

RECENT THEORIES OF THE FIRM: A CRITICAL APPROACH

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Besides the classical theories of the firms as complete or incomplete contract theories, in the last decades there were developed some new theories bringing new perspectives and approaches. Among these new perspectives we are presenting in this paper the evolutionary theory of the firm, the importance of resources and knowledge, and game theory. According to evolutionary theory the most important element for a firm is the company itself and its specific assets (physical and human). Evolutionist theories, in their diversity, are interested in issues such as the effects of changes in the long run within the firms, in terms of products, processes, decisions, analysis of the determinants of success. Resource and knowledge -based theories try to find a common point between transactions and organizational management analysis, focusing on development issues within companies, the importance of business strategy and achieving competitive advantages. Finally, cooperative game theory sees the firm as a coalition of various parts that compose it, emphasizing the importance of cooperative relations between employees and shareholders, risk sharing and effective collective skills, knowledge and funds using. This paper is part of the doctoral thesis on Integrate perspective on companies sector, coordinated by professor Ph.D. Alina Bădulescu from University of Oradea, Faculty of Economics.

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Introduction

This paper is part of the doctoral thesis on Integrate perspective on companies sector, coordinated by professor Ph.D. Alina Bădulescu from University of Oradea, Faculty of Economics.

In the last decades there were developed some new theories bringing new perspectives and approaches on the firm behaviour, from which we are presenting in this paper the following: the evolutionary theory of the firm, the resources and knowledge-based theory of the firm, and the game theory.

1.The evolutionary theory of the firm

Williamson's contributions and, in particular, his analysis of assets and skills specific of the firm, share common points with the evolutionary theory, which nevertheless distances itself from Williamson's works by choosing a different determining element for the company. Thus, while for Williamson the crucial element in the analysis of the company is the "transaction", for Chandler and other theorists of "firms' evolutionism" the central element is the company and its specific physical and human assets (Chandler, A.D., (1992). Thus, the theory is based on the essential characteristics of the company, i.e. its strategy, structure and organizational capabilities. If the first two are widely known and discussed in literature, organizational capabilities are a relatively new category, as they refer to the managerial availability of a company, arising from *indivisibilities* or uneven rates of development of the various components within the firm and the knowledge, skills and expertise accumulated in the company. Availability, seen as a potential reserve, may practically exist in any area where the firm operates, and according to some authors (Penrose 1959) or (Robertson and Langlois 1995) the generation of new reserve capacities is

continuous: "whenever a new system is functional and procedures become routine, the lack of using management resources appears".

Organizational routines are therefore the cornerstone of organizational capabilities, and one may speak of routines in each of the different functional areas of the organization: in the activity of purchasing, production, distribution, marketing, research and development - and, more importantly, in the coordination of these functions; "Routine is the genetic code of the company, and it carries the information of adaptation, necessary in the fight against competition and for survival" (Clark and Juma 1987).

Robertson and Langlois clarify the relationship between the skills and the routines of a firm, stressing that routines refer to what the firm actually does, while capacity includes what the company could achieve if resources were reallocated; routines influence the behavior of the firm but do not determine completely what could be achieved if the company used resources competently (4).

It can be said that the evolutionary theory starts from the research of Alchian, seen as a Darwinian interpretation of the socio economic environment in which the company operates (Jacobson and Andreosso-O'Callaghan 1996). According to Alchian, the internal organization and functioning of the company are irrelevant, because "the pressure to survive will be that which, on the long run, will dictate how firms will behave on the market" (Alchian 1950) ... and those who have set objectives other than those considered correct and essential (e.g. tracking and maximizing profit), will not survive. Evolutionist in essence, Alchian's theory focuses mainly on results and less on processes, often ignoring the temporal dimension, technical progress being a type of response to market conditions and obviously, an exogenous factor in the economic development of the company (Clark and Juma 1987). Thus, Alchian's theory ignored behavior patterns, attitudes and motivations of firms, reducing them to "adaptive, imitative behavioral of the trial and error type processes, in pursuit of profit" (Alchian 1950).

The most important representative of the evolutionary theory is, however, AD Chandler, both through his research, and through the school he created, by the challenges and openings to other approaches in the economic research on the firm.

In his well-known article entitled *Organizational capabilities and the economic history of the industrial enterprise*, Chandler interpreted, in an evolutionist vision of the company, historical and empirical data collected. Thus, he looks at the case of chemical industry, both in the United Kingdom and in Germany, showing that although the late nineteenth century Britain had all the necessary comparative advantages of market dominance throughout the world for the products of this industry, (including knowledge scientific materials and access to large markets), however, the early twentieth century German companies Bayer, BASF, Hoechst managed to dominate the market and become world leaders.

Chandler's explanation is based on the accent placed on investments in production, distribution and management undertaken by German companies that managed to exploit economies of scale and scope and create a competitive advantage, to offset the British comparative advantage. Furthermore, the model successfully reproduced in other industries and has multiplied by expanding into foreign markets and related industries. Thus "managers of German firms were less concerned to reduce transaction or information-related costs and focused on using the competitive advantages created by the learned coordination routines in the processes of production, distribution, and on the improvement of existing products and processes (Chandler 1992).

Chandler's research emphasizes the role of "continuous learning that stimulates the assets of a company" (Chandler 1992) and offers an explanation of how some companies managed to maintain their position on the market.

For those interested to develop the subjects, more recent papers, such as those of Porter, return to the main features and go deeper into the analysis and comparison between the comparative and the competitive advantages (Porter 1990) or (Porter 2008).

According to the evolutionary approach, companies are organized as "enterprises", being characterized by three main attributes:

- they act strategically, i.e. they choose their own segment on which to compete;
- they look for a strategic advantage not through continuity and long production series aimed at minimizing costs, but through constant innovation of products, processes and of the organization itself
- thirdly, the organization of production is not based on repeating the same operations, but by maintaining organizational flexibility at all levels, the competitive advantage being preserved through continuous learning.

Why the British entrepreneurs did not manage to make the investments necessary to the development of organizational capabilities, in order to be able to compete with German and American companies? The answer is extremely complex, involving considerations of institutional, socio-cultural and historical nature (...), without those investments that would use the advantages of scale economy, the enterprises and industries in which they operated lost the fight even on external markets they had created before. Moreover, without a basis of organizational learning and of specific capacities in production, distribution, research, development, etc, the forces needed in the competition fight could not develop (Chandler 1992).

An interesting contribution to the evolutionary theory was brought by Lazonick, who refers to the "innovative" company, namely the company that adopts a development and innovation strategy even at high costs, since the formation of a new cost structure is an "evolutive process" that, if successful, offers a competitive advantage to the company. The process involves "innovation", creating a quality-cost relation that did not exist previously. Unlike other authors, who focused on organizational flexibility and thus emphasized the advantages of small firms, Lazonick suggested that large firms are more likely to succeed.

Several other researchers (Robertson and Langlois 1994), or (Nelson and Winter 1982) examined the role and importance of routines, and their positive and negative aspects, especially the effect of inertia on the activity of the company. "Routines that prove effective and do not come to the fore can be considered a very important asset of the company, but they may also induce inertia", as it is very difficult for firms to replace them once they were established and proved convenient for employees. "It is important to consider not only the positive aspects of routines, but also their negative role in generating inflexibility or inertia, as well as the capabilities they may generate and that can rise to prohibitive levels the cost of adopting a new technology or of entering new domains" (Robertson and Langlois 1994).

Despite the differences that can be identified among the researchers of the evolutionary school, there are many unifying themes such as the interest for the analysis of a change within firms, not only as regards products, but also in terms of production processes and decision making, the analysis of the determinants of success of a firm or group of companies, etc.

Without denying the role of analysis of actual facts and of scientific conclusions, we believe that evolutionary theory gives too much importance to empirical and inductive approaches, in comparison with other theories of the firm, which makes it difficult to operationalize rigorously.

2. Resources and knowledge in the theory of the firm

This approach tries to find common ground between economic theories centered on the analysis of transactions and those of the organizational management, addressing issues related to the development and limits of companies, the importance of business strategy and the means of obtaining competitive advantages etc..

The theory has many points in common with the evolutionary theory, identifiable in the work of Penrose, entitled *The Theory of the Growth of the Firm*, which approaches issues related to resources, to services offered by resources and to capabilities (Penrose 1959), showing that "unlike resources, capabilities are based on the development, transfer and storage of information by the human capital of the firm " (Muşetescu 2009).

In the concepts put forward by these schools we find a new approach to the link between resources and rents - seen as super-normal rates of profit, and which identified four major types of annuities (Mahoney and Pandian 1992 , quoted by Muşetescu 2009):

- Ricardian rents coming from a limited resource, a patent, a unique location;
- Monopoly rents, coming from governmental barriers, abusive arrangements between companies etc.;
- Entrepreneurial, or schumpeterian rents, which are temporary, generated by risk taking and performance of entrepreneurial anticipations;
- Quasi-rents (marshallian or Pareto-type), specific to a company, by the characteristics and appropriate use (most valuable) of a company's capital.

3.The co-operative game theory

Relatively recent among approaches to the nature of the firm and inspired from the principal agent theories (and not only), Aoki's research develop the co-operative game theory of the firm, which sees the firm as a coalition of various "parties" within it. Thus, the firm can serve as a link in relations of cooperation between employees and shareholders and allows for optimal redistribution of risk and the effective collective use of skills, knowledge and funds (Aoki 1984). Co-operative game theory differs significantly from the managerial approach to the company. While the managerial theory interprets the target of the company as the objective of one of its components, the co-operative theory sees a "set of relations of cooperation", a nexus of co-operative relationships, providing a link between the various units that form the company. The behavior of the firm on the market is a result of this relationship, of the cooperative game also called "organizational equilibrium".

It may be observed that Aoki's theory essentially emphasizes the analysis of internal processes within the company and gives less importance to external environmental forces acting on the company. Thus, to these potential external players, the co-operative game theory has a dual-mode approach. On the one hand, it does not include them in the category of internal "parties" that cooperate in defining one behavior of the firm on the market, but at the same time, it recognizes their important role in influencing the cooperative game solution, here being included financial institutions, capital providers, customers and suppliers, other competitors, and so on. The problem is even more complicated if some employees are also shareholders and / or business customers, situation in which their actions matter to determine the cooperative game solution. Among other forms of criticism raised in relation to this theory, one should not ignore the fact that the theory gives a reduced importance to relationships with customers, and especially it does not take into consideration the role of the entrepreneur in decision making and the activities of the firm.

As being derived from this theory, some researchers speak of non-cooperative game theory (Davies and Lyons 1988), arguing that it is more common and more appropriate in the organizational analysis of the firm, focusing more on how rival firms' strategies and the external environment influences company decisions and market behavior, and less on the nature of domestic coalitions.

According to Rasmusen, differences between a cooperative game and a non-cooperative one is that, in the first case, players can make binding commitments, unlike the non-cooperative game, in which these commitments can not exist. Thus, the co-operative game theory is axiomatic, invokes the paretian optimum, fairness and equity, and the result is more important than strategy, while

the non-cooperative game theory is claimed from a certain form of economic behavior, where solving the problems arising is based on maximizing the utility function of players, in situations of coercion (Rasmusen 2005). In applied economics, the most common use of the co-operative games theory is found in modeling negotiations. Cooperative games allow players to share the gains from cooperation in payments among themselves, outside the conditions prescribed. The distinction between co-operative and non-cooperative games are not in conflict or in the absence of conflict, having to deal with a variety of situations, summarized as follows (Rasmusen 2005):

- cooperative games without conflict. Employees of firms choose equally the tasks they will perform and the way of coordination among these;
- cooperative games with conflict. Bargaining over the price between a monopolist and a monopsonist.
- noncooperative games with conflict. Prisoner's dilemma (see notes)*.
- noncooperative games without conflict. Two companies set standards of creating similar products, without communicating in advance these objectives.

Note: Prisoner's dilemma is a classic example of the game theory, which describes the situation of two suspects that would be punished depending on their collaboration with the police or their solidarity with the other suspect. Prisoner's dilemma is an example of non-cooperative game, but one which may be modeled as a game of cooperation, allowing the two players not only to communicate, but also to establish compulsory commitment (see <http://www.scientia.ro/homo-humanus/51-psihologie/385-dilema-prezonierului-teoria-jocului.html>)

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