

Anna GRZEŚ<sup>1</sup>

## OUTSOURCING – EMPLOYMENT AND WAGES

### Summary

The fact that the global market of outsourcing has been steadily expanding for the last few years indicates that outsourcing is an effective tool to increase the efficiency of enterprises. Among the effects of outsourcing of functions and processes, or their parts, are changes in the organizational structure and associated with them: reduction of employment and shifts in the division of work in the original location of the company. This kind of activity affects the internal job market through remuneration levels, as well as the external market as a result of restricted employment and dismissing staff. As research shows, there is no evidence of strong negative influence of outsourcing on wages or on unemployment rates. There is, however, a link between the quality of human resources, their remuneration and subcontracting of work to outside providers. The aim of this article is to address the question: What new phenomena have emerged in the labour market (with particular attention to the Central and Eastern European markets) as a result of the use of outsourcing in business?

**Keywords:** outsourcing, Business Process Outsourcing (BPO), Shared Services Center (SSC), labour market, employment, wages.

### 1. Introduction

Globalisation processes in the world economy have compelled enterprises to seek ways to improve efficiency more actively. One of those ways is outsourcing, and its variation – offshoring, of entire business processes or their parts<sup>2</sup>. The popularity of outsourcing has been growing for over ten years. The main reasons for which owners and managers decide to outsource an increasing number of functions and processes are, on the one hand, greater focus on core business and lowering of the operational costs of their activity, and, on the other hand, a higher quality of the services offered by suppliers, barriers to the organic development of enterprises, increasingly greater awareness of the nature of outsourcing and of the role it can play in enhancing growth [Couto 2006 pp. 5 – 11]. The relatively high popularity of outsourcing used in

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<sup>1</sup> Anna Grześ, Ph.D. is a research worker at Faculty of Economics and Management, University of Białystok.

<sup>2</sup> The following definitions are assumed: *outsourcing* – isolating a certain process /function/ or its part from a structure and transferring it to an outside contractor for realization; *offshoring* – transferring a certain process /function/ or its part across national borders. For example, isolation of cleaning services and commissioning them to an outside firm is called outsourcing. Whereas the transference of the manufacture of complete products or their components is called offshoring or offshore outsourcing, which will be explained further on.

combination with information and communication technologies (ICT), indicates that it is an economically profitable solution.

One of the consequences of using outsourcing in business practice, and of the resulting rise in demand for outsourcing services, are changes in the job market. These changes are both quantitative and qualitative. With regard to quantitative changes, it should be noted that outsourcing frequently leads to employment reduction and, consequently, to a rise in the number of job seekers. Whereas outsourcing vendors, who try to meet the demand for their services and ensure adequate quality and acceptable prices, introduce technical and organizational improvements and increase demand for a work as the services become more widespread and more complex. In that case, the problem of adjustment between quality and quantity appears, that is the problem of lack or shortage of people with the right qualifications, experience and skills who could carry out the outsourced work. Another obstacle is the relatively low mobility of workers. The aim of this article is to address the question: What new phenomena have emerged in the labour market (with particular attention to the Central and Eastern European markets) as a result of the use of outsourcing in business?

The article is limited to two main measurable parameters of the labor market: wages and employment. These are also the parameters that have a significant impact on the costs of activities of enterprises and as a result of their economic efficiency. At first, it is made an attempt to identify essential trends occurring in the global outsourcing in recent years (including the impact of financial crisis in its development), then the impact of outsourcing on wages and employment.

Analysis of these phenomena will be carried out on the basis of the selected articles and books concerning these issues. There are used available statistics collected from reports of known consulting companies like McKinsey, Deloitte, AT Kearney, Nelson Hall and DiS. An important supplement to the data will be report of Polish Information and Foreign Investment Agency. This institution takes care of foreign direct investment in Poland..

To carry out the object of the article two main methods will be used: comparative analysis of the collected statistical data and deduction. The second method will be applied to analyses the qualitative data relating to the outsourcing process and the components of the labour market.

The expected result of the analysis will not only identify trends in employment and wages caused by the expanding phenomenon of outsourcing as well as an attempt to draw attention to the need for adjustment of education offer to labor market needs and thus reduce unemployment, particularly among young people entering the labor market..

## **2. Outsourcing – basic change tendencies in the world market**

The last twenty years or less have brought great changes in the phenomenon of outsourcing. Its range has expanded from sub-contracting simple tasks to delegating

entire business processes, including those connected with core business. There are several stages of development within which enterprises pursue certain goals. Thus, in the initial phase of using outsourcing, enterprises mainly aimed at lowering their operating costs by shifting simple jobs or auxiliary functions outside. In the second stage, the main objective was to improve the quality of offered services through access to advanced technologies. In the third stage, they focus on boosting innovation and on further development. R&D divisions are created, as well as marketing divisions, legal departments and sections dealing with surveys and analyses (banks), while the vendors of outsourcing<sup>3</sup> become the driving force of change. They can inspire new ideas, conceptions and innovations. They can also stimulate firms to gain new markets or even change their business philosophy. Also, services connected with Knowledge Process Outsourcing (KPO) are transferred outside. This is common practice particularly in pharmaceutical firms, advanced technology companies and banks (e.g. Pfizer, Eli Lilly, IBM, Nokia, the British bank HSBC<sup>4</sup>). A characteristic feature of KPO is the necessity of close (even closer than is the case in traditional outsourcing) cooperation between the customer and the contractor. Typical of the third phase of outsourcing are also simultaneous contracts with many different suppliers (multisourcing) [Kłosińska 2008 p.16]. These stages illustrate the objectives that companies try to attain. Knowing them helps to avoid the potential risk connected with the fact that achieving a goal, e.g. saving costs, does not necessarily lead to the strengthening of one's position in the market or to gaining competitive advantage.

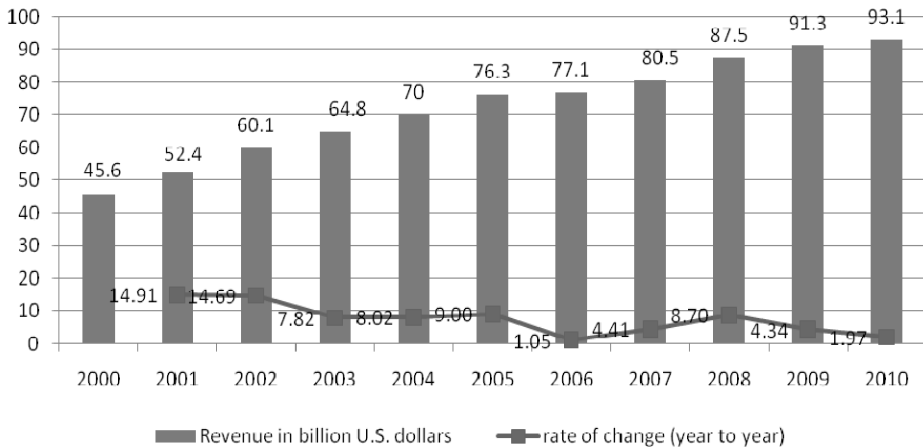
Outsourcing can be analysed in the light of the frequency with which certain functions are transferred outside organizations and, also, according to the development of the outsourcing market in the form of Business Process Outsourcing (BPO) centres and Shared Services Centers (SSC). In 2004, the International Data Corporation (IDC) estimated that the annual global business process outsourcing (BPO) market was by 10,8% higher than in 2003, and it predicted its value to be nearly double of that in 2009 [Couto 2006 pp. 5 – 11]. These figures show only part of the formation of the whole phenomenon. A more complete picture of the scale of outsourcing in the world for years 2000-2010 is presented in the figure 1.

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<sup>3</sup> Vendor of outsourcing is the firm that takes over certain business processes.

<sup>4</sup> K. Rybiński describes the strategy of the HSBC bank as an example of KPO. The bank created 8 global centers of excellence which support the organization in various business processes and in the IT field. The centres have a staff of 10000 people (Rybiński 2007, *Globalizacja*. op.cit., p.70)

**FIGURE 1.**  
**Global market size of outsourced services\* from 2000 to 2010**  
**(in billion U.S. dollars)**



Explanation: \* Annualized revenue is based on active industrywide contracts with a total contract value over 25 million U.S. dollars.

Source: [*The TPI Index 2010*, page 4, behind: <http://www.statista.com/statistics/189788/global-outsourcing-market-size-since-2000>, downloaded on: 10.10.2011].

The data included in figure 1. show that the annualized revenue of active industry-wide contracts with a total contract value over 25 million U.S. dollars has doubled in the period. The global market of outsourcing services showed a growing trend, although the degree of the intensity of these changes was quite diverse. Relatively large number of companies entered into contracts in years 2000 – 2005 and in 2008, and with the financial crisis intensified in late 2008 there was a noticeable slowdown in these projects. Seeking mainly for reduction of labour costs and new markets large companies kept outsourcing back office services and, in addition they more often offshored production functions to countries with lower labour costs than in their origin country. For example, more and more enterprises in EU countries began releasing functions considered to be crucial. In 2000-2006, 10.8% of all companies moved their core business functions, while 10% relocated their support functions [Alajääskö 2009 pp. 1 – 3]. It can be noticed, that this figure does not comprise local firms from the BPO sector or consulting firms that offer outsourcing counselling. Even more importantly, it does not comprise SSCs belonging to capital groups (so-called captive centers), which usually do not report their revenue separately as they do not function on a commercial basis

The scale of changes in the outsourcing market is complemented by, among others, the latest NelsonHall (2010) research, which shows that in 2009 the total contract value (TCV) of global BPO and ITO services exceeded \$67 billion and was by 5% higher than in 2008. The value of these contracts and the pace of change are presented in Table 1.

**TABLE 1.**

**Total contract value of outsourcing projects in 2008 and 2009**

Region	Total contract value (TCV) in 2008		Total contract value (TCV) in 2009		Change in %
	Billions	%	Billions USD	%	
North America	33.3	52.2%	17.6	26.3%	-47.0%
Europe	26.8	42.0%	43.8	65.4%	63.0%
Asia and Oceania	0.7	1.1%	1.8	2.7%	157.0%
Other regions	<b>3.0</b>	4.7%	3.8	5.7%	26.7%
Total	63.8	100.0%	67.0	100.0%	5.0%

Source: own modification on the basis of the NelsonHall report 2010 after Wolak 2010.

The above table demonstrates that a shift in proportions and in the power structure has taken place in the global market. American firms, which until 2008 had been the market leader became less active (a drop from \$33.3 bln in 2008 to \$17.6 bn in 2009). The financial crisis of the American economy contributed to a lower number of contracts, and, consequently, to diminished cooperation with outsourcing suppliers in 2009. According to a A.Kearney report, during the financial crisis banks cut the entire workforce by 5% (1/4 m people), and until then they had contracted 40% of the services to Indian service centers [Kearney 2010 p. 5]. It can be inferred from the above data that many of those services had actually been contracted before the onset of the crisis, and that trying to find further savings of this sort would not have brought the expected economic benefits, but would have entailed higher social costs.

European firms took a different approach to the global crisis. They heavily invested in outsourcing, contracting services of the total value of \$43.8 bn, which is 63% more than in the previous year. It is also worth noting the more than three-fold rise (from \$3 bn to \$10.9 bn) in the contracts drawn by European public sector organisations. Those entities saw in outsourcing a chance to lower costs and increase efficiency [*Europejskie kontrakty ...* 2010].

Asian firms seem to be least interested in outsourcing – the value of contracts that they signed was only \$1.8 bln in 2009. This stems from the fact that Asian firms are, first and foremost, service suppliers for firms from all over the world. India has consistently ranked first in the world as BPO and ITO vendor ever since 2004. It is also ranked as high as second (behind the USA) for people skills availability scores, which encompasses such factors as: relevant experience, size and availability of labour force, education, language capabilities [Kearney 2006, 2009, 2010]. Indian outsourcing companies have started their conquest of world markets and, along with large firms, they are becoming major players in the USA and Europe [Kearney 2010].

As was mentioned above, Central and Eastern European countries substantially benefit from the increased significance of BPO and ITO services. Apart from lower costs of work these countries' advantages as outsourcing vendors are: suitably qualified and available staff equipped with expert knowledge and experience, increased

work efficiency, relatively good communication skills in foreign languages<sup>5</sup>, a wide range of offered services, geographical and cultural closeness, a coherent business environment in the EU-10 countries, intellectual property protection, and a growing interest of firms in the outsourcing of increasingly advanced processes<sup>6</sup> [*Outsourcing 2009. The Review...*]. Among the CEE countries, Poland is perceived as "...one of the best locations for service centres requiring high-level qualifications and expert knowledge, most notably research and development centres (R&D) with emphasis on science and commercialization of research" [*Onshore, Nearshore ... 2010 p. 3*].

### 3. Change in employment and wages in the context of outsourcing

The above outlined changes in the outsourcing market, of course, considerably affect the labour market – both the internal one (employees, who work in companies making decisions about allocating some functions outside) and the external one. When discussing the labour market, one should distinguish the following elements: employment structure in the qualitative and the quantitative aspect, salary levels, qualifications of workers, self-employment (also called in the literature as "employee outsourcing"), casual work, telecommuting along with other flexible forms of employment, and, finally, unemployment rates. Therefore, the question arises about the links between outsourcing (including offshoring and nearshoring) and the two basic components of the labour market – employment and wages.

Davidson and Matusz (2005) and Kletzer (2004) emphasized that the export orientation and international competition were the important determinants of job creation and elimination of some existing ones. However, the significance of international outsourcing for the labor market dynamics has not been explicitly emphasized. It is common knowledge that outsourcing, or transferring certain processes to nearby countries (nearshoring – for example from Germany to Poland) or to more distant ones (offshoring - from United Kingdom or Poland to China), are justified by lower costs of work or by a shortage of highly qualified staff in the origin country. Outsourcing is usually connected with staff reduction in mother companies and with changes in the division of work and the resultant necessity to supplement the qualifications of the workers who retain their posts. There it can be put an open question whether the number of dismissed employees in the origin country is equal to the number of employed?

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<sup>5</sup> According to the research and analysis company DiS, a survey into the BPO and SSC market in Central and Eastern Europe showed that about 80 out of 750 of the examined centres in 19 outsourcing countries could communicate in 10 or more foreign languages. Whereas 190 centres offered simultaneous services in at least 6 languages [*Outsourcing 2009; The Review of 750...*].

<sup>6</sup> According to a NelsenHall report (2010), significant changes have taken place in the field of outsourcing. While the share of IT outsourcing in the world services market was constant throughout 2009, the value of the new BPO business for the first time exceeded that of the ITO. In the area of BPO there was a serious rise in the more advanced and complex services (so-called multi-process outsourcing) – up to 37% from 15% in the previous year [*Europejskie kontrakty... 2010*].

It is difficult explicitly to compare these amounts, because they depend on various factors, such as the production capacity of contractors, their work output, degree of the modernity of applied technologies, creating or increasing demand for produced goods in the relocation country may cause the growth of sales income. In this way, companies have an additional access to new output markets. Together with an increasing in demand for goods or services They enhance the production in addition hiring new employees or investing in newer, more efficient technologies. Meanwhile, a rise in employment can be observed in the vendor firm. For instance, although in the years 2005 – 2008 the Siemens concern reported an overall rise in employment by 3.13%, the rise occurred in its overseas branches, while in the country of origin it actually fell by nearly 21%. This confirms the general tendency according to which, in the long term, outsourcing results in overall higher employment and better efficiency. Similar results can be found in research by D.Marin, who analysed 2200 investment projects carried out in 660 Austrian and German enterprises, which created 201795 and 463500 jobs, respectively, in Central and Eastern European countries (CEE) – primarily in the Czech Republic, Slovakia, Croatia, Russia, Ukraine and Poland. Those firms reduced staff only slightly – they laid off 22000 workers in Austria and 90000 in Germany. Analysis of labour efficiency in German daughter companies also revealed that its level was lower than in the mother companies with a lower still level of wages. This made it possible to reduce unit labour costs to 27.6% of those in mother companies [Marin 2004, 2005]. The managers of German small and medium-sized firms even declared that they would have been bound to collapse if they had not transferred production to Eastern European countries<sup>7</sup>. Employees who were dismissed due to outsourcing frequently found employment in the same or other branches. Change of location, meanwhile, brought about a rise in labour efficiency and business efficiency of firms and thus led to the strengthening of the potential of enterprises and economies [cf. Radlo 2007 pp. 229 – 233; Amiti, Wei 2005 pp. 309 – 339].

In the literature it is difficult to find research that would unequivocally confirm the fact that employment reductions which result from outsourcing negatively influence entire economies, entailing higher unemployment. A rise in unemployment is caused by restructuring of sectors and enterprises, rather than by outsourcing. This is demonstrated in the analysis done by Deutsche Bank Research, which concerns, among other things, the reasons for the reduction of workforce in European banks since 2002. The survey indicates that employment reduction is primarily a result of internal restructuring (73% of the replies). Whereas 10% of those asked admitted that workforce cuts were caused by offshoring, which, as can be presumed, can be another tool to achieve lower operational costs or improve the quality of offered services [*Offshoring Does...* 2008].

What also has a marked influence on changes in employment patterns are the above described changes in outsourcing itself. As was already mentioned, out-

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<sup>7</sup> According to the Yearbook of Labour Statistics, 2006, average salary in Poland was one sixth of that in Germany.

sourcing is not only used because of the need to reduce costs, but also because firms suffer from shortages of high-skilled staff and thus are unable to live up to the demands of the market. Supplementing employees' qualifications financed from enterprises funds and providing employees with modern technological equipment is less cost-effective than subcontracting certain functions to a third party. This is illustrated by the already mentioned growing interest in increasingly complex services, which exceed the scope of typical BPO and ITO services. They are classified as KPO services and are still frequently offered by BPO and SSC centres. In order to satisfy the increasing expectations of customers KPO companies need such specialists as: chartered accountants, lawyers, economists, and engineers unlike English-speaking operators in BPOs. They are involved in such processes as: financial research, procurement service, valuation, legal and intellectual property research, investment researches, patent filing, legal and insurance claims<sup>8</sup>.

Both the scale and the complexity of the processes which are outsourced and later implemented in the centres pose a greater challenge for the labour market and in particular for job seekers, persons who wish to change jobs and for the education market. For instance, in Poland, the European leader of BPO and SSC centres that offer increasingly advanced services mainly for Western European clients, the activity is concentrated in large cities (Warszawa, Kraków, Wrocław, Katowice, Łódź, Trójmiasto and others), which are important scientific centres with extensive technology infrastructure [cf. *Onshore, Nearshore ...* 2010 p. 9]. In spite of the economic slow-down, it is a branch that has an increasing number of job offers for graduates and experienced persons. Since 2007 the number of people who work for the centres has increased from 17000 (*Trendy na polskim ...* 2009) to 45000 – 50000, and the overall turnover has reached \$2 bn. It is forecast that in the next few years about 20 to 25 thousand new job opportunities can appear in business service centres [Błaszczak 2010].

BPO/SSC market is growing constantly in Poland. There are about 300 centers. Major companies more and more often carry their business over to Poland. They value especially Polish working culture, foreign languages and geographical location. Service centers employ approximately 95000 employees. They are mainly in Kraków (approximately 17 000 workers), Warszawa (15 000), Trójmiasto 11 000 (including about 4,600 employees in IT centers). Behind us, amongst big urbanized areas they are also Wrocław (about 9 000), Poznań (about 9000) Łódź (about 5000), Katowice (about 4500) and Kielce (about 3000). For the example, the annual rotation of employees in Gdańsk rarely exceeds the 17%, which is one of the lowest results in the country [*Zatrudnienie w centrach...* 2011].

Observation and analysis of these trends provide information that is important for the education market, which should prepare graduates to face the requirements of employers and the labour market demand. If the labour supply is not adequate, the costs of labour in those centres will grow and the customers' needs may not be

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<sup>8</sup> This kind of tasks are realised by a KPO centre in Gurgaon (India), [cf. <http://haryanaindustries.nic.in/Newsroom/Pages/GurgaononKPOfastlane.aspx>, downloaded on: 12.11.2010].



fulfilled. In India, where the centres are usually located, it is estimated that “only 10 to 15 percent of Indian college graduates are considered suitable for direct employment in the offshoring industry” [*Extending India's...* 2005 p. 168 ; *Global Financial ...* 2007]. This can result in a shortage of ca. half a million of professionals in 2010 [*Infosys chief ...* 2007 p. 24], and thus can lead to a greater than assumed increase in salaries.

Another factor associated with the labour market is wages. They are cost drivers for enterprises, while for employees they are a remuneration for the performed work (income). Generally speaking, a relatively high growth of wage is undesirable from the point of view of firms because it affects their business efficiency and competitiveness. That is why outsourcing was seen by firms as a possibility to cut the overall wage costs. This does not mean explicitly that there was a decrease in wages as a result of outsourcing. Increasing in relative demand for skilled labour at home has been a result of moving of certain activities to low-wage countries [Kletzer 2004]. Feenstra and Hanson [1999, 2003] have provided empirical evidence as to the fact that outsourcing caused wages dispersion. Based on data from US and others countries, they have noticed that wages of the low-skilled workers have fallen relative to those of the high-skilled workers as a consequence of foreign outsourcing. Also, Munch and Skaksen, who studied Danish enterprises functioning in the period from 1991 to 2003, noted that „foreign outsourcing has a negative but insignificant effect on wages, while domestic outsourcing has a significantly positive effect. The price of foreign outsourcing has declined (by more than 10% from 1993 to 2002), while the price of domestic outsourcing has been roughly constant”. In Danish firms, high-skilled workers benefited from outsourcing much more than low-skilled labor [Munch, Skaksen 2009 pp. 64 – 69].

Other studies, by D.Marin, A.Lorentowicz, A.Raubold, showed that in both of the examined countries Poland and Austria in 1995 – 2002 outsourcing had a bearing on wages, which dropped by 2% in Austria, while in Poland they rose by 41%. One of the most important reasons for this is the fact that Austria “is poor in human capital relative to its trading partners”. In both countries outsourcing was partly responsible for up to 35% change in skilled workers’ wages. If outsourcing had not been used, relative earnings of the human capital would have dropped by 35% less in Austrian firms and would have risen by 35% less in Poland [Marin... 2005 p. 5; 16 – 18] I. Geishecker, H. Görg, J.R. Munch also noticed that: „In the UK wages for both high and low skilled workers are reduced by outsourcing to Central and Eastern Europe Countries (CEECs), while skilled workers benefit in terms of wages from outsourcing to (more advanced) non-CEECs. For Germany the picture is more complex, with high skilled workers being negatively affected from outsourcing to CEECs, while low skilled workers face reductions in wages due to outsourcing to non-CEECs” [2007, pp. 12 – 13].

As mentioned above, Poland has become a place of attractive locations in terms of BPO/SSC. According to the analysis by Association of Business Service Leaders (ABSL), in Poland employees of SSC / BPO centre are mostly people with higher education (81% of total employed). Students form 7%, and remaining employees

12% of total employment. The average age of SSC/BPO workers is 29 years. In almost all centers, the average time of employment is from 1 to 4 years. However, in this group predominate workers with average length of service from 1 to 2 years. Operation employees constitute 85%, team leaders - 10% and managers - 5% of all centre staff [*Sektor SSC/BPO w Polsce*]. These data indicate that the main candidates for the job are university graduates. This way they have an opportunity to gain first experiences in the labour market. This is undoubtedly a great chance for young people, who still constitute one of the largest groups at risk of particularly high unemployment.

Is very difficult to find detailed information about wages because of its confidentiality. Accessible data demonstrates the average monthly remuneration in SSC/BPO centres amounted PLN 4,500 gross in 2009 (including bonuses and additions resulting from the employment). Therefore, it was about over PLN 1000 higher than an average remuneration in the enterprise sector in 2009, when the value amounted PLN 3,325 gross [[www.stat.gov.pl](http://www.stat.gov.pl)].

Comparing two categories: the remuneration and the percentage of workers employed in operation positions, it is noticeable that low costs of functioning of these centres are an important factor. Their work is not complicated and relatively low paid. Therefore, having gained experience, part of them will strive for the change of a workplace. Lower work supply can cause rise in remuneration, which is undesirable from the point of view of the company's efficiency. Therefore, non-paid forms of motivating employees become more and more important and effective.

The above research proves that the claim that outsourcing contributes to decreases in wages is not fully justified. Earnings are shaped primarily by two job market factors: labour demand and labour supply. Making decision about moving of the activities outside causes more disadvantageous changes in the amount of low-skilled workers' wages than high-skilled one.

#### 4. Conclusions

Outsourcing is a consequence of globalization processes in the world economy. Its shape is changing under the influence of customers' expectations and those of the business milieu. Increasingly complex business processes are contracted to outside providers, while the growth in IT processes is relatively steady. They require greater involvement of outsourcers, in particular of BPO, ITO, SSC and KPO centres, which find it necessary to seek adequately skilled graduates, as well as experienced specialists. This is valuable information for universities, which should provide education that is compatible with the requirements of the labour market. The more so that statistical data reveal growing interest in the services of external vendors. Moreover, the proportions and the balance of forces in the global outsourcing market are changing. In 2009, European firms attained leadership in this field for the first time. They started to provide a large part of the services within BPO/SSC. Among those entities many new workplaces were created. These were filled mainly with young people. Thanks to

the development of BPO / SSC nearly 300 such centres came into existence in Poland and the number of employees, as estimates show, is close to 90 thousand.

Despite the popular view that as a result of outsourcing employment drops and wages are either cut or maintained on the same level, it is difficult to find studies that would fully confirm it. It is more often noticed that companies which outsourced the functions focus on the reduction of remuneration, especially in unskilled positions. Employees who were dismissed due to outsourcing frequently found employment in the same or other branches. Change of location, meanwhile, resulted in a rise in labour efficiency and business efficiency of firms and thus led to the strengthening of the potential of enterprises and economies.

### Bibliography

- Alajääskö P. 2009 *International Sourcing in Europe*, “Eurostat, Statistics in focus. Industry, trade and services” No. 4.
- Amiti M., Wei S. 2005 *Fear of Services Outsourcing: Is It Justified?*, “Economic Policy”, Vol. 20, Issue 42.
- Błaszczak A. 2010 *Centra usług biznesowych czekają na pracowników*, „Rzeczpospolita”, 03.02.
- Couto V., Divakaran A., Tucker J. 2006 *Next Generation Global Sourcing Opportunities*, Available: [http://www.booz.com/media/uploads/Next\\_Generation\\_Global\\_Sourcing\\_Opportunities\\_in\\_the\\_Consumer\\_Products\\_Industry.pdf](http://www.booz.com/media/uploads/Next_Generation_Global_Sourcing_Opportunities_in_the_Consumer_Products_Industry.pdf), accessed 12.11.2010.
- Davidson C., Matusz S. 2005 *Trade and turnover: theory and evidence*, “Review of International Economics”, Volume: 13.
- Europejskie kontrakty outsourcingowe*. 2010 Raport NelsonHall, available: <http://www.outsourcing.com.pl/16886,infosys.html> (accessed 12.11.2010).
- Extending India's Leadership of the Global IT and BPO Industries*. (2005) NASSCOM-McKinsey Report. Available: [http://www.mckinsey.com/locations/india/mckinseyonindia/pdf/nasscom\\_mckinsey\\_report\\_2005.pdf](http://www.mckinsey.com/locations/india/mckinseyonindia/pdf/nasscom_mckinsey_report_2005.pdf) (accessed 12.11.2010).
- Geishecker I, Görg H., Munch J.R., *Do Labour Market Institutions Matter? Micro-Level Wage Effects of International Outsourcing in Three European Countries*, Discussion Paper Series, IZA DP No. 3212, Dezember 2007.
- Global Financial Services Offshoring Report 2007* 2007, Deloitte, Available: [http://www.deloitte.com/view/en\\_GB/uk/industries/financial-services/article/b514d056580fb110VgnVCM100000ba42f00aRCRD.htm](http://www.deloitte.com/view/en_GB/uk/industries/financial-services/article/b514d056580fb110VgnVCM100000ba42f00aRCRD.htm) (accessed 12.11.2010).
- Feenstra R.C., Hanson G.H. 2003 *Global Production Sharing and Rising Inequality: A Survey of Trade and Wages*, [in:] *Handbook of International Trade*, eds. E.K. Choi, J. Harrigan, Blackwell Publishing.
- Infosys Chief Points to Skills Gap in India* 2007, “Financial Times”, 12.01.
- Kearney A. 2006 *Global Services Location Index*. Available: <http://www.atkearney.com/index.php/Publications/global-services-location-index-2006.html>, accessed 12.11.2010.

- Kearney A. 2009 *Geography of Offshoring is Shifting*. Available: <http://www.atkearney.com/index.php/News-media/geography-of-offshoring-is-shifting.html>, accessed 12.11.2010.
- Kearney A. 2010 *Foreign Direct Investment (FDI) Confidence Index*, available: <http://www.atkearney.com/index.php/Publications/foreign-direct-investment-confidence-index.html>, accessed: 12.11.2010.
- Kletzer L.G. 2004 *Trade-related Job Loss and Wage Insurance: A Synthetic Review*, "Review of International Economics", Volume: 12, Issue: 5.
- Kłosińska O. 2008 *Ewolucja outsourcingu: od sposobu na obniżenie kosztów do narzędzia realizacji strategii*, dodatek HBRP poleca: *Różne oblicza outsourcingu. Nowe wyzwania, najlepsze praktyki*, „Harvard Business Review Polska”.
- Marin D. 2004 *A Nation of Poets and Thinkers – Less So with Eastern Enlargement? Austria and Germany*. CEPR Discussion Paper, No. 3526.
- Marin D. 2005 *A New International Division of Labour in Europe: Outsourcing and Offshoring to Eastern Europe*, "Journal of the European Economic Association".
- Marin D., Lorentowicz A., Raumbold A. 2005 *Is Human Capital Losing from Outsourcing? Evidence for Austria and Poland.*, "CESifo Working Paper", No. 1616.
- Munch J., Skaksen J. 2009 *Specialization, Outsourcing and Wages*, "World Economic Review", Vol. 145.
- Offshoring Does Explain Job Cuts at European Banks* 2008, Deutsche Bank Research, available: [www.db.research.com](http://www.db.research.com), accessed 12.11.2010.
- Onshore, Nearshore, Offshore: Unsure? A Polish Perspective 2010* 2010, The Report of Polish Information and Foreign Investment Agency, available: [http://www.grafton.pl/downloads/PL/PolandOutsourcingPaper2010\\_FINAL-noblankpages.pdf](http://www.grafton.pl/downloads/PL/PolandOutsourcingPaper2010_FINAL-noblankpages.pdf), accessed 12.11.2010.
- Outsourcing 2009* 2009, The Review of 750+ BPO and Shared Services Centres in CEE with Russia, Available: [http://dis.waw.pl/index.php?lg=en&act=reports&mode=onereport&id\\_reports=133](http://dis.waw.pl/index.php?lg=en&act=reports&mode=onereport&id_reports=133), accessed 12.11.2010.
- Radło M. 2007 *Offshoring i outsourcing w Unii Europejskiej a wzrost gospodarczy i zatrudnienie*, [in:] *Globalizacji usług, outsourcing, offshoring i shared services centers*, ed. A. Szymaniak A, Poznań.
- Rybiński K. 2007 *Globalizacja w trzech odsłonach: offshoring-globalne nierównowagi- polityka pieniężna*, Warszawa.
- Rynek outsourcingu finansowo-księgowego.* (2010) Available: <http://www.bankier.pl/wiadomosc/Rynek-outsourcingu-finansowo-ksiegowego-2256619.html>, accessed 12.11.2010.
- Sektor SSC/BPO w Polsce, Raport.
- Trendy na polskim rynku pracy* 2009, Summary of the Report, available: [http://www.rynekpracy.pl/pliki/raporty\\_oferta/18\\_of.pdf](http://www.rynekpracy.pl/pliki/raporty_oferta/18_of.pdf), accessed 12.11.2010.
- Wolak D. 2010 *Europejski biznes postawił na outsourcing*, „Rzeczpospolita”, 11.02.
- Zatrudnienie w centrach usług w Trójmieście*, <http://www.outsourcingportal.pl/artykuly,zatrudnienie-w-centrach-uslug-w-trojmiescie,1,11,321,2,0.html> [22.10.2011].