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TRANSFORMATION OF EMPLOYMENT STRUCTURES IN POLAND – SERVITIZATION OF ECONOMY

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K e y w o r d s: servicization, employment, services, knowledge-intensive business services (KIBS).

A b s t r a c t

Transformation of the Polish economy and the related process of reallocation of labour resources have been progressing since the beginning of the 1990s, but their growth is insufficient. The current level of development of the service sector does not constitute an adequate alternative to diminishing employment in the so-called declining heavy industries, which were dominant in the Polish economy for many years. Given that a more dynamic growth in the services sector can contribute to the labour market balancing alleviating the unemployment problem, not only by the absorption of people laid off from the restructuring industrial enterprises but also by providing new jobs for young people, it is necessary to increase consistently the share of modern section services in GDP and total employment.Increasing employment and created added value in modern, knowledge-based services are consistent with the direction of changes observed in the developed countries.In Poland, the employment is steadily increasing in services related to real estate and businesses, financial and insurance services, particularly in IT services. The knowledge embodied in products and technologies and highly skilled labour resources determines the innovativeness of the economy, providing a source of growth and competitiveness. Therefore, the direction and pace of these changes are important.One of the possibilities of further service sector development in Poland is the offshoring of business services. The created BPO and KPO centres allow for the absorption of high-quality labour resources, including university graduates, whose numbers are increasing from year to year. This is even more important as in the long time span the sector development and created jobs will increasingly be based on the human factor and the skills possessed by employees rather than on lower labour costs compared with other locations.

PRZEMIANY STRUKTUR ZATRUDNIENIA W POLSCE – SERWICYZACJA GOSPODARKI

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S ł o w a k l u c z o w e: serwicyzacja, zatrudnienie, usługi, wiedzochłonne usługi biznesowe (KIBS).

Abstrakt

Przesunięcia w trójsektorowej strukturze gospodarki bezpośrednio są powiązane z poziomem rozwoju danego kraju, któremu z kolei towarzyszą zmiany na rynku pracy – w jednych sektorach miejsca zatrudnienia znikają, a powstają w innych. Wzrostowi zatrudnienia w sektorze usługowym towarzyszy systematyczny spadek liczby pracujących w przemyśle oraz w rolnictwie, co jest określane jako proces serwicyzacji gospodarki. Kierunek oraz dynamika zachodzących zmian wskazują, że nie cały postęp można wyjaśnić za pomocą analizy sektoralnej (rolnictwo–przemysł–usługi), a coraz większe znaczenie mają zmiany zachodzące wewnątrz tych sektorów. Następują zasadnicze przesunięcia w kierunku wiedzochłonnych usług biznesowych.

Introduction

Services play a key role in modern economies. They are the largest source of growth in jobs and the increase in the national income per capita to a large extent contribute to the growth in demand for them. In addition, the services determine smooth running of the production processes, and some of them are used to satisfy social needs of the population. Thus the increase of their share in total employment as well as in GDP reflects fundamental structural changes taking place in many countries and regions. Transformational changes in the Polish economy, especially the servitization process and transition to a knowledge economy, are reflected in the labour market and lead to raising the questions, whether the service sector is able to absorb labour resources appearing on the labour market as a result of the loss of employment in the manufacturing and agriculture? Whether the job creation dynamics in the modern, knowledge-based services meets the needs of the modern economy? The occurring changes indicate that not all progresses can be explained by the sectoral analysis (agriculture-manufacturing-services), and the changes taking place within these sectors are becoming more and more important. From the standpoint of structural policy and the labour market it is, therefore, essential to identify the fastest growing areas of the Polish economy, characterized by high growth in employment and productivity, their convergence and possible divergence in comparison with the developed countries. Hence the aim of this article is to determine trends in the evolution of employment structures in the various sectors of the economy in Poland compared to other European Union countries, with particular emphasis on knowledge-intensive business services.

Servitization of economy and its determinants

Servitization, also referred to as tertierization of economy, has been recognized as one of the main megatrends of the modern world. From the

macroeconomic perspective it means the growing importance of services in the economy, reflected both by the third sector participation increase and the large-scale use of services in other sectors (the first and second). Relating this concept to the servitization of industry or production is understood as convergence of products offered by manufacturing companies and the service products or enlarging the share of services in production activities. From the viewpoint of changes in the labour market the servitization is reflected in the increasing number of workers in the service sector and the tertierization of industry usually refers to the increasing participation of managers and specialists in the employment in the industry. The growing role of services in the products reflects their position in the strategies of manufacturing enterprises and the customers' role recognition as an important factor of competitiveness[1].

Combining the progressive servitization with the deindustrialization process, understood as a cumulative reduction of the manufacturing industry share in the national economy, which is visible if the industry share in creating added value and domestic product, exports value, capital investment and employment decreases significantly, and in relation to employment this decrease is not only relative but also absolute (KUCIŃSKI 2007). Deindustrialization does not mean the disappearance of manufacturing as a means of producing wealth, but rather its better adaptation to the changing technological and social conditions existing in the modern world.

Assuming that the servitization is an inevitable stage of economic development, which brings certain advantages, the scope and dynamics of changes taking place should be adapted to local conditions and specifics of each country. Servitization leads to changes in the structure of the economy, affects the use of resources, especially human capital, increases competitiveness and creates conditions for the knowledge economy development. Servitization does not mean benefits only, but also the risk that the service sector will not be able to fully absorb the labour resources, emerging in the labour market as a result of employment loss in the manufacturing sector, which may lead to rising unemployment and stagnation.

Among the factors that determine the development of the service sector it is worth to point at:

– internationalization of services, supported by deregulation processes,
– technological advances, particularly the use of ICT,
– demographic factors,

[1] Convergence of both sectors is also done through the industrialization of services, which means that in service activities modern technologies are increasingly used, particularly IT, and the specific processes occurring in the services sector are subject to the same organization and based on the same principles as those in the manufacturing sector. Although many features still differentiate the two sectors, but their number is definitely smaller than it has been thought for many years.

– interactions, dependencies and the convergence process of service and manufacturing sector.

One of the vital determinants of the services development is an increase of competitiveness on the international level associated with the ongoing globalization process, whose effects, among the others, are: rise in the flow of goods, services, individuals, payments and information transmitted between organizations or countries. The changes in laws and regulations on the transport, communication, financial market, or more broadly – business services, combined with abolishing barriers to international trade and investment in the service sector, with the simultaneous growth of competitiveness and scale of international trade in this field contributed to the opening of services markets, which were previously protected from competition[2].

The requisite facilitating the flow in the international field, and thereby contributing to the growth in demand for certain services, is technological progress. A growing number of collected, stored and distributed information requires framing into the specialized institutional service forms. On the other hand, the ongoing process of specialization, the growth of state intervention and regulation causes that entrepreneurs increasingly use the specialized services of financial and legal advice. The intensification of specialization and competition in the services sector is important for another reason, it fosters growth and market launch of new companies demonstrating an innovative and effective approach to individualized consumer demand for services.

Changes within the service sector allow for increasing labour productivity in this sector and the quality of services as well as are contributing to the emergence of new types of services. In these change processes an important role is played by innovation and new technologies, especially information and communication technologies revolutionizing the means of production and delivery of traditional services as well as offering the ability to create entirely new services, not existing yet. More often, the services are delivered to customers in a package with a specific commodity, such as banking, insurance, etc. The creation of new types of services, their transformation into commodities (processes of commoditisation of services), as well as "industrialization" processes and the reorganization taking place in this sector on a global scale indicate that they constitute the essence of structural changes in modern economies.

[2] The process of European integration plays a vital role here. The accession to the European Union, amongst others, is associated the adoption of the principle of free movement of services, so the liberalization of financial services, the harmonization of inspection of banks and insurance, as well as opening transport and telecommunication services markets.

Theoretical explanation of the service sector development

The overlap of various factors of an endo- and exogenous character affected the evolution of several basic hypotheses regarding the development of the service sector. Given that the size and pace of the service sector expansion can be measured by, among others: the share of services in the general level of employment, the following hypothesis were subject to research on the structural shift in employment:

– changes in the structure of demand, resulting from an increase in consumers' income and differences in income elasticity in demand for services and products. The Clark-Fisher hypothesis verification, based on the model built in 1990's, was undertaken by APPELBAUM and SCHETTKAT (1999) and ECHEVARRIA (1997). The empirical validity of the approach presented, among others, was argued by Curtis and Murthy, and Summers (CURTIS, MURTHY 1998). Bearing in mind that this hypothesis is increasingly being challenged both on theoretical and empirical grounds, and the traditional division into three sectors becomes outdated, one can not refer to the theory of transformation of economic structure in the three-sector system as a universal economic law,

– an increase in productivity, which in the service sector is called: stagnant, is relatively slower than in the processing sector, as it is pointed in their publications, among others, by BAUMOL (1967). This theory is based on the assumption that the economy consists of two different, in terms of the level and pace of development, sectors. The manufacturing sector, in contrast to the service, is growing rapidly thanks to technological progress, capital accumulation, and economies of scale, which is the result of: standardization, specialization and formalization[3]. The uneven development of manufacturing and service sectors causes reallocation of resources towards the "stagnant" sector, ultimately slowing down the aggregate productivity growth,

– relatively rapid growth in demand for services as intermediate goods used in the manufacturing sector, which is emphasized in the publications of, among others: FRANCOIS (1990), KLODT (2000), FIXLER and SIEGEL (1999). The growing share of modern knowledge-intensive services has a beneficial effect on productivity changes and the development of the whole economy,; changes in the intersectoral work division – globalization and technological revolution, the progressive restructuring of industrial enterprises; focusing on the core business, which shows their competitive advantage associated with the development process of outsourcing and offshoring services.

[3] This assumption, however, is denied by the heterogeneity of services. In addition to "stagnant" services the increasing number of services such as telecommunications have similar and sometimes higher than that productivity growth in the observed industrial sector.

Particular approaches and hypotheses, along with their revisions, are still an important research area, in particular, as so far there has been no approximation of individual views leading to the development of a coherent theory on the development of the service sector.

Transformation of the employment structure in the services sector in Poland in the years 1992–2010

In the economies of developed countries services play a key role and are the largest source of growth in jobs, and their increasing share in the created GDP confirms major structural changes in many countries. In the EU, services account for more than 70% of GDP, at a similar level of employment. In Belgium, Denmark, France, Luxembourg the figure exceeds 76%, and in the Netherlands and the UK is over 80% – see Figure 1. Since 2000, nearly 20 million jobs have been created the service sector, with a simultaneous loss of employment in agriculture (3.8 million). In the EU countries, the percentage of the employed in agriculture is less than 4%, and in most countries of the "old 15" oscillates at around 2–3%, with the added value produced at a similar level (1.8% in 2008).

The sectoral employment structure in Poland compared to other EU countries, and especially the EU-15 is unfavourable, although the direction of change is similar. Poland has a very high share of employment in agriculture (13% in 2009) and the pace of change is too slow. Although the percentage of

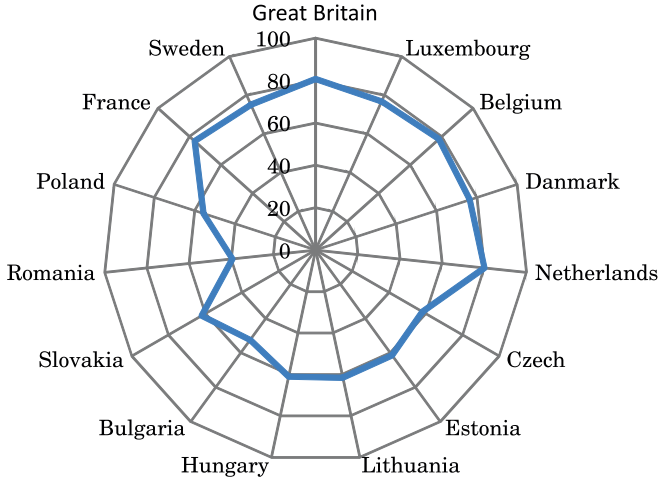

Fig. 1. Share of employment in the services sector in Poland and other EU countries in 2008
Source: http://eurostat.ec.europa.eu/ (12.08.2011)

working in this sector, which was nearly sixfold higher than in the EU-15 in 1992, in the year 2009 was outpacing the EU average only fourfold, but the gap between Poland and the individual member countries remains a significant e.g. in relation to the UK or Luxembourg (nearly 13 percentage points).

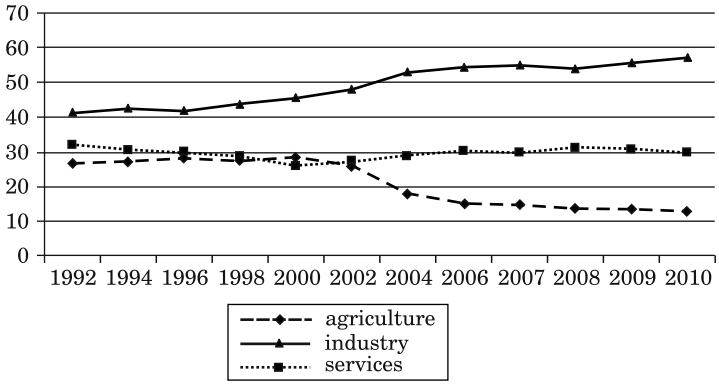

Fig. 2. Structure of employment by the sectors of economy in Poland in 1992–2010
Source: Latour Force Survey 2002–2010, GUS, Warsaw 2002–2010, s. 34, 80.

The employment growth in the third sector is due to the progressive tertierization of Polish economy, although the proportion of employed in the service sector remains one of the lowest in the EU. In 2002, the borderline of 50% share of services in employment was exceeded in Poland, which is conventionally taken as a criterion for assigning to the countries with the service economy. In 2010, this share was just over 57% and lower rates were found only in Bulgaria and Romania. However, in comparison with 1992, the share of employment in this sector increased by over 36%, which meant increasing the number of employees by more than 2.3 million people. One of the factors affecting the development of service sector in Poland is the inflow of foreign direct investment (FDI), which share in financial intermediation only and real estate and business services exceeded 40% of the total FDI in 2006-2007, and 56% in 2008 (*Ewolucja sektora usług...* 2010).

The growing importance of services sector and its differentiation across particular countries is evident not only in relation to the level of employment, but also the added value produced by the sector. In 2008, in the EU-27 the share of services in the structure of added value amounted to more than 71% and in comparison to Poland was more than 7 percentage points higher, while this proportion ranged from 55% in Romania, and 75% in Belgium, Greece, France or Great Britain , to 84% in Luxembourg – see Figure 3.

In comparison to 1992, the decreasing importance of the first and second sector in the structure of added value was observed in all EU countries,

opposing the growth of third sector involvement, especially business and financial services. The relatively high rate of changes dynamics occurring in Poland indicates that the distance in relation to the developed countries is reduced, but even in comparison with some "new" member states (Latvia, Estonia, Hungary), the share of services in the added value is lower in Poland.

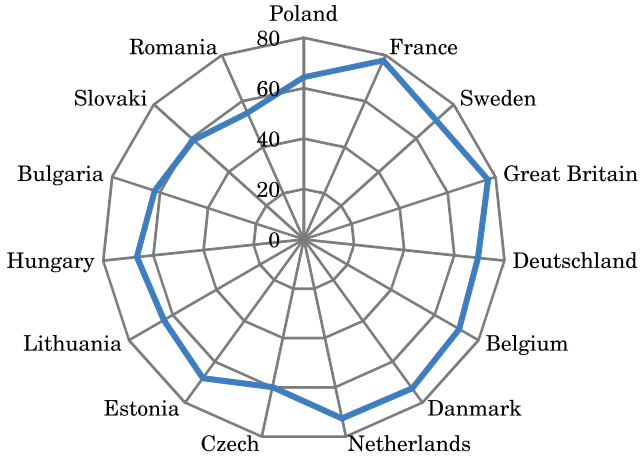

Fig. 3. The share of services in the added value structure in Poland and other EU countries in 2008 (in %)
Source: http://eurostat.ec.europa.eu/ (12.08.2011).

When analyzing and assessing the development level of the service sector particular attention should be paid to the changes within the sector. The development level of an economy is not determined by the bare share of employment or the added value produced by the entire services sector, but in certain types of services. In Poland, like in other EU countries, the market services dominate (69% in 2008), wherein an unfavourable phenomenon is the excessive share of hollow services, which neither enhance the competitive position of the country, nor do they increase its intellectual potential, and they lead to obtaining profits only (KARPIŃSKI 2010, p. 92–94). According to A. Karpinski's estimates the share of employment in the hollow services, i.e. advertising, public relations, security services and *non-banks* financial intermediation is 2.5% of total employment in Poland, while in the EU only 1.3% (KARPIŃSKI, PARADYSZ 2010, pp. 23, 41, 64). Although the starting point for the development of these services was much lower in Poland than in the EU-15, but after several years of transition, their excessive share in the services cannot be explained by mere filling the development gap in relation to more developed countries.The growing importance of services sector in the Polish economy should be evaluated positively, as it provides the evidence that the

structure of the Polish economy is getting closer to the developed countries, although the development gap in this field is still quite significant. Assuming the current pace of change and the convergence thesis, namely the changes direction complementarity in the structure of employment, it should be considered as the most likely that the third sector participation will be in the range of 70–78% in Poland in 2025, compared to 73% in the EU-15 in 2008 (KARPIŃSKI 2006). It should be noted that the depletion of the formula of the economy division into three sectors contributed to the attempt of separating and supporting the development of modern sectors, which determine the competitiveness of modern economies.

INTRASECTORAL CHANGES – development of knowledge--intensive business services (KIBS)

Distinguishing the sector of knowledge-intensive business services (KIBS) is associated with their three characteristics: knowledge-intensity, which singles them out from other services, and is a form of advice addressing clients; problems and creating services in close interaction with the customer (customer orientated).

Initially, this group of services was described as "advanced corporate services" and then "professional business services". The concept of KIBS has also been associated with research and development services or information technologies. In the early 1990s characterizing KIBS this concept was applied to consulting firms and sometimes also to the whole business services sector, without exposing the importance of knowledge in this kind of services.

The advancement in research on knowledge intensive business services in highly developed countries falls on the second half of the 1990's. The intense interest in KIBS is often combined with the growing role of innovation in modern economies, especially through the perception of KIBS from the angle of initiating and stimulating innovative operations. Continuous development of knowledge in the learning process lays foundations for KIBS activities, which in accordance with the concept of transition to a knowledge economy, is of fundamental importance for innovative operations. These services provide valuable guidance and insight into their customers' business processes and knowledge delivered by them is vital for the active development of products, processes, and technology.Being aware of the diversity of approaches and ways of defining KIBS, it is assumed that these are companies that specialize in professional customer problem solving, providing knowledge-intensive products (knowledge-based services), which are produced in close interaction with the client / service user. KIBS are a subcategory of business services, whose

customers are businesses, both private and public, and are based on the professionalism involved in their labour provision, which with a slight simplification can be referred to their level of education.

Knowledge-intensive business services in Poland – actual state and structure

The development of KIBS is determined by several factors of various nature. Globalization, increased competition, shorter implementation cycle of innovative solutions and primarily the development of new technologies, including IT contributed to the growing demand for external sources of expertise, delivered within KIBS. Not without significance are also issues of cost reduction, which add to outsourcing and offshoring of knowledge-intensive services.

The development of KIBS is reflected in the growing share of this sector in the economy in relation to employment or added value and high productivity but the KIBS quantitative volume was not, especially in the 1990's, dominant in the service sector. The share of KIBS in services employment in the EU-15 in 1996 did not exceed 7%, and the produced added value 398bn euro, although a considerable diversification in this respect was visible inside the Community[4]. Countries with higher development levels (e.g. the Netherlands, the United Kingdom) showed a 10-15% share of KIBS, while in Poland the figure was 3.6%. In 2008 more than 16.8 million people were employed in more than 3.5 million enterprises, in KIBS across the EU, representing 11.7 percent of the total services and nearly 21%, if not accounting for public administration, while the sector generated added value amounted to 842bn euro[5]. Despite the dynamic KIBS development the distance between Poland and the highly developed countries is not diminishing. Although the recorded employment growth in the period 1996–2008 (nearly 300 thousand people) and in the added value (by over 300%), the share of employment in KIBS in Poland remains one of the lowest in the EU – in 2007 was only 6.2%, while in Luxembourg exceeded 23%, 21% in the Netherlands.

The analysis of knowledge-intensive services requires paying attention to their heterogeneity resulting, among others, from the diversity of the markets in which they operate, the average size of enterprises, tradition or work methods. Legal, accounting and management services (74.1) and in the field of

[4] According to the PKD 2004 classification the KIBS sector includes the following sections and groups of Section K: 72. Computer and Related Services (excluding 72.5), 73 Research and development, and 74, other business activities (74.1, 74.2, 74.3, 74.4, 74.5).

[5] Data taken from the website http://eurostat.ec.europa.eu/

architecture, engineering and technical studies (74.2–3) show a similar economic profile characterized by a higher share in the total number of enterprises than the number of employed. These two subcategories constitute more than 60% of all enterprises belonging to the KIBS in Poland, with employment of no more than 55% of working across the sector – Figure 4. These proportions indicate a dominance of small firms employing a relatively small number of people.

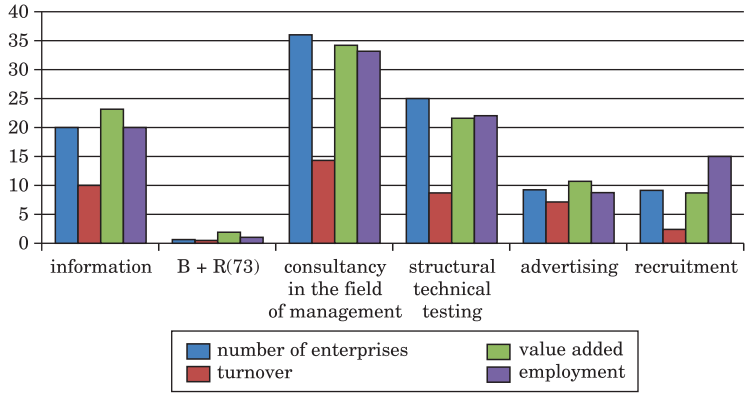

Fig. 4. The share of each subcategory of services in KIBS: in relation to the number of enterprises, turnover, added value, employed in Poland in 2008 – in%

A clear division between the countries of "old" 15 and new EU members is shown in relation to architectural and engineering services and technical studies. Their share in employment fluctuates around 25-28% among the new member states (Poland – 22%), while in Luxembourg amounts to 4.3% and 9.2% in the Netherlands.

The technological and information revolution and the transition to a knowledge economy are reflected, among others, in the dynamic development of computer services. The use of IT tools and of advisory services in the field of software and hardware, data processing, and management of websites, is a requirement of the modern world. In Poland, both the dynamics of changes in employment (an increase of over 250% between 1996–2008) and the added value (an increase of almost 700%) and the share of computer services in KIBS are relatively high; in 2008 it was almost 20% – Figure 4. This is, among others, the result of foreign direct investment (FDI) inflow and associated with it the increase in the number of investment projects in the field of offshoring services. At the same time a higher share of added value compared to the employed in computer services as well as in research and development, advertising and management services reflects a higher average labour produc-

tivity, which is related to the employment of highly qualified, specialist staff providing consulting services in this field.

In the developed countries, among others, due to the long tradition of using employment agencies and human resources consulting, there were a high number of jobs in this subcategory. It was respectively: in Luxembourg – 34.1%, the Netherlands – 45.2% and Belgium – 34.5% and in this sense we can speak about the specialization of these countries in the provision of recruitment services[6]. The domestic enterprises much less often use the services of employment agencies. The proportion of the number of recruitment services providers (74.5) in KIBS is a little over 9% in Poland, with a parallel 15% share of employment – Figure 4.

The development of knowledge-intensive services in Poland should be considered as a positive direction of change but their growth remains insufficient. The gap separating Poland from highly developed countries adversely translates into a competitive position and innovativeness of Polish economy in this respect.

Prospects of services sector development in Poland

Taking the thesis of convergence, i.e. the directions of change complementarity in employment structure, it should be assumed that aspiring to the reduction of the development gap occurring between Poland and the developed countries, the service sector will continue to develop. It is predicted that changes within the service sector will continue to advance along with the pace of change, especially they will grow steadily in less developed countries. In these countries, just as today in highly developed countries, an increasingly bigger share and importance will fall on business activities based on knowledge-oriented services. This reflects the growing demand of individual and business customers for certain services, outsourcing and offshoring of service activities from manufacturing companies and the leading role of the IT sector.

The process of moving modern services beyond boundaries of a country where a company is located takes two basic forms:

– Business Process Offshoring (BPO),
– Knowledge Process Offshoring (KPO).

The Business Process Offshoring sector includes, among others, service centres handling accounting or human resource management and call centres. The Knowledge Process Offshoring focuses on key operations for the company, having strategic importance in the long time span, such as research and

[6] Data taken from the website http://eurostat.ec.europa.eu/.

development, designing information systems or creating analyses and forecasts.

From the point of high-quality human capital absorption a vital role is played by a form of dynamically growing business process offshoring, which is Knowledge Process Offshoring (KPO). It includes services which in order to be provided require specialistic, expert knowledge, together with: financial services, accounting, research and development, analysis and market research, legal advice, design services, engineering. Companies dealing in KPO conduct scientific research on business operations, investment, databases, and intellectual property. The development of this type of operations in Poland is clear evidence of the growing international attractiveness of our country. Companies prefer opening research centres in the field of information technology, telecommunications, and electronics, which allow them to reduce costs, save time, and consequently give them the opportunity to gain an advantage in the market by creating high added value. Still, the figures are far below the absorption capacity of highly skilled labour resources, including the growing population of university graduates.

The value of modern business services market reached $ 2.5 billion in Poland in 2010 and to a large extend is the result of operations development of companies that have already been operating in Poland. The dynamic development of BPO and KPO is reflected, among others, in an increasing number of entities and people employed in them. The decision about the location of service centres in Poland is primarily undertaken companies from the EU countries (including France, Germany, Great Britain, Italy, the Netherlands) as well as the United States, and India. In 2010 132 international BPO service centres conducted their operations in Poland, employing nearly 40 thousand people. It should be noted that compared to 2008, employment grew by over 36%, and in line with expectations the growth is forecast to exceed 45% at the end of 2011 (*Sektor SSC/BPO w Polsce* 2010, p. 15).

In the BPO and KPO services centres the employment is found by, among others: specialists in human resource management, supply management, accountants, lawyers, analysts, financiers, market research, investment, insurance, specialists etc. Thus, a high share of employment in finance and accounting (almost 50%), customer service and financial services (*Sektor SSC/BPO w Polsce* 2010, p. 22). An increasing share has also created the so-called Centres of Business Excellence, which set standards and create best practices for the services they render.The main centres of business services offshoring are, apart from Warsaw (28 centres), Kraków (24 centres), Wrocław (13 centres), Łódź (11 centres) and Poznań (10 centres). A total of 14 centres operate in the Silesian agglomeration, of which 9 are located in Katowice. An example of a consulting company in the region of Katowice is Capgemini,

which is a leader in providing integrated advisory and IT services, and outsourcing. In turn, Rockwell Automation, also located in Katowice, is a global provider of industrial automation, process control and information technology, supporting businesses throughout the world.Analyzing the impact of offshoring services on the labour market it is also necessary to draw attention to the fact that apart from jobs directly created in this field, they are also created in the company's environment, both for people with lower qualifications (security services, cleaning, catering) and people with higher education (e.g. training, information technology, medical services)[7].

The attractiveness of Poland as an offshoring services location has been confirmed by the rankings conducted by various companies and institutions. On the 30 countries list developed by specialists from Gartner, representing the most attractive locations for offshoring services, among European countries, Poland found itself next to Bulgaria, the Czech Republic, Hungary, Romania and Slovakia[8].

The investment attractiveness analysis and the service location indicator, developed by A.T. Kearney, show that Poland is one of the most attractive countries in Europe in terms of services offshoring, especially that there was an upward change in the ranking of 15 positions in relation to the year 2009 there – see Table 1.

Prospects of meeting the demand for specialized knowledge-intensive services, reducing the level of structural unemployment, building local competencies and consequently long-term economic development caused that offshoring of knowledge-intensive services has become an important element of economic policies of modern economies. It should be noted that the global economic crisis may bring about significant changes in the global market, influencing the direction and extent of offshoring in both the short and long term.Polish potential remains not fully utilized in this regard. The country has an enormous potential for research and development. It consists of academic as well as research and development units, development centres and higher education institutions, leading research. Being aware of the fact that due to the

[7] According to current estimates for 1000 jobs in the service centres were created 110 jobs in companies that support these centres, including training companies, transportation, medical services, recreation, information, and security. Additionally, 150 jobs were created in the field related to the purchasing of consumer goods and services, thanks to income earned by the service centres employees, and 5 jobs in the hotel and catering services. In total for 1000 working in BPO 265 jobs were created in their environment. See: G. Micek, J. Działek, J. Górecki, Centra usług w Krakowie i ich relacje z otoczeniem lokalnym, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2010.

[8] Ranking is created based on 10 evaluation criteria that determine the location of the offshoring of services, include: language, government support, access to labour resources, infrastructure, education system, cost, political and economic factors, cultural proximity, the maturity of the legal system, data and intellectual property protection, assessed on a scale from "weak" to "excellent". See. www.gartner.com/resId+ 1,491,316 (as of 15/06/2011)

Table 1

Ranking of countries with the highest investment attractiveness in the field of services

Place	Country	The attractiveness of financial terms	Access to skilled labour	Business environment	Final result
1	India	3.11	2.7	1.14	7.01
2	China	2.66	2.55	1.31	6.49
3	Malaysia	2.78	1.38	1.83	5.99
4	Egypt	3.10	1.36	1.35	5.81
5	Indonesia	3.24	1.53	1.01	5.78
11	Estonia	2.31	0.95	2.24	5.51
12	Brasil	2.02	2.07	1.38	5.48
13	Latvia	2.56	0.93	1.96	5.46
14	Lithuania	2.48	0.93	2.02	5.43
15	United Arab Emirates	2.41	0.94	2.05	5.41
16	Great Britain	0.91	2.26	2.23	5.41
17	Bulgaria	2.82	0.88	1.67	5.31
24	**Poland**	**2.14**	**1.27**	**1.81**	**5.23**
25	Romania	2.54	1.03	1.65	5.21

Source: Offshoring Opportunities Amid Economic Turbulance The A.T. Kearney Global Services Location Index, 2011, p. 2.

nature of offshoring, among factors that determine their location, apart from infrastructure, transport accessibility, investment incentives, low labour costs, etc. a crucial role is played by an access to high quality labour resources necessary to intensify efforts to convince potential investors to locate operations in the Silesian Voivodship.

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References

APPELBAUM E., SCHETTKAT R. 1999. *Are Prices Unimportant? The Changing Structure of the Industrialized Economies.* Journal of Post Keynesian Economics, 22.

BAUMOL W.J. 1967. *Macroeconomics of Unbalanced Growth: the Anatomy of Urban Crisis.* American Economic Review, 57(3).

CURTIS D.C.A., MURTHY K.S.R. 1998. *Economic Growth and Restructuring: a Test of Unbalanced Growth Models – 1977–1992*, Applied Economics Letters, 5.

ECHEVARRIA C. 1997. *Changes in Sectoral Composition Associated with Economic Growth*, International Economic Review, 38.

Ewolucja sektora usług w Polsce w latach 1995–2008. 2010. Ministerstwo Gospodarki, Departament Analiz i Prognoz, Warszawa.

FIXLER D.J., SIEGEL D. 1999. *Outsourcing and Productivity Growth in Services*. Structural Change and Economic Dynamics, 10.

FRANCOIS J.F. 1990. *Producer Services, Scale, and the Division of Labor*. Oxford Economic Papers, 42.

http://eurostat.ec.europa.eu/

KARPIŃSKI A., PARADYSZ S. 2010. *Trendy zmian w poziomie i strukturze zatrudnienia w województwie mazowieckim w 10-leciu 2000-2010 na tle krajów Unii Europejskiej*. Warszawa.

KARPIŃSKI A. 2006. *Przyszłość rynku pracy w Polsce.* Komitet Prognoz „Polska 2000 Plus", PAN Warszawa.

KLODT H. 2000. *Structural Change Towards Services: the German Experience*. University of Birmingham IGS Discussion paper, 7.

KUCIŃSKI K. 2007. *Deindustrializacja w procesie rozwoju gospodarczego.* www.sgh.waw.pl/katedry/kge/mdp/

MICEK G., DZIAŁEK J., GORECKI J. 2010. *Centra usług w Krakowie i ich relacje z otoczeniem lokalnym*. Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków.

Offshoring Opportunities Amid Economic Turbulance. 2011. The A.T. Kearney Global Services Location Index.

Sektor SSC/BPO w Polsce. 2010. Association of Business Service Leaders In Poland, Warszawa.

SUMMERS R. 1985. *Services in the International Economy*. In: *Managing the Service Economy*. Ed. R.P. Inman. CUP, Cambridge.

www.gartner.com/resId+1491316