



Conceptualization and application of capability theory

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Abstract

The capability theory offers the conclusions that can be used to: a) make a connection between certain results of economic theory and management, b) demonstrate strategic competences of the manager in the dynamic-competitive environment, c) apply the economics of idiosyncrasy for the purpose of explaining competitive advantages of the firm. However, the capability theory faces difficulties due to the dynamics of the management in the changing business conditions. We have raised the question of the possibility to respond to the mentioned challenges and suggested further development of argumentation based on the capability theory.

Key words: *Capability, Financialization, Theory*

1. CONCEPTUALIZATION OF CAPABILITY THEORY

There are different theories of the firm in economic theory. We are not going to list them here, we have chosen just one theory which allows an insight into micro and macro aspects of economizing, although we are, according to our methodology, going to stay inside of microeconomic framework.

In fact, our choice of the capability theory was made for several reasons.

Firstly, the economic theory is essential for understanding the management practices. Otherwise, economic theory can offer foundations for management understanding: our paper takes that into consideration. The relevance of capability theory lies in it being the bridge between economic theory and management. Apart from that, linking the interests in the economic theory and the interests in management is not evident at all. On the other hand, there were very important economists who emphasized the importance of a manager as a determining figure in the firm. In this way, a prominent economist, Alfred Marshall, in his famous work, discussed about "Managers" of the "firm" to whom "is left a great part of the work of engineering the business and the whole of the work of superintending it"; The "Managers" "open up new and improved methods of business", "exercise (s) a general control over everything, and preserve(s) order and unity in the main plan of business". [1] We will be happy to emphasize the crucial role of Edith Penrose and her

book "*The Theory of Growth of the Firm*". [2] She gave a decisive impetus to orientation in terms of articulating the importance of a firm in economic life based on the resource-based theory of the firm. The firm is treated as the entity for the collection of resources. The far-reaching problems mentioned in her book are more than justified: "The Role of Enterprise and the Competence of Management", "Entrepreneurial versus Managerial Competence", "The Nature of Managerial Limit", "Managerial Services Available for Expansion", etc.

However, in the large part of the economic theory, the importance of the manager is lost especially in the context of the unconditional affirmation of market coordination. In this way, economic theories which operate with a well-known production function, neglect the manager or limit him on the meaningless element in the economic processes. In other words, in different theories, *differentia specifica* of the managerial performance in the firm is lost, or the firm is reduced to the contractual relationship. This way, in different theories, the manager is reduced to the practice of opportunism in the firm. We, naturally, do not dispute the fact that, *in potentia*, there is an opportunism of managers. Moreover, over the last decades, some scandals (Enron, e.g.) have been related to the aforementioned behavior of managers. Different theoreticians in the framework of business ethics have thematized the elements of opportunism, and an intensive critique on the account of the manager was imposed.

However, the role of a manager is not only about (possible) opportunism and general attitude towards opportunism. The role of a manager is relevant in terms of those aspects that are constituent part of the capability theory: endogeneity of innovation, i.e. innovation economics related to the firm, generation of capabilities, and orchestration of those strategies-related operations. In addition, the capability theory is intensely interested in strategic management. The capability theory is interpreted here as a *managerial-strategic theory of the firm*. With the help of capability theory, we can explain an exceptional importance of strategic competences for the firm.

Secondly, the capability theory is the *theory about the firm* (there is another orientation in terms of "capability" [3]). This is significant to point out because the relevant theory can take into account the complex determinations related to the firm's performance in the market economy. The capability theory can be analyzed in the context of "microfoundation of the firm" [4], but the range of this theory is broader because the dynamics of the firm involves both micro and macro aspects. We should also take into account the statements that the effects of the overall economy depend on the firm's performances, that is, on "dynamic capabilities" of firms. The firm is constituted in a rich, multifaceted environment in which there are numerous institutions or institutional rigidities; therefore, the firm is created "by its relations with society more broadly, including the state". [5] Moreover, the firm constitutes micro and macro dimensions in such a way that it is embedded in "broad relations" of the environment. This way, the disciplines, which integrate with economy and law, emphasize that when it comes to the firm, it is impossible to ignore the fact that it is a *legal* entity. The same disciplines also point out that it is important to keep in mind that legal framework is necessary for the "firm" in economic environment which is characterized by diversification (this was emphasized by already mentioned Edith Penrose) and in which new forms of economization occur (conglomerates, etc.). The term "business unit" is coined in this way and it cannot be equated with the firm as a legal-economic entity. Therefore, the capability theory contributes to the theory of the firm in the following way: it relies on the mentioned legal framework. The capability theory can be used for an explanation of the firm as an *organization* ("order and unity of business") that is embedded in wider environment and which it is run by managers. A significant term "managerial capitalism" can be found in Marshall's discussions.

Thirdly, the capability theory can be characterized as an orientation relying on certain heterodox elements of the economic theory. We believe it is important to take into account the same elements that are relevant for *real-specific* analysis of various forms of business activities. It will be enough to emphasize that the mentioned theory is opposed to an attempt to hold absolute principles on market coordination in terms of a firm being subordinated to this type of coordination. Namely, different theories perceive the firm as an expression of

market-related continuity; according to the previously mentioned, the firm is only an extension of the market, a set of contracts, and it can be regarded as an *internal* market that competes within the framework of the *external* market. We believe that the capability theory can efficiently criticize the above-mentioned absolutism which actually denies the autonomy of the firm as an economic entity and makes an unfounded claim about the internal market of the firm.

The heterodox elements that can be found in the capability theory derive from its relationships with heterodox economic theory. An emphasis is placed on the moments such as "fundamental uncertainty" and "animal spirits". *The first* projection puts an emphasis on the structural characteristics of the environment in which the firm and its manager operate. *The second* projection is related to the a-rational power that triggers the manager to perform different activities in an uncertain environment. Both points have been extensively discussed about in different theories and represent the basis for making connection between management and economic theory. [6]

In certain classifications [7] related to the capability theory, the performance of a manager within the framework of "deep uncertainty" is regarded as a framework of "dynamic capability". This is contradictory to the framework of "ordinary capabilities" within which operational tasks are carried out, performance of standard operations without innovation and with elements of imitation is recorded. Here, we will not discuss about the different classifications of capabilities. However, we think that "dynamic capabilities" are of crucial importance for the firm's position; they actually determine the development stages of the firm in today's dynamic environment. Therefore, they are primary capabilities in comparison to the "ordinary capacities". By the virtue of that, a dynamic theory of the firm which outgrows static framework can be imagined. Na osnovu toga se može zamisliti *dinamička* teorija firme koja prevazilazi statičke okvire.

Fourthly, based on the capability theory, we obtain an orientation that is susceptible to:

- a) innovation economics associated with the capabilities,
- b) dynamics of knowledge.

In other words, the relevant theory develops the knowledge-mediated theory of the firm. In that case, the firm is not regarded as a set of market contracts but rather as capabilities that cannot be obtained within the framework of market coordination but are created *endogenously* within the firm itself. The endogeneity of the constitution of knowledge is characterized by the special results of this theory of the firm. We believe that the theorization of knowledge-based firms can be proved by various contemporary, empirical examples. Therefore, capabilities represent the "intangible assets" of firms that cannot be included in the logic of optimization which is applied in many economic theories. It is also important to point out that creation of

capabilities greatly depends on the efforts of a manager. Other terms directly or indirectly referring to capabilities are also used such as "routines", "experience", "skills," or "combination of assets", "enterprise performance" and some theorists even equate capabilities with know-how. If we accept the aforementioned classification between "dynamic" and "ordinary capabilities", than they can be used in different ways. The focus is not on an individual who is not considered to be the basic methodological unit, but the emphasis is placed on interactions between the members of the firm. Capabilities are actually the outcome of *process interactions* between firm members. They represent the inevitable mutual horizon of the firm, the members of the firm assume identity through this horizon. They do not exist as *ex-ante* what they "intend to" in the mentioned interactions and make the invisible potentialities of the firm. Namely, if we regard capabilities as "routines" (which are broadly interpreted in the literature about management), than they should be regarded as "stored potentialities", that is, the firm should be analyzed as a *repository of the potentialities* that can be organized and reorganized by managers. We believe that this enables the application of technology within the firm, which is a standard problem [8] for the economic theory.

Fifthly, the capability theory does not regard companies as units within a homogenized space. It recognizes firms as bearers of asset-specificity, i.e. it affirms the *idiosyncrasy* of the firm and it supports the economics of idiosyncrasy.

The capability theory contributes to the explanation of the differences between the firms in the market. In fact, we focus here on the traditional issue concerning the economic theory, namely, the comparative advantage on the market.

How do certain differences in market performance arise? The capability theory provides a perspective that highlights the dynamics of creating market differences by taking into account the distinctiveness of the firm and incorporation of knowledge in the firm. Joseph Schumpeter provided a dynamic understanding of the competition. However, the capability theory is necessary for understanding the competition on the market as a dynamic creation of differences in terms of innovation, brands, respect of consumers, etc.

A non-reductive evolutionary theory that focuses on selection processes, the phenomenon of replication and the importance of the habits in firm can be used as a fruitful methodological framework for analyzing the firm in modern conditions and for the differentiation processes. The same processes were primarily modeled in biology, but they are also intensively used in academic literature about management. We particularly refer to the term "organizational routines" [9] which, as

the term itself clearly presents, links the dynamics of "routines" to the firm as an organization-unit. "Organizational routines" clearly indicate to the collective horizon of the firm in the market competition and the firm is the location of the selection processes. Organizational routines provide perspectives for such collective horizons as organizational creativity.

The capability theory enables trade-off between individual-creative results of managers and collective horizon of the firm.

2. CHALLENGE FOR THE CAPABILITY THEORY

The capability theory can be treated as the theory of the firm within the "managerial capitalism": now, it confronts with a tendency which is shortly expressed as "finance-led capitalism".

Financialization implies certain phenomena that have characterized the market economy in the last decades and they are associated with the dynamic expansion of various financial operations (for example, the expansion of the derivative trading and the secondary trading). These refer not to technical but far-reaching changes. Naturally, one part of the economic theory has always paid attention to the financial aspects of the firm. Thus, certain economic theories allowed us to connect the "financial frontier" of the firm with the pricing behavior. There are various formalized models of "financialized investment", but the impact of financial motives and operations is now more important than before. Financialization (or "risk valuation of modern finance" [10]) means the transformation and positions of the financial sphere, as well as the change in the relationship between financial categories and other spheres of the economy. According to statistics, there has been an increase in the volume of the financial sector's profits and it is noticeable that the essential characteristic of these processes is the financialization of the non-financial business units. Critically-inclined economists believe that financialization

a) contributes to perpetuating inequality,

b) reduces investment inclination, or, here, the assumption about "finance-growth nexus" is criticized, or the financialization as the engine for growth is subordinated to the critical reflections. Numerous economists with critical intentions even state that the financialization is the causative factor of crisis disorders.

Nonetheless, we are interested in the financialization only in the perspective of capability theory. There is data and evidence that clarify the fact that financialization is not just a macroeconomic phenomenon, and that we must consider the financialization of the firm itself [11] with appropriate managerial implications. Furthermore, it is obvious that, if there is an adverse impact of financialization on the investments, then the capability theory must respond with an aim to re-interpret new meanings of financial constraints and financial environment. By interpreting

* Hodgson, *ibid.*, 47. Hodgson finds it appropriate to criticize understanding of the „routines“ as „behaviour“. It is extremely important to differ routines from behaviour.

the mentioned theory as an articulation of a managerial firm, we have suggested an adequate strategic and operational autonomy of managers in relation to shareholders. We have claimed that this managerial autonomy is essential, for the reason of firm's confrontation with the challenges which arise from the complex and dynamic environment. But, we can't avoid the question: have the conditions of the same autonomy changed in the conditions of financialization?

We particularly refer to the financialized shareholders who set certain requirements for the managers and cause them stress. There are various formalized models that shape changed relationships and power relations between the shareholders and managers. Managers can be seen as entities that realize trade-off between growth of the firm and profitability, and shareholders are primarily interested in the profitability *even at the expense of growth of the firm*. In addition, conflicts of interest between short run and long run must also be considered; it can be proved that extensible financialization is associated with short-termism which subordinates the long-term interests of the firm.

Different interpreters who follow business trends recognized long ago that financial marketing and expansion of financial meanings in the life of the firm led to a transfer of income to shareholders in various forms such as the forms of dividends or stock buybacks, repurchases of stocks (the role of fund managers in accordance with different descriptions has greatly increased, and not accidentally). This is also associated with the practice of the so-called hostile takeover, which also profoundly determined the manager's maneuvering space. Here, we will also give just a quick view of another significant question, such as the decline in the importance of PhD scientists and engineers in corporate laboratories: financially orchestrated marketing has contributed to "putting out of work a large number of PhD scientists and engineers who previously had secure employment and who enjoyed high incomes and benefits as well". [12] This issue is also relevant for the capability theory, as it affects the conditions of building knowledge-based capabilities within the firm.

To sum up, the expansion of the financial frontier has created new constraints and new imperatives for the manager who realizes the coordination of the firm's activities, and creates cohesion in the firm. They face multiple trade-offs: the conditions of firm's performance are determined by the changed positions of shareholders in the sphere of distribution by the intensification of financial risk. The manager must maneuver between the (short horizon of) profit ambitions and the long-term growth/development goals of the firm. Accordingly, the terms of the manager's performance and conditions for his decision autonomy must be reconceptualized. The capability theory is, therefore, multifaceted by financial-mediated marketization:

a) financialization has created an altered context for managerial capabilities that are crucial for the configuration and reconfiguration of various skills and competences related to the development of "organizational routines",

b) the conditions for developing strategic decisions of managers have changed,

c) the dynamics of changed conditions influenced the development of knowledge in the context of financial instability.

3. TWO STEPS TO THE CONCEPTUALIZATION OF THE CAPABILITY THEORY IN THE CONTEXT OF FINANCIALIZATION

We suggest the combination of the capability theory with evolutionary argumentation and evolutionary finance. [13] This is the *first* step in our argumentation. The evolutionary logic has been fruitfully applied over the last decades in relation to the business-framework. We see some other possibilities of the evolutionary logic application, but currently with the cooperation with capability theory.

The said logic related to the evolutionary argumentation takes into account certain aspects that are relevant for the capability theory:

a) describing business from the perspective of continuous changes,

b) there is a complexity of the environment in which business units perform and which cannot be reduced,

c) combination of the individual and collective elements of the firm

d) we are talking about bounded cognitive abilities of economic agents in the context of deep uncertainty,

e) bounded cognitive abilities are combined with such evolutionary-collective aspects as routines, habits,

f) processes such as learning mediated by communication and the processes of dynamic adaptation are acknowledged,

g) the potentials of the firm are determined by its historical paths; thus, the processes of competence building in the past determine the possibilities of the firm in the present; evolutionary argumentation meets with the path-dependent logic.

All these moments are important for the capability theory which is directed towards the articulation of a strategic position of an innovative firm. For example, the capability theory is particularly interested in the learning processes that take place at different levels, from individual to collective level (within teamwork, for example). The manager appears as a constituent agent in the context of evolutionary selection-processes, but now, it is the context of expansion of financial operations. Accordingly, we need the theory which situates the position of the management, but in the changed context where the financialization has become more significant. The evolutionary theory of finance can

articulate pertinent financial instability that characterizes the economic environment from the breaking out of the financial crisis in 2008.

An important element of the changed conditions in which management develops strategic competences is the confrontation with the intensification of financial risk. This is the *second* step. Economic theory recognizes the phenomenon of "risk-transfers", that is, "risk transfers theory". We can describe this as a transfer of financial risk into the *real* risk. [14] To put it simply (and concise), this can be expressed in such a way that the manager develops such processes that increase the utilization of the firm's capacity due to the increased "profit margin"; in other words, the use of the firm's capacity is intensified, although this brings new modes of risk. The manager mediates between the profit-based goals of the shareholders and the (optimal) utilization rate of the capacities of the firm.

The strategic positions of managers are much more complicated than before: the evolution of the firm is not independent from the evolution of its financial operations. The monetized profit of the firm depends on phenomena such as the balance sheet, the relations between the financial inflow and outflow, financial liquidity, leverage and liabilities aspects with the collateral dimensions. Management intensively confronts the "margins of safety"[15] of the firm, with the problem of refinancing of the firm and the forms of liquidity in highly unstable, crisis-ridden and financialized environment. Management must provide financial co-ordination with distribution and growth-based conflicts that we have recognized in the relationship with shareholders.

Management undoubtedly faces a more complex environment than before,[16] which requires a re-conceptualization of its strategic competencies. This implies the necessity of cooperation between the capability theory and evolutionary argumentation which strongly indicates the importance of learning capabilities of managers and companies as well.

The same goes with the concept of risk transfer: it does not ignore the financial aspects, but takes into account the process of coordination between the growth of the firm and the changed configurations of the financial frontier. This way, the reconceptualization of the capability theory (which deeply relies on the notion of knowledge-based firm) is developed in an environment that is determined by the explosion of financial operations.

It is certain than none theoretic reflexion can't offer certain paths regarding the managerial positioning. Maneuvering space of management is determined by plenty of circumstances which arise from the internal and external environment of the firm. In fact, management is now shrunk between the elements of "managerial capitalism" and "finance-led capitalism". Certain elements of managerial capitalism still exist, but they are shaken due to the breach of financialization which creates both micro and macro consequences. The course of further research is drawn on the basis of

managerial positioning in a multidimensional environment which becomes more and more complicated and complex, both locally and globally.

4. CONCLUSION

The capability theory is a relevant theory that offers perspectives for the analyses of a firm's behavior in modern conditions. It takes into consideration the dynamic of the market, but still respects the importance of the managerial role in firms. Still, it has been facing some difficulties due to intensive financialization. Financialization brings a lot of problems for the economization, but we have acted reductively and taken into consideration certain moments. Namely, the financialization processes create:

- a) problems with distribution-processes in the firm,
- b) (long run) growth-related problems for the firm,
- c) intensification of the complexity of the environment where the firm is active unit of the dynamic of market.

However, the said theory has the capacity to transform itself with considerations of

- a) evolutionary argumentation,
- b) the process of "risk transfers" in the context of financialisation.

We bare in mind the theoretic bond between capability theory and evolutionary logic, which allows a comprehensive explanation:

- a) know-how of the firm, on the basis of the dynamic framework for studying of different levels
- b) firm as knowledge and capability based entity,
- c) embeddedness of the entrepreneurship in the firm or the understanding of the firm as a business enterprise.

The cooperation between the capability theory and evolutionary argumentation represents the basis for the analysis of the balance between strategic outputs/competences of the manager and collective

horizons of the firm.

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