# THE RELATIONSHIP BETWEEN TRANSACTION COSTS AND FLEXIBILITY IN OUTSOURCING: A CONCEPTUAL FRAMEWORK

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**Abstract:** *Companies face endless anxiety to ensure they deliver goods and services of the best quality in perfect time to their customers, so they have to find the best and most flexible outsourcing firms to contract with. However, this will lead to high transaction costs which arise because of the of company's activities in the market. The aim of this paper is to shed light on the relationship between transaction costs and flexibility in outsourcing, and then to determine the equilibrium point between them. Various publications, including (articles and research reports) have been used to explain the notions of transaction costs, outsourcing, flexibility in outsourcing, and related theoretical issues. As a result of a review of the literature it emerges that, transactions costs and outsourcing flexibility are the main challenges facing companies (operating as an anvil and a hammer. Transaction costs are costs which arise because of the company's activities in the market, and include (fees, commission and taxes) and which are paid by the firm to provide a service or produce a good, either to external parties or as internal costs. Companies must determine the equilibrium point which meets the optimal level of flexibility required in outsourcing for the best performance, and which allows them to cover transaction costs which arise because of uncertainty. The equilibrium point explains the extent to which the company is willing to bear high transaction costs in order to get benefits from applying outsourcing flexibility. We can use the terms outsourcing flexibility or supplier flexibility to express the way firms meet their needs in the light of uncertainties caused by demand fluctuations and market circumstances.*

**Keywords:** *Transaction Costs; Outsourcing; Supplier Flexibility; Flexibility in Outsourcing.*

**JEL classification:** *D23; M1; L14.*

## 1. Introduction

In the light of changes in the work environment and the increasing growth of businesses, firms face risks because of uncertainty, especially when they deal with external units in order to fulfil their needs. Hence two main challenges appear, the first is finding the best outsourcing, and the second is reducing transaction costs. According to Scott and Thompsonn (2011) outsourcing means the process of moving aspects of the company to another supplier. Transaction costs are mainly concerned with finding and negotiating with a proper partner and monitoring this partner's performance (Brouthers, 2002). According to Vasiliauskiene and Snieska, (2009:1018), when a company decides to outsource as an element of supply or production, it is important to determine which risks should be allocated between the parties to the contract – the principal and the agent. In the same sense, Williamson (2008) noted that the main cause of transaction costs, may be mainly connected to maladaptation, and flexibility or the ability to adapt is required to cope with the changes and disturbances arising from transaction costs. From this perspective we can ask the following question: to what extent can flexibility in outsourcing help a company to reduce transaction costs (flexibility here means the ability to vary as you wish, according to your needs)? Furthermore, flexibility is the ability to adapt without excessive costs (Grigore, 2007). Consequently, flexibility helps companies to cope with uncertainty and may reduce transaction costs which arise because of uncertainty). Supply flexibility means flexibility in relationships with partners. Companies may contract with outsourcing providers by choosing to solicit short-term bids, entering into long-term contracts and strategic supplier relationships, forming joint ventures, forming consortiums, creating problem-solving councils or vertically integrating (Grigore, 2007), and as a result, this leads to an increase in transaction costs.

## 2. Literature review

### *2.1 Outsourcing*

Companies are under continuous pressure to ensure they can deliver goods and services with reliable quality and in perfect time to their customers at a competitive cost. Therefore, they have to find the best sources to ensure that production processes will go smoothly at all times, by looking for outsourcing providers for their needs. According to Scott and Thompsonn (2011), outsourcing is consider when a company cannot achieve a specific task by itself, so it seeks another partner or another company to do the task better, and in supply chain management, outsourcing occurs when functions such as buying, manufacturing, warehousing and transportation are given to another supplier. Many studies have examined the motivations for and benefits of outsourcing. Abraham and Taylor (1993) identified three reasons for outsourcing: first, savings on wage and benefit payments. Second, transfer of demand uncertainty to the outside contractor, and third, access to specialized skills and inputs that the organization cannot itself possess. In the same area, Kakabadse and Kakabadse (2000) reported that the main reasons for outsourcing are: First, *economic*—greater specialization in the provision of services, as outsourcing allows economies of scale and the longevity of demand for the activity; second, *quality*—access to skills, the competency and focus of potential suppliers and geographical coverage is increased; and lastly, innovation—improvements in quality through innovation, and the development of new service products, can lead to new demands. Samuel (1998) also emphasized that outsourcing provides a certain capacity that is not available within an organization's internal departments. According to Aranda et al, (2011) outsourcing success depends on the distribution, processing, and exchange of information between both parties and the correct choice of outsourcing provider enables the company to achieve competitive advantage. As a result, flexibility in these tasks generates faster responses to potential environmental changes.

### *2.2 Transaction Costs*

Transaction costs theory might be one of the most important organizational theories because of the studies that it has encouraged (Williamson 2007); it also is one of the main perspectives in organizational studies (David and Han 2004). Moreover, transaction cost economics theory is frequently viewed as a subset of new institutional economics. The new trend in transaction costs is to describe firms from a new perspective based on organizational terms, as governance structures, rather than in neoclassical terms, as production functions (Macher and Richman 2008). Evidence has emerged that the performance of firms which take transaction costs into consideration is better than that firms which do not consider it (Brouthers et al, 2003). Furthermore it was found that companies that follow the basic transaction cost hypothesis, (i.e. the high costs of finding and negotiating with partners), tend to use a higher degree of control (Brouthers, 2002). In addition, transaction costs economics has recognized that the productivity of a value chain is a function of both production costs and transaction costs (cited by Dyer& Chu, 2003). In the same area, transaction costs are significant and have a major impact on economic efficiency (Williamson, 1991) (cited by Dyer& Chu, 2003). The hybrid mechanisms introduced (Williamson, 1985) are specified more precisely as supply management, supply chain management and the virtual enterprise. From a global sourcing perspective companies obtain their intermediate products from outside suppliers if the transaction costs of external purchases are lower than those arising from domestic purchases. In other words, transaction costs determine the governance structure of a supply chain. So, in the light of globalization, a firm has to decide if it will follow a domestic or global source to supply its needs.

***2.2.1 Market transaction costs decisions***

Figure 1 shows how the demand for market transaction changes according to price. The vertical axis is the price of a market transaction *Pb, the* horizontal axis is the number of market transactions.

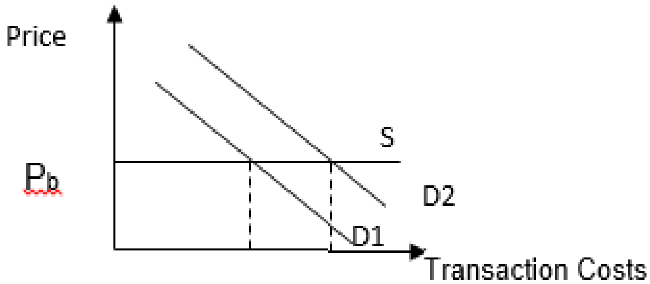


**Figure 1:** Demand for market transactions
(Alston and Gillespie, 1989)

According to the previous diagram, increasing dependence on market transactions leads to a reduction in production by the firm. Moreover, demand for market transactions depends on the price of transactions and the production of the firm.

When the number of market transactions goes down, the demand for internal transactions increases directly; in contrast, an increase in both internal transactions and production costs leads to an increase demand for market transactions. At point $P_b$ the supply of market transactions is completely elastic; at this point the price includes the cost of market transactions which represents the limitation line between the selling price and total costs of the buyer. The greatest proportion of market transaction costs is the greatest limit between the supplier price and the price which the buyer is ready to pay to ensure the transaction. On the basis of above, we can draw the transaction costs demand curve as follows:

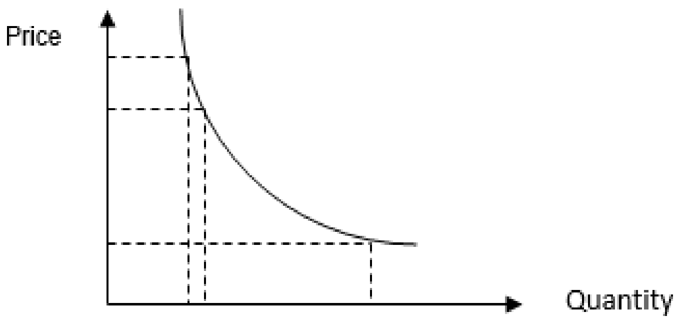


**Figure 2:** Transaction costs demand
Source: Authors' own research

### *2.3 Outsourcing and Transaction costs:*

Vasiliauskiene and Snieska, (2009:1023) determined the structure of transaction cost factors that influence outsourcing contracts as follows:

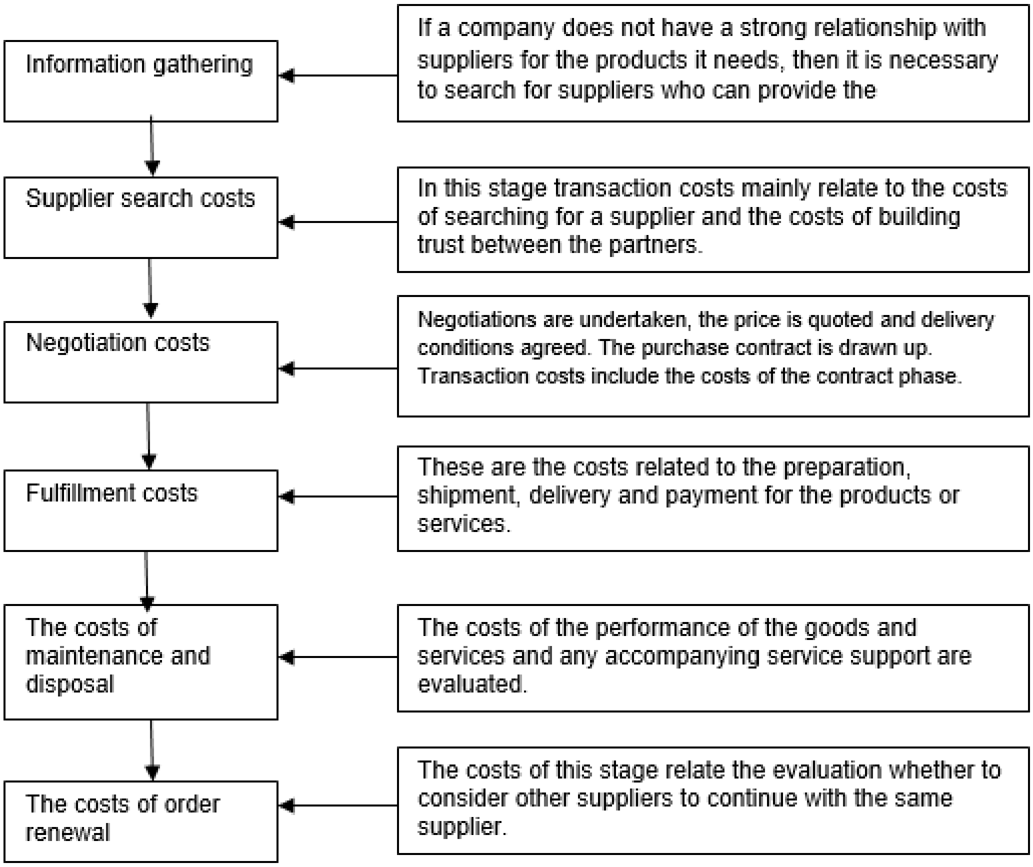


**Figure 3.** The structure of transaction cost factors for outsourcing contracts 2009
Source: Vasiliauskiene and Snieska, (2009: 1023)

From the previous diagram we can notice that supplier search costs account for a part of transaction costs, and this relates to the costs of order renewal (i.e. considering other suppliers or continuing with the same supplier); therefore, if we consider that suppliers are similar to outsourcing, this means that is a significant relationship between outsourcing as suppliers and transaction costs. As a result, companies have to take into consideration that transaction costs which arise from dealing with suppliers as outsourcing as a way to enhance profitability. According to Bremen et al, (2010) transaction costs determine the governance structure of a supply chain (obtaining intermediate products from outside suppliers); So this must be take into consideration when configuring the relationship with suppliers who are considering outsourcing.

### *2.4 Supplier Flexibility:*

In the supply chain management literature, both the high speed and low cost of supply chains have been important drivers for companies (Kopecka et al, 2010), and the question which may arise is, how companies can cope with changes in demand fluctuations and unexpected changes which may confront supply chains in uncertain conditions. According to Giannoccaro et al, (2003), changes in market demand, differing supplier lead times, product quality and information delay are sources of uncertainty that create a need to build a 'flexible' approach, and supply chains can deal with these issues through this flexibility, which gives them a competitive advantage. Furthermore, Kopecka et al (2010:4) referred to the fact that changing circumstances also emphasize the importance of the dyadic relationships between the focal company and its clients in the buyer-supplier relationships, which can be described as 'sourcing' and 'supply'. The concept of supplier flexibility covers a wide range of supplier information on involvement at different levels (Kayis and Kara, 2005). According to Chan et al, (2009:965), in a supply chain, suppliers' flexibility is considered as a tool to cope with the environmental uncertainties, and reducing uncertainty through better control is considered one of the objectives when a cluster of suppliers is being developed. In general, supply flexibility refers to the ability of a supplier to increase suppliers' responsiveness (Tachizawa and Gimenez, 2005), the ability to efficiently change schedules on a frequent basis (Krajewski et al., 2005) or a supplier's ability to produce efficiently in small quantities (Fisher et al, 1997). Although the importance of dealing with many outsourcing vendors (suppliers) to reduce dependency and create competition between them is clear, there are also disadvantages, including difficulties in coordination between suppliers, high cost and communication problems (Tan and Sia, 2006). The primary risk is the difficulty in managing work and relationships with several suppliers (Lacity et al, 1995). Hence, the role of flexibility appears as a capability to cope with risks and adapt to uncertainty in the work environment. According to Chung et al, (2010:623), if one supplier offers a quantity flexibility (QF) contract to the buyer, while the other offers the a cheaper price, then a company should determine where flexibility and cheaper price have an advantage, one against the other and companies can get significant benefits from having multiple sources of supply. Furthermore, multi supplier systems may be better than single-suppliers in the supply chain under certain conditions. Supplier flexibility lead to improved profitability, Avittathur and Swamidass (2007:717) found, for example, that profitability is above average when a flexible plant uses flexible small suppliers. So supplier flexibility is consider one of three criteria for choosing a supplier, alongside Just-In-Time (JIT) capability, and the technological competence of suppliers. According to Chan et al,(2009), high levels of supplier flexibility need high cost investments in real-time information systems, and there is no need for a cost intensive real-time information system when supplier flexibility levels are lower. Consequently, the relationship between supplier flexibility and costs can be illustrated below (figure 4).

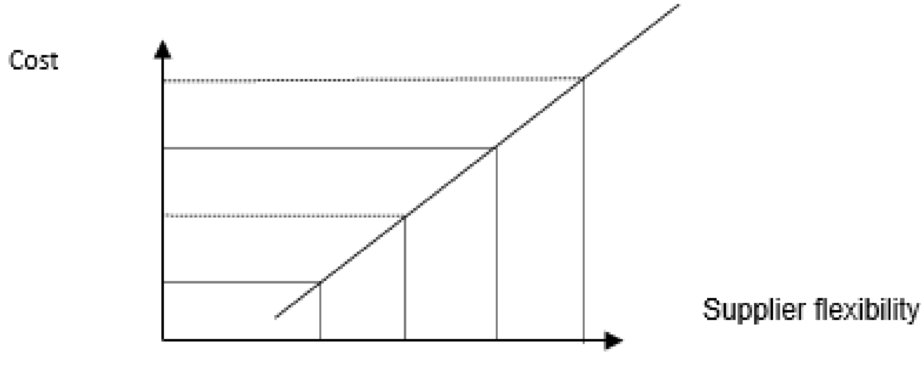


**Figure 4.** Degree and cost of supplier flexibility
Source: Authors' own research

Therefore, decision-maker can reach a trade-off between the benefits obtained from supplier flexibility and the costs which accrue as an element of suppliers search costs, also considered an important part of transaction costs. So, high levels of supplier flexibility lead to high transaction costs.

## 3. Outsourcing flexibility and transaction costs

Flexibility, or the ability to adapt, is required to cope with the changes and disturbances arising from transaction costs (Williamson, 2008). The relationship between outsourcing and transaction costs has been investigated by many researchers (Vasiliauskiene and Snieska, 2009; Williamson, 2008), as has the flexibility of outsourcing (Chung et al, 2010; *Grigore*, 2012; Tan and Sia, 2006). However, we also have to consider the relationship between transaction costs and flexibility, in order to know how companies can find the balance between them, because some researchers, such as Tan and Sia (2006), have highlighted the fact that strategic manoeuvres to apply flexibility in outsourcing are costly, and have suggested there is a positive moderating impact on outsourcing success only in high environmental uncertainty; i.e. they have emphasized the importance of flexibility in outsourcing despite the high costs of applying strategic manoeuvres for flexibility in out sourcing. Consequently, we can ask the following question: Does flexibility in outsourcing reduce the cost of transactions which arise from uncertainty?

The cost of flexibility is discussed by Häberle et al, (2005:4), if flexibility is justified and valuable in a specific context, the question arises of, how to price the flexibility provided?

According to Häberle et al. (2005), pricing flexibility means finding a balance between value and risk; in other words value and uncertainty. In the same context, Vasiliauskienė and Snieška (2010) argued that, when a company decides to outsource a supply service, it is necessary to outline how the risk should be allocated between the contracting parties (a customer and a supplier). Aranda et al, (2011), explained that there is a strong relationship between flexibility and outsourcing, in addition to the magnitude of the impact of short- and long-term flexibility dimensions with the benefits of outsourcing. Most outsourcing decisions should lead to increased performance and productivity. Outsourcing clearly supports both types of flexibility in threatening, risky, and complex environments (McGee and Rubach, 1996). Regarding long-term flexibility, the expansion dimension-when implicitly related to outsourcing implementation-allows the firm to achieve additional capacities in the system due to these activities being carried out by companies with a greater specialization within their organization, while firm itself focuses on core activities (Quinn and Hilmer, 1994).

We can state that supplier flexibility or outsourcing flexibility is the ability to switch between suppliers when their performance is not good enough, or because of market circumstances. Hence transaction costs appear and increase because, because Brouthers (2002) noted that transaction costs are mainly incurred when finding and negotiating with an appropriate partner and monitoring this partner‘s performance.

## 4. The decision about flexibility in outsourcing and transaction costs

The following diagram (figure 4) shows the equilibrium between transaction costs demand and suppler flexibility (outsourcing flexibility), i.e. the extent to which a company can opt for supplier flexibility and bear transaction costs. Above the red point the benefits of supplier flexibility will be less than transaction costs, and greater suppler will lead to higher transaction costs, so the firm cannot depend on more outsourcing, because after this point dependence on outsourcing (suppliers) increases transaction costs. The red point indicates where the benefits of supplier flexibility equal transaction costs, and the degree of supplier flexibility fits the level of transaction costs, so firm can still depend on outsourcing , because depending on outsourcing (suppliers) at this point will not lead to higher transaction costs. Below the red point, the benefits of supplier flexibility are less than transaction costs, and the degree of suppler flexibility is not enough for the company, so the company can increase its dependence on more suppliers to obtain its needs and the transaction costs will still be within acceptable levels; consequently, the firm can depend on outsourcing, because dependence on outsourcing (suppliers) will not lead to higher transaction costs at this stage. Finally, figure (5) expresses the integration between the three concepts: transaction costs (TC), outsourcing (OS) and flexibility (F).

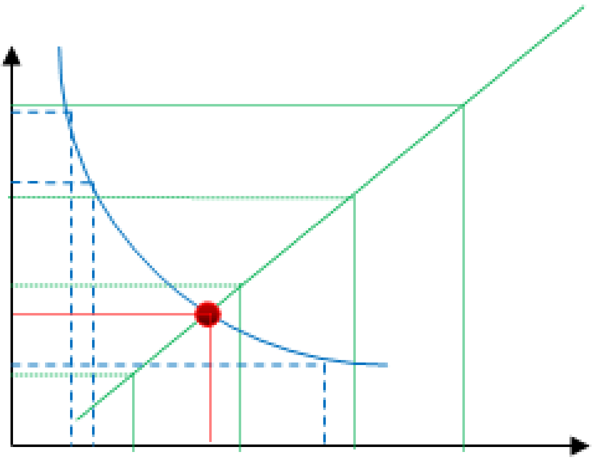

**Figure (4)** Equilibrium between TC and SF
TC: transaction costs, SF; supplier flexibility
Source: Authors' own research

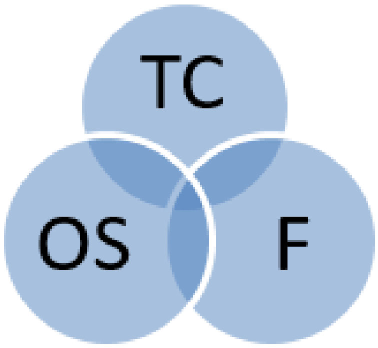


**Figure (5)** integration between (TC, OS, F)
TC: transaction costs, OS: outsourcing, F: flexibility
Source: Authors' own research

## 5. Conclusion

Transactions costs and outsourcing flexibility are the main challenges (operating like an anvil and a hammer) facing companies working in an environment characterized by uncertainty. Transaction costs are costs arising because of the of company's activities in the market, including (fees, commission and taxes) paid by the firm to provide a service or produce a good. They arise because of the relationships between the company and its suppliers (when a firm is unable to provide these itself), who are consider outsourcing providers and are responsible for providing the required needs for the company's activities in the best quality at the perfect time, which means they have to be characterized by flexibility. Companies have to reduce transaction costs to a minimum to gain more profit and competitive advantage, by determining the required (perfect - optimal) level of flexibility in outsourcing, and also making comparison between the benefits which they will obtain from flexibility in outsourcing and the transaction costs incurred, if the expected benefits are greater than the transaction costs, then they will be willing to pay more and bear higher transaction costs (because more flexible outsourcing means higher transaction costs). Companies have to find the equilibrium point between flexibility in outsourcing and transaction costs, which mean the extent to which the company is willing to bear higher transactions cost in return for the benefits it receives from applying outsourcing flexibility, and they should attempt to integrate outsourcing, flexibility and transaction costs. We also have to take into consideration the sector in which the company operates, because flexibility in outsourcing in service companies will not lead to high transaction costs as it will in industrial companies.

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