FROM TRADITIONAL THEORY OF FIRM TO NEW MICROECONOMICS

Grigore Maria Zenovia

Universitatea Nicolae Titulescu Facultatea de Științe Economice Calea Văcărești nr. 185, Sector 4, București mgrigore@univnt.ro 0726271894

Diamandescu Andrei

Universitatea Nicolae Titulescu Facultatea de Științe Economice Calea Văcărești nr. 185, Sector 4, București dandrei@univnt.ro 0744222007

In the neoclassical model firm, identified with a perfectly rational entrepreneur, is reduced to the function of production and is mechanically adapted to its environment. Reconsidering some hypothesis of this model led to a contractual approach of firm, based upon concepts and results of game theory and information economics.

Contractual theories have as an objective to describe relations of exchange between agents, considering institutional and informational restrictions of their evolution background. The most known contractual theories are: transaction costs theory, which is based on the notion of transaction, positive theory of agency, which analyses divergences of interest between partners in the frame of collaboration and the cost of these conflicts, and theory of property rights which emphasizes the structure of property rights.

Keywords: neoclassical model, adverse selection, moral risk, contractual paradigm

The article's JEL code: D23

1. Firm in neoclassical model

A. Smith suggested since 1776 that following selfish interest of each individual should lead to establishing general interest. He argued that selfishness is not necessarily ill-fated, though the selfish individual is "led by an invisible hand toward an end which is not at all his intention. (...) Following his own interest, often he serves interest of society better than if he initially aimed for it". (A. Smith, 1776).

An essential contribution of neoclassical economics theory is to exploit A. Smith intuition, in a formal frame, using mathematical instruments. This type of formalization has allowed defining hypothesis necessary for the exchange to be a more efficient resource allocation. Neoclassical microeconomics shows that individuals have the interest to participate to exchange and not to remain in a state of autarchy. It reaches the conclusion that only a particular organization of exchange allows maximum resource exploitation, which the society has. This organization is the perfect competition and constitutes, along with the principle of individual rationality, the reference frame of traditional microeconomics.

In neoclassical microeconomics firm is seen as and enterpriser: there is only one will distinguished, of the proprietor – entrepreneur, which will tend to maximize profit by putting forward a product for perfectly informed buyers.

This representation has many trumps and was for a long time pertinent. Small enterprises specific to industrial revolution and even big enterprises of 1930's, in which labour is standardized and hierarchal authority is distinguished, responded well enough to neoclassical model.

This model has the advantage to enable formalization. An essential contribution of neoclassic is to introduce, thanks to marginal calculus, the theoretical possibility of spotting optimal conditions. Through these, the neoclassical model is not only positive, but normative. The producer has to his disposal a powerful analysis instrument which allows him to find conditions of maximizing profit. A great number of management instruments resulted from this formalization: productivity, profitableness threshold, elasticity, outturn scale, experience curve etc.

More, neoclassic model is integrator and allows the passage from individual optimal and collective one.

Neoclassic economics theory has greatly influenced firm theory. To this matter we can bring two arguments. First of all, neoclassic economics theory and developed model on basis of its hypothesis constitutes pertinent points of reference for any development of enterprise concern. Second, more economics thinking schools were based upon this theory. To the purport we can exemplify through Classic School of Organization, represented by first authors who, at the beginning of XX century, developed the basis of organization science (F. W. Taylor, M. Weber, H. Fayol) and Neoclassic School of Organization, inspired by Classic School, though introducing new waves, especially psychosocial (A. P. Sloan, P. Drucker, O. Gelinier, T. Peters, R.H. Waterman etc.)

Neoclassic economic theory was often criticized. First was considered unrealistic, for rarely exists a forum in which all demands and offers to be centralized. In reality, economic agents meet individually, study if the exchange is advantageous and, which case, negotiate the exchange.

The neoclassic model was also criticized for raising the problem of market efficacy without considering the cost of its functioning. The cost of assuring correct information transmission, guaranteeing a good exchange proceeding and so on has two major implications. On one hand, as underlined by R. Coase (1937), economic agents can be interested of using other coordination mechanisms than the market. On the other hand, markets could not be considered perfect coordination instruments, for some desirable exchanges do not take place (when the utility increase is inferior to cost of change).

In spite of such critiques, the matter of a block rejection of neoclassic model is not to be considered. As long as only one of four key hypotheses is reconsidered, its explicatory and normative power remains important. When two or more of these hypotheses are rejected, the coherence and implicitly the operationally degree of neoclassic model have but to suffer from.

2. Contractual approach of firm

First hypothesis of neoclassic model which was reconsidered, without being totally removed, was that of product homogeneity. From the beginning of 1930, E. H. Chamberlin suggested and analysis of monopolist competition, underlining the advantage of differentiating products. Thanks to this, the producer (seen also as an individual) can maximize satisfaction by clientele fidelity and find such a possibility of acting above price and quantity: "each salesman has absolute monopole upon his product, though he is amenable to competition by products more or less substitutable." (E. Chamberlin, 1933).

The individuality hypothesis was also reanalyzed, first by financial approach. Since 1932, A. Berle and G. Means underlined separation of property by enterprise management. In spite of this precocious turn up of organization (governing, in present language) of enterprise, financial theory, which developed a great deal after 1970, remains neoclassic in essence: markets differentiating the portfolio by the aversion towards risk.

Neoclassic analysis is profoundly renewed by removing the hypothesis of perfect information, thanks to game theory. The actor, further an individual strategist and maximiser, decides his behaviour concerning a competition variable (price, enter or exist on or off market etc.) by the information had about future behaviour of others. He can adopt a cooperative or non-cooperative attitude, can fulfil commitments or can cheat. The game theory shows that, in some cases, optimal does not exist, which represents a crucial reconsideration of neoclassic model, because it can appear the case of not being normative.

Another component of neoclassic model which represented an issue is the principle of individuals' rationality. H. Simon (1955) suggests a new concept: that of limited or procedural rationality. This concept has two components. First, information can be imperfect: either has a high price, or is used in particular purposes, or it has an uncertain future that could not be

established probable. In this context, the relation between actors becomes more complicated, developing some cases more or les incorrect, which O. Williamson names in 1991 "unfair dealing": adverse selection or contractual opportunism, after P. Milgrom and J. Roberts (1992) and moral risk or post-contractual opportunism, after same authors. An elementary prudence consists in trying to counteract such deviation of behaviour.

Second, H. Simon argues that the individual can choose a satisfying decision without looking for optimal one. The nuance, apparently secondary, is nevertheless essential. If the individual does not follow maximization, then marginal calculus becomes less adequate and the normative determination of decision becomes more and more difficult. The actor is not any longer considered an individual who determines through the behaviour calculus which brings the best profit, but is considered as opting for first acceptable solution.

On the basis of this new explicative frame, J. G. March and H. A. Simon (1958) and R. M. Cyert and J. H. March (1963) suggested a contractual and enterprise behaviour model as a productive organization. This appears as a coalition of actors which contributes at the well functioning of organization in exchange of a satisfying retribution. The contribution can be of capital, case in which the shareholder will maintain the investment as long as he will consider the profitableness as satisfying. The analysis of R. Marris (1964), which does not explicitly refer to limited rationality, develops a convergent perspective: the shareholder will maintain investment as long as obtained remuneration exceeds the profitableness threshold (under which he sells). Also, the contribution can be of competence (knowledge, know-how etc.). This perspective offers various recent developments: the contribution of stakeholders does not consist in competence per se, but in using it inside the firm. The analysis of contribution which can be brought by various participants at enterprise life can be extent to considering public power attitude, central or local, or economic partners, and clients, respectively.

Management art does not consist in combining on optimal manner the production factors, but to maintain coalition and its capacity of serving clients efficiently (which means better than competition). H. A. Simon and J. G. March insist in management role, and R. M. Cyert and J. G. March (1963) emphasize certain general organization practice (sequence and secret treatment of matters, preference for short deadline, preference for already experimented solution etc.).

This model considers the human functioning of productive organization which is the enterprise. The economists looked to integrate in a more general model, which takes into account the economic efficiency. This depicts what we could name contractual paradigm.

Even though a precise definition of domain covered by contractual theories is difficult, we can nevertheless state that their object is describing exchange relation between agents, considering institutional and informational restriction in which they evolve. Considering also the proportion of such task, the contract theory could not aim, at least in the present time, same degree of generality as general equilibrium theory, for example.

This model has as a basis the notion of contract, which can be explicit (when being the object of a signed document) or implicit, consisting a system of norms of behaviour. In first case, the contract is granted by a third party (e.g. a justice court), or simply by the agents' will of maintaining a good reputation, in the second case, it should perpetuate as a balance between interaction of parties.

We can distinguish more families of models in the frame of contract theory, sending to different economic preoccupation. The most known are: transaction cost theory, property right theory and positive theory of agency.

Transaction cost theory is based upon two hypotheses: limited rationality and individual opportunism. This theory identifies a connection between the nature of transaction (the degree of incertitude of transaction, frequency of transaction and active specificity) and institutional arrangements which will be chosen by individuals: market hierarchy or hybrid form (cooperation between firms). Most efficient organization manners are those which minimize costs of

transaction owed to exchange, costs connected to negotiation, surveillance and contract control. There are three ways of coordination: complementary activities (corresponding to different phases of production process) and similar (which need same knowledge, experience and capacity) will be coordinated through firm, and strictly complementary activities, though unsimilar will be coordinated ex-ante by cooperation agreements and ex-post by market transaction. *Property right theory* has an important part in understanding firm. It is based on the idea that any relation between the economic agents can be considered an exchange of property rights upon some goods. Adepts of this theory consider the existence of well determined property rights is an essential condition of individual initiative. Maximising each individual utility must develop a growth of collective efficacy, and the diverse ways of motivation are influenced my property rights structures (E. Furubotn, S. Pejovich, 1974).

Positive theory of agency represents an integrated theory of organizations, which aim to reuniting two different research trends: research base on market functioning and the one associated with psychology domain, sociology, organizational behaviour, anthropology, biology, having as an objective explaining human behaviour, as well as individually and socially.

If at the beginning the positive theory of agency seemed a financial theory, it rapidly extended to other domains, for proposing new accountancy analysis, management control, and human resources management, management of production or marketing. Positive theory of agency is at the origin of many new theoretical domains such as "corporatist governing". Along with transaction cost theory, positive theory of agency became one of the main "grammars" used in management sciences.

3. Conclusions

For a long time the only economic representation of enterprise was provided by the neoclassic model.

Identified with a perfectly rational entrepreneur, the enterprise is reduced to a technical unity defined by a production function, which tries to efficiently transform the production factors in products and which adapt mechanically to its environment. Reconsidering the majority of hypotheses of this model led to appearance of a contractual approach of the enterprise, named also the new microeconomics.

The new microeconomics considers the perfect competence as an abstract reference, which could not have normative value, because the market operations are unavoidably the subject of transaction cost and imperfect coordination.

The analysis of agents' behaviour in different strategic environments and in the conditions of asymmetry and information imperfection allows understanding systematic sources of inefficacy of market transaction. Loss of resources can be classified in two categories. First results from the problem of coordination of individual decision took in an uncooperative environment (like the Paretian inefficacy of Nash equilibrium). Contrary to Adam Smith intuition, the game theory shows that selfish individual decisions are more often incompatible with collective interest. Second category of resources loss is due to information asymmetry, which raises problems of moral risk and antiselection.

In contractual theories the firm is considered a network of contracts, of policy and agreements between individuals who constitute it (employees, managers, clients, providers, investors etc.).

The results of contractual approach of firm made the object of numerous critiques. A most important critique consists in the fact that contractual theories suppose sophisticated maximising behaviours which lead to signing complex contracts which do not correspond to practice. Majority of results is obtained considering that individuals sign complete contracts which take into account all possibilities of achievement of random events. Except insurance domain, contracts met in real economic life are not as sophisticated as the theory suggests. They do not

solve ex ante all problems which may appear between parts and are neither perfectly incentive, nor optimal.

References:

BERLE A., MEANS G., The Modern Corporation and Private Property, Macmillan, 1932.

CHAMBERLIN E. H., La théorie de la concurrence monopolistique, 1933.

COASE R.H., The Nature of the Firm, Economica, vol. 4, 1937.

CYERT R. M., MARCH J. G., A Behavioral Theory of the Firm, Prentice Hall, Englewood Cliffs.

FURUBOTN E., PEJOVICH S., The Economies of Property Rights, Ballinger, 1974.

MARCH J. G., SIMON H. A., Organization, New York, Wiley, 1953.

SIMON H. A., A Behavioral Model of Rational Choice Quartely Journal of Economics, vol. 69, 1955.

MARRIS R., The Economic Theory of "Managerial" Capitalism, London, Macmillan, 1964.

MILGROM P., ROBERTS J., Economics, Organization and Management, Prentice Hall, 1992.

SMITH A., An Inquiry into the Nature and Causes of the Wealth of Nations, 1776.

WILLIAMSON O. E., Comparative Economic Organization the Analysis of Discrete Structural Alternatives, University of California at Berkeley, 1991.