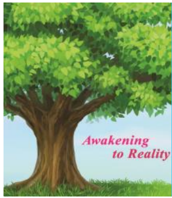

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Organizational Economics Theory: From Theory of Firm of Jensen & Meckling to Business Transactions of Rubin

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ABSTRACT

Organization is a relatively young science in comparison with the other scientific disciplines. (Ivanko, 2013) Accounts of the growth of organizational theory usually start with Taylor and Weber, but, as Scott (1987) mentions, organizations were present in the old civilizations which goes back to Sumerians (5000, BC) and which experiences its maturation phase with Taylor, Fayol and Weber, continuing to come up to present with modern management methods and principles. The modern organization may be the most crucial innovation of the past 100 years and it is a theory which will never complete its evolution as the human being continues to exist. Understanding how organizations work has been the focus of scientists and scholars until the early part of the 20th century. Just as organizations have evolved, so to have the theories explaining them. These theories can be divided into 9 different "schools" of thought (Shafritz, Ott, Jang, 2005): Classical Organization Theory, Neoclassical Organization Theory, Human Resource Theory, or the Organizational Behavior Perspective, Modern Structural Organization Theory, Organizational Economics Theory, Power and Politics Organization Theory, Organizational Culture Theory, Reform Though Changes in Organizational Culture and Theories of Organizations and Environments. This introductory paper will concentrate on the organizational economics theory and is divided as follows: The introduction talks about the developments of the organization and organization theory from its early stages with detailed definitions. In section 2, theoretical roots in other words literature review on the subject will be presented. At further section, by looking at the perspectives of the 6 pioneering people (Jensen & Meckling, Williamson, Barney & Ouchi, and Rubin) main principles of the classical organization theory are presented one by one. Section 4 mentions strengths and weaknesses of the classical organizational theory and section 5 discusses and concludes the paper.

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I. Introduction

Organization theory is not an easy concept. Unless you are naturally interested to the abstract, you probably expect this subject to be dry, unconnected to practical matters and perhaps a little boring. Even if you are interested about abstractions, it can be boring to confront as many of them at one time as organization theory asks you to do. So why would anyone sign up to study this complex and difficult subject matter?

There are many answers to this question. For some, studying organization theory is motivated by curiosity. They want to know what it would be like to think like an organization, to get inside organizing processes far enough to reveal the intricate organizational patterns that make organizations understandable. Others are motivated by the attraction of stretching their minds in new ways. For example, organization theory relies on the sciences, the humanities and the arts, and so presents the intellectual challenge of thinking in interdisciplinary ways. Some turn to organization theory in the hope that it will get better their chances of becoming successful executives in business, government or non-profit organizations. Table lists some of their specific reasons.

Man is intent on describing himself into a web of collectivized patterns. ``Modern man has learned to accommodate himself to a world increasingly organized. The trend toward ever more explicit and consciously drawn relationships is profound and sweeping; it is marked by depth no less than by extension.`` This comment by Seidenberg summarizes the influence of organization in many shapes of human activity.

Some of the reasons for hectic organizational activity are found in the main transitions which revolutionized our society, shifting it from a rural culture, to a culture based on technology, industry, and the city. From these shifts, a way of life occurred and characterized by the proximity and dependency of people on each other. Proximity and dependency, as conditions of social life, harbor the threats of human conflict, capricious antisocial behavior, instability of human relationships, and uncertainty about the nature of the social structure with its concomitant roles.

Of course, these threats to social integrity are still exist to some degree in all societies, ranging from the primitive to the modern.

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Strategy/Finance	Those who want to improve the value of a company need to know how to organize to achieve organizational goals; those who want to monitor and control performance will need to understand how to achieve results by structuring activities and designing organizational processes.
Marketing	Marketers know that to create a successful corporate brand they need to get the organization behind the delivery of its promise; a thorough understanding of what an organization is and how it operates will make their endeavors to align the organization and its brand strategy more feasible and productive.
Information technology	The way information flows through the organization affects work processes and outcomes, so knowing organization theory can help IT specialists identify, understand and serve the organization's informational needs as they design and promote the use of their information systems.
Operations	Value chain management has created a need for operations managers to interconnect their organizing processes with those of suppliers, distributors and customers; organization theory not only supports the technical aspects of operations and systems integration, but explains their socio-cultural aspects as well.
Human resources	Nearly everything HR specialists do from recruiting to compensation has organizational ramifications and hence benefits from knowledge provided by organization theory; organizational development and change are particularly important elements of HR that demand deep knowledge of organizations and organizing, and organization theory can provide content for executive training programs.
Communication	Corporate communication specialists must understand the interpretive processes of organizational stakeholders and need to address the many ways in which different parts of the organization interact with each other and the environment, in order to design communication systems that are effective or to diagnose ways existing systems are misaligned with the organization's needs.

But, these threats become serious when the harmonious functioning of a society acts upon the maintenance of a highly intricate, delicately balanced shape of human collaboration. The civilization we have generated depends on the preservation of a precarious balance. Hence, disrupting forces impinging on this shaky form of collaboration must be prohibited or minimized.

Traditionally organization is seen as a intermediary for accomplishing goals and objectives. While this approach is nifty, it tends to obscure the inner workings and internal aims of organization itself. Another fruitful way of behaving organization is as a mechanism having the ultimate aim of offsetting those forces which undermine human collaboration. In this approach, organization sloping towards to minimize conflict, and to lessen the meaning of individual behavior which deviates from values that the organization has established as worthwhile. Further, organization increases stability in human relationships by decreasing uncertainty regarding the nature of the system's structure and the human roles which are inherent to it. Parallel to this point, organization enhances the predictability of human action, because it limits the number of behavioral alternatives available to an individual. (Scott, 1961)

Furthermore, organization has built-in safeguards. Besides prescribing acceptable shapes of behavior for those who elect to submit to it, organization is also capable to counterbalance the effects of human action which transcends its established ways. Few segments of society have engaged in organizing more strongly than business. The reason is clear. Business depends on what organization offers. Business requires a system of relationships among functions' it requires stability, continuity, and predictability in its internal activities and external contacts. Business also appears to need harmonious relationships between the people and processes which creates it. In other words, a business organization has to be free, relatively, from destructive tendencies which may be caused by divergent interests. (Scott, 1961)

As a main principle for meeting these needs build upon administrative science. A major element of this science is organization theory, which gathers the grounds for management activities in a various number of crucial areas of business endeavor. Organization theory, however, is not a homogeneous science based on generally accepted principles. Different theories of organization have been, are being evolved and continued to be evolving. (Ibid.)

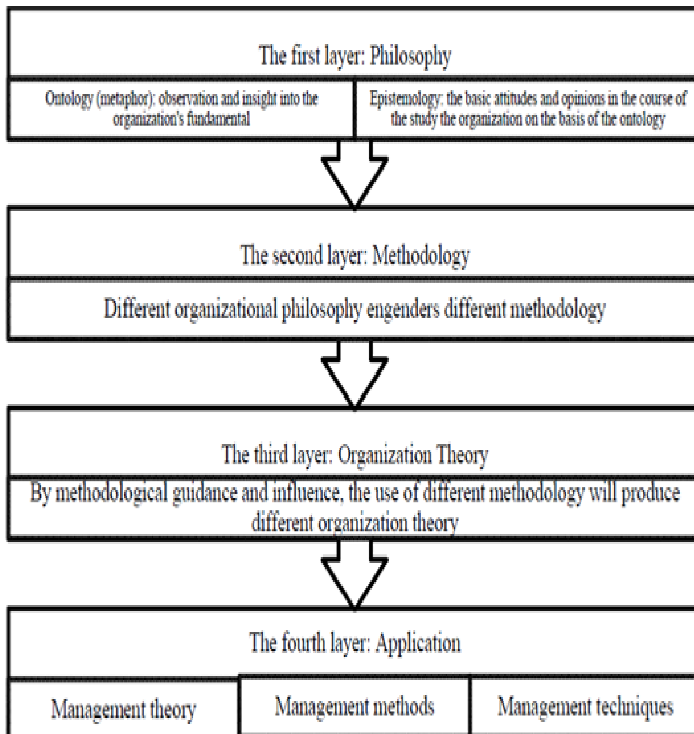
If it is needed to give detailed definition of organization and organization theory; there are various definitions. To start with organizations, organizations are universal phenomena in human social and were explained by March and Simon (1958) as a systems of coordinated action among individuals who differ in the dimensions of interests, preferences and knowledge. Who holding the same philosophy included Arrow (1974), Mintzberg (1979), et cetera. Organizations exist when people interact with one another to implement essential (Daft, 2007), they are social units of people with recognizable boundary to reach certain goals (Robbins, 1990). Organizations are the unities composed of mental activities of member with same goals and technologies and operate in the clear relationship mode (Liu,2007). On rational, natural, and open system perspectives, there are various emphasis in the definitions of organizations. The rational perspective sees an organization with tool which is designed to meet the pre-defined goals; the natural perspective underlines that an organization is a group; and the open system perspective concentrates on that an organization as a self-regulation system and an open system, exchanging with its external environment.

Organization theories comes from organization practices and in turn serve practices. Nicholson explains them as ``a series of academic viewpoints which attempt to explain the multiplicities of organizational structure and operating process (Nicholson, 1995).`` In other words, organization theories are knowledge systems which study and explain organizational structure, function and operation and organizational group behavior and individual behavior (Zhu, 1999).

Complete organization science should include 4 layers: philosophy, methodology, theory and application, and organization theory takes place on the third layer, under the direction of methodology, it builds various management theories, management methods and management techniques by management practices. The relationship of them shows as the following figure:

Furthermore, science of management is a process arise of which goes back to Sumerians (5000, BC) and which experiences its maturation phase with Taylor, Fayol and Weber, going to exist up to present with modern management methods and principles such as, Total Quality Management, Process Management and it is a theory that will never complete its development. On the contrary, to developments and changes in world economy and industry during years before First World War, especially fast economic growth

breaking out in the USA, production techniques used being far away from science interested some scientists. With Industry Revolution happening at the end of 18th c., human abilities, skills and energy were replaced with machines, small scaled employers who couldn't adapt to these changes began to work as workers in enterprising implementing change; and production moved from small locations to big locations (factories). Thus came out with problems regarding management and organization structure (Celik and Dogan, 2011).



Organization is a relatively young science in comparison with the other scientific disciplines. An organization is a system of two or more persons, engaged in cooperative action, trying to reach some purpose. Organizations are bounded systems of structured social interaction featuring authority relations, communication systems, and the use of incentives. Example of organizations includes businesses, hospitals, colleges, retail stores et cetera. (Ivanko, 2013) Accounts of the growth of organizational theory usually start with Taylor and Weber, but, as Scott (1987) mentions, organizations were present in the old civilizations which goes back to Sumerians (5000, BC).

Complex forms of organization were necessiated and did change as families grew into tribes and tribes evolved into nations. The earliest written record, the clay tablets of the Sumerians, recorded division of labor and supervision practices. In Sumerian society, as in various others since then, the wisest and best leaders were thought to be the priests and other religious leaders.

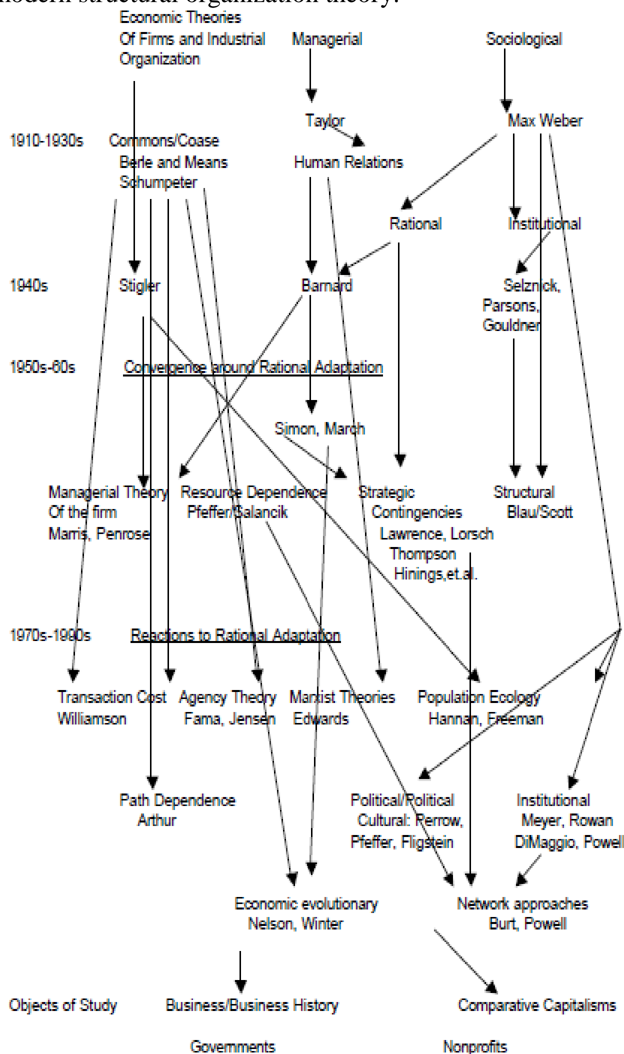
Likewise, the ancient Babylonian cities developed very strict codes, such as the code of Hammurabi. King Nebuchadnezzar used color codes to control production of the hanging gardens and there were weekly and annual reports, norms for productivity, and rewards for piecework. The Egyptians organized their human and their slaves to build cities and pyramids. Construction of one pyramid, around 5000 B.C., required the labor of 100,000 people working for approximately 20 years. Planning, organizing, and controlling were required elements.

China was perfected military organization based on line-and-staff principles and utilized these same principles in the early Chinese dynasties. Confucius wrote parables that offered practical suggestions for public administration. The city-states of ancient Greece were commonwealths, with councils, courts, administrative officials, and boards of generals. Socrates talked about management as a skill different from technical knowledge and experience. Plato wrote about specialization and suggested notions of a healthy republic. Many think the Roman Empire did well also because of the Romans' great ability to organize the military and conquer new lands. Similarly, those sent to govern the far-flung parts of the empire were successful administrators and were able to maintain relationships with the other provinces and the empire as a whole. There are various other ancient examples of organization development, such as Hannibal leading a massive army across the Alps, Alexander the Great building a vast inter-connected empire, and the first emperor of China building the Great Wall. Many of the practices employed today in leading, managing, and administering modern organizations have their origins in antiquity.

	1900		
		1911	Taylor - Scientific Management
Weber - Bureaucracy Model	1922		
		1925	Fayol - Administrative Theory
Mayo - Hawthorne Studies	1933		
		1954	Maslow - Hierarchy of Needs
McGregor - Theory X-Theory Y	1957		
		1957	Tannenbaum-Schmidt – Continuum of Leader Behavior
Simon & March – Organizations	1958		
		1961	Burns & Stalker – Management of Innovation
Blake-Mouton - Managerial Grid	1964		
		1965	Woodward – Industriel organisation
McClelland - Achievement Theory	1965		
		1966	Herzberg - Motivation-Hygiene
Likert - Systems 1-4	1967		
		1967	Fiedler - Contingency Model
Olsson - Management By Objectives	1968		
		1969	Hersey-Blanchard - Situational Leadership
Alderfer – Existence, Relationship and Growth	1972		
		1974	House-Mitchell - Path-Goal
Vroom - Expectancy Theory	1976		
		1980	Hackman & Oldham – Jodesign
Mintzberg – Organizational Design	1981		
		1985	Schein – Organizational Culture
Senge – The Learning Organization	1990		
		1991	Toyota - Lean
Martin – Culture in Organizations	1992		
		1995	Weick – Sensemaking in Organizations
Whetter-Cameron - Empowerment	1995		
		1997	Kotter – Leading Change
Fairholm - Values-Based Leadership	1998		
		1998	Scott – Rational, Natural and Open Systems
Knowledge Society - Kolind	2001		

The Industrial Revolution caused occurence a need for new thinking and the refinement of old thinking. However, modern management theory, as discussed in this paper and applied specifically to organizations, is primarily a phenomenon of the 20th century with new theoretical constructs and practices emerging now in the early 21st century. Taylor, Fayol and Weber, continuing to come up to present with modern management methods and principles. The modern organization may be the most crucial innovation of the past 100 years and it is a theory which will never complete its evolution as the human being continues to exist. Organization theory comes from practice and the evolution of it depends on the evolution of organization practice. The development of productivity causes the development of organization theory. As environments have become more complex, organizations going to be flat-structure, class stratified, network relationship, flexible and fuzzy boundary. The paradigm of organization theory has developed to the complexity one as seen below (Chunxia et. al, 2013).

Understanding how organizations work has been the focus of scientists and scholars until the early part of the 20th century. Just as organizations have evolved, so to have the theories explaining them. These theories can be divided into 9 different "schools" of thought (Shafritz, Ott, Jang, 2005): Classical Organization Theory, Neoclassical Organization Theory, Human Resource Theory, or the Organizational Behavior Perspective, Modern Structural Organization Theory, Organizational Economics Theory, Power and Politics Organization Theory, Organizational Culture Theory, Reform Though Changes in Organizational Culture and Theories of Organizations and Environments. This paper will concentrate on modern structural organization theory.



II. Literature Review

Organizational economics inherits the use of economic logic and methods to understand the existence, nature, design, and performance of organizations, especially managed ones. As Kenneth Arrow (1974: 33) described it, "organizations are a means of achieving the benefits of collective action in situations where the price system fails," thus including not only business firms but also consortia, unions, legislatures, agencies, schools, churches, social movements, and beyond. All organizations, Arrow (1974: 26) explained, share "the need for collective action and the allocation of resources through nonmarket methods," suggesting a range of possible structures and processes for decision making in organizations, including dictatorship, coalitions, committees, and much more. ``

Within Arrow's broad view of the possible purposes and designs of organizations, many other various distinguished economists can be seen as having addressed organizational issues during the first two centuries of the discipline. For example, Adam Smith (1977) famously was dealt about moral hazard and free riding by directors of joint-stock companies, and his pin factory is a discussion of job design. A century after the first publication of Smith's volume, in the first volume, the establishing president of the American Economic Association, Francis Walker (1887), described that differences in the quality of management account for persistent intra-industry differences in productivity and profitability. Frank Knight (1921) argued entrepreneurship and the nature of the firm, which he saw as an institution in which the more uncertainty-averse worked for fixed wages, whereas the entrepreneur bore the risk but had authority over the employees. Berleand Means (1932) explained conflicts of interest arising from the separation of corporate ownership by shareholders from corporate control by top managers. Ronald Coase (1937) came with the question of the boundaries of the firm, arguing that economizing on the costs of transacting would determine what was done in the market versus under hierarchic control.

Herbert Simon (1951) proposed that perhaps the first formal model in organizational economics, treating the employment relationship as the use of authority rather than as contracting in response to uncertainty and the need for adaptation. Edith Penrose (1959) dealt with managerial activities and decision making, organizational routines, and knowledge creation in firms and argued that the sear critical determinants of the success and growth of the firm. Alfred Chandler (1962, 1977) documented the historical emergence of the modern corporation and professional management.

At the edges of economics, there was related work in organizational theory. Chester Barnard (1938) was one of the first contributors, acceptingg\ organizations as a whole systems of collaborative activity and discussing the roles of incentives and authority in the formal and informal aspects of organization. Building on Barnard, the Carnegie School then concentrated on two major issues: bounded rationality and conflict of interests. Simon (1947) and March (1958) asked how the organization can orchestrate the acquisition and communication of information and the allocation of decision making so as to produce a tolerable outcome for the organization when its members are boundedly rational. Cyert and March (1963: 30) offered that "people (i.e., individuals) have goals; collectivities of people do not" and that "since the existence of unresolved conflict is a conspicuous feature of organizations, it is exceedingly difficult to construct a useful positive theory of organizational decision making if we insist on internal goal consistency." Instead, March (1962) described "The Business Firm as a Political Coalition."

Relying on these early developments, Arrow (1964: 397–398) underlined that "the large organization, so prominent on our contemporary social landscape, is of great antiquity .... But it is perhaps only in our era, and even then haltingly, that the rational design of organization has become a subject of inquiry." Around 1970, however, the field began to take off.

Many significant contributions in the 1970s concerned the nature and boundaries of the firm. Oliver Williamson (1971, 1975) offered a theory of the replacement of market dealings by authority in the firm, based on the potential for inefficient haggling when unplanned adaptations are required. In contrast, Armen Alchian and Harold Demsetz (1972) argued against the

idea that the firm is a manifestation of authority, offering instead that the firm was best viewed as a collection of contracts. George Richardson (1972) undercut the simple firm-versus-market dichotomy by accentuating the great variety of organizational forms and relationships between firms that actually populate the economy, and he wrote convincingly of the role of capabilities—information, knowledge, and skills—in determining the effectiveness of activities in and between firms. And Benjamin Klein et al. (1978) and Williamson (1979) explored the consequences of specific assets and hold-up for firms' make-or-buy decisions and contracting between firms.

Other important contributions were concentrated within organizations. Arrow's (1974) beautiful little book addressed topics ranging from authority and codes to responsibility, trust, and values. Richard Nelson and Sydney Winter (1982) wrote in evolutionary terms about organizational routines that enable the organization to do what it does (and hence may convey competitive advantage or its opposite). And Michael Jensen and William Meckling (1976) provided the first treatment of agency costs as a necessary consequence of the separation of ownership from control.

In formal modeling, Jacob Marschak and Roy Radner (1972) proposed optimal communication and decision making processes in uncertain environments with dispersed information but shared objectives. Leonid Hurwicz (1973) came with the concept of incentive compatibility and initiated mechanism-design theory, where the institutions used to allocate resources become a choice variable, thereby setting the stage for economic analysis of organizational design. And James Mirrlees (1975/1999) and Bengt Holmstrom (1979) introduced formal models of moral hazard, launching a literature that would have tremendous influence on organizational economics.

These early contributions laid the foundations for the work that has started to seen in the past 30 years. Extrapolating from this early work suggests a wide range of issues for organizational economics, including the following. What are the vertical boundaries of the organization? How are relations with suppliers and customers organized? Who owns which assets, and how are the activities of the organization financed? How is governance defined and exercised, both internally, within the organization, and by external parties with ownership claims? What are the horizontal boundaries of the firm (i.e., what businesses is it in)? How are departments and divisions defined? How are resources of different types allocated? What is the role of hierarchy, how many levels are there, and what are the spans of control? Is the organization an expression of authority or a nexus of contracts? What are the roles of formal versus relational contracts in the organization? Where does decision making occur in the organization? How is power achieved and exercised, and what role does politics play in organizations? What information is collected, by whom, to whom is it communicated, and how is it used? How are people recruited, trained, and assigned to jobs? How is performance measured? How are people rewarded? What effects do rewards have on behavior? What norms exist regarding behavior toward others in the organization, as well as outsiders, and how do these norms affect behavior and organizational performance? How do other aspects of corporate culture manifest themselves and affect behavior? What is the nature and role of leadership in organizations? And, finally, how do the answers to these questions depend on the markets in which the organization operates; the strategies it adopts to compete; and the social, legal, regulatory, and technological environment in which it is embedded; and how do all these choices interact and affect performance?

III. Major Theorists and Contributions

Michael C. Jensen & William H. Meckling – *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*

Agency theory holds a main role in the corporate governance literature. It explains the fundamental conflict between self-interested managers and owners, when the former have the control of the firm but the latter bear most of the wealth effects. Jensen's and Meckling's (1976) original model illustrates this by describing how lower managerial stakes lead to tremendeous effect in non-pecuniary spending by the managers as they do not fully internalize the costs. Agency problems of this kind create agency costs. A key ingredient in their theory is that outside shareholders cannot costless to observe the managers' actions. While the model makes many restricting assumptions, the results are applicable to a more general setting as shown by the variouss theoretical and empirical articles that have followed Jensen's and Meckling's work.

Jensen's and Meckling's insight has also caused to models, where the ownership structure matters not only in the sense how much the company insiders own, but also in the sense how concentrated the holdings of the outside shareholders are. Large shareholders are argued to monitor the management better than small shareholders as they internalize larger part of the monitoring costs and have sufficient voting power to influence corporate decisions. Moreover, a range of other mechanisms that either align the interests of the managers and owners or limit managerial discretion have been suggested to decline agency costs.

Jensen and Meckling put their discussion in to a more formal context with explicit models on the behavior of the agents. The point in this literature as well as in Jensen's and Meckling's model is that there is a conflict of interest as managers do not bear the full consequences of their actions. It is good to be aware that a long discussion precedes Jensen's and Meckling's work, and for example Alchian and Demsetz (1972) had before analyzed a similar problem of managerial shirking and monitoring. The fundamental advantage of Jensen's and Meckling's approach is its generality, agency relationships are all around us.

The main insight of Jensen and Meckling (1976) was to model the relationship between owners and managers similar to one between a principal and an agent. The owners contract the managers to perform the controlling tasks of a firm, and as both seek to maximize their own utility and are self-interested a conflict of interest arises. As the managers have the effective control of the firm, they have the incentive and the ability to consume benefits at the expense of the owners. Jensen and Meckling explain the costs caused by the divergence of interests between owners and managers as agency costs consisting of 1) the monitoring expenditures by the principal, 2) bonding expenditures by the agent and 3) the residual loss.

Principals' monitoring come arise from activities designed to limit the agents' (from the principals' point of view) harmful actions. Bonding expenditures result from the agents' actions to assure the principals that they will not take certain actions. Despite these monitoring and bonding expenditures by the principals and the agents, there will still be a loss caused by the divergence of the decisions taken by the agents and the decisions that would maximize the

principals' welfare. These decisions by the managers can entail, for example, shirking from work or the consumption of perquisites. This cost created by the agency relationship is explained as the residual loss.The empirical studies mostly refer (implicitly or explicitly) to it, when they argue agency costs.

The starting point for the analysis of agency costs is a firm, whose equity is owned 100 % by the manager. Decisions in which we are interested in this setting not only include pecuniary benefits, but especially non-pecuniary benefits such as having larger office space, more comfortable furniture, making charitable contributions, having a larger secretarial staff than necessary, shirking from work, etc. When the manager owns 100 % of the equity, the optimal amount of both pecuniary and non-pecuniary benefits are reached as she bears all the costs created by these actions. Agency costs enter into the picture, if the owner-manager sells limited liability equity claims on the firm and thus owns less than 100 %. She will then bear only a fraction of the costs on the non-pecuniary benefits paid by the firm. The agency costs are a natural consequence of the utility maximization by self-interested manager. (Jensen and Meckling 1976)

Monitoring by outside shareholders is likely to decrease the costs created by the manager as it limits her discretion, but is unlikely to eliminate them completely. However, the owner-manager cannot escape bearing the ultimate price for the agency costs as she will bear the wealth effects on the value of her equity share, if the market anticipates the agency costs generated by her actions. For the empirical part, the idea that the markets anticipate agency costs is a crucial assumption. Furthermore, the manager then has an incentive to try to limit agency costs. (Jensen and Meckling 1976)

To put the managers behavior and its effect on firm value into a more formal context we need to make a set of restricting assumptions. Jensen and Meckling (1976) present the following list as their permanent assumptions:

1) No taxes
2) No trade credit
3) Outside equity is non-voting
4) No warrants, convertible bonds, complex financial instruments etc. can be issued
5) Outsider owners only gain utility through the wealth effects on the firm
6) Single period world
7) Money wages for the owner-manager held constant
8) There is a single manager with ownership interest in the firm

Furthermore, for the aims of analyzing the effect of outside equity, the size of the firm is fixed, presence of diversifiable risk is ignored and since we are really interested in the residual loss on equity values we also drop the effects of external debt, monitoring and bonding activities. In addition, all of the manager's wealth is tied to the firm. Even though Jensen and Meckling (1976) present a special case in their paper, it shows the conflict between managers and owners well. Naturally, we have left out any effects of the monitoring or the bonding (compensation tied to firm value, etc.) activities gathered by the outside investors or the managers that would help to reduce agency costs. Nevertheless, even if most of the assumptions are loosened, the conflict of interest between owners and managers is relevant as long as the owners cannot observe the managers actions or their consequences completely.

The central point of Jensen's and Meckling's (1976) model is that there is a trade-off in the form of agency costs between having more or less insider ownership. Agency costs are created whenever the manager also controls an outsider's investment besides her own, because there is a main conflict of interest. This is the same conclusion Berle and Means argued already in 1932 by underlying that the separation of ownership and control in large public companies created room for managers to use the wealth of the companies to their own advantage. Jensen and Meckling formulated a theory of ownership structure based on this problem of agency. Because of the conflict of interest between managers and outside shareholders, firm performance is not independent of ownership structure. Jensen's and Meckling's (1976) analysis of agency problems serves as the starting point for the analysis, there are many other further complications to be taken into account

Oliver E. Williamson – *The Economics of Organization: The Transaction Cost Approach*

The existence of transaction cost economics (TCE) in the early 1970s with Oliver Williamson's successful reconciliation of the so called neoclassical approach with Herbert Simon's organizational theory can be taken into account as an important part of the first cognitive turn in economics. The development of TCE until the late 1980s was particularly marked by treating the firm as an avoider of negative frictions, i.e., of transaction costs. However, since the 1990s TCE has been enriched by many other approaches dealing with the role of the firm in creating positive value, e.g., the literature on modularity. Hence, a second cognitive turn has taken place: the firm is no longer only seen as an avoider of negative costs but also as a creator of positive knowledge.

While the term 'transaction costs' appeared in the economic literature relatively late, the notion of 'transaction cost economics' entered into economics even later, that is, in the work of Oliver Williamson from the late 1970s. Before that, the approach starting from Coase's (1937) "The nature of the firm" was explained as *transaction cost reasoning*, *transactional paradigm* or *transaction cost approach*. Surprisingly, even in his now classic papers from the early 1970s Williamson did not use the term 'transaction cost economics'. For Williamson the *transaction cost approach* was at that time outside the domain of mainstream economics, based on the work of Arrow and Debreu.

In *Markets and hierarchies*, Williamson explains his doubts as about the place of *transaction cost reasoning* within economic theory as follows: "Whether such an approach qualifies as economics is problematic" (1975, 248). A few years later he adds: "[...] the origins of transaction cost theory must be sought in influences and motives that lie outside the normal domain of economics" (Williamson 1981b, 1538). In other words, in the economics built on the general equilibrium framework any attempt to incorporate transaction costs into the realm of ME would be treated as a heresy, and the term 'transaction cost economics' would seem an oxymoron.

In the 1970s, however, something had changed in mainstream economics: economic theory started to become more pluralistic again (as it had been in the 1920s and the 1930s). On the one hand, many economists had not been successful in their attempts to build a "whole" economic theory on the general equilibrium framework, e.g., because of the impossibility of formulating the so called micro foundations of macroeconomics—the implication of the

Sonnenschein-Mantel-Debreu theorem (Sent 2006). On the contrast, the introduction of transaction costs into the world of Arrow-Debreu resulted in claims such as that "[...] different social arrangements result in different transaction technologies purely as a result of legal ways of protecting property rights" (Kurz 1974, 4), i.e., that the set of possible transaction opportunities relies on the institutional framework of the economy. Consequently, mainstream economics has been transformed into many other complementary approaches based on game theory, bounded rationality, experimental methods, and last but not least transaction cost reasoning. In the late 1970s putting the term 'transaction cost' together with the word 'economics' became not only possible, but also desirable. The long past of TCE was over, and the history of TCE had begun.

Williamson's PhD dissertation entitled *The economics of discretionary behavior: managerial objectives in a theory of the firm* is situated just at the *intersection of economics and organization*:

[...] although the objective function of the firm was reformulated in favor of realism in motivation, I worked out of a maximization rather than a satisfying setup. The dissertation therefore reflected some of the tensions between behavioral economics and orthodoxy (Williamson 1996, 150).

The research strategy of Oliver Williamson was to benefit the behavioral assumptions of organizational theory combined with the quantitative and marginal analytical framework of neoclassical economics (Allen 1999). The following statement by Williamson from "Hierarchical control and optimum firm size" clearly summarizes his research strategy: The strategy of borrowing behavioral assumptions from the organization theory literature and developing the implications of the behavior observed within the framework of economic analysis would seem to be one which might find application quite generally. Combining these two research areas so as to secure access to the strengths of each would thus appear to be quite promising`` (Williamson 1967, 135).

For Williamson, the theories and concepts of organization theory literature including those of Simon's behavioral economics were in relation with to the analysis of individual decision making and hence had a very microeconomic character. However, the most of organization theory's concepts were explained so broadly that it was nearly impossible to use them in empirical research. It became evident for Williamson that there was a need to translate the behavioral concepts of Carnegie into the language of economics (Simon 1997, 38).

In the late 1960s, Williamson tried to explicate the rationale for vertical integration, but he could not reasoned within the framework of ME. That question is similar to the one posed by Coase in "The nature of the firm", but the answer given by Williamson is slightly different from that of Coase. Although Williamson was deeply convinced that the existence of market exchange costs was significant for describing the existence of firms, "[he] was not persuaded of the possibilities inherent in the transaction cost approach" (Williamson 1990, 117). Then, while preparing a series of seminars on the theory of vertical integration requested by Julius Margolis, he discovered that the reasons for integration lie in the behavioral characteristic of contracting actors and first of all in bounded rationality:

``Bounded rationality is one of them. I don't know if I defined opportunism at the time, but we focused on two critical issues which are close to opportunism, namely limitations associated with promises and the fact that some promises need institutional support`` (Williamson 1990, 118).

In order, the problem of opportunistic behavior combined with that of bounded rationality arising in the situation of bilateral monopoly (small-numbers exchange) and uncertainty occurred as the defining specialities of his analytical framework. To proceed, Williamson translated ideas from organization literature into concepts observable in the functioning of firms and markets: Simonian bounded rationality gave a theoretical foundation for formulating the idea of incomplete contracts and opportunism, and the search theories of Cyert and March (1964)—e.g., myopic search, trial-and-error learning, and local search— enabled Williamson to develop the concept of "feasible foresight". Next, he combined that conceptual framework with the "classical" assumption of neoclassical economics, namely that of cost minimization. The emerging transaction cost economics, here explained also as Williamsonian TCE, followed. The first paper in which he used that framework was "The vertical integration of production: market failure considerations" (1971). Twenty years after its publication he says: "I really feel, at the time when I wrote the paper, that I cracked the problem. This was certainly an obvious exaggeration. But I did have a sense that this reformulation [of concepts] really got to some of the basic issues" (Williamson 1990, 119).

The organizational theory of Carnegie was the introductory attempt within (broadly defined) economics of building a connection between (cognitive) psychology and (old behavioral) economics (Sent 2004, 739- 740). That was possible mainly due to Simon's contribution to the so called cognitive revolution: the successful attempt to bring psychological insights into the realm of economic theory and simultaneously to limit the role of behaviorism. But still, organizational researchers at Carnegie remained quite dissatisfied with mainstream economics. Simon, for instance, left the Carnegie Graduate School of Industrial Administration in the 1970s for the psychology department of the same university, noting: "My economist friends have long since given up on me, consigning me to psychology or some other distant wasteland" (Simon 1991, 385). Sent (2004) even claims that due to its distance from ME the organizational theory of Carnegie had a very bounded impact on economic theory of the 1960s and 1970s; however, the existence of Williamsonian TCE proves the contrary.

There is no doubt that TCE had a vigorous impact on the state of economic theory in the 1970s, and that it is partly responsible for its current plurality. Moreover, there is no doubt that the rise of TCE in the 1970s was only possible due to the Carnegie revolution of the incorporation of psychological concepts into economics. Within that relation, Carnegie, by making the rise of TCE possible, played an important role in transforming ME, and hence the rise of TCE can be treated as the first cognitive turn in economics.

And theory had following assumptions: (Shafritz, Ott, Jang, 2005)

- Explains "a transactional cost occurs when a good or service is transferred across a technologically separable interface".
- "By converting exchange relations into hierarchical sub-elements (for example, by 'making' instead of 'buying' components of the final products), behaviors of transaction partners can be better monitored through direct supervision, auditing, and other organizational control mechanisms".

- “Transaction costs are thereby reduced or at least controlled by the presence of hierarchy”.

Jay B. Barney & William G. Ouchi – *Learning from Organizational Economics*

The theory of organizational economics is a new paradigm that takes place in the field of administrative theory (Barney & Ouchi, 1986). But like any new paradigm, organizational economics has many questions for established management theories. As Donaldson (1990), organizational economics up to the paradox that the administrative relevance is achieved via the criticism of the behavior of managers.

Organizational economics and organizational capabilities or resources are relied on two streams of research contributing to the strategic organization (Argyres, Felin, Foss and Senger, 2009). Donaldson (1990) adds the need to determine the nature and potential of organizational economics with the aim of identifying main key issues and somehow pointing a path for resolution.

The theory of organizational economics deals with the nature of the obstacles to coordination of activities in and between firms. Economics studies organizational tasks of coordination and motivation of human activities in organizations to contribute to the design of forms and arrangements efficient organizational structures. The organizational economics theory deals with the costs and benefits of institutional, organizational and contractual. Also organizational economics identifies organizational alternatives with their costs and benefits. And organizational economics underlines organizational efficiency with implications for the organization of transactions. Because organizational economics plays an unimportant role in the evolution of knowledge management, little emphasis is placed on the costs of activities.

The criticisms of organizational economics are various and some of them very strong considering the impact it has had organizational economics in the general theory of organizations. It criticizes the organizational economics literature that is not supported and acknowledge the significant contributions of traditional management theories.

Perrow (1986:2359) criticism of agency theory and organizational economics generally as dangerous and insidious compared to the critique of other theoretical models of organization. The negative reaction of Perrow's theory is based on agency that thought to be more inclined to favor the main by the agent and therefore is more critical than other economic organizational theories, organizational position may be considered more of political sentiment in this debate.

The discussion of Donaldson (1990) on organizational economics is a systematic critique of the difference from other traditions and calls for further research to understand the wide range of organizational phenomena that can be analyzed. Donaldson (1990) argues that differences in assumptions and scientific methods organizational economics separate from other approaches in organizational research and differences in the assumptions and methods are of conflicts, once settled theoretical integration is possible. Donaldson (1990) criticizes the attributes of the organizational model of the economy that hinder the intellectual discourse and theoretical integration with traditional management theory. Donaldson (1990) cites four attributes differences between the models of organizational economics and traditional management theory and discourse prevent the integration of the two models. These differences in the attributes are different assumptions about human nature and the assumption of opportunism, different levels of analysis used, the theories of motivation used in the many other models and the prescriptive and descriptive of the economy and other organizational different models.

The organizational capabilities approach underlines the theory of organizational diversity and differences of sustainable performance. The organizational capabilities approach has not investigated the organizational forms and governance arrangements relating to the creation of differences in organizational capabilities. Capacity building uses organizational governance issues through the design of structures, forms and organizational arrangements to improve decision-making processes.

Organizational capacity building and resource acquisition are essentially decisions about organizational boundaries implying approaches of transaction costs and property rights. Human capital is an crucial component of organizational capabilities. Jones, George and Kosnik (1989) developed a growth model of the firm that combines elements of organizational economics to the concept of bias and heuristics drawn from research in cognitive psychology (Tversky & Kahneman, 1974). The resulting model proposes that firms can grow and be bigger than traditional organizational economics course with simple self-interest. Additional work that integrates organizational economics approaches of organizational behavior, social psychology, anthropology and related disciplines will be very successful (Barney, 1990).

Future research on organizational economics must develop and articulate the theories and hypothesis that complement derive new hypotheses and theories existing traditional organizational and administrative approaches to create new theoretical - methodological and empirical approaches can support the scope of organizational theory. Organizational economics can make important contributions to management theory only if it enhances their development in variables such as motivation.

The methodological individualist approach motivation and the systems approach for the coordination of team efforts, require research in the processes of integration and synthesis. Barney (1990) suggests that in their understanding of the limitations and potential is encouraged by the analysis of Donaldson (1990) and hoped that the limitations and potential of traditional management theories are encouraged by a careful study of organizational economics.

The organizational economic theory was developed to give greater significance to the role of management in marketing organizations. The organizational economics theories concentrate on the neglected category of the economy as traditional theory of government, which complicates the relationship between academics and administrators. It is difficult to determine a priori the potential contributions of the organizational economic theory, but only until this research paradigm has more conclusions.

Organizational economics concentrates on the compatibility of incentives to investment issues for the production and sharing of knowledge, but neglected the costs of incentives and benefits of the practices of knowledge management. According to Foss and Mahnke (2003), organizational economics proposes three options to provide incentives to employees to investment in firm-specific knowledge, such as high-powered incentives, promotion rules and give access to critical resources. Organizational economics addresses stress with these situations of conflict of interest that are central to the practice of knowledge management. Economic theories that concentrate on

organizational conflict of interest and that are positive by nature live in what is known as credible transactions.

Paul H. Rubin – ***Managing Business Transactions***

- "focuses on the cost of maintaining the principal-agent relationship, how to minimize costs, and the effects of transaction costs on management decisions".
- "First people are self-interested and opportunistic. Second, it is impossible to write complete contracts with take account of any and all possible events and which eliminate all forms of opportunism or cheating".
- "Thus, other mechanisms must be used to minimize agency costs" such as "pre-contractual and post-contractual mechanisms, including adverse selection, the market, the 'use of hostages and credible commitments to support exchange,' strategically selected payment schemes, reputation, and ethics".
- "Because there is a limit to our willingness to reduce our own incomes in order to benefit others (another possible meaning of ethics), there are advantages of structuring transactions in ways which lead us to provide such benefits without harming ourselves" (Shafritz, Ott, Jang, 2005).

IV. Strengths and Weaknesses of the Modern Organizational Theory

Strengths

- Incorporated fields within economics.
- Helped explain that price theory alone does not control behavior.
- Helped spur production by providing additional tools and lenses (such as reducing transaction costs).
- Incorporated behavior into agency theory.
- Assisted in the legal foundation of "who" owns "what" information within an organization (property rights).

Weaknesses

- Complex and often technical.
- Organizational structure and change through the economic lens is very limiting, and is based deeply within reduction of costs.
- Raises ethical/equity issues.

V. Discussion and Conclusion

Explicit assumptions about the knowledge held by entrepreneur-managers and employees have been an integral part of organizational economics since its beginning (Knight, 1921; Coase, 1937). The large body of research in organizational economics, over the last forty years, has overseen assumptions about how well agents and individuals process knowledge (team theory), and what knowledge they possess (contract theory, transaction cost economics), fundamental stage. For example, agency theory does many explicit assumptions in these domains (e.g., shared common priors, common knowledge, specific assumptions about what exactly is asymmetric information). Equilibrium outcomes in terms of contracting, levels of monitoring, and so on are significantly dependent on what exactly is assumed about knowledge in these models. In general, asymmetric information, ignorance about future contingencies, ambiguity concerning contract terms, and the like are invoked to describe imperfect and incomplete contracting, ownership patterns, and incentive design. Thus, organizational economists have never truly "neglected knowledge" or capability.

However, what can rightly be claimed is that, until recently, organizational economics did not pay much attention to organizational heterogeneity; thus, the organization of transactions across governance structures was in focus, but the possibility that various instances of the same governance structure (e.g., firms) in the same industry may organize transactions differently, and with different results, was not looked into (Holmström and Roberts, 1998). Therefore, it is only recently that organizational economists and organizational scholars influenced by organizational economics have systematically started to address the governance of capability and the capability of governance. Of course, as the paper argued, organizational economics already has for several decades pointed to theoretical mechanisms that help endogenize firm-level knowledge, that is, capability. Despite the capability critique that organizational economics proposes homogeneity of such firm-level knowledge, nonetheless scholars increasingly include knowledge-related factors and mechanisms in the study of capability formation.

It is so significant to note that although we argue that organizational economics can significantly develop our understanding of capability formation, they are hardly the entire story. Some areas of organizational economics do make certain and strong assumptions about the cognitive powers of individuals. At least, the formal manifestations of organizational economics (i.e., contract theory) explicitly make the assumption that individuals hold the same, correct, model of the world. These assumptions are built into formal contract theory (i.e., agency theory and property rights theory) via the assumption that payoffs, strategies, the structure of the game, and so on are common knowledge. Bounded rationality is often invoked as a required part of the theory of the firm, particularly by Williamson (1985, 1996). However, most of the contracting problems proposed in the modern theory of the firm require only asymmetric information (Hart, 1990). Indeed, bounded rationality seems until to have served little function beyond justifying the assumption that contracts are incomplete. And yet, bounded rationality may influence economic organization in many other ways, as is increasingly being recognized (Tirole, 2009; Fehr, Hart and Zehnder, 2008; Hart and Moore, 2008). Thus, behavioral economics insights about reference points, ambiguity, loss aversion, etc. are tremendously being brought to bear on contracting. Incorporating them more fully into organizational economics may direct to additional insight into heterogeneity and otherwise allow organizational economists to tackle issues that have often been idea of as the turf of capabilities theorists (e.g., loss aversion may help explaining organizational rigidity). In conclusion, this article invites on scholars to more carefully specify and discuss the relationship between capabilities and governance. Paper offer that it is central to recognize the role that organizational economics can play in helping us understand both capability governance and the comparative factors associated with the governance of capabilities. Finally, encourage theoretical work that elevates the logical integration between organizational economics and capabilities work and avoids semantic debate (Argyres & Felin & Foss and Zinger, 2012).

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