STRATEGIC DECISION-MAKING BASED ON TRANSACTION COSTS THEORY

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Abstract: Globalization phenomenon has amplified the influence of the multinationals to the national companies, so many of them have decided to enter the international or global economic cycle. The management decision-making may be eased by the use of the transaction cost theory. The transaction costs theory has been a useful tool for decision making since about 50 years ago to improve the activity’s efficiency of the business and along time it has been approved or criticized by many authors and the arguments pro and against it seems not to end. However, the main use of this theory has been related to make-or-buy decision, but also, in strategic decision the balance between internalisation and outsourcing. This paper is aiming to offer a brief synthesis of this theory and some of its forward developments on the basis of references and explains some of its utilization in the business, more exactly in strategic decision-making. A conceptual process of strategic decision-making based on the transaction costs is proposed. Finally, some of the advantages and disadvantages of internalisation and outsourcing are mentioned, as well as some of the limits of the transaction cost theory utilization in the business’s strategic decision.

Keywords: strategic decision-making, transaction cost theory, internalisation and outsourcing, management, business.

1. Introduction

The transaction cost theory (TCT) initiated by Coase (1937; 1993) and then developed by Williamson (1981; 1985) promotes a useful framework for analysing cost elements that delimit managerial decisions to internalize and outsource certain organization activities "hierarchical governance" and "market governance".

The cost of the transaction differentiates "what's happening on the market, where price is the regulatory mechanism and what is happening inside the organization, where hierarchical bureaucracy is the regulator" (Coase, 1937). Although both types of governance involve costs, their analysis is the basis for managerial decisions under conditions of risk, inflexibility, uncertainty, loss of managerial control, and indirect cost generation. According to the author's view, organizations are "structured and bounded" just to minimize transaction costs. The "boundaries" of an organization are determined not only by economic factors but also by the nature and efficiency of the organization's structure.

The TCT as it was developed by Williamson (1985) based on the three characteristics of the environment or transaction (asset specificity, transaction uncertainty and frequency of transactions) was and is being debated. The history of the transaction costs theory emphasizes stories of remarkable success (Klaes, 2000).

The TCT applications were developed by a number of authors, of which: or the denial of its applicability in some areas of management was argued by other authors, of which (Canback, 1998):

- using TCT to identify the differences between American and Japanese management styles argued by Aoki (1990);
- the use of TCT for the choice of the aviation industry transaction mechanism investigated by Masten (1984) and the car industry by Teece (1981) and Klier (1993);
using TCT in Canbeck Consultancy Management (1998);
the use of TCT in management control developed by Spekle, (2002).

Other authors have examined the TCT limits and have raised arguments about the uncertainties and inconsistencies of TCT use, such as:

North (1987; 1990) and North and Wallis (1994), which pointed out that organizations seek to reduce the total cost, not only transaction costs, and not only transaction costs cause internalization or outsourcing;

Lacity and Willcock (1998) bring arguments about the inability to use TCT in information technology, and Aubert and Weber (2001) continue their arguments.

The idea of transaction costs is based on an incomplete reasoning because the transaction costs give the sole attention to the control aspect of resource allocation (Dietrich, 1991).

2. **Briefing of the transaction costs theory**

According to Williamson (1985, p.2) the TCT facilitates the analysis of the "comparative costs of planning, adjusting and monitoring completeness of tasks under the alternative of governance of structures."

The transaction costs are those costs that make an economic or commercial transaction related to the business conducted outside the organization. These costs arise from ex-ante (design, negotiation and insurance under agreements between the parties to a transaction) and ex-post (costs of poor, operational, site-based adaptation costs).

The transaction costs do not relate to the cost factors (material, labour, etc.), but to the cost of transaction management and control (resulting from the uncertainty and risk of managing contracts or transactions). The difference between transaction costs and production costs is that the first category may vary by changing resource allocation while the second category depends on technology and preferences and may be the same in all economic systems (Arrow, 1983, p.377).

Transactions means any type of business activity of an economic agent, and each transaction is conducted under a contract (formal or informal). The transaction "occurs when a good or service is transferred over a separate technological interface" (Williamson, 1985, p.1).

The main attributes of a transaction are:

- the frequency of transactions or the intensity of the ex post information asymmetry, or the ability to assess the actual quality of the current performance;
- the uncertainty that characterizes a transaction, or the extent to which the desired activities and contributions are improved by ex-ante programming;
- the extent to which a transaction is supported by investments in specific sustainable assets, or the extent to which the alternative of using the investments made to support the business implies the opportunity for loss.

According to Williamson (1985), as we mentioned above, two human factors and three environmental factors make the cost of the transaction appear. The two human factors are: limited rationality and opportunism, and the three environmental factors are: asset specificity, transaction uncertainty and frequency of transactions.

**Bounded rationality**

The organization protects its interests within its borders. Transactions of any kind are based on rational, but limited, contracts due to the limitations and limited information available to the management.

**Opportunism**
The opportunism refers strictly to management and is defined by Williamson as "his own interest in the quirk." Managerial practice of making self-directed decisions is in contradiction with the organization's interests, so these decisions are often suboptimal, inconsistent and unsafe.

Specificity of assets

The organizations tend to specialize and accumulate valuable, expensive, specialized assets (locations, specific equipment, specialized human resources, good-will, etc.) that require high costs. These specific assets cannot be easily transferred to other uses. If these assets are part of a market transaction, an opportunistic behaviour is expected. The more specific the assets, the less the market governance minimizes transaction costs. For example, if a timber supplier invests in specific equipment to meet the requirements of a furniture manufacturer, the manufacturer will in the time put pressure on the purchase price of the timber and the supplier will accept to sell at a price that does not cover all indirect costs. There will be another situation for negotiations if the specific equipment belongs to the manufacturer.

Uncertainty

The uncertainty arises because of the limited rationality and opportunism that make the problems amplified and lead to uncertain transactions. The impossibility of predicting the course of business (of its life cycle) or the uncertainty of the technologies used will lead to more bureaucratic transactions, with many clauses covering as many situations as possible. To eliminate these situations of uncertainty, the organizations tend to internalize their activities.

Frequency or intensity of transactions

The high frequency of transactions leads to the trend of internalization because the transaction cost of the contracts exceeds the cost of bureaucracy within the organization. If there are a small number of players on the market, one of the parties involved in a transaction may have difficulty in disciplining the other parties to the transaction and may alternatively use other players on the market.

Therefore, in a complex and dynamic economic environment, in order to reduce transaction costs, organizations can have two types of behaviours: hierarchical governance and market governance. When the market is disadvantageous, the organization will follow hierarchical governance through internalization or hierarchical decomposition, and when opportunities for economies of scale, goal economy and risk mismatch arise, the organization will follow market governance through outsourcing.

Outsourcing

In order to reduce transaction costs, organizations outsource a number of activities, typically to distributors seeking to achieve their own business goals and not always shared with their organization or management.

Hierarchical decomposition

The bureaucratic hierarchy involves high costs, so reducing hierarchical levels, altering the organization's structure in favour of power delegation and decision-making and motivation leads to the internalization of low-cost activities.

In the figure 1 we synthesize the behaviour of organizations based on transaction cost theory (Williamson, 1985).
Fig. 1. The behaviour of organizations based on transaction cost theory (Williamson, 1985)

The three characteristics of the environment that represent three dimensions of transactions, namely the specificity of assets, frequency and uncertainty, explain which one is preferred by most organizations:
- if the specificity of assets and uncertainty increase, the risk of opportunism increases and the decision will be based on a hierarchical (enterprise based - internalization) governance;
- as the frequency increases, the comparative advantage of using market governance decreases because the costs of hierarchical governance can be amortized over a larger number of transactions.

By comparing the main consequences of internalizing and outsourcing transactions in different situations, the transaction cost theory involves establishing boundaries for the organization as follows:

- Due to the limited rationality, many outsourced contracts with external suppliers may be suboptimal;
- Under conditions of uncertainty, internalization (hierarchical governance) can provide greater protection and more managerial control than outsourcing (market governance);
- When the transaction involves a high specificity of assets, the risks are lower in the internalization situation;
- The outsourcing presents a particular risk in distribution and leads to loss of control;
- If hierarchical decomposition is inefficient, the outsourcing (market governance) can be attractive.

Based on this brief analysis it can be appreciated that:
- Internalization (hierarchical governance) is preferred when:
  - the organization requires greater protection and significant control due to uncertainty, with the help of restricted rationality;
  - the organization has the specificity of assets, which diminishes the risk of managerial control;
  - Through hierarchical decomposition, the organization can resort to internalization with low transaction costs.
- Outsourcing (market governance) is good when:
  - Organizations have signed sub-optimal contracts,
- Organizations suffer from major disadvantages in renegotiating contracts;
- Organizations allow the loss of distribution control
- Hierarchical governance is inefficient.

On a high competitive market and an IT developing environment, the companies are looking to reduce or to save costs by balancing their strategies between insourcing and outsourcing. When are too much integration, the costs, and especially the overheads, have the tendency to increase too much and then, the outsourcing becomes necessary (Doval, 2016). But, adding different perspectives in understanding the company’s behaviour as a complex entity, it cannot be examined only by profit and loss account (Mroczek, 2014).

3. **Using transaction costs in management decision-making**

The literature, creativity and databases are conclusive factors in the decision-making process. Moreover, the most of the management decisions are taken under the influence of external and internal environmental constraints (Negulescu, 2014). However, starting with the transaction cost definition, when the costs increase the decision leads to market governance (outsourcing). Similarly, when the costs of outsourcing increase the decision leads towards internalization and the circle is closed by defining again the transaction costs. The process is dynamic, updated continually, based on the environment changes.

With all the debates and controversies over the last 15 years, the transaction cost theory finds its usefulness in a number of areas of strategic managerial decisions such as: defining the cost of the transaction, outsourcing some activities, and vertical integration of some activities (fig. 2).

1) **Transaction costs definition**

The costs of production factors (materials, labour, etc.) are followed by all organizations, but the analysis of indirect costs and administration is usually neglected.

When the organization builds a competitive advantage and grows, its organizational structure becomes more and more busy and expensive. New functional compartments and new management jobs are being set up.

If, for example, the marketing activity was done by a person, in time a department is created, then a department with problem managers: brand manager, public relations manager, account manager etc. The transaction costs increase not only by the amount of salaries and administrative costs (journeys, phones, computers, cars made available, etc.), but also through managerial control, which becomes cumbersome, with many hierarchical stages.

The decision process slows down and the conditions favourable to opportunism are created. If one of the brand managers develops their labels or packaging design skills, they will create their personal design relationships and will open a door to a specialized firm where they will go on the first occasion where the facilities offered are greater. Also, a company based on personal relationships with an immediate or future personal gain may be selected at the auction to designate the advertiser.

Under these circumstances, the organization itself creates pressure to reduce the cost of the transaction and may lead to the decision to outsource marketing activity. As a rule, organizations do not perceive the importance of transaction cost analyses, but instinctively resort to "cutting" administrative costs.
Fig. 2 Conceptual process of strategic decision-making based on transaction costs

2) Outsourcing some activities

The organization's response to the transaction cost pressure is usually the outsourcing of work with direct consequences on job cuts, redundancies and the reduction of indirect or administrative costs. In the first phase, part of the costs is used to outsource activities, and the other part is cost-saving, with a competitive advantage based on cost. In the next phase there are two major risks:

- Loss of control over outsourced activities (quality and compliance);
- Increase in costs following renegotiation of contracts at higher prices.

The level of advantages and disadvantages depends on the nature of outsourced activities and their strategic importance. Outsourced activities can be:

- of minor importance to the organization's strategy since the loss of control does not influence its future performance (e.g. legal advice, security activities, cleaning, financial and tax consultancy activities);
- of insignificant importance in the short term, as the organization does not have the capabilities necessary to create the competitive advantage and the transfer of control does not significantly affect the organization's current performance (e.g. research-design activities, advertising activities, transport activities, sales, etc.);
- of major importance for the organization's future strategy since loss of control can influence its future performance (for example: giving up its own distribution network in favour of distributor and exporter agreements). Through outsourcing, the organization loses control over consumer satisfaction, resolving complaints, setting up the consumer preferences database, etc., leading in time to increased transaction costs. Than is deciding to internalize some activities.

If the organization has specific assets (equipment, specialized workforce, intellectual property, etc.), outsourcing is not under discussion, especially with regard to the production of goods and services, customer databases, intangible databases, etc. (e.g. aircraft production, banking services, country risk calculation services, etc.).

3) Vertical integration of some activities

Vertical integration can lead to process management through coordinated planning, efficient management and effective managerial control.

As a result of the implementation of advanced technologies and the application of modern management techniques, a reduction in the cost of the transaction through internalization can be obtained, according to Grant's arguments (1995).
Although in the last 30 years outsourcing has expanded as a means of using the competitive market benefits to reduce transaction costs. This reduction can also be achieved by internalizing or vertically integrating activities, but, in conjunction with the development of a flexible system of relationships co-operative type with suppliers of raw materials, materials and long-term services. In this way, the organization is provided with: access to market advantages in purpose and scale economies, as well as flexibility and control over operations within the organization, leading to lower transaction costs.

This system is based on trust in long-term relationships that do not bring high immediate profits and carry a significant risk. Large enterprises with high integration have failed, others have broken down on the value chain to eliminate the risk of bankruptcy.

5. Advantages, disadvantages and limitations of transaction cost theory

Internalization or hierarchical governance and outsourcing or market governance have advantages and disadvantages in organizational and management performance.

- **Internalization or hierarchical governance**
  - ensures the control of operations, activities and strategic capabilities;
  - ensures flexibility of tasks;
  - enables continuous learning and asset development and strategic capabilities.

But, in the same time, there are some disadvantages that consist of:

- large indirect and administrative costs;
- creates conditions for the development of opportunism;
- develops rigidity in organizational culture.

- **Outsourcing or the market governance**
  - economies of scale and purpose;
  - cost flexibility;
  - it develops organization agility and responsiveness to market competition.

Its disadvantages consist of:

- loss of activity control;
- loss of competitiveness.

Regardless of how they are governed (hierarchically or based on market mechanisms), the organizations are performing if they can secure the contour and reduce their transaction costs.

Although much appreciated, quoted and used, the transaction cost theory has a number of limits (Stamper, 2000), of which:

- ignoring the dynamic nature of change;
- it underestimates the importance of decisions based on internal policy and managerial strategy;
- it assumes that the structure of the organization remains unchanged, although the structure is dynamic and changes with the major environmental influences;
- it ignores a number of strategic reasons that are more important than short-term efficiency considerations;
- it does not apply to hybrid organizational structures and network;
- it ignores the flexible specialization that can bring benefits through continuous innovation.
Other authors (Nikolaeva and Pletnev, 2016) concluded that there is a nonlinear interrelation between transaction costs and economic efficiency of an enterprise.

6. Conclusions
Even criticized by several authors, the transaction cost theory is and still remains an analytical tool, quite useful to management for at least two reasons:

- it provides a framework for decision-making on the activities and capabilities that need to be developed within the organization;
- it provides an insight into internal analysis and understanding of the relationships that need to be developed between vendors and distributors.

The transaction cost theory could be a permanent tool for managerial decision-making in many enterprises and an analysis of the implications for the balance between cost reduction and maintenance of activity control.

The flexibility and dynamic nature of organizational structures allow for flexible decisions and switch from outsourcing to internalization and vice versa, but only in a strategic context for creating and maintaining competitive advantage when competitive environment conditions demand. In this respect, the conceptual model of strategic decision-making based on the transaction costs proposed in this paper may be, also, a useful tool for any business.

BIBLIOGRAPHY


