne praktyki najlepszych z najlepszych*, MT Biznes, Warszawa 2002, p. 193.

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PART IV

RESTRUCTURING FOR THE DEVELOPMENT OF HIGHER EDUCATION

Zbigniew Malara, Radosław Ryńca, Adam Świda
Wroclaw University of Technology, Poland

PREMISES FOR CHANGING THE TEACHING PROCESS AT HIGHER EDUCATION STUDIES. CONCLUSIONS FROM THE RESEARCH OF THE POLISH AND THE BRITISH UNIVERSITIES

Summary

This article presents an analysis of foreign students educational preferences, especially the ways of knowledge transferring. The research were taken at Wroclaw University of Technology. A base for comparison are the preferences of foreign students at one of British University. These two approaches are compatible, which means that students preferences helps to achieve the aims of Universities Strategy. The role of academic teachers in creating the ways of knowledge transfer is also pointed out. This research concerns the teaching style, language communication and assessment methods. In the conclusion, the authors present strategic context of upgrading the University teaching offer.

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Introduction

The changing reality of functioning of the higher education sector in Poland makes universities face new and diverse challenges which have to be coped with. A contemporary university must be a place where: research is conducted, new knowledge is created, innovations are generated and transferred, and teaching is provided according to the tradition. In addition, recently, universities have been developing and coordinating cooperation between local government units and regional business. For this reason, its development plans and strategies must take account of the regional context outlined in the regional development strategies. These challenges require the universities to perform many functions and tasks, and the academic staff must constantly improve their qualifications and competences.

In the article, the authors discuss an important aspect of the university's activity, which is enriching the didactic offer by, among others, internationalization of the study majors offered. The empirical subject is the Wroclaw University of Technology. In its strategy[1], the university determines, as one of its objectives,

[1] Amendment to the Higher Education Law Act, valid from 1 October 2011, introduced the following provision (Article 66. 1a): *The Rector prepares and implements the university development strategies, adopted by a collegial body indicated*

improving the quality of education and education internationalization[2]. At the level of operationalization of the development strategy each faculty of the Wroclaw University of Technology must present its own plan and ensure appropriate dynamics of such internationalization. A detailed measure of assessment of the process for each faculty is the number of specialties implemented in foreign languages[3].

At the Faculty of Computer Science and Management of the Wrocław University of Technology, currently five specialties in foreign languages (mainly English) are implemented on the bachelor's and master's level. These specialties have been created in response to demand of the educational market. The academic staff of the faculty knows and is familiar with the changing educational preferences and expectations of the present and the future students from abroad. This is important especially when planning specialties and their thematic content in the light of the implemented development strategy.

Another important aspect related to implementing education in a foreign language is the question about the manner of transferring the educational content, in particular how this process is received and assessed by the final customers – the students. In order to answer this question, it is necessary to perform research as to the assessment with regard to current level of transfer of the provided content. As a result, it will be possible to correct shortcomings in the education process and prepare a better education offer at the faculty.

An example of such action is a survey conducted in November 2014 at the Faculty of Computer Science and Management of the Wroclaw University of Technology whose results are presented in the paper.

Case study: Comparison of research results with regard to assessment of factors in the scope of preferences of foreign students with the example of the Polish and the British universities

The research was conducted at the Wroclaw University of Technology on a group of 31 students from abroad. Auditorium research was used[4] in the form of a survey questionnaire which contained 17 statements (theses). Selection of a tool in the form of the survey questionnaire was not accidental. It provides a consistent set of data form a large sample and what is more significant, by keeping anonymity, it allows students to express their concerns honestly, thus maximizing the quality and credibility of the data[5]. Questions were grouped in three thematic areas (see table 1).

in the Charter. This provision imposes on the Rector an obligation to prepare ant implement the university development strategy. The strategy is adopted by the senate upon request of the Rector.

2 *Development strategy of the Wrocław University of Technology*, Wrocław 2013, pp. 28-29.

3 Purpose-Internationalization of the studies, measure 3.6 - number of specialties implemented in foreign languages, Development strategy of the Wrocław University of Technology, Wrocław 2013, pp. 31-32.

4 Auditorium research belongs to the group of direct survey methods. This research consists in distributing the survey questionnaire to the participants and after their are filled in – their collection by the surveyor. Auditorium research makes it possible to obtained a relatively high answer rate (reaching 100%), and keep anonymity at the same time. The disadvantage of this form is, however, a small group of the surveyed respondents. Auditorium research allows provides much more control of the measurement process than in the case of intermediate survey methods (survey questionnaire reaches the respondent via mass media (e.g. mail, press, Internet). For more, see: S. Kaczmarczyk, *Badania marketingowe. Podstawy metodyczne,* PWE, Warsaw 2011, pp. 260-262.

5 R. M. Lebcir, H. Wells, A. Bond, *Factors affecting academic performance of international students in Project management courses: A case study from a British Post 92 University*, International Journal of Project Management, 26 (2008), p. 270.

Table 1. Statements in the survey questionnaire

Category 1: Teaching style	
1.	The way the lecturer speaks is important in understanding the lecture
2.	The pace of delivery of the teaching is too slow
3.	The pace of delivery of the teaching is too fast
4.	It is difficult to understand what is explained if there is no clear link between the different parts of the lecture
5.	I find that information put by the lecturer on the module website always gives the answers to any questions I have after a lecture
6.	I have difficulty with class discussions on project management
Category 2: English Language and Communication	
7.	I find reading management text book difficult
8.	I find writing reports and essays difficult for this module
9.	The use of some words in course make it harder to understand
10.	I find difficult to express my thoughts in spoken English
11.	I discuss the course material in my first language with my associates
12.	I would like to read about course in my first language
Category 3: Assessment Methods	
13.	I find answering examination question difficult in this module
14.	The course assignment is difficult to understand
15.	I prefer to work in a teams for assignment work
16.	I prefer to work on my own for assignment work
17.	I am happy with questions which are mathematically based

Source: prepared by the author.

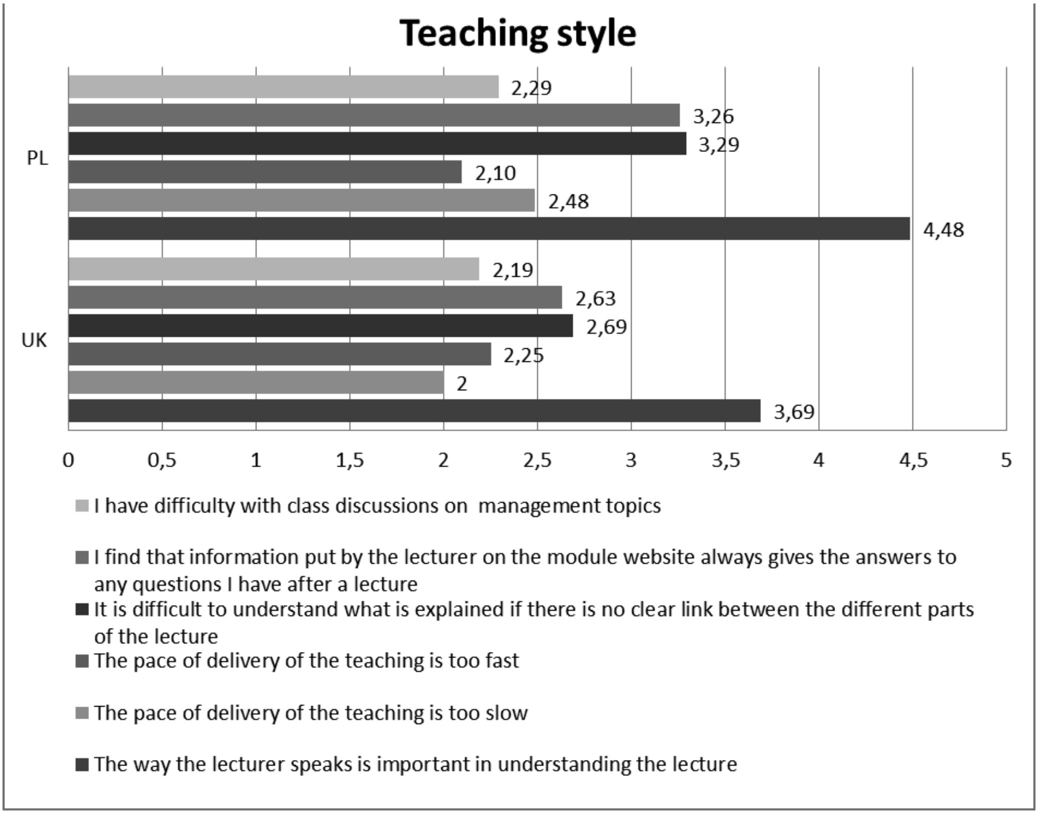
As shown in table no. 1, assessment of statements was concerned with the fields, such as: teaching style, English language and communication and assessment methods. Respondents were asked to assess the statements in the scale of 1 to 5, where 1 meant - I completely disagree, 5 - I completely agree. The scale also contains the score referring to intermediate assessments. The purpose the research was to assess the factors with regard to preferences of foreign students as to course implementation. In further parts the obtained results have been compared with results of research conducted in 2008 by R.M. Lebcir, H. Wells and A. Bond[6] on a group of 32 respondents[7] - foreign students, studying at the British university, for whom English was not the mother tongue.

The further part of the article presents the results of conducted research and their analysis.

[6] R. M. Lebcir, H. Wells, A. Bond, *Factors affecting academic performance of international students in Project management courses: A case study from a British Post 92 University*, International Journal of Project Management, 26 (2008).

[7] Survey questionnaire was sent to 300 foreign students. Only 35 were returned (which is 12% of feedback). Due to incorrectly filled in questionnaires - only 32 received surveys were used for further analysis.

Figure 1. Average assessment of respondents from the area of: Teaching style



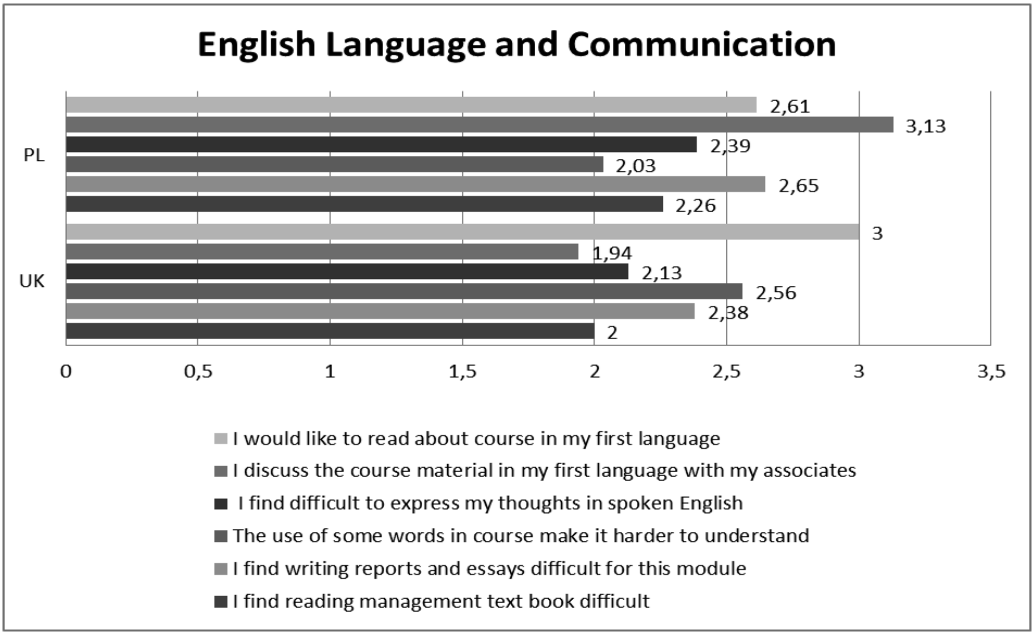
Source: prepared by the author.

As shown on figure 1 both for the Polish and the British university student, a significant factor from the point of view of assimilation of knowledge is the manner of presenting the issues by a lecturer (The way the lecturer speaks is important in understanding the lecture). In both groups of the examined students the pace of conducting classes has a relatively small meaning. Small discrepancies in the assessment of the factors: *The pace of delivery of the teaching is too slow* and *The pace of delivery of the teaching is too fast.* Among foreign students in the Polish university it is more important to understand what is explained if there is no clear link between the different parts of the lecture (3.29) than for respondents of the British university (2.69). Foreigners studying in Poland pay attention also to *information put by the lecturer on the module website* (3.26 as compared to 2.63 in the case of students in the UK). Both groups of respondents show similar, relatively small difficulties associated with understanding the issues of the conducted classes. It may be supposed that this is caused by the fact that the subject matter of the conducted classes including the applied terminology, concerning issues from the area of management[8] and the manner of the presented teaching content at a lecture is comprehensible for students.

Figure 2 presents results of the study of the area related to the English language and the communication process.

[8] At the British university, the preference assessment related to the course in "project management". At the Polish university, it was the course in "modern personnel management".

Figure 2. Average assessment of respondents from the area of: Teaching style

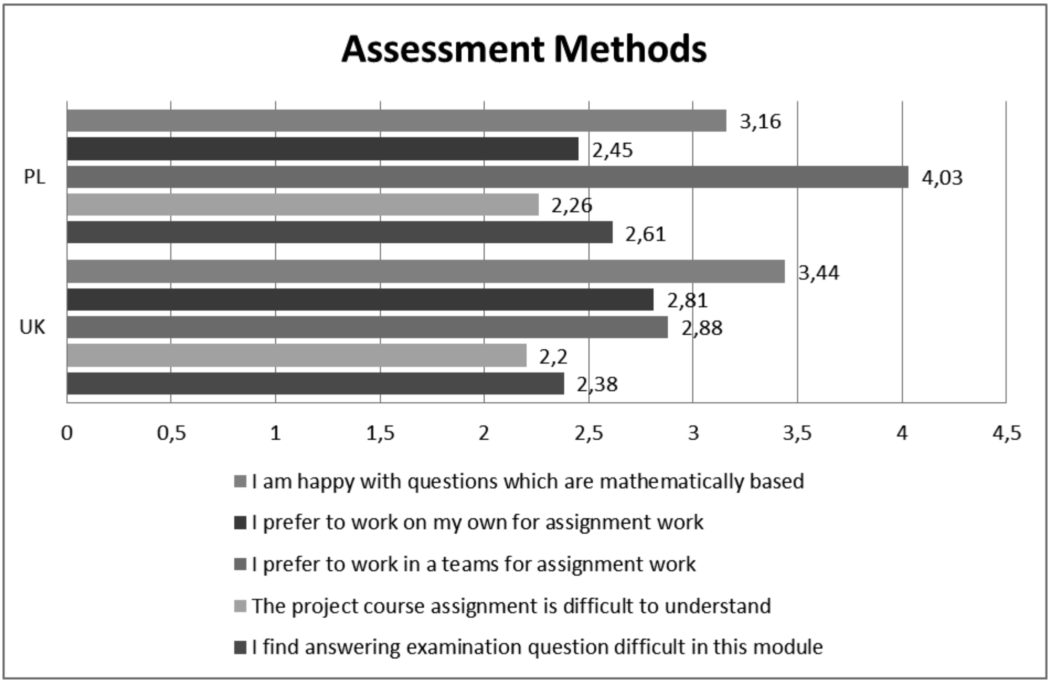


Source: prepared by the author.

As shown on figure 2 foreign students at the Polish university assess much higher the possibility of discussing the issues presented at a lecture with other course participants in native language (3.13) than respondents at the British university (1.94) *(discuss the course material in my first language with my associates*). Considering the fact that both groups of respondents assess difficulties associated with the analysis of literature concerning management similarly (accordingly, 2.26 at the Polish university 2.0 at the British one, preparation of written papers in the form of reports and essays (accordingly, 2.65 and 2.38) or presenting their views in English (2.39 and 2.13), it should be assumed that differences in assessment as to selection of the language in which foreign students communicate with other course participants will not be as high, as in both groups of the examined respondents. Also surprising is the assessment of preferences with regard to the selection of the mother tongue in which the lecture literature should be presented, which is higher in the case of students at the British university (3.0) than at the Polish one (2.61).

Figure 3 shows the results of the survey research in the area: Assessment Methods.

Figure 3. Average assessment of respondents from the area of: Assessment Methods



Source: prepared by the author.

The conducted research implies that students of the Polish university to a greater extent than the British university students focus on crediting in the form of teamwork (for instance in the form of common projects, reports) – (accordingly, 4.03 and 2.88). In the case of respondents from the UK preferences as to the method of preparing the final project between individual and group work are similar (average assessment of 2.81 and 2.88). For both examined groups the course crediting criteria are clear and comprehensible. Large discrepancy between the manner of crediting the course (group and individual) may result, as emphasized by R. M. Lebcir, H. Wells, A. Bond from different experience with regard to teamwork, acquired during education in the native country.

Conclusions

The purpose the research was to assess the preferences of foreign students for whom English is not a native language at a selected university in Poland. The results of the conducted research were compared to the research conducted in the UK. According to the research, preferences of foreign students, both at the Polish university and at the British university, as to the method of teaching are similar. In both groups of students, a diverse level of command of English can be observed, which is proven by the assessment of pace of delivery of the teaching. Considering that for both of the examined groups the manner in which the lecturer transfers information has a great influence on its understanding, it is thus important to adapt the pace of the conducted lecture to the language skills of all students. According to the authors of the research, in the UK, *"...it is advisable that lecturers prepare well-structured lectures and deliver them in reasonable pace to allow students the time to understand them"*[9].

A factor which is also important for both groups of respondents is posting materials on the Internet in the form of presentations, drafts or additional materials from the lecture that would make it possible to dispel doubts arising during knowledge transfer by the lecturer. R. M. Lebcir, H. Wells, A. Bond also draw attention to the fact that materials, in particular the recommended literature of reference, should be written in simple language, understandable for a foreign-language-speaking student[10].

Bearing in mind, on the one hand, various skills in formulating written and oral statements in English by students, and, on the other hand, the need to consider the requirements related to crediting a course, it would be appropriate to consider, in the recruitment process for studies, a greater emphasis on practical language skills. It would also be justified to make a division of students into groups, depending the degree of the command of a foreign language. In the discussed issue it should also be helpful to ensure greater availability of foreigners to the English language courses. The experience of the authors shows that in many cases, especially among students who take only annual studies abroad[11] the command of a foreign language is not sufficient (which can also be proven by the results of the conducted research both in the UK and in Poland regarding evaluation of the preference factors: "*I discuss the course material in my first language with my associated*" and "*I don't like to read about course in my first language."* In addition, lecturers should engage international students through class discussions and encourage them to participate in these discussions")[12].

Differences in the scope of preferences as to the method of assessment of the course participant (individual or group assessment) result in the fact that it seems necessary to consider, in the process of students' evaluation, heterogeneous forms of verification of acquired knowledge and skills. It seems reasonable, which is also confirmed by the results of the conducted research, to consider, in the process of verification, knowledge, tasks and instructions of quantitative nature. At the same time, it should not be forgotten that the introduced changes with regard to forms and methods, as well as the curriculum content, should enable acquiring knowledge, appropriate skills and social competences, consistent with the market expectations as to the graduate's profile.

The authors of the article are aware of constraints resulting from conducted research, both in Poland and in the UK, which was conducted only in one, selected university in a particular country on a relatively limited sample of respondents. Thus, the obtained results cannot be representative for the opinions of students at other universities, both in Poland and the UK. Therefore, it is necessary, which is also emphasized by R.M. Lebcir, H. Wells, A. Bond, to continue the research on a much larger group of respondents taking account of a greater number of examined universities, as well as to conduct segmentation of respondents in terms of the year of study, which may demonstrate differences in assessment of particular preference factors. The research results will be then located closer to the organizational reality of universities.

The research results will increase individual experience and knowledge of the lecturers. This knowledge will enable necessary adjustments and improvements in the process of teaching foreign students at the faculty. If such actions are taken, their positive effects could be expected, that is improvement in the education quality, faster adaptation to the changing environment (market) requirements and expectations of foreign students.

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9 R. M. Lebcir, H. Wells, A. Bond, *Factors affecting academic performance of international students in Project management courses: A case study from a British Post 92 University*, op. cit., p. 272.

10 Ibidem.

11 For example via the Erasmus programme.

12 R. M. Lebcir, H. Wells, A. Bond, *Factors affecting academic performance of international students in Project management courses: A case study from a British Post 92 University*, op. cit., p. 272.

The results of tests and further actions resulting from them constitute the process of the faculty strategy implementation. It should be then believed that other faculties of the Wroclaw University of Technology carry out similar research, thanks to which the teaching offer of the entire Wroclaw University of Technology will become more attractive, in particular owing to the fact that enriching the didactic offer implemented in a foreign language at the university fits into the implementation of the Development Strategy for the Lower Silesia Voivodship[13].

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[13] One of the objectives (objective 8) of the Development Strategy for Dolny Śląsk is increase in the level of education. Development Strategy of the Lower Silesia Voivodship 2020, p. 24.

Monika Mazurkiewicz, Jarosław Karpacz
The Jan Kochanowski University in Kielce, Poland

UNIVERSITY ENTREPRENEURIAL ORIENTATION – OUTLINE

Summary

The aim of the paper is to present the university entrepreneurial orientation as a determinant of technology and knowledge transfer from science to business. This important problem is part of the research on understanding the academic entrepreneurship, the nature of which remains rather vague, especially in terms of separation of basic stages, key activities, potential participants, as well as factors affecting the success of their undertakings . It is worth noting that academic entrepreneurship is not a single event, but rather a continuous process consisting of a series of events.

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Introduction

So far, universities have focused on their traditional function relating to education and research. At present, however, it seems to be insufficient. Universities face another important mission which will have an important impact on the economic growth and the development of knowledge-based economy. The new role and mission of the university should be contribution to the academic entrepreneurship and business development. To do this, they should make entrepreneurship a strategic goal and develop all business initiatives within their environment, as well as build linkages with the external environment. Meanwhile, the research results indicate that academic entrepreneurship is underdeveloped.

The new area of the university operation is stimulating the development of broadly understood entrepreneurship among staff, students, alumni and persons working for a doctorate, as well as in the external environment. Reorientation of the role of universities towards stimulation and promotion of entrepreneurship can bring a number of benefits, such as financial resources to conduct further research, prestige, which consequently attracts investors, gaining experience in the field of entrepreneurship, and possibility to provide advice on issues related to the management of educational units.

The aim of the paper is to present the university entrepreneurial orientation as a determinant of technology and knowledge transfer from science to business. This important problem is part of the research on understanding the academic entrepreneurship, the nature of which remains rather vague, especially in terms of separation of basic stages, key activities, potential participants, as well as factors affecting the success of their undertakings. It is worth noting that academic entrepreneurship is not a single event, but rather a continuous process consisting of a series of events.

The concept of academic entrepreneurship

The concept of academic entrepreneurship is multidimensional. On the one hand, it refers to entrepreneurship of the people associated with the university, i.e. students, persons working for a doctorate, and university staff. Enterprises created by these persons use intellectual and organizational resources of research units for commercial purposes. A university spin-offs and spin-outs are an important, though still underdeveloped, mechanism for the research commercialization, which contributes to the economic development of the region, as well as to the value and job creation. In addition, spin-offs are one of the strands of academic entrepreneurship, which in Poland has a relatively short history and is at an early stage of development. Spin-offs involve many new challenges, facing at the same time a variety of barriers at the successive stages of development and aiming at the market success. One of the problems emerging in this regard is the university orientation towards business relationships.

On the other hand, universities can be seen as a kind of enterprises properly organized and managed, educating future workers in many areas of the economy, administration, and so on.

Academic entrepreneurship is, therefore, the activity involving the transfer of technology to the current economic standards and the operation of enterprises using the knowledge, as well as scientific and research programs carried out by academics, students and persons working for a doctorate. It is a specific type of business moving at the interface between science and economy.

The growing researchers' interest in the academic entrepreneurship is confirmed by the results of M. Yusuf and K. Kishore Jain. They analyzed more than 70 scientific articles concerning academic entrepreneurship, published in leading scientific journals. The papers have been divided into three categories: entrepreneurial universities, academic entrepreneurship and university technology transfer. The division was made based on keywords found in the article titles and headlines. Most articles related to technology transfer to business and the least referred to entrepreneurial universities. The authors drew attention to the diversity of definitions, descriptions, explanations, and structure recognition within these categories, which prompted them to determine the association between them. As a result, the entrepreneurial university proved to be the broadest concept, since it has an organizational structure with leadership, control system, human resources and culture. According to the authors, academic entrepreneurship is a process that occurs within the organizational framework of the university – it is a significant component of the university. The researchers noted that the entrepreneurial process or entrepreneurial activity did not always result in the technology transfer from the university. Moreover, the very process of technology transfer to industry, commercialization of research results, granting licenses or authorization of the invention, joint research projects and the creation of university start-ups should be treated as business activities.

To sum up, we may say that the entrepreneurial university is the one in which the academic entrepreneurship is practiced and its level is measurable. Academic entrepreneurship facilitates and promotes the technology transfer between science and industry. The high degree of entrepreneurial orientation is reflected in the large number of technology and knowledge transfers within this area.

University entrepreneurial orientation

The university has always played a very important role in the society, because it started changes, created new ideas at the service of the society. Currently, a trend to transform the university into an enterprise is observed, which leads to the „clash of cultures – the academic and the commercial one". As a result, the university has become the subject of "free market", which generates such "products" as: knowledge, research, discovery, and in which researchers and students participate.

The perception of universities as market or quasi-market organizations is due to the fact that their teaching and research activity is the source of profit. The market orientation of the university is, among other things, forced by accreditation and quality evaluation systems, which in turn translates into "the creation of high-quality effects of the core business as the factor of operation of the free market". The commercialization of the scientific know-how enables scientists, and scientific and business partners (universities, capital investors) to reap benefit.

Due to changes in the perception of universities, in the academic environment there appeared new vocabulary associated with the commercialization. The university is then called the *revenue centre*, a group of people is a *stakeholder*, the student is referred to as the *customer*, and the professor is the *entrepreneur*. This new terminology describes the university in economic terms, which confirms that the commercialization has become a reality.

The modern university is also compared to a factory, an enterprise or a supermarket. Let us yet note that factories count approx. 200 years, supermarkets have existed for 30–40 years, and universities are almost 1000 years old. The commercialization is not a threat to the university, but remains the next stage of development, because at present, the university is part of the market and is subject to the market processes. The university differs from the factory, since the money saved is earmarked for education and research. These are two purposes of its existence. As a rule, the university does not make money, or does very little, does not abandon unprofitable specializations and does not remove them from the curriculum (e.g. Greek or Latin). On the one hand, the university cooperation with enterprises generates profits (licenses sold, patents, research), and thus, it contributes to the social and economic development. On the other hand, too strong cooperation can lead to increased research confidentiality, result manipulation, or the conflict of interest.

Developing entrepreneurship at universities requires the activity of the university itself in this regard. This can be done by the quality of the academic staff, scientific and research potential, the university organization, and the scope of cooperation with the environment.

The new, entrepreneurial approach to the function of the university was begun at American universities after World War II. Organizational experiments at the Massachusetts Institute of Technology (MIT), as well as the Stanford University contacts with the business gave rise to the model of the "Third Generation University", as opposed to the traditional model of the university (typical for Europe), in which knowledge and technology commercialization are treated as secondary activities. Within the model of the Third Generation University, the university is to conduct, in addition to education and research (the domain of traditional universities), active operations in support of entrepreneurship and to open to collaboration with the business. As a result, universities face the following challenges:

- shaping students and staff's attitudes open to entrepreneurship and self-employment,
- developing knowledge, as well as technological and organizational solutions meeting the needs of the market, and of small and medium companies,
- management of intellectual property,
- entrepreneurial management of the university,
- initiating partnership and relationship networking with local business.

The name of the „Third Generation University" may be given to technical universities or science faculties that have recognized technology commercialization as their primary goal, apart from the research and education (teaching). Such universities and faculties are characterized by the total organizational change expressed in the break with the classical division into faculties for the creation of specialized research centres cooperating with industry. Third Generation Universities have the following features:

- technology (know-how) commercialization;
- ambition of becoming an international centre for technology transfer, implementing the principle of know-how carousel (cooperation with industry, private research centres, financial institutions, specialized service providers and other universities);

- introduction of the evaluation studies based on direct control using the appeal system (expert judgment);
- dual education, resulting from the general access to higher education; a Third Generation University runs both elite colleges for talented students and researchers, and widely available teaching and research programs at the lower level;
- independence from the power of the State related to the lack of direct financing of the university by the State, cessation of the intervention in the university management and giving them freedom in determining working conditions;
- the university reorganization based on replacing faculties by the specialized thematic units of entrepreneurial character, having their own leadership and forming their own networks;
- recognition of English as the primary language of communication.

Entrepreneurial orientation as a basis for a model of academic entrepreneurship in Finland

The problem of academic entrepreneurship and cooperation between universities and business in Finland has been regulated in a systematic way. From the beginning of the transformation process, a number of pioneering initiatives can be identified. One of them is the pre-incubation and incubation of business ideas, implemented by a number of universities. It resulted in strengthening efforts aimed at promoting entrepreneurship and knowledge transfer to the economy.

Over the years, Finns have developed support instruments that are highly differentiated depending on the region. The starting point is the existence and implementation of a coherent policy on academic entrepreneurship, including both legislative and fiscal elements, as well as organizational and social ones. Finns built their model of entrepreneurship on four pillars:

- construction of entrepreneurial attitudes and skills,
- technology (know-how),
- capital,
- support system.

An important role in this process is played by the scientific institutions, creating a more or less favourable conditions for the researchers' entrepreneurial activities, intellectual property management strategies for universities and other research institutions. The use of these experiences seems important and possible to apply in the Polish realms. It is worth noting systematic actions stimulating entrepreneurship among the young people, promoting the newly emerging innovative companies. This was made possible through the development of flexible curricula aimed at activating entrepreneurship, students and staff mobility and enhancing cooperation between the university and the employer in terms of innovation and knowledge transfer.

A good example of cooperation in the field of knowledge transfer from the university to industry, the incubation of new, often high-tech projects and ideas, as well as creating conditions for the formation and development of spin-off companies is the University of Helsinki and Oulu, very involved in a number of activities (see Fig. 1 and Fig. 2).

Figure 1. Innvation system in Oulu

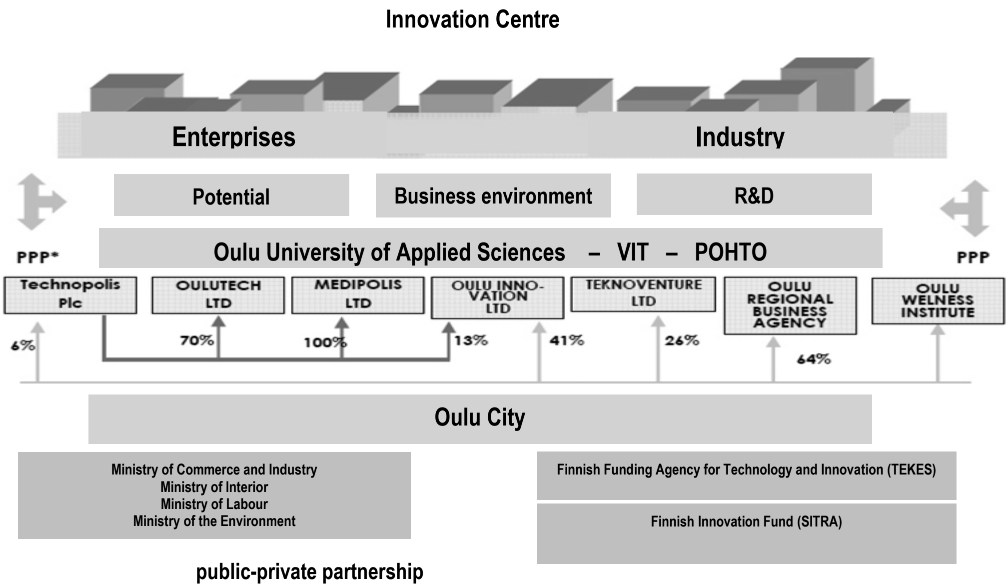
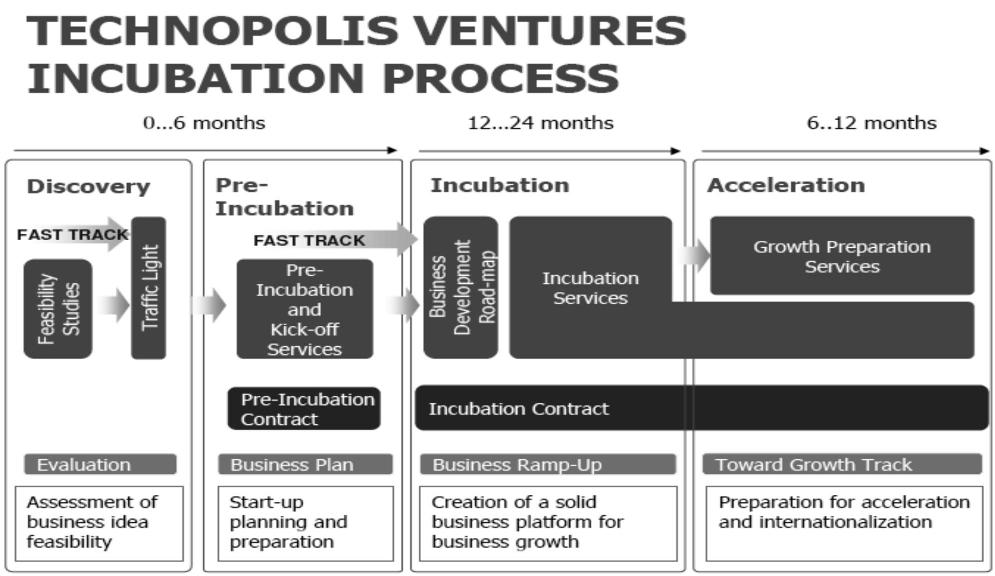


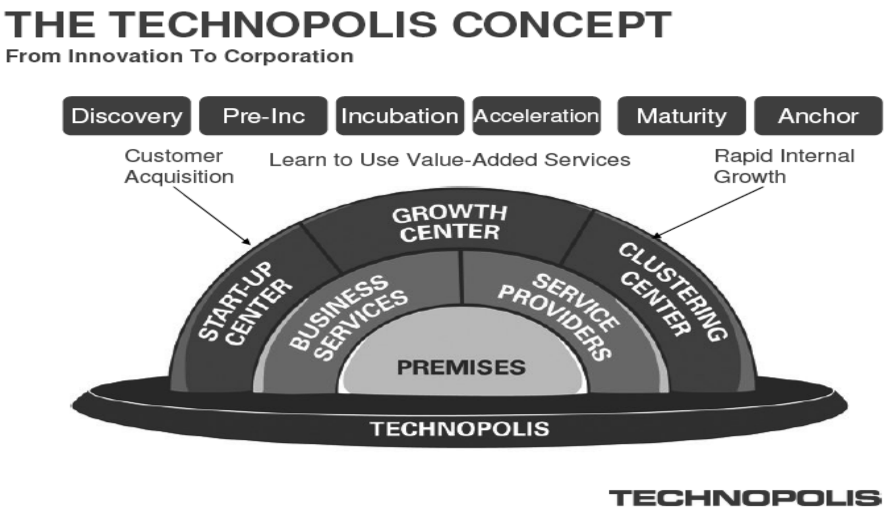
Figure 2. Model of the system to support the development
of technology start-up companies Technopolis



The implementation of this incubation system in Finland enabled to order many scattered initiatives undertaken by universities.

Finns put more weight on the intensification of cooperation of the universities and their teaching staff with business, government and support institutions. To effectively support this cooperation, they continuously organize meetings of business clubs, competitions, seminars, conferences, science festivals, exhibitions, exchanges and fairs of innovation. They also establish and operate regional portals and databases. Moreover, internal university rules for the management of intellectual property and cooperation with spin offs providing benefits for both parties have been developed. The good practice in Finland is also introducing instruments to support the development of markets using new technologies, in particular to stimulate their demand side. The foresight technology is being often used to predict growth trends within technology and economy. They also emphasize the role of public funding of the research in the areas of commercial potential, as well as the need for greater emphasis on innovative projects (see Fig. 3).

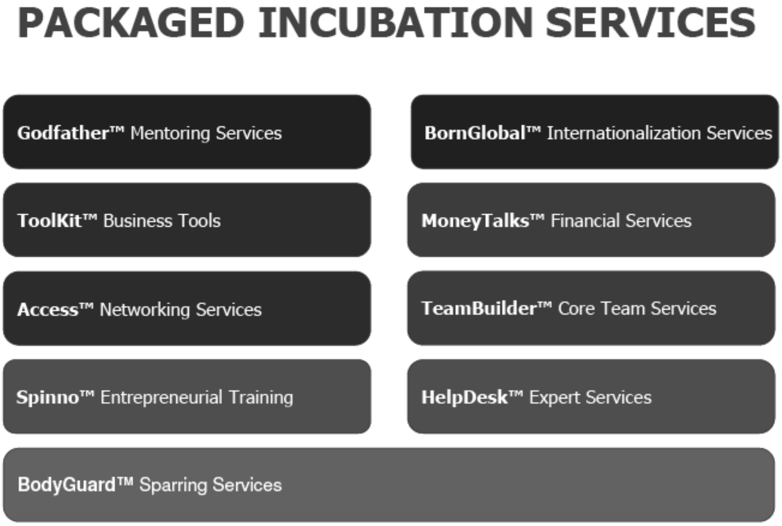
Figure 3. The Technopolis concept – from innovation to corporation



An important factor in the success of programs support the collaboration between science and business is regional cooperation between institutions and the use of regional networks. Cooperation between institutions at the regional level is essential for achieving critical mass of programs. Only strong regional networks with relevant business knowledge can provide a sufficiently large amount of flow of well-prepared projects. Next, we present the systemic packages for supporting cooperation between science and business, which also provide for a comprehensive range of services to support commercialization of research and to create spin-outs and spin-offs.

The so-called incubation services (see Fig. 4) have been developed and are provided by the entities participating in the regional innovation stage in Finland. They remain an excellent model to implement in Polish conditions at the national, regional and local levels.

Figure 4. Incubation services



Godfather™ Mentoring Services – they consist in supporting future managers by creating a specific relationship in which a person with a lot of practical experience and professional success assumes the task to enter the business and to assist in the development of both staff and the processes taking place in the enterprise.

ToolKit™ Business Tools – they are an instrument providing various types of advisory services and consulting, access to information, as well as financial support and brokerage in dealing with risk institutions.

Access™ Networking Services – they provide and organize numerous networking meetings aimed at the exchange of information between entrepreneurs, and establishing new business contacts.

Spinno™ Entrepreneurial Training – it mainly refers to the development of new forms of technology transfer, entrepreneurship promotion and local marketing. Within these services, entrepreneurs can get professional help from identifying potential and technological needs of the company, by finding the technology appropriate for the development of the company, to carrying out the technology transfer or helping in its implementation and post-implementation evaluation.

BodyGuard™ Sparring Services – they refer, among other things, to intellectual property rights. Within the conversion program, a very thorough documentation and audit of the available resources in the field of intellectual property rights are conducted in order to avoid problems with uncontrolled information disclosure made by inventors.

BornGlobal™ Internationalization Services – they consist in supporting the development of business and linking it with supra-local business networks.

MoneyTalks™ Financial Services – they involve the analysis of potential sources of financing the project, with division into public and private funds.

TeamBuilder™ Core Team Services – it is a package of services consisting in building teams within companies in order to carry out certain business ventures.

HelpDesk™ Expert Services – they consist in supporting the future managers in creating the best strategies and growth directions, developing future decisions, supporting and guiding the development of managers' skills and competencies in a specific area of the company activity, as well as building relationships between customers and the management board.

The above-mentioned tools prepared in a systematic way are a great form of the support provided by a network of organized institutions for the development of cooperation between science and business. They may be used by the universities as a tool to support the technology transfer and implementation.

Seeking directions of innovation and new solutions to support the development of academic entrepreneurship, one may use the base of good practices[1] and activities that have brought success to the advanced economies. However, we should be aware that direct copying of ready-made solutions may prove to be expensive and not very useful, because the cultural, social, mental and political aspects in which the solution works are often neglected.

Academic entrepreneurship itself is inherently innovative. A good way to exchange experiences for Polish academic entrepreneurship centres and to learn the best practices from the regions and institutions of Western Europe is to take part in the European Union projects. Supporting academic entrepreneurship and technology transfer from science to economy were considered to be one of the most important priorities for the EU development.

The desired directions of solutions should focus on leveling problems, but in the context of a holistic perspective on local and national circumstances.

In this context, the academic entrepreneurship needs strong incentives for entrepreneurial attitudes, activities and system solutions that will affect the change of thinking among researchers and will result in greater openness to entrepreneurship in the context of modern development processes.

The activities in the field of innovative solutions for human resources and utilization of the research results by entrepreneurs should ensure:

- increasing the number of commercialized technologies and innovative solutions developed by students, persons working for a doctorate and researchers;
- creating a network of agencies supporting the researchers' entrepreneurship;
- increasing the efficiency and effectiveness of the actions taken by the business units supporting academic entrepreneurship;
- disseminating the information about the opportunities and benefits of creating companies based on the university intellectual property; subsequently, creating this type of companies;
- disseminating good practices and procedures relating to the knowledge commercialization, protection of intellectual property rights throughout the academic environment.

Conclusions

Today, the academic entrepreneurship is becoming an integral factor in the process of building international innovation and competitiveness of the economy. There are numerous known benefits for universities, researchers, and representatives of the business world involved in this type of activity. As far as the university is concerned, they include, among others, financial and social aspects, as well as increasing reputation. Researchers reap financial benefits, either those of a personal nature, or those regarding the possibility of the research financing; they can closely collaborate with industry, and have many possibilities of development, as well as the inspiration for new discoveries. Entrepreneurs, through the contact with the technology transfer unit, have access to innovation, remaining a potential source of entrepreneurial inspiration and ideas.

In addition, new academic enterprises increase the potential of a certain area, can contribute to the reduction of unemployment, provide support for small and medium enterprises, as well as assist in the creation of new partnerships at regional, national or international levels[2].

[1] Bąkowski A. (et al.), *Innowacyjna przedsiębiorczość akademicka. Światowe doświadczenia*, PARP, Warszawa 2005.

[2] A. Marszałek, *Wpływ przedsiębiorstw spin-off na rozwój regionu,* „Kwartalnik Nauk o Przedsiębiorstwie" 2010, nr 4/17, p. 84.

In principle, therefore, the result of academic entrepreneurship is the commercialization of the research results and increasing the competitiveness of both universities and enterprises within the environment[3]. In turn, the entrepreneurial orientation of the university is reflected in its mission and the ensuing development strategy. They should leave no doubt as to the direction that has been selected and the pursuit of the entire academic community to play the new role and to implement the strategy.

The appropriate organizational structure should also be important for the entrepreneurial university. It can promote the liberation of the factors supporting entrepreneurship throughout the organization. A major role in this respect may be played by a relatively broad discretion of faculties or institutes, which can enable launching the mechanisms supporting researchers and graduates in their efforts to create new projects and develop the existing ones. This can occur by attracting expertise to the university, or by building strong relationships with the existing institutions supporting entrepreneurship, such as incubators and technology parks.

In order to create favourable conditions for the development of entrepreneurship at universities, taking the following steps seems necessary:

- transforming the university organization – building openness attitudes, following examples from the market in terms of customer approach and service;
- adapting the curricula on entrepreneurship in cooperation with groups of entrepreneurs, as well as their monitoring, evaluating and following up after implementation;
- disseminating using all possible means of communication the knowledge on the available forms of supporting academic entrepreneurship – the communication portal can be innovative, new communication tools, which have not yet been applied, can be tested;
- introducing sustainable systems supporting academic entrepreneurship – grants, consulting support, training etc.;
- developing procedures for the management of intellectual property at the universities – clearly defined regulations, contracts or rector's orders, which will be called the code of practice;
- systematizing and digitalizing the knowledge, identifying key research areas that can be commercialized;
- creating ads for entrepreneurs and their continuous updating;
- introducing the employee development assessment systems, investing in human capital and research sphere, in order to strengthen the development of potential ideas for the use of new technologies.

Against this background, the direction of further scientific investigations outlines. It leads towards determining the optimal level of the university entrepreneurial orientation, balancing the level of commercial results achieved by the university with the level of research and teaching.

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Tomasz Kusio
Cracow University of Economics, Poland

COOPERATION WITH BUSINESS PRACTICE IN UNIVERSITY TEACHING PROCESS

Summary

Changes in the education market, determined by the needs of the changing environment and in particular the increasing demand for the creation of a knowledge-based economy mean for universities the need to enter the adjustment process. One of the main stakeholders in the functioning of the university are the employers. They shall designate directions of the demand for employees who are holders of certain competencies and a certain knowledge. Thus, they delimit the need for the creation of knowledge, as well as teaching. It is therefore quite important to recognize what needs towards the educational process employers represent. Also it is important not only recognition at the set time the employers' needs but also establishing rules and continuous monitoring of the current labour market needs.

***

Introduction

To answer the question concerning the guidelines for teaching to meet current expectations, directed by the labour market, the information from employers are needed. In a further and necessary step it is necessary to compare this information on the required characteristics and candidates' potential to work with the existing teaching process at universities. The didactic process may indeed has an impact on what kind of candidates leave the walls of the university for the labour market. It is therefore important to determine to what extent the positive intervention and change in the field of teaching is possible in order to meet the needs of the labour market. However, beyond the fact of preparing future graduates to the labour market, it is also important to prepare young people for life and work in a global and competitive society[1].

The continuous cooperation with employers is needed at every stage of consideration on how such action is possible to be realized that as a result of teaching graduates represent by their attitudes,

[1] K. Śliwińska, *Wizja Szkoły Wyższej. Kierunki rozwoju procesów dydaktycznych na tle postaw i aspiracji młodzieży akademickiej* [in:] *Uczelnia oparta na wiedzy. Organizacja procesu dydaktycznego oraz zarządzanie wiedzą w ekonomicznym szkolnictwie wyższym*, Ed. by T. Gołębiowski, M. Dąbrowski, B. Mierzejewska, Fundacja Promocji i Akredytacji Kierunków Ekonomicznych, Warszawa 2005, pp. 20-25.

qualifications and skills the expected characteristics of the labour market, it is necessary to continue cooperation with employers. Cooperation between universities and employers is at the stage of:
- contact with employers in the field of study of their expectations in terms of the characteristics and behavior of candidates for the job offered;
- analyzing the demand of graduates for specific job positions in terms of quantity;
- analyzing, in qualitative context, predispositions possessed by graduates for a future work;
- analyzing, in the context of "foresight", i.e. future-oriented, the demand of predispositions held by candidates to work and at the same time predicting the formation of the labour market;
- providing trainings and their creation in the context of thematic content and methods of knowledge transfer to listeners.

The participation of employers in the teaching process can also be more ad hoc in nature, i.e. for example the joint creation and conducting of classes and even participation in the selection of candidates to participate in such courses, which is better known as *business academies*.

Demand from the business practice towards universities

Cooperation with business practice means both aspect of the demand for specific skills and competencies which universities can equip their students, as well as the competencies and skills that the employer may not give directly, but which are also expected from persons who constitute the core of the management or team of experts in a company. This refers to the general interpersonal skills and attitudes of a candidate to work on the important position that requires good manners. Very often, unfortunately, there is presented a view that one should shape only selected competencies of a graduate for specific job positions, while at the same time one forgets about the thorough educational process, where attitudes of a graduate are obtained, which, after all, students gain not only through teaching, but throughout the period of study, through contacts with the fellowships, educators, teachers and at the same time shaping their attitudes and behavior.

In the transition from the phase of learning (education) to the phase of employment, employers are an important part of the equation. Education is for the employer a signaling function. In the absence of other forms of acknowledgment of skills and abilities of future employees, level of education and its quality expressed by the results of training, can provide information about the intelligence, skills and knowledge of a candidate[2]. Higher education, which is a summary of the educational process in schools is affected but without prejudice to getting a job[3]. Additional advantages include, among others, work as a volunteer, unpaid internships in large and well-known companies and everything that is making contacts and gaining experience.

Employers' expectations in terms of competencies and skills, and personal characteristics will vary depending on what position they want to hire new people (Fig. 1).

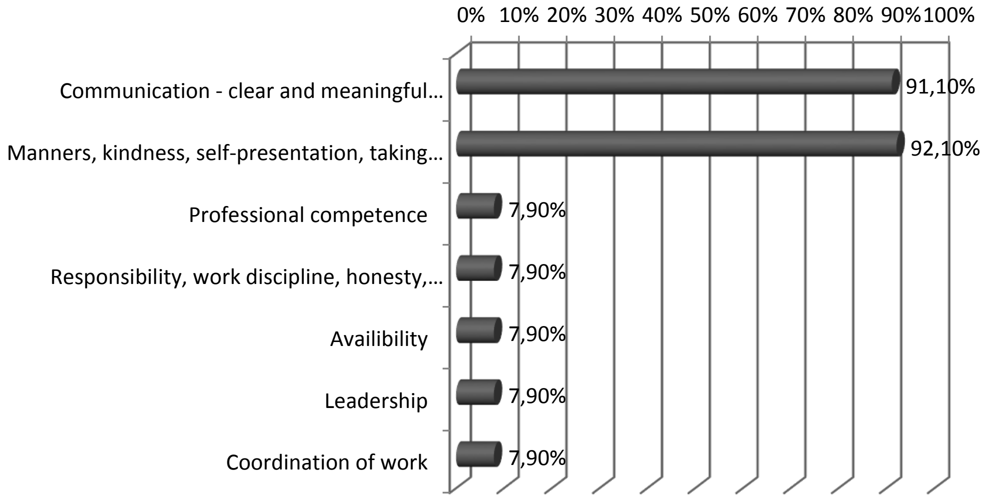
The teaching process, thus, focused on how best to prepare graduates to enter the labour market, should obviously be focused on equipping graduates in the features expected by employers (table 1 - the characteristics desired), but one should not forget also about the overall development of the student.

Trying to group the competencies expected by employers, the following groups can be divided:
- ability to self-organization,
- interpersonal skills,
- work in a group.

[2] N. Ripmester, *International Business: Consumers of Global Talent?* [in:] EAIE, Raabe 2014, p. 23.

[3] S. Jarmoszko, *Kategorie ryzyka w przestrzeni kształcenia akademickiego* [in:] *Jakość kształcenia akademickiego w świecie mobilności i ryzyka* , Ed. by H. Kwiatkowska, R. Stępień, Akademia Humanistyczna im. Aleksandra Gieysztora, Pułtusk 2011, p. 127.

Figure 1. The competencies required for the positions of managers and officials



Source: M. Jelonek, D. Szklarczyk, A. Balcerzak-Raczyńska, *Oczekiwania pracodawców a pracownicy jutra. Na podstawie badań zrealizowanych w 2012 roku w ramach III edycji projektu Bilans Kapitału Ludzkiego*, PARP, Warszawa 2012, p. 39.

Figure 2. The competencies required for the positions of specialists

Source: M. Jelonek, D. Szklarczyk, A. Balcerzak-Raczyńska, *Oczekiwania pracodawców a pracownicy jutra. Na podstawie badań zrealizowanych w 2012 roku w ramach III edycji projektu Bilans Kapitału Ludzkiego*, PARP, Warszawa 2012, p. 39.

Acquiring these competencies is possible through direct contact with other people and self-activity, i.e. learning by doing, or outside of formal education, such as local projects, volunteering, initiatives pursuing passion and workshops[4]. It is believed that these powers are not generally acquired while learning in higher education and only during professional work. However, expectations of employers are for the university authorities directional signal on how to shape the educational offer.

Acknowledgement of the need for education through the practice is reflected in the results of a survey of students at the University of Economics in Cracow. Results of research conducted by the Department of Sociology at the University of Economics in Cracow confirm the need for learning through practice and for practice[5]. To achieve the desired effect, the traditional forms of teaching in the form of lectures should be replaced by classes where mutual solving problems from real life would take place. Also there should be the replacement of actual knowledge with the data and assistance in their own interpretations by the students and to propose solutions. Research results also confirmed that the need for change is noticed and declared by the scientific community. 82.1% of respondents from the faculty reaffirmed the need to make changes in didactics. Among the proposed changes and directions of changes, the main stream was to activate the student through the introduction of methods of forcing to work in the name of "to study and not to listen to a lecture". To be able to implement a similar mode of changes it would be necessary to reduce the number of groups, limiting the amount of lectures for the exercises and tutorials. To use non-standard methods of teaching it is also essential to have adequate technical facilities at universities especially in equipment and infrastructure.

Table 1. The skills lacking at graduates in the eyes of employers

Skills / Abilities	**Indications of interest**
Ability to combine theory with practice	42%
Customer service skills / customer contact	39%
Ability to solve problems	34%
Ability to organize work	33%
Knowledge of foreign languages	28%
Interpersonal skills	23%
Ability to work in a group	22%
Ability to adapt to changes in the environment	22%
Creativity	20%
Ability to operate machinery and equipment	11%
Computer and Internet literacy	10%
Ability to learn quickly	7%

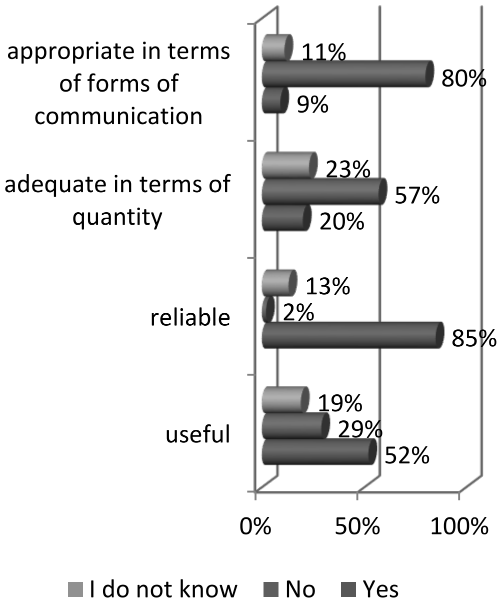
Source: M. Jelonek, D. Szklarczyk, A. Balcerzak-Raczyńska, *Oczekiwania pracodawców a pracownicy jutra. Na podstawie badań zrealizowanych w 2012 roku w ramach III edycji projektu Bilans Kapitału Ludzkiego*, PARP, Warszawa 2012, p. 11.

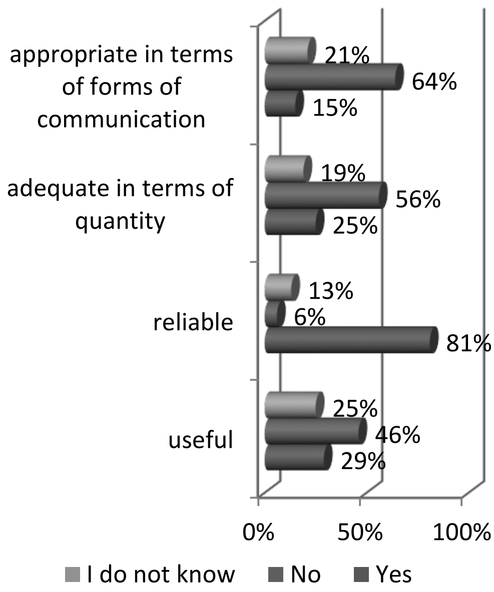
4 Ibidem, pp. 31-32.

5 A. Karwińska, M. Karwiński, *Perspektywa doskonalenia dydaktyki. Dwa punkty widzenia* [in:] *Uczelnia oparta na wiedzy. Organizacja procesu dydaktycznego oraz zarządzanie wiedzą w ekonomicznym szkolnictwie wyższym,* Ed. by T. Gołębiowski, M. Dąbrowski, B. Mierzejewska, Fundacja Promocji i Akredytacji Kierunków Ekonomicznych, Warszawa 2005, p. 352.

Interesting results, confirming the validity of the changes in teaching, show data from the University of Economics in Katowice (Fig. 3).The survey results show how the period of just five years have caused changed the opinion of students on the usefulness of the knowledge generated in the local university. As many as 46% against 29% of students from an earlier period found that the knowledge is not useful. There has been a change from answer “yes” to the answer “no”. However, in this case, what should also be taken into consideration, is the fact that virtually a quarter of respondents are still unaware of whether the obtained knowledge is or is not useful. However, as the authors point out, the perception of the usefulness of knowledge applies only to this present context, students do not perceive the stock of knowledge in the context of perspective, because they do not have the knowledge and awareness of how knowledge and attitudes which will be acquired in the course of study will result in the future. In the context of discussing the need for change in the teaching process there is also indicated the need, recognized by students, to change the form of knowledge transfer, as well as the amounts of the classes. At this point the context of presence also seems to be an important as well as the context of present perception of knowledge and learning at the moment. Responses in both 2000 and 2005 are similar, although it seems from the answers that there is an improvement in this respect. It should be noted that the survey respondents were students of business studies.

Figure 3. Characteristics of knowledge transmitted by teachers in the classroom, in the opinion of students (2000 years chart on the left and 2005 years chart on the right)





Source: own elaboration based on: K. Śliwińska, *Wizja Szkoły Wyższej. Kierunki rozwoju procesów dydaktycznych na tle postaw i aspiracji młodzieży akademickiej* [in:] *Uczelnia oparta na wiedzy. Organizacja procesu dydaktycznego oraz zarządzanie wiedzą w ekonomicznym szkolnictwie wyższym* Ed. by T. Gołębiowski, M. Dąbrowski, B. Mierzejewska, Fundacja Promocji i Akredytacji Kierunków Ekonomicznych, Warszawa 2005, pp. 20-25.

Expectations of employers towards job candidates, suggest however, that less attention is paid to specific knowledge, and more on general preparation and general potential of a candidate. Of greater importance are, therefore, features and general knowledge and attitudes of a candidate rather than direct, detailed expertise, which employers provide at the first stage of work as a training. For this reason there are situations on the labour market, where many graduates of technical-education nature work in accounting companies. Higher expectation of employers towards education are directed to young people. Graduate student with educational qualifications is seen as a market product. This implies decisions of companies in the context of competition, because human capital which consists of personal resources is an essential asset of the company. Taking into consideration a similar line of perception the importance of graduate properly equipped with knowledge, the institution should seek to maintain a high quality of education[6].

The graduates' situation after the education process

Employers, therefore, have specific expectations for the skills possessed by the employees, but that does not mean that they have no awareness that young people before ascending to the labour market does not fully be immediately ready to perform the job activities, which is expected from them. For this reason, a common practice is to train newly hired people. At the same time, however, employers expect from recruited people such potential, which will ensure that the employee after acknowledgement with the specifics of work and adoption, will effectively perform the tasks assigned.

It is important for universities to collect information on the labour market expectations in terms of the educational process. The implementation of adaptive changes and adapting existing university educational curricula may be possible only if the high school has valid and reliable knowledge of the labour market expectations. The knowledge that higher education acquire on the labour market is obtained, among others, from secondary sources, which are statistics from statistical offices and job centers, publications, prepared and published by for example institutes and offices operating in the area of labour market monitoring, but also by scientists and researchers dealing with issues of employment and the labour market. Information on the labour market are also collected from primary sources. Primary sources on the labour market are usually own research, conducted by research bodies, including universities, but also information from the environment, such as interviews, pooled data from students or workers in the industry. Within the college, detailed information may be obtained from Academic Career Centers, which are in direct contact with employers. Academic Career Centers (ACK) stay in contact with companies especially with regards to the offers of student placements, which companies can offer. At the same time ACKs possess a very large databases of companies seeking employees, update these databases as well as provide links to other sources of information on sought people. ACKs are also applying for EU and national grants and tax havens and in this respect coordinate collaborative projects between universities and employers. One of the forms of activity with the use of European funds is the conducting survey on the graduates' careers. Furthermore ACKs create training programs which are adequate to the graduates' requirements. This is done according to the ongoing monitoring of the demand of employers for certain graduates and also using the opportunities offered by EU funds. Among the training programs, those intended for young graduates entering the labour market, include mainly issues such as the preparation of application documents for the employer, preparation for the interview, as well as search for jobs. In the career centers themselves, there are also available links to databases of job offers that are published by labour market institutions such as employment offices. The opportunities which universities offer for their students by means of career centers are enormous and students frequently and gladly use them.

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6 A. Francik, K. Szczepańska-Woszczyna, A. Pabian, M. Wróbel, *Sytuacja absolwentów uczelni na polskim rynku pracy* [in:] *System kształcenia w zakresie zarządzania a śląski rynek pracy,* Ed. by A. Francik, WSB w Dąbrowie Górniczej, Dąbrowa Górnicza 2012, p. 28.

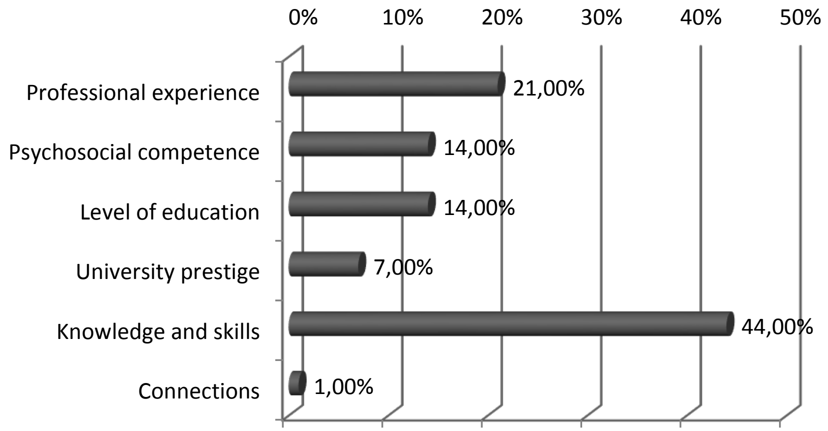
Confirmation of students' interest in careers centers activities are the statistics of participation in job fairs, career days and other types of events that bring together candidates to work with one hand, and companies offering jobs on the other. Self-entrepreneurship understood as resourcefulness in search of work translates into success in finding it. All the more actions made by career centers are reasonable because they create opportunities for very often the first contact between the graduate and employer. Those contacts are also offered between heads of personnel departments and people interested in submitting application documents to the company.

The role of higher education

The role of higher education in the process of establishing a national human capital is crucial. The actual weight of the creation of intellectual capital and inspiring interaction in an environment of higher education is led for institutions of higher education. As regards the effects of education - universities should properly profile silhouette of graduates themselves and the effects of education should take account of social expectations[7]. More and more often in literature it is mentioned the need to relate the learning outcomes to the expectations of the environment. In this context, therefore, the role of key stakeholders such as enterprises and public administrations, seems to be important. Companies need employees who will create intellectual capital necessary to strengthen the competitiveness of the company. Expectations of the environment can also mean the expectations within the local dimension as well as the further dimension represented by further environment. The close environment is a local one, also regional, and the further environment can be considered within national activity of the university. Closer environment may be bound with the university involvement in regional public administration activities, and in terms of the further it will be the central administration.

Figure 4 presents the key factors in finding employment by the graduates.

Figure 4. Factors influencing the choice of finding employment for graduates



Source: M. Jelonek, D. Szklarczyk, A. Balcerzak-Raczyńska, *Oczekiwania pracodawców a pracownicy jutra. Na podstawie badań zrealizowanych w 2012 roku w ramach III edycji projektu Bilans Kapitału Ludzkiego*, PARP, Warszawa 2012, p. 10.

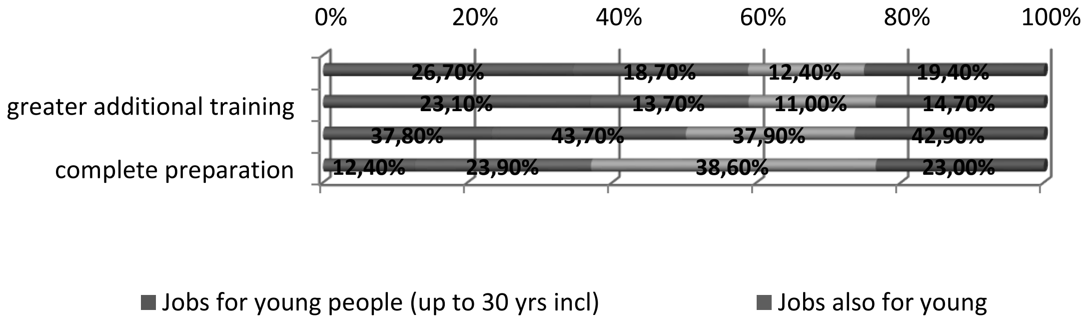
[7] M. Geryk, *Kapitał intelektualny uczelni i jego wpływ na rozwój regionu* [in:] *Rozwój organizacji i regionu wyzwaniem dla ekonomii i nauk o zarządzaniu,* Ed. by J. Stachowicz, M. Nowicka-Skowron, L.A. Voronina, TNOiK, Lublin-Toruń 2014, pp. 63-73.

When it comes to looking at the work of graduates from traders, it is already one-third of them who believe that the graduates of management work on positions held by them under formal qualifications.

When it comes to undertaking works hortly after graduation, there is a variety of approaches to this subject. In one case, one may talk about undertaking work by graduates, where the level of requirements is lower than the level of competences held by candidates. On the other hand it is also said that there are in flated aspirations of persons who are to take their first job. People are therefore reluctant to simple work, and value the work as "worthy" and "unworthy"[8].

The confirmation of the need to supplement the skills by graduates is shown in the results of "college-friendly employers" survey. According the results of the survey 65% of graduates were forced to raise their qualification after graduation. However, employers rate highly the ability to learn quickly by graduates. As many as 46% of people do not work in their profession, while 67% of people admitted that they had extra training. Here it may be concluded that a large proportion of people (because almost half) was forced to training due to the fact that they were forced or decided to work in a profession not adequate to the education but another. Therefore, these people were obliged to further education, which would predestine these people to other work than consistent with the directional education.

Figure 5. Evaluation of employers on the need to train the candidates or the expectation of full preparation



Source: M. Jelonek, D. Szklarczyk, A. Balcerzak-Raczyńska, *Oczekiwania pracodawców a pracownicy jutra. Na podstawie badań zrealizowanych w 2012 roku w ramach III edycji projektu Bilans Kapitału Ludzkiego*, PARP, Warszawa 2012, p. 13.

With regard to the educational process, the demand for a certain potential of candidates for the job, and at the same time students of a high school, may determine to some extent, conducting classes, it may also affect the structuring of teaching instruments in terms of the number of hours of classes. As teaching instruments there are considered different forms of teaching, i.e. lectures, workshops, case studies, simulation games, etc. On the one hand, on the side of the university, it is important for the student to acquire specific knowledge and skills and the ability to present this knowledge. In turn, at the employer's side, the personal culture, skills and attitudes that characterize the total potential of candidate, predestining him to effectively perform her/his duties, is important. However, one should not forget that the attitudes and expectations which in the perception of employers include the candidate's overall potential is a result of the educational process that takes place during the entire period of study. Besides

[8] A. Francik, A. Pabian, M. Wróbel, *Bezrobocie absolwentów szkół wyższych na tle sytuacji ludzi młodych na rynku pracy* [in:] *System kształcenia w zakresie zarządzania a śląski rynek pracy,* Ed. by A. Francik, WSB w Dąbrowie Górniczej, Dąbrowa Górnicza 2012, p. 39.

the fact that it is acquired in the process of learning, independent learning, acquisition of attitudes and behavior skills, acquisition and cooperation in the group, one can safely conclude that overall candidate's potential is determined not solely by means of teaching. Teaching, therefore, can to some extent influence shaping characteristics that are desired by the labour market. As there is the possibility in obtaining improvement in the quality of candidate's potential in the context of the teaching process changes, such changes should be considered especially if they lead to an improvement in both the learning by the students, as well as such a shape that will have a positive impact on the adoption of the labour market.

Market orientation in the context of university teaching means among others[9]:

- treating education as a service, which means that its offering as part of the sales process is the need to adapt to customer requirements (recipients of services, which is education);
- students should be treated in the market categories, which means that they constitute a kind of clientele of a university. The period of time in which students should be regarded as customers is learning-time. After this time becoming graduates and leaving university, they are armed with the knowledge, experience, competencies, which they obtained at the university. Graduates create the image of the university and become a by-product used in university teaching strategies;
- in the implementation of the educational process increasingly important role is played by labour market needs. The requirements of the labour market towards workers refer to both those already in the labour market functioning, as well as those just joining the labour market, which means graduates. Expectations arising from the labour market relate to the competences, which are not only needed but also those occurring at the moment, just emerging. Dynamics of changes in the labour market is high. Currently rapidly changing environment, in particular speeding market of modern technology, generates new needs for positions, to which only the educational market adjusts.
- finally, one of the determinants that describe the educational market in higher education is also a principle of treating universities as businesses.

Real verifier of the effects of academic education is the practice hence the importance of corporate reputation and managers of graduates of different universities and colleges themselves.

Shaping teaching and learning processes in schools is consistent with the strengthening of the competitive position of higher education. As noted by Z. Makieła[10] competitiveness of higher education is perceived by:

- market-based fields of study,
- individualization of the learning process,
- competitive curricula,
- the modernly designed syllabi,
- the selection of modern and contemporary literature,
- creative teaching methods,
- multi-language teaching offer.

The university is a provider of pro-innovation at the same time frames, changing human capital in the region. List of desired competencies and skills is not surprising - professional competences dominate, as indicated by almost 2/5 of employers seeking young workers. The following places are listed so called "soft" skills, such as ability to contact with people, customers, communication or personal culture and the ability to self-presentation. However, there are also important features which complement professional

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[9] *Metodyka i badania jakości kształcenia w szkolnictwie wyższym w Polsce*, Ed. by S. Doroszewicz, Oficyna Wydawnicza SGH, Warszawa 2011, p. 82.

[10] Z. Makieła, *Pozycjonowanie ośrodka akademickiego w budowaniu regionów wiedzy* [in:] *Rozwój organizacji i regionu wyzwaniem dla ekonomii i nauk o zarządzaniu*, Ed. by J. Stachowicz, M. Nowicka-Skowron, L.A. Voronina, TNOiK, Lublin-Toruń 2014, pp. 175-190.

competence which ensure the quality of the work - it is among others: responsibility, discipline, honesty and trustworthiness, diligence, and thoroughness, accuracy and paying attention to details. Highly valued by employers is also the availability of young workers. “Headlamp” of competences required from the young is not much different from the statement to the public, except for a few features. To a greater extent it is required from them: manners, courtesy, self-presentation and taking care of an image, entrepreneurship, creativity, innovation, inventing new solutions, punctuality.

Conclusions

Making the university to be closer to the labour market may mean, among others, treating seriously labour market needs for a specific model of education and above all, the effects of this training. Also to an even greater extent, it means analyzing current changes in demand for specific knowledge and skills in the labour market by employers. Monitoring and analysis of the current labour market is, at this point, mainly the domain of labour market institutions such as labour offices, which, moreover, receive EU support for purposes related to the broad support of the labour market. In addition to tracking labour market needs for specific knowledge and skills, science and business cooperation can be of much more ad hoc. Employers can directly participate in academic activities which allow them to gain knowledge about future employees. Participation of employees of companies in the classes provides opportunities for the selection of potential candidates for employment. At the same time it allows students allows for direct contact with future employers. In the discussion of the desirable characteristics and skills of graduates one often draws attention to the requirements directly related to the specific work performed, but research indicates that employers expect skills and potential to the appropriate apprenticeship to the profession. Thus, it becomes important not only what specifically the candidate knows about the specific work. More important is her and his capacity to adequately carry out the work. The potential is created not only by the pure teaching, but throughout the educational process and the time spent at the university.

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Ivanna Bakushevych, Daria Goszczynska, Oksana Kovalyuk
Ternopil Institute of Social and Information Technologies, Ukraine

RESTRUCTURING OF THE BUSINESS - UNIVERSITY NETWORKING MODEL BASED ON THE NEW LAW OF HIGHER EDUCATION IN UKRAINE

Summary

This paper investigates basic problems in restructuring business - university networking system in Ukraine, which focus on the field of innovation. A comparative analysis of the partnership condition among companies and universities and its impact on innovation activity is done in terms of implementation of the new law of higher education in Ukraine. A virtual platform in creating innovative laboratories as a model for restructuring university - business networking is proposed in order to provide innovative development on regional, national, and global levels.

Keywords: restructuring, innovation, networking, business, education, innovation laboratory.

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Introduction

The year of 2014 will definitely be known as Year of the Maidan and Year of Change in Ukrainian and World histories – the year of unrest transformation and restructure of many sectors of the economy and society. On the one hand, the increase transparency in national economics towards European integration processes, and on the other hand, the sensitivity to destructive, sometimes even detrimental military operations in Eastern and Southern regions of Ukraine, can determine the need to search for effective ways of reforming and restructuring the system of innovative development on the regional and national levels. Leading to the acceleration of the recovery process, not only in high-tech manufacturing and service sectors of the economy in the state of martial law, but also the revitalization of particular cities, territories, regions as well as the country altogether.

Although science and education show sufficiently high potential in some Ukrainian cities, their rather low efficiency and rate of success are still observed in regards to the needs of business and social sectors. Particularly, the acute gap between science, education and business is traced in small and medium-sized cities almost throughout the whole territory of Ukraine. It leads to the gradual lag of the national innovation system. It also causes the decrease of the country's competitiveness in many sectors of the economy in comparison to the world's innovational system. It is necessary to identify a number of issues that demand urgent solutions and to find ways to reform individual links in a chain "education - science - business - society", as well as a process of interaction between them, including:

- the lack of information in business sector about national scientific achievements, their potential possibilities to solve local and national strategic tasks;
- no database on existing scientific and technological challenges in manufacturing plants, in infrastructural sphere of business in social sphere of a city / region;
- lack of organizational economic mechanisms of interaction in the chain: education-science-investor business;
- insufficiency of "critical mass" of financing for innovative projects realization at a local, regional and national levels;
- imperfect regulatory of legal framework of knowledge transfer, and an intellectual property protection.

Today, the process of reformation of the national innovative system starts with the reformation of one of its units, in particular with the high education. However, the other components also need rethinking and restructuring interactions between the particular links of the innovative system at regional and national levels.

Theoretical and practical aspects of business collaboration, science and education in the global integration can be found in the works of Ukrainian scientists, in particular such as Yu. Bazhala, V. Heyets, O. Kondrashova, O. Maslak, L. Fedulova and others [1-10] as well, as in the publications of international scientists, including J. Baldwin, P. Hanel, M. Porter and others [13-17]. Today, the development strategy and the partnership model are developed almost in each university in the USA and Western Europe. It can be confirmed through the analysis of web pages where the universities publish information about available projects on collaboration between businesses and a local community.

The aim of the present research is to identify the positive and the negative aspects of the existing interaction between the key "players" in the process of innovative development of the chain: "education - science - business" and to offer new methods of a horizontal network cooperation between universities, factories, companies and non-industrial sectors and innovative agents based on a cluster model of a creation and development of innovative laboratories.

Analysis of readiness of education and science to interact with business in Ukraine

Higher Education is one of the areas of the national innovative system which still allows for Ukraine, despite the low GDP index, to hold a position of an "average country" in the relevant world rankings. Ukraine took the 63rd place among 141 countries in the 2012 International Innovative Index rating. It was the 60th place among 125 countries in 2011. One of the factors that determine the quality of an innovative activity includes a level of higher education and a state of research and development spheres. Thus, in 2012 Ukraine took the 34th place and in 2011 the 39th place in those categories; according to the higher education index coverage – (8th place) and the quantity of graduate students of scientific and engineering majors – (19th place)[1, 2].

The Research and Development evaluation includes three indicators:

1) a number of researchers per 1 million people,
2) R & D expeditures,
3) a quality of research institutions.

[1] *The Global Competitiveness Report 2010-2011*, http://gcr.weforum.org/gcr2010.

[2] *The Global Competitiveness Report 2011-2012*, http://gcr.weforum.org/gcr2011.

Ukraine ranked on the 44th place by the first, the 37th place by the second and 69th place by the third indicator[3].

In 2012 Ukraine took the 30th place for the research productivity (in 2011 – the 40th place); establishment of new scientific knowledge which is characterized by the number of patents and scientific articles – 21st place, in terms of knowledge spreading – 55th, the impact of knowledge – 66th place. In 2012-2013 Ukraine was ranked the 73rd among 144 countries in the ranking of the Global Competitiveness Index (in 2011-2012 – 82nd). It demonstrates Ukrainian main competitive advantages in education and capacity of market. One of the important components in Competitiveness Index is "Innovation" which includes such basic factors: "the availability of high-quality research institutions" (64th place), "Universities and business cooperation in scientific researches" (69th place) "the availability of scientific and engineering personnel" (25th place), "Intellectual Property Protection" (51st place).

The annual investments, of over 20% of total funding, received from foreign customers for development and researches conducted by Ukrainian scientists confirm a fairly high demand on them. That is why Ukrainian science is keeping to be really attractive for international scientific technological and innovative cooperation and global integration[4].

Quantitative indicators of education make it possible to state the following: in 2014, the network of III-IV accreditation levels higher educational institutions consists of 325 higher education institutions, 215 of them are the state property, 14 – public and 96 - private. There are 198 universities, 62 academies, 83 institutes, 245 colleges, 97 high schools, 117 technical schools and 1 conservatory in Ukraine. In the 2013/2014 academic year the number of students enrolled in higher educational institutions of all levels of accreditation and ownership reached over 2052 (4.4% of the population). The cost of education of 1074 students (52%) was covered by private or juridical subjects[5].

The adoption of the new law in Ukraine "On Higher Education"[6] confronts scientific, educational and business communities with challenges of finding a new model of mutual cooperation chain: education - science - business - government. There is an urgent need for structural changes to the existing ties between universities and domestic enterprises on the one hand, and on the other hand, companies get the problem of establishing relations with Ukrainian universities in order to obtain highly qualified graduates who have relevant creative skills, practical abilities to work with innovations. The ability to find a quick search and an access to the latest international scientific inventions and advanced technologies, abilities to carry out own ideas into the real innovative projects, engage and work with Ukrainian and foreign partners, promote the innovative product of domestic producers to international markets these all challenges need to be meet.

Strengths and weaknesses of the University - Business partnership: Ukrainian and international experiences

Nowadays there are two models of partnership among businesses and universities in Ukraine, as well as in the world:
1. Partnership in training activities,
2. Partnership in Research & Development.

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[3] Ibidem.

[4] *Research and Innovation in Ukraine*: Statistical Yearbook, Kyiv 2014, p. 314.

[5] Higher education in Ukraine/ Ministry of Education and Science of Ukraine official website, http://www.mon.gov.ua/ua/activity/education/58/

[6] *The Law of Ukraine «On Higher Education»*- Закон від 01.07.2014 № 1556-VII, http:// vnz.org.ua/zakonodavstvo/111-zakon-ukrayiny-pro-vyschu-osvitu.

The absence or the very poor manifestation of partnership causes the weakness of the economy of a city or a region where the university is located. The deficiency of such partnership leads to the rise of one more problem - graduates' unemployment. It is caused to some extent by the wrong approaches of educational system processes at the universities.

The First National Forum "Business and Universities" organized in Kyiv in November 2013 has revealed the strong and weak points of the existing models of Business Education Science Partnership[7].

Analyzing the opinions of some experts regarding the collaboration between business and higher education we can find out that institutions of higher education interact with companies in terms of student's internships and the exchange of students and professors - in the first model of partnership. This interaction is unstable, fragmented, and, in most cases, it is initiated primarily by students and professors who are interested rather in international programs of mobility than in university management. Professor. S. Feyhi, an Australian expert, deems that universities need to change the model by which they offer their educational services, "universities need to redirect themselves, to provide more practical skills and active involvement of business to transfer such skills"[8]. Regarding the implementation of the second model of collaboration between business and universities in the field of Research and Development, professor S. Feyhi notes that the majority of scientists carry out their researches in isolation from the business and offer already ready results, hoping it is going to be attractive for business afterwards. Business, however, must be involved in the research process as earlier as possible, almost on the very early stages.

The experience of Great Britain is noteworthy. The close and integrated collaborations between universities, government and local private sector has been working there since 1990s. According to M. Daul, director of the British Council in Ukraine, the success of "British" model of partnership in the process of Knowledge Transfer Partnership (KTPs)[9] from university to business is based on three key principles:

1) University - is an economic pioneer and initiator of economic development of a city / region, which means:
   higher education institutions are considered as structural elements of business areas, and should involve their financial resources in projects of the state sector; determine priorities for research in universities on the basis of economic needs and plans for future developments in a city / region; to seek perfection in the selected areas of knowledge transfer.
2) University - as an innovative center, which means:
   close cooperation and involvement of private companies in developing and financing of research projects, creation of innovative technology centers, research incubators, etc., establishment of joint enterprises to conduct practical studies. It starts with a tiny idea and ends with mutual ownership for intellectual property on the obtained product. It comprises research and creates opportunities for the development of local companies, particularly for small and medium businesses.
3) The university is focused on the needs of employers, which provides:
   development of the order of the necessary training programs for business, proposal for joint content of training courses; identification of future needs of employers for new employees - university graduates; internships and trainings for graduates, programs for development managers' personal skills, and practical business skills for professors and students.

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[7] *Report on the National Forum I "Business and Universities – 2013" (in Ukrainian),* http://csr-ukraine.org/wp-content/uploads/2014/04/ForumReport_Final.pdf.

[8] *Report on the National Forum I "Business and Universities – 2013" (in Ukrainian),* op. cit., p. 9, http://csr-ukraine.org/wp-content/uploads/2014/04/ForumReport_Final.pdf [19.09.2014].

[9] *Services for Business: Knowledge Transfer Partnerships (KTPs),* http://www.ncl.ac.uk/business/knowledge/ktp [27.03.2014].

The strategic plan of the partnership and networking development

The existing models of partnership in Ukraine make it possible to identify strategic areas of development:

- universities need to change their status from "*educational*" institutions to "*research*" institutions, to become centers of research and innovation. They have much potential because of many students who not only study there, but also produce new innovative ideas,
- shift the paradigm of university-business *partnership* to new paradigm of university-business *networking* that means development of distance learning and distance communication, where universities and companies can improve the efficiency of using the unique open knowledge resource, which are virtual and spatially separated from each other. The online education should become helpful in relation to the traditional model of obtaining knowledge and enhance quality, optimize the learning process, create new opportunities for everybody, students and various groups of people (managers, who need new skills for their own career growth; professionals, who need to change their specialization or profession; seniors, who want to remain active in business).

"Innovation Lab" as a virtual model of Education - Science - Business networking

One of the ways to strengthen the Education- Science- Business networking using modern information and communication technologies and online education may be the creation of **open innovative training and research laboratories (platforms).** Innovation Lab is a concept closely associated with open innovation, the creation of a platform for experimentation where businesses, local authorities and individuals involved in the development of innovative product / service / technology. The openness of platform to all stakeholders with different educational backgrounds, public participation in presenting ideas to solve local business problems, social sphere, the environment, a wide range of links of "innovative chain" with suppliers, intermediaries, consumers and other participants of the new knowledge and innovation market.

The project "Innolab" has been operating in Ukraine and Belarus since 2012 with the financial support of "TEMPUS". It is implemented in order to develop the integration activity between enterprises and universities. There are three universities of Ukraine (Kyiv-Mohyla Academy, Uzhgorod National University, Kharkiv Polytechnic Institute), two universities of Belarus (Grodno State University named after Yanka Kupala, Polotsk State University), three Western European universities (University of Bradford, UK; Tallinn University of Technology; University of Thessaloniki named after Aristotle, Greece), the Ministry of Education and Science of Ukraine and Business Incubator of Ternopil are partners of the networking project. The leading partner is the University of Bradford.

In the framework of the project Ukrainian and Belarusian participants held a number of meetings at three universities and their innovative structural units (Great Britain, Estonia and Greece). The models of collaboration between business, education and science were analyzed; researches of innovative activities and their readiness to communicate with universities at the leading enterprises in three Ukrainian regions (Western, Central and Eastern) were done. This enabled to develop mutual steps to promote innovative technologies in the regions of Ukraine and Belarus. It also helped to create a virtual platform to accommodate innovative projects and proposals of specific companies.

Creating a virtual platform of the Innolab will enable to deploy the process to facilitate the cooperation between Education - Science - Businesses and create a transfer of open innovation which will be implemented in the following areas:

- practice of a rapid response to solve business problems in a team (team of students, professors and entrepreneurs with the means of practical exercises, course and diploma papers on companies' demand) to create and fill the platform,
- "Ideas Market": using a virtual platform for modeling business development through the generation of students' ideas for real business needs. International and national teams of students will offer their ideas on the platform of the market of ideas and vote for the selection of each investing virtual money.

The result of the Innolab model will attract students to create innovative activities and involve students, professors and entrepreneurs to rank a list of ideas to determine the winners. Thus, the result of the project is to start working in five innovative laboratories directed towards Belorussian and Ukrainian enterprises. It will strengthen the cooperation among businessmen, professors and students to make experiments with breakthrough and innovative business developments on the early stages.

Conclusions

Creating a network of Innovation Labs will give an opportunity to review the development strategy in partnership between local authorities, universities, businesses and public sectors, all those organizations who are interested in the innovative developments of their cities, territories, regions and country as a whole. Moreover, the role of universities as an economic innovator and the center of the future development innovations must be specified in the national/regional innovative strategies' development.

The success of the Innolab project as one of the elements of regional and national innovation systems in strategic and short-term perspective will depend on several factors of territorial administration readiness for radical changes.

Thus, local authorities should:

- create favorable conditions for private sector investment funds in development of education and research;
- provide public access to the financial statements of the universities in the cost-benefit of scientific and technical partnership;
- provide privileges to companies that support higher education institutions (for example, offer an employment of the best graduates);
- ensure the development of regional innovation conditions for business infrastructure in order to facilitate investments and protect intellectual property in the process of partnership development;
- develop social infrastructure of cities.

Universities that will create innovative laboratories for their successful operation will need:

- to take into account the development trends in their training programs and serve as a bridge in the implementation of students' business ideas;
- to focus on achieving strategic indicators for successful businesses, such as reducing the time for adaptation for young professionals during the formation of professional skills of students;
- to increase the practical trainings of students;
- to redirect towards the active involvement of business for knowledge and skills transfer in managing the innovative enterprise to students;
- to foresee financial and organizational ways of cooperation in business (budget items involve at least 25% for research work at the request of business, to create special innovative funds, joint enterprises with innovative start-ups);
- to develop innovative skills of professors through internships at appropriate enterprises;
- to create a network of graduates who will actively assist at higher education institutions;
- to use online education to improve and enhance the learning process.

Innovation - oriented companies, in turn, also need:

- to move to the business model of development as a stakeholder party in the innovation chain of interaction between universities and to set their own clear business tasks directed on results-based partnerships;
- to cooperate with training programs, simplifying the process of adding changes proposed through the business;
- to increase the amount of companies' fees into universities research centers (at least in 10% of profits);
- to create conditions (special article in the budget of the company, charitable foundations) to support joint trainings for professors, students and to participate in the preparation of practical diploma projects;
- to use cluster interaction approach for complex problem solving training specialists (to "book" particular places for students at universities with regard to indicators of partnership, especially based on the results of joint research and student mobility);
- to provide possibility of the creation and function of innovative enterprises. It may be achieved through the overlapping efforts and resources of companies and universities for project and program research and developments;

The idea of creating a network of Innovation Labs will be crucial for the development of partnership based on the communicative process of businesses and institutions of higher education. The creation of a virtual platform will accelerate the spread of the best models of partnership between enterprises and universities. Foreign partners may be also included to this process. Leading universities, innovative enterprises, public organizations and associations dealing with innovation and territorial development, for example as in Poland, are welcomed.

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This publication, consisting of thematically coherent papers by twenty-six authors, discusses the problems of restructuring, considering the following four research areas:

- Restructuring in the Face of the Challenges of Contemporary Economy,
- The Trends of Changes in the Sectors of Poland's National Economy in the Context of Restructuring,
- Restructuring Processes – an Attempt of the View from the Angle of Selected Examples from Economic Practice,
- Restructuring for the Development of Higher Education.

The publication came into existence on the basis of many years' cooperation of Department of Economics and Organization of Enterprises at Cracow University of Economics with representatives of various Polish and foreign scientific centres and individuals coming from economic practice. Within the framework of this cooperation are organized, among others, conferences, seminars and symposiums, which are a platform for exchanging ideas and views. Results of such cooperation are the following English-language books published by the Foundation of the Cracow University of Economics:

- Borowiecki R., Jaki A. (eds.) (2008), *Enterprises in the Face of 21st Century Challenges. Development – Management – Entrepreneurship,*
- Borowiecki R., Jaki A. (eds.) (2009), *Global and Regional Challenges for the 21st Century Economies,*
- Borowiecki R., Jaki A. (eds.) (2010), *Enterprises Facing New Economic Challenges, Management – Development – Restructuring,*
- Borowiecki R., Jaki A. (eds.) (2011), *Global and Regional Challenges of the 21st Century Economy. Studies from Economics and Management,*
- Borowiecki R., Rojek T. (eds.) (2011), *Developmental Challenges of Contemporary Economies. Management – Finance – Restructuring,*
- Kaczmarek J., Rojek T. (eds.) (2012), *Dilemmas of the Contemporary Economy Facing Global Changes,*
- Borowiecki R., Jaki A., Rojek T. (eds.) (2013), *Contemporary Economy in the Face of New Challenges. Economic, Social and Legal Aspects,*
- Jaki A., Rojek T. (eds.) (2014), *Managing Organizations in Changing Environment. Models – Concepts – Mechanisms,*
- Kaczmarek J., Kolegowicz K. (eds.) (2014), *Developmental Challenges of the Economy and Enterprises after Crisis,*
- Borowiecki R., Siuta-Tokarska B. (eds.) (2015), *Restructuring as the Imperative of Developmental Changes in Economy,*
- Jaki A., Rojek T. (eds.) (2015), *Contemporary Conditions and Trends in Enterprise Management. Strategies – Mechanisms – Processes,*
- Kaczmarek J., Krzemiński P. (eds.) (2015), *Development, Innovation and Business Potential in View of Economic Changes.*

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