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# OFFSHORING IN THE TRANSACTION COSTS THEORY

# SUMMARY

The paper presents an idea of offshoring, a concept assuming movement and realization of production and service processes abroad. It displays different kinds of offshoring as well as presents the transaction cost theory, which considerably influences in explanation of offshoring activities. There were also presented attractiveness of particular countries for running offshoring activities as well as the global and Polish offshoring markets.

Keywords: transaction costs, offshoring

JEL Classification: F2, F6

# **INTRODUCTION**

Processes of economic globalization taking place in the global economy have been contributing to intensification of competiveness. A higher level of economic efficiency is also forced by worsening economic conditions caused by the economic crisis present in many regions of the world. Many companies, especially transnational corporations, improve their competitiveness by making costs lower. Moving realization of production and service process-



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es abroad, so offshoring, is one of strategies of lowering costs. The concept of offshoring is present in various theoretical frameworks, including the transaction cost theory by O.E. Williamson.

The aim of the paper is an attempt to present relations between a change of transaction costs and offshoring development as well as presentation of offshoring processes on the world and in Poland.

# 1. TRANSACTION COST THEORY BY O. E. WILLIAMSON

The transaction cost theory is one of the main element of new institutional economics. It is often perceived as the most influential and theoretically rich part in these economics<sup>1</sup>. It was worked out in 70ties by a group of American economists and refers to the work of R.H. Coase from 1937. Coase concluded that a hierarchical structure of taking up decisions within particular management system in a company is an alternative mechanism towards market. Moreover, a motive of saving in a field of costs of price mechanism use, so costs of regulation of market allocation of resources, is a basic factor determining establishment, size and structure of companies<sup>2</sup>.

Despite a fact that the paper of Coase from 1937 is perceived as a beginning of transaction cost theory development, it does not contain a phrase of a transaction cost at all. First use of this term occurred in works of Scitovsky (1940) referring to capital market. But there was still a lack of defining it. First attempts defined transaction costs as "costs of economic system functioning" - Arrow (1969), but this approach was very difficult to implement in empirical research. That is why there were taken some efforts to estimate transaction costs in a context of a transfer and protection of property rights -Allen (1991). Although referring to the property rights theory allowed to indicate frameworks of transaction costs, it was still difficult to operationalize this term<sup>3</sup>.

In 80ties of the XX century North and Wallis (1986) did one of the first measurement of a value of a transaction and non-transaction sector in the United States. In their research they based on a definition assuming that

<sup>&</sup>lt;sup>1</sup> M. Dietrich, *Transaction Cost Economics and Beyond. Towards a new Economics of the Firm*, Routledge, London 1994.

<sup>&</sup>lt;sup>2</sup> K. Cieślińska, Koncepcja paradygmatów T. S. Kuhna a nauka o przedsiębiorstwie, "Zeszyty Studiów Doktoranckich Akademii Ekonomicznej w Poznaniu", Poznań 2006.

<sup>&</sup>lt;sup>3</sup> M. Gorynia, K. Mroczek, Koszty transakcyjne jako determinanta formy zagranicznej ekspansji przedsiębiorstwa, "Ekonomista", No. 2/2013.

transaction costs includes "all costs connected with running exchange". It led to a fact, that contemporary definitions use a contract structure and determine transaction costs as a difference between a selling price and production/purchase price enlarged by profit Wang (2003) or as a difference between a selling price and production/purchase price Niehans (1987)<sup>4</sup>.

The transaction cost theory formulated by O.E. Williamson concentrates on a choice of the best way of transaction regulation. The choice of two opposite solutions, namely market and hierarchy, is determined by a level of transaction costs<sup>5</sup>. It is assumed that transactions within an internal hierarchy, are coordinated by an entrepreneur managing production. However, it should be noticed that contracts of a company on market are not eliminated, but very reduced. It is assumed that companies are established and develop taking over a role of market in conditions, when it is not efficient enough and coordination within internal hierarchies provides them potential solutions for situations, when the above mentioned conditions of market operations are not fulfilled<sup>6</sup>.

Market cannot operate efficiently under all circumstances because of two basic reasons<sup>7</sup>:

economic entities have limited rationality – entities are rational in intentions but to a limited extent, so they are not able to establish complete contracts, taking into account all events and possible conditions when a transaction, which is projected, becomes a part of complex environment,
economic entities are characterized by opportunism – entities aim craftily at achieving their objective, when a situation allows for it they get profits at the expense of others, even using tricks and bad will in order to hide their true intentions and not fulfill their promises.

Basing on the above mentioned facts O.E. Williamson concluded that costs of transaction realization on market become too high if a transaction is characterized by the following features<sup>8</sup>:

- uncertainty which does not allow to come into satisfactory contracts (a risk of fraud, stratagem in use of market transactions),

<sup>&</sup>lt;sup>4</sup> Ibidem.

<sup>&</sup>lt;sup>5</sup> M. Gorynia, *Pośrednictwo w handlu zagranicznym a teoria kosztów transakcyjnych*, "Ekonomista", No. 4/1998.

<sup>&</sup>lt;sup>6</sup> K. Murawiak, Znaczenie teorii sieci w wyjaśnianiu działalności gospodarczej przedsiębiorstw, [in:] M. Winiarski (ed.), Nowe idee początków XXI wieku, Wydział Prawa, Administracji i Ekonomii Uniwersytetu Wrocławskiego, Wrocław 2009, p. 18.

<sup>&</sup>lt;sup>7</sup> O.E. Williamson, *The Modern Corporation: Origins, Evolution, Attributes,* "Journal of Economic Literature", Vol. XIX (December 1981), pp. 1537-1568.

<sup>&</sup>lt;sup>8</sup> K. Murawiak, op. cit., p. 18.

- specificity of assets in a transactions. When a supplier makes special investments in order to satisfy costumers' needs, then a product offered cannot have substitutes on market. Starting from this moment, a supplier has a strong position and can behave in an opportunistic way or lower quality level in order to decrease costs.
- considerable frequency, which enhances previous danger and makes it profitable to implement a stable structure of transaction administration despite of addressing market each time (normally, market staring competitiveness, shelter operating entities against opportunistic behavior of their partners). In fact, a real or potential victim of an opportunistic partner can immediately change one for other, addressing a competing entity or at least pretending to do such thing. On the other hand, such kind of activity is not always possible because costs of a change of a supplier often are very high. As a situation is developing and is repeating between the same partners, a preliminary situation, even if was perfectly competitive, can transform in a situation, when a number of potential suppliers and customers significantly decrease.

According to O. E. Williamson transaction costs can be one reason of changes of an organizational structure in a company<sup>9</sup>. He stresses that specialized companies, which use external sources of goods and services, are usually more efficient than those which provide a wide range of goods and services on their own. A solution connected with gaining goods and services from external resources is characterized by higher costs resulting from a necessity of planning and coordination of functioning a company and a net of cooperating organizations<sup>10</sup>.

#### 2. OFFSHORING – NATURE AND TYPES

Movement of realization of production and service processes abroad, called offshoring, is one of the newest trend in a process of international expansion of companies operating on international markets. The term offshore was borrowed from a law and revenue terminology, where it describes entities within jurisdiction of other country. The relevant literature describes offshoring as a practice of hiring specialist competences owned by foreign compa-

<sup>&</sup>lt;sup>9</sup> Ch. Pitelis, A. Pseiridis, *Transaction costs versus resource value?*, "Journal of Economic Studies", Vol. 26, No. 3/1999, pp. 221-240.

<sup>&</sup>lt;sup>10</sup> O.E. Williamson, *Instutycje ekonomiczne kapitalizmu*, Wydawnictwo Naukowe PWN, 1998, p. 16.

nies and located abroad comparing to a place of realization of business processes. These competences are outside the main area of a firm which hire them. It is conducted in order to decrease costs, improve quality or efficiency<sup>11</sup>. Offshoring means cooperation with foreign companies; it is a process of external commissioning of some own functions and operations in an organization to business partners located abroad, which do these tasks abroad in relation to localization of the commissioning body<sup>12</sup>.

Offshoring can have two basic types: intra-firm offshoring and off-shore outsourcing. The first one means internalization, so movement of business operations within own organizational structures to own entity, a production entity or a service center – placed abroad. In this form it is a direct investment. The second form is connected with looking for external partners abroad for realization of business operations.

Dynamic development of the offshoring phenomena have been taking place during the last 20 years. It has been occurring in different forms, starting from international outsourcing, venture capital to foreign direct investments. Nowadays, offshoring is especially used for new types of processes taking place in an organization as for example research and development activities or product innovations.

Offshoring can contemporary concern all types of production processes as well as services<sup>13</sup>:

- of basic character; in this sphere it is characterized by a high level of standardization. It includes information services as hardware and software. Companies which decide for offshoring want mainly to decrease costs,
- which produced in cooperation with a foreign partner should lead to increase in efficiency in firm functioning as well as gaining new experiences necessary for operation on other market. This form of cooperation should cause not only cost reduction but mainly allow to creation of a new value thanks to building a relation with other organizations,
- strategic for organization functioning. The aim of this kind of offshoring and relation with a foreign partner is to implement innovations or enter new market.

<sup>&</sup>lt;sup>11</sup> L.R. Dominguez, Outsourcing krok po kroku dla menadżerów, IPS, Warszawa 2009, p. 27.

<sup>&</sup>lt;sup>12</sup> J. Niemczyk, *Wyróżniki, budowa zachowania strategiczne układów outsourcingu*, Wydawnictwo Ekonomiczne we Wrocławiu, Wrocław 2006, p. 142.

<sup>&</sup>lt;sup>13</sup> D. Ciesielska-Maciągowska, Wpływ zmiany kosztów transakcyjnych na przyspieszenie procesów outsourcingu i offshoringu, http://www.sgh.waw.pl/katedry/karik/Referat20/D.\_Ciesielska\_ koszty\_tranzakcyjne\_a\_offshoring\_i\_outsourcing.doc (16.08.2013).

## 3. OFFSHORING IN THE CONTEXT OF TRANSACTION COSTS

The transaction cost theory is a theoretical background which is important in explanation of offshoring activities. O.E. Williamson and his partners stated that participants of economy do not aim at competing by all means. High costs resulting from a necessity of running negotiations, creating reserves, loses from unsuccessful transitions and lost chances, so transaction costs, are barriers. Ex ante transaction costs are paid before entering into a contract and are connected with looking for a partner, negotiations of contract conditions, and signing it. Ex post costs are paid after entering into a contract and include controlling of agreement realization and optionally renegotiation of previous agreements. According to O.E. Williamson, transaction costs are especially high when a company operates in changing and unpredictable environment and contemporary environment of companies, especially operating on international markets, is like that. A rational entrepreneur, aiming at decrease in transaction costs and improvement of own competitive position towards other entrepreneurs, will limit competing through development of cooperation with suppliers and customers, but also - in some cases - with competing entities. Significant possibilities of decrease in transaction costs are accessible for companies operating in close links of the same chain of economic activity, for example production and distribution. The transaction cost theory explains existence of agreements and cooperation between various participants of economy as aiming at rational allocation and use of resources<sup>14</sup>.

Transaction costs considerably influence development of offshoring of business processes and production. They determine a level of use of these solutions by companies. Transaction costs are not directly connected to efficiency of production and service activities but with activities taking up in order to gain and maintain cooperation with suppliers, verification of quality as well as with providing products and services in a way satisfying for costumers. However, it should be mentioned that separation and movement of particular process to foreign partners also cause transaction costs. In a case when this activity is not a basic function and costs of its running are high, looking for foreign external partners can be reasonable; on the other hand when it is an activi-

<sup>&</sup>lt;sup>14</sup> R. Oczkowska, *Offshoring w świetle wybranych koncepcji ekonomicznych*, [in:] B. Mikuła (ed.), *Historia i perspektywy nauk o zarządzaniu*, Uniwersytet Ekonomiczny w Krakowie, Kraków 2012, pp. 407-408.

ty important from a strategic point of view, it is better to keep it within own structure and run basing on own resources.

### 4. OFFSHORING INVESTMENTS IN POLAND AND WORLDWIDE

From 2004, the A.T. Kearney Global Services Location Index<sup>TM</sup> have been presenting ranking of 50 countries regarding their attractiveness for offshoring, including IT services and technical support, contact centres and back-office support. The assessment has consisted of 43 sub-points, forming three categories: financial attractiveness, staff availability and qualifications as well as business environment<sup>15</sup>.

| No. | State                     | Financial<br>attractiveness | Staff availability<br>and qualifications | Business<br>environment | Total |
|-----|---------------------------|-----------------------------|--|-------------------------|-------|
| 1   | India                     | 3.11                        | 2.76                                     | 1.14                    | 7.01  |
| 2   | China                     | 2.62                        | 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  |
| 6   | Mexico                    | 2.68                        | 1.60                                     | 1.44                    | 5.72  |
| 7   | Thailand                  | 3.05                        | 1.38                                     | 1.29                    | 5.72  |
| 8   | Vietnam                   | 3.27                        | 1.19                                     | 1.24                    | 5.69  |
| 9   | Philippines               | 3.18                        | 1.31                                     | 1.16                    | 5.65  |
| 10  | Chile                     | 2.44                        | 1.27                                     | 1.82                    | 5.52  |
| 11  | Estonia                   | 2.31                        | 0.95                                     | 2.24                    | 5.51  |
| 12  | Brazil                    | 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 Emi-<br>rates | 2.41                        | 0.94                                     | 2.05                    | 5.41  |
| 16  | United Kingdom            | 0.91                        | 2.26                                     | 2.23                    | 5.41  |
| 17  | Bulgaria                  | 2.82                        | 0.88                                     | 1.67                    | 5.37  |

Table 1. Global Services Location Index 2011 by A.T. Kearney

<sup>&</sup>lt;sup>15</sup> E. Chilimoniuk-Przeździecka, *Offshoring we współczesnej gospodarce światowej*, "Zeszyty Naukowe Kolegium Gospodarki Światowej", No. 30/2011.

| No. | State      | Financial<br>attractiveness | Staff availability<br>and qualifications | Business<br>environment | Total |
|-----|------------|-----------------------------|--|-------------------------|-------|
| 18  | USA        | 0.45                        | 2.88                                     | 2.01                    | 5.35  |
| 19  | Costa Rica | 2.84                        | 0.94                                     | 1.56                    | 5.34  |
| 20  | Russia     | 2.48                        | 1.79                                     | 1.07                    | 5.34  |
| 21  | Sri Lanka  | 3.20                        | 0.95                                     | 1.11                    | 5.26  |
| 22  | Jordan     | 2.97                        | 0.77                                     | 1.49                    | 5.23  |
| 23  | Tunisia    | 3.05                        | 0.81                                     | 1.37                    | 5.23  |
| 24  | Poland     | 2.14                        | 1.27                                     | 1.81                    | 5.23  |
| 25  | Romania    | 2.54                        | 1.03                                     | 1.65                    | 5.21  |

Source: A.T Kaerney Inc, Offshoring Opportunities Amid Economic Turbulence, Chicago 2011, p. 2.

Countries - emerging markets remain competitive in terms of prices compared to developed countries, despite increase in salaries of employees in IT and business processes, in which is located the majority of offshoring centres. The most attractive locations for outsourcing processes are the countries of South East Asia, Latin America as well as Central and Eastern Europe. Their attractiveness results mainly from highly qualified employees, companies' business experience, quality certifications and favourable legislation<sup>16</sup>. According to A.T.Kearney, the most attractive countries regarding offshoring include: India, China, and Malaysia. Poland is located in the ranking of 24th place behind highly developed countries such as the U.S. or the UK. In these countries, employees earn significantly more than in Poland, so that the rate of financial attractiveness of these countries is significantly lower, but the other two sub-indices are higher: staff availability and qualifications and business environment (table 1). At the end of the last decade, the global market for outsourcing and offshoring of services was estimated at 785-805 billion USD, of which 88% was in a domestic outsourcing, whereas the rest was international outsourcing and capital offshoring. Business Process Offshoring (BPO) was at the level of 56-58 billion USD, while offshoring of IT processes (ITO) was at the level of 36-48 billion USD<sup>17</sup>. During the period 2004-2009 there was an 300% increase in offshoring (including international outsourcing) in the global market. During the economic and financial crisis, development of offshoring of services was affected by two opposing trends. On the one hand, demand for such services decreased due to general economic downturn in the

<sup>&</sup>lt;sup>16</sup> Ibidem.

<sup>&</sup>lt;sup>17</sup> UNCTAD, Information Economy Report 2010. ICTs Enterprises and Poverty Alleviation, New York, Geneva 2010, p. 49.

global markets. This applies especially to financial services, where demand for outsourcing declined dramatically because of difficult situation of the financial sector. On the other hand, as mentioned before the recession forced companies to take action to reduce costs, which contributed to the emergence of a kind of pressure on outsourcing and offshoring. This situation also drove to broaden the scope of services that companies want to obtain from external suppliers, and consequently to expand the offer of companies offering such services for businesses. It is assumed that in the long term, in the case of improvement in the global markets, offshoring in the service sector will continue to grow dynamically and increasingly will concern complex services, based on knowledge and providing higher value added products<sup>18</sup>.

Recently Central and Eastern Europe has become an important place for offshoring of business services, not only in Europe, but also globally. By the end of 2011, in the region operated 847 service centres with foreign capital. The vast majority of them were investments of companies from Western Europe. Employment in modern business services in the countries of Central and Eastern Europe amounted to approximately 225 thousand people in December 2011. India remains the world leader, with about 40% market share. Recent forecasts indicate, however, that in the coming years, the share of that country will decrease in favour of other, growing locations, including Central and Eastern Europe. It is worth mentioning that in recent years there was an increase in the countries of Central and Eastern Europe in the global market for offshoring services. The share of these countries can now be estimated at approximately 7-8% of the total value of offshoring services in the world. Poland is an unchallenged leader in terms of employment in the sector in Central and Eastern Europe, followed by the Czech Republic, Hungary, Romania, Slovakia, and Bulgaria. Number of service centres in Poland has been steadily increasing. From 2005 until the end of 2011 there were established 250 new service centres. The largest annual increase in the number of centres took place in 2006 and 2008 - in each of these years by 44. More than 30 centres were established also in 2005, 2007, and 2011. In December 2011, Poland had 337 service centres with foreign capital, belonging to 241 investors. Most of the centres (131) were BPO / ITO entities. Shared service centres (SSC) amounted to 113, while the remaining units (93) were centres for research and development (R&D).

In the seven major centres of business services offshoring (Warsaw, Krakow, Wroclaw, Lodz, Silesia Metropolis, Tricity, Poznan) is situated more

<sup>&</sup>lt;sup>18</sup> D. Ciesielska-Maciągowska, op. cit.

than 80% of all service centres in Poland, at least 25 centres in each of the  $city^{19}$ .

#### CONCLUSIONS

Movement of production and service processes to other countries or regions, sometimes far from headquarters of a company, is a permanent practice of many companies, especially transnational corporations. The most important reason of this process is mainly decrease in transaction costs, which can be achieved by acquiring knowledge and competences inaccessible in a company, use of cheaper labour force, use of transfer prices as well as transfer of profits to tax havens, etc.

Some economists believe that mass offshoring is a major reason for the third industrial revolution, which has already started and will run through the next few decades. The processes make a division of workers providing services to well-educated and low-qualified less important. In the near future, there may be the most important division into the employees carrying out works easy to make and cable delivered (or by wireless connections) with little or no reduction in the quality and works not meeting these conditions. The first group of tasks can be called impersonal services, while the other - services provided in person, or simply personal services. At present, impersonal services are largely subject of offshoring, which raises concern in the United States and other developed countries. With the development of information transfer technology, more and more personal services would evolve into impersonal services. Several years ago, the Forrester Research institute estimated that 3.3 million of American job places in the service sector will become offshored by 2015, which gives a rate of about 300 thousand of jobs per year<sup>20</sup>. Offshoring has become an opportunity for less developed countries, where impersonal services can be provided to a large extent. Poland has a great ability to provide offshoring services. It is a leader in the Eastern Europe regarding an employment scale in offshoring centers as well as a number of these centers. It has been continuously developing a range and increasing a level of services in the Polish service centers. As at the beginning there was mainly the simplest services provided (for example basic accountancy), new areas of services

<sup>&</sup>lt;sup>19</sup> Assocition of Business Service Leaders In Poland, *Sektor nowoczesnych usług biznesowych* w *Polsce*, Warszawa 2012, pp. 10-11, 13.

<sup>&</sup>lt;sup>20</sup> A.S. Blinder, *Offshoring – kolejna rewolucja przemysłowa*, "Studia Regionalne i Lokalne", No. 4(26)/2006.

have been creating year by year. Apart from centers basing on low labor costs and high skills, there is an increasing number of centers of business management basing of high skills, cultural similarities, time similarities or language capabilities. The next few years will show if Poland succeeds and use possibilities in the field of offshoring services development.

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