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SERVICES CENTRES IN POLAND AS THE CONSEQUENCES OF THE INFORMATION REVOLUTION

Introduction

In recent years, the most important phenomenon in the global economy has been a trend towards the globalization of markets. The new system links and increasing pressures of global competition require new methods of gaining competitive advantage. The rapid development of technology and getting cheaper and easier flow of information significantly expand the scope of tradable goods and services. Enterprises are trying to improve the efficiency of the operation through the relocation of production or transfer a part of the production process outside the home country. One of the solutions is the offshoring, which over the past decade has experienced a great growth. The offshore services industry includes the trade of services conducted in one country and consumed in another, and it has transformed the way companies do business by allowing for the separation of the production and consumption of services[1]. The concept of offshoring is recognized in a number of theoretical elaborations. The evolution of this phenomenon is particularly important in relation to changes in the labour market. The offshore industry has grown an important source for employment and economic growth around the globe. Offshoring is the migration of employment from home country (usually development) to lower-cost localization. In view of cost advantages, leaders of these offshore services are mainly developing countries. Poland has become one of the most attractive locations for offshore services in Europe. Therefore, the main ob-

[1] G. Gereffi, K. Fernandez-Stark: *The Offshore Services Value Chain: Developing Countries and the Crisis*. Policy Research Working Paper 5262, The World Bank Development Research Group 2010, p. 2.

jective of this paper is to define and classifies the term *offshoring* and determine the scale of this phenomenon in large Polish urban centres, with particular reference to Kraków case. The source of information is the analysis of existing reports in this subject area.

1. Trends in the global economy in the offshore services industry

The current stage of scientific and technological revolution with which we have been dealing since the 1980s has been defined as the period of the information revolution. Since then the information and telecommunications technology has become an essential factor of both economic growth and improved quality of life. Technical progress in the production of processors, data storage and networking, combined with modern software provides opportunities for new applications, reducing costs and the spread of information technology. This connection of technology, particularly the Internet, cancels the traditional cost, distance and time limitations. The result of rapid evolution of science and technology in the last decades of the twentieth century has been deeply structural as well as the market changes that occur in the global economy. New products and services, which are associated with the development of modern communication technologies and new forms of realization of the production cycle, appear on international markets. Further globalization and regionalization of the world economy and concomitant them the process of trade liberalization and the opening of borders to the free movement of capital led to the creation of more efficient manufacturing centres. As an outcome, there has been a relocation of production to those parts of the world, where labour costs are lower. These changes will also have effects on the labour market by changing the size and the structure of labour demand. At this point, the following terms should be mentioned: outsourcing and offshoring. The difference between them is related to the location of and control over the organizations contracted to carry out the errand (Figure 1).

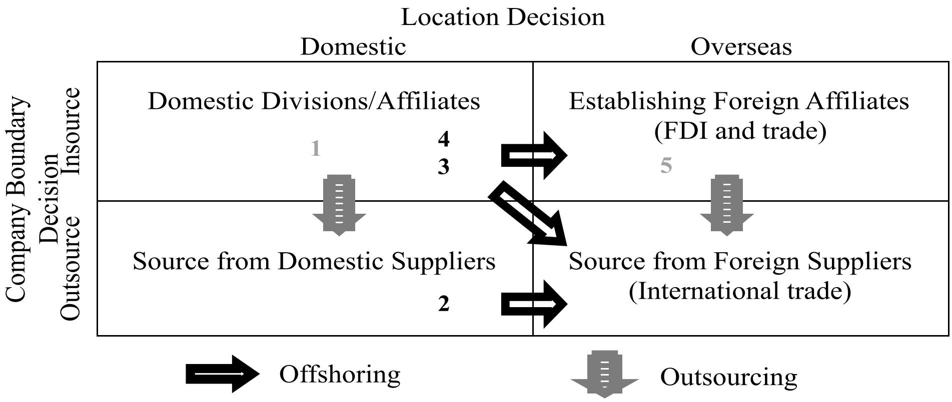

Figure 1. Business Models in Outsourcing and Offshore Services

Source: M. Sako: *Outsourcing and Offshoring: Key Trends and Issues*, 2005, http://www.emergingmarketsforum.org/wpcontent/uploads/pdf/2005%20EMF%20Outsourcing.pdf (accessed: April 20, 2013).

Outsourcing involves a superior specialization as companies shift from sourcing inputs internally to commissioning them to separately unit (domestic but outside the company – indicated by the arrow no. 1 in Figure 1). Offshoring takes place when firms transfer selected business process beyond national (arrows no. 2, 3, 4). There are three different opportunities towards offshoring. One scenario describes a company's decision to outsource services to a foreign supplier instead of a domestic one (arrow 2). Other solutions are to move service to a foreign provider (arrow 3) or foreign affiliates (called "captive offshoring", arrow 4). The last prospect includes the source's shift from foreign affiliates to foreign suppliers (called "offshore outsourcing", arrow 5). For the host economies, the latter scenario gives the most beneficial spillovers in terms of technology and higher skilled jobs[2].

The offshore services value chain contains all services that are provided and value is correlated to employee education level. Offshore services industry can be defined as three main segments and activities:

– Information Technology Outsourcing (ITO)

The basic building block for the offshore services chain value concentrates on the production and use of software. It is made up of four categories: software Research&Devlopment, Information Technology consulting, software and infrastructure.

[2] M. Sako: *Outsourcing and Offshoring: Key Trends and Issues*, http://www.emergingmarketsforum.org/wp-content/uploads/pdf/2005%20EMF%20Outsourcing.pdf, 2005 (accessed: April 20, 2013).

– Business Process Outsourcing (BPO)

The segment contains three main categories, namely he management of enterprise resources (ERM), human resources (HRM), and customer relationships (CRM).

– Knowledge Process Outsourcing (KPO)

It refers to specialized activities that often require professional licensing (such as in the medical, legal and accounting field). The lower value segment is basic services in ITO and BPO activities, while KPO is considered to be the highest segment of the chain and requires highly specialized workforce[3].

There is no doubt that offshoring is one of the most important factors in today's business environment. The part of the value chain that can be performed offshore has increased in value-add and complexity as we continue to see new types of services being handled remotely and across borders. The separation of non-production functions and transferring them abroad reduce the costs of the organization and improve the quality of its services to foster the ability to meet customers' needs. The decision of offshoring certain business functions can be a part of growth strategy because it allows a company to concentrate on its core activity and improve its efficiency. The investors choosing the most convenient location guided chiefly by following features:

– availability and quality of skilled human resources with knowledge of foreign languages,
– cost of conducting business,
– accessibility to transport and adequate infrastructure,
– quality of investor services,
– city image,
– quality of life,
– opportunity to take advantage of investment initiative[4].

The combination of above mentioned factors allows the investor to choose the most attractive location for offshore services.

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3 K. Fernandez-Stark, P. Bamber, G. Gereffi: *The Offshore Services Global Value Chain. Economic Upgrading and Workforce Development*, 2011, Center on Globalization, Governance&Competitiveness, Duke University, http://www.cggc.duke.edu/pdfs/2011-11-11_CGGC_Offshore-Services-Global-Value-Chain.pdf (accessed: April 15, 2013).

4 Association of Business Services Leaders in Poland, Modern Business Service Sector in Małopolska, http://www.absl.pl/documents/10186/26940/004+Modern+business+service+sector+in+Ma%C5%82opolska?version=1.1 (accessed: April 15, 2013).

2. Poland as a offshore services location

The development of communication technology allows investors to change preferences for the location of offshoring units in the world. At the end of the 80s twentieth century Benelux countries were used as international centres to provide services. Then, a decade later, the United Kingdom, Ireland and Spain became popular. At the beginning of 21^{st} century the increase in the labour costs in these countries caused the moving wave of offshoring to the countries in Asia and the Pacific, mainly India and the Philippines. The advantage of these countries became a lower level of wages and the relatively widespread knowledge of English. At the same time cultural differences and geographical distance started to be an obstacle for some recipients of offshoring. Then attention has been paid to the countries of Central and Eastern Europe, which coincided with their accession to the European Union. Despite the fact that labour costs are higher here, and the size of human resources smaller than in Asia, a region is characterized by a more political and macroeconomic stability and similar cultural exposure[5] (in this context it is said about *nearshoring*, which means the transfer of business process to countries culturally and geographically close). Actually both the Tholons Top 100 Outsourcing Destinations Report and the Kearney Global Services Location Index show that Southeast Asia remains as a premier offshore destination for services outsourcing[6]. During that time two other regions have progress significantly, namely South America and Central-Eastern Europe.

In the last few years Poland has become an important localization of business services offshoring in Europe. The first services centres were set up in the 1990s, however, significant growth in this area was noticed after the Polish joining to European Union. The accession to the EU triggered the changes in the legal environment of business operation and contributed to the growth of the country's political credibility. Poland is the largest market among new EU members states. Polish population is 7.7% of the EU population, of which 36.5% are aged between 25 and 49 years[7]. The number of foreign services in Poland has been increasing regularly (figure 2). From 2004 to the end of 2011, 250 new centres were established. Over 80% of all the services centres in Poland are located in seven major business services agglomeration, which include: Warszawa, Kraków, Wrocław, Łódź,

[5] J. Kalinowski, K. Lipka: *Centra usług wspólnych. Szansa przyciągnięcia kolejnych inwestorów do Polski*, http://www.paiz.gov.pl/files/?id_plik=8855 (accessed: April 15, 2013).

[6] Tholons: *2012 Tholons Top 100 Outsourcing Destinations. Regional destination*, http://www.tholons.com and The A.T. Kearney Global Services Location Index http://www.atkearney.com (accessed: April 15, 2013).

[7] Eurostat: *Population*, http://www.epp.eurostat.ec.europa.eu (accessed: April 25, 2013).

Metropolia Silesia, Trójmiasto and Poznań[8]. These cities are simultaneously the main academic centres. Foreign companies are attracted to Poland for several reasons, including lower labour costs, good geographical location, the high potential of the Polish labour market political stability and culture similar to that of Western Europe.

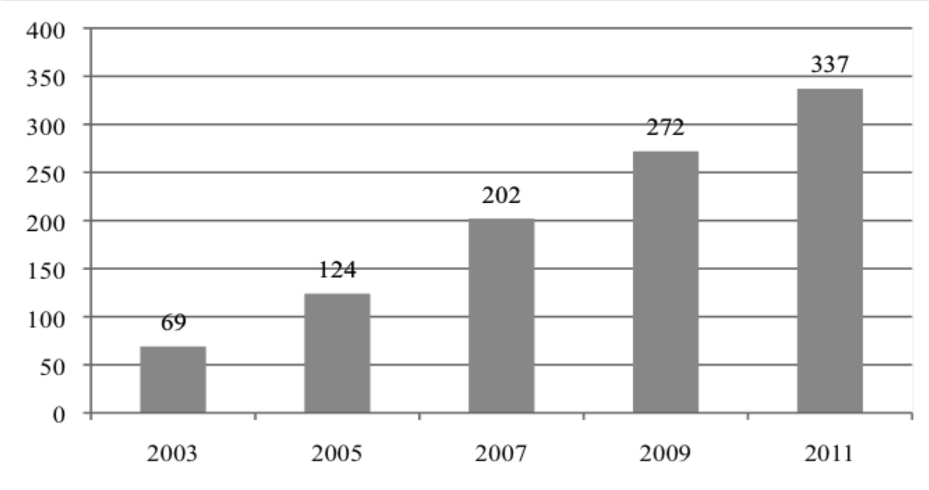

Figure 2. Number of foreign services centres in Poland in over the years 2003-2011

Source: Association of Business Services Leaders in Poland*: Sektor nowoczesnych usług biznesowych w Polsce*, http://www.absl2012.epublish24.com/ABSL/assets/downloads/files/ABSL_2012.pdf (accessed: April 20, 2013).

The dynamic development of the sector in Poland has been an increase in employment. In comparison with 2008 the number of employees of services centres increased by 80% to 85 thousand in 2011[9].

[8] Association of Business Services Leaders in Poland: S*ektor nowoczesnych usług biznesowych w Polsce*, 2012, http://www.absl2012.epublish24.com/ABSL/assets/downloads/files/ABSL_2012.pdf (accessed: April 20, 2013).

[9] Ibid.

3. The investment attractiveness of Kraków

According to a recent Tholons report, Kraków has taken place in the top ten cities for the best location for investment in the business services sector[10]. Thus, it has been the leader in Central and Eastern Europe and one of the two highest-rated European cities (Table 1). The ranking also included Warszawa (36th place) and Wrocław (75th place). For comparison the point values are among others: availability and training of employees on the labour market, the cost of doing business, available infrastructure, investment risk and quality of life. Kraków, the top city of the region, maintains its competitiveness through its skilled labour force, quality infrastructure and government support[11].

Table 1

Outsourcing Destinations Rankings, 2013

Rank	Movement from 2012	City	Country	Region
1.	-	Bangalore	India	South Asia
2.	-	Mumbai	India	South Asia
3.	+1	Manila (NCR)	Philippines	Southeast Asia
4.	-1	Delhi (NCR)	India	South Asia
5.	-	Chennai	India	South Asia
6.	-	Hyderabad	India	South Asia
7.	-	Pune	India	South Asia
8.	+1	Cebu City	Philippines	Southeast Asia
9.	-1	Dublin	Ireland	Western Europe
10.	+1	Kraków	Poland	Eastern Europe

Source: Tholons: *2013 Top 100 Outsourcing Destinations*. *Rankings and Report Overview*, http://www.tholons.com, (accessed: April 15, 2013).

Across many Polish cities where the offshoring takes place, Kraków is the leader both in terms of number of centres and the number of employees (Figures 3 and 4). In December 2011 there were 337 services centres in Poland, including 55 in Kraków agglomeration (second in Poland behind Warszawa: 57). The development of the business services sector in Kraków, as well as throughout the country, has occurred in the last 7-9 years. The city has highly developed educational system, it offers the possibility of studying in 24 higher education institution. Annually the Kraków University leaving about 50 thousand graduates[12]. Of the offshore

[10] The cities ranking is divided in to four categories. Kraków was included in the rankings as the city observed in 2006 and a year later came straight on the 16 position among emerging cities.

[11] Tholons: *2012 Tholons…*, op. cit.

[12] Biuletyn Informacji Publicznej, *Kraków in Numbers* 2011, http://www.bip.krakow.pl/?mmi=6353 (accessed: April 27, 2011).

service centres that existed in Kraków in 2011, the slight majority –21 centres – are BPO/ITO[13]. Number of shared services centres and research and development centres is equal: 17 units. The last sector is the most importance for the labour market and the quality of the workforce, because it enhances the condition of the economy in the advanced technology sector.

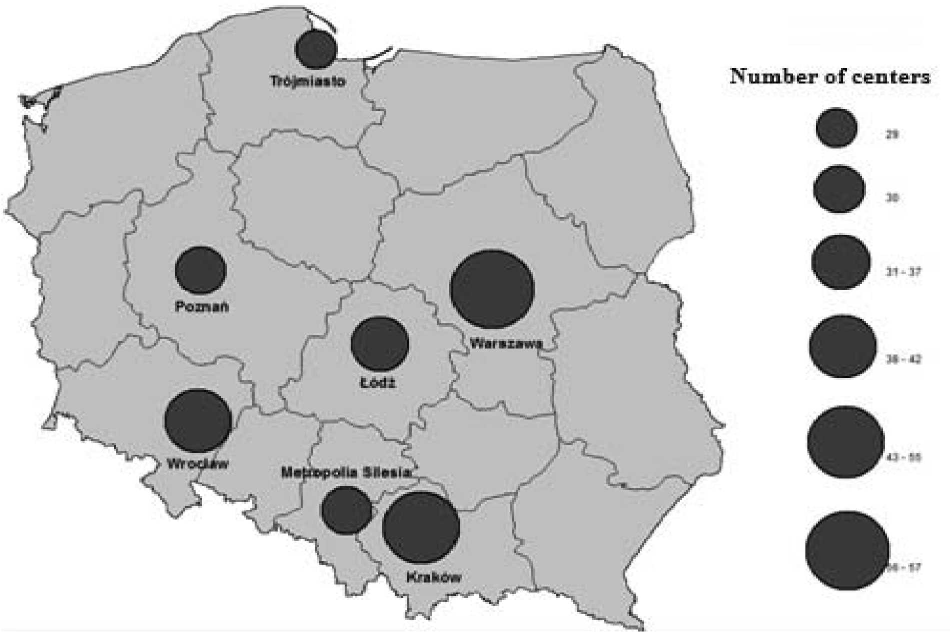

Figure 3. Number of services centres in the major services offshoring localization in Poland in 2011

Source: Association of Business Services Leaders in Poland: S*ektor*..., op. cit.

Services centers with foreign capital play a significant role in the regional labour market. In Kraków, 19,4 thousand people are in employment, which constitutes 23% of all the sector's employees in Poland (Figure 4).

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[13] *Business Process Outsourcing Centres* (BPO) – specialized companies, which on behalf of other companies take over the implementation of selected non-productive activity. *Shared Services Centres* (SSC) – separate service units of a company or individual economic units that operate under a parent organization or its branches, supporting business process. *Research and Development Centres* – specialized companies, which conduct research on behalf of other companies, but also technical and engineering centres and units, in which the dominant process is software development work (for: Association of Business Services Leaders in Poland: *Modern Business*..., op. cit.

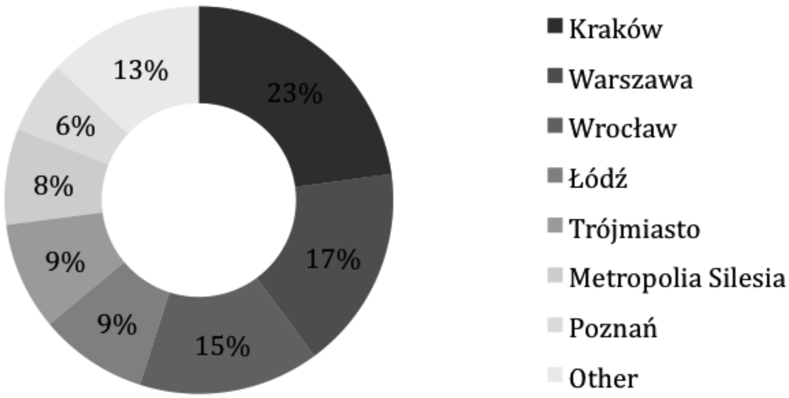

Figure 4. The participation of each city in the business services sector employment in Poland (2011)

Source: Ibid.

Table 2 presents a synthetic estimation, which evaluates the attractiveness of three best locations in Poland for investors in the modern business service. The ranking identify seven most important factors for the location of offshore centres. Kraków holds first place in the ranking ahead Wrocław and Warszawa. Kraków reached 0,29 in synthetic index value, mainly due to availability of skilled staff and recognition in the global arena through its presence in the Tholons ranking. The quality of life index was also rated relatively high. Poor performance was noted in the degree of saturation of centre employees, the assessment of cooperation with local authorities and average price for renting office spaces.

Companies currently operating in Kraków are constantly evolving, increasing the range of services. This entails the local impacts on surrounding area. The important issues are benefits in the form of additional employment and government revenue. It should be used interests of companies from Western Europe using a nearshoring strategy. Kraków for employment in this segment has better prospects than the competing centres because of lower level of wages. The next element of the impact of centres is employment in services generated by centres customers. The development of offshore industry not only creates job, it also generates positive spillovers, such as knowledge and technology transfer, enhanced incentives for education or improvement in human capital. The evidence is even the high ratio of graduates that fit the needs of employers in the sector. Otherwise, the advance of quality and availability of transport hubs is observed. The example is the action taken in Zabierzów in the field of rail and bus connection. The good transport accessibility is in turn an important advantage for attracting new investments. New investors make their demands for workers and office spaces, there is a kind of feedback.

Table 2

Ranking of the investment attractiveness of selected Polish cities

Investment attractiveness factor	Availability of qualified staff				Cost of doing business		Availability of modern office space		Transport accessibility		City image		Competition for personnel	Quality of life		
Factor weigh	35				25		10		10		10		5	5		
Indicator	Employment in the service centres in 2010	Number of graduates in 2010	Active knowledge of English	Seniority of service centre employees	Average salary in the services market	Rental price per m2 of office space	Supply of office space	Number of office renter options with an area of > 100m2	Number of flight connections	Journey time from airport city centre	Presence in the Global Services ranking Tholons 2010	Option of centres on collaboration with local authorities	Degree of saturation of centre employees	Quality of life index value	Synthetic indicator value	Rank
Kraków	1.9	0,5	0,6	-0,1	0,4	-0,7	-0,1	0,2	0,1	-0,1	1,9	-1,5	-2,4	0,7	0,29	1
Wrocław	0,8	0,1	1,3	0,3	0,0	-0,6	-0,2	-0,4	0,0	0,2	1,1	1,2	-0,4	0,5	0,26	2
Warszawa	1,1	2,4	1,0	-0,1	-2,4	-1,8	2,8	2,8	1,3	0,8	1,1	-1,5	1,0	1,6	0,25	3

Source: Association of Business Services Leaders in Poland: *Modern Business Service Sector in Małopolska*, http://www.absl.pl/documents/10186/26940/004+Modern+business+service+sector+in+Ma%C5%82opolska?version=1.1 (accessed: April 15, 2011).

Conclusion

Presented data indicated, that the investment attractiveness of Polish cites has increased in the last decade. The present financial crisis has had a significant impact for global offshoring services, considering that financial firms were the biggest customer of services outsourcing. Initially the crisis held decisions of potential investors for the creation of new centres, but with time it has created demand on offshore service by existing and new consumers due to the recession and in search of the cost reduction. In this context, we can expect further expansion of service offshoring sector. Simultaneous, today's offshore relocation patterns are increasingly based on the need for more skilled labour recourses.

Due to cost advantages and labour force availability and worth, Poland may still be an important localization of offshore services and the industry remain a source for employment. It is possible to use the prevalence associated with labour arbitrage. So far the qualified staff and the strong academic centres have been the main virtue of Poland over other countries in the region of Central and Eastern Europe for creating business service centres. In this regard it is worth to stay one step ahead. The example of Kraków shows that the city is doing well both in the domestic and global competition due to its quality and quantity of labour force. Poland is an attractive country as far as well-qualified human resources are of interest. Strategic investment in the workforce development is cost effective but in formulating the policy for this industry one should be aware of the rapid evolution and highly competitive character of the sector. A successful outsourcing strategy for Polish centres would therefore focus on supporting the advantage by providing specific qualifications of employees such as technical, linguistic and analytical, which is subject to the specialization of education in the city. The types of higher education opportunities available are a key factor in developing skilled workforce. Another critical requirement for a country attempting to provide offshore services is taking care of the business environment, including in particular the level of infrastructure development and the prospect of cooperation with local authorities.

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Summary

Fast technological development and easier information flow increased the scope of foods and services sold. Companies, which reduce the cost and aim at improvement of efficiency shift the production (or a part of it) to the host country. Outsourcing is one of the solution for that.

Keywords: services centres, information revolution, Poland