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# CONTRACT THEORY OF THE FIRM

**ABSTRACT.** In the present article I examine the largest and most elaborated group of theories of the firm, namely the contract theory of the firm, systemizing and comparing the main ascertainments of each theory. Introducing the development process from the neoclassical theories of economics to the contract theory of the firm, I highlighted the conception of Knight and Coase is made the theories attain its nowadays known form. By analysing classical and modern authors in details my piece of work gives answers to the three big questions of the theory of the firm – what is the cause of the existence of the firms, what determines the boundaries of the firm and what determines the internal structure of the firm according to these theories?

**JEL Classification**: D21, D23, D86,

Keywords: theory, firm, contract, transaction costs, market, hierarchy.

## Introduction

Both in academic and in everyday life we often meet the words: firm, company, enterprise. News is about expansion of multinational firms, the neighbour's son is forming a company, this year's calls for proposals for SMEs has been opened, while the Budapest Transport Company transports millions of passengers. Firm, company and enterprise – we use these words, but do we know their meaning? What are firms? Why have they been established? What do they do? How do they work?

The aim of my work is to examine the answers of the economic literature to these questions. The questions, first asked by Coase in The nature of the firm (1937), are still contentious subjects among economists, though no universal answers have been given so far (Hart-Moore, 2002/1990<sup>1</sup>, p. 14).

The available literature is very extensive: significant economists of every major school have already published their opinions on this subject, several of them has been awarded a Nobel Prize. Moreover, not only economists have dealt with this subject: lawyers consider and examine the firm as a legal entity; sociologists look at the firm from a sociological point of view, psychologists from a psychological point of view (and we could enumerate the areas of science endlessly). Thus there are a great number of viewpoints as well as theories. The area that deals with these questions is the theory of the firm. There is an agreement within the economics profession about the aim of the theory of the firm, which is to examine the effect

<sup>&</sup>lt;sup>1</sup> First publication.

of the behaviour of firms on the allocation and distribution of scarce resources (Archibald, 1993/1987, p. 27), however there is much debate on what can even be considered as theory of the firm.

The new theories were usually critiques of the former theories and/or were developed from the former theories, and from time to time not only the theory itself, but often the frame of the investigation was also changed, making it difficult to draw comparisons between certain ideas. The often-mentioned article of Coase (1993/1937) is based on the work of Knight (1964/1921) and it laid down the basis of the contract theories that were developed only in 1970's. Alchain and Demsetz (1972) criticized and completed the work of Coase. Based on the work of Alchain and Demsetz Williamson (1975) had his own theory published and finally Hart and Moore (2002/1990) used the work of Williamson to build upon their own ideas.

Although handling certain issues with different importance the contract theories are all trying to find the answers to the 'Grand Questions' of the theory of the firm, which were first drawn up by Holmström and Tirole in 1989, but the pioneer work of Coase (1993/1937, pp. 39-40) also focused on the first two questions.

1. What is the cause of the existence of the firms?

The cause of the existence of the firms has to be examined, because the market and the firm exist side by side. Both of them perform transactions; however the market in itself could perform all of the transactions. Then why are there firms?

2. What determines the boundaries of the firm?

This question follows logically from the previous one. If there is 'The' market and there are 'The' firms, all of them performing transactions, then what does it depend on if a transaction is performed on the market or by the firm? Where does the market and where does the firm begin?

3. What determines the internal structure of the firm?

Firms have a varied internal structure. What does it depend on that one firm has a certain internal structure and another one has something different?

# 1. The standard neoclassical price theory

Ever since there is production the economic actors regularly get into contact to exchange different goods. In order to carry out these transactions smoothly certain instruments and institutions are required to enable the coordination of these transactions. There are two fundamental coordinating institutions: the market and the organizations (e.g. the firms). The market uses price while the organizations use their influence to perform the coordination. These two institutions coordinate the transactions together in every economy – 'when, which one and how' mainly depends on the necessary and available information in the given situation.

According to the standard neoclassical theory there is no need for organizational coordination (and consequently for firms), because the market can perform these tasks perfectly. The theory focuses on a single institution, namely the market (Kocsis-Szabó, 2000, p. 65). It is natural thus, that this theory does not give the definition of the firm, and does not give an explanation for the existence of the firm either. It only says that the firm is conscious, rational or decides on a different basis, profit-maximizing, possesses known and given technology and it is an active organization operating among well-defined market forces (Archibald, 1993/1987, p. 27). But it is not only the firm that this theory disregards, but also the entrepreneur itself: 'The theoretical firm is entrepreneurless – the Prince of Denmark has been expunged from the discussion of Hamlet' (Baumol, 1968, p. 66).

So the firm is just there like a robot, programmed for every possibility well in advance, unable to change: it decides rationally on the basis of all necessary information, is profit-maximizing, operates in a static environment and it can be entirely described by its technology, this is why it is natural, that it does not require leadership skills, and under these conditions it is obviously in equilibrium or is seeking the equilibrium.

Thus the decision of the firm is completely rational, no environmental aspects such as competitors, influence it, since the model describes a complete decentralization, where the parties are indifferent towards each other. According to the standard neoclassical theory the decision is determined by the technology and the prices, and so it describes how the price system can control in a decentralized economy (Kapás, 2000a, p. 16). Another fundamental assumption of the theory is that the aim of this rational decision is profit-maximization. As Veblen drafted simply, briefly and effectively: the motive of the business enterprise is profit, its method is sale and purchase. People, who do not intend to increase their assets, do not engage in business activities Veblen (1904/1962, p. 26).

The firm is a pure technological organization, which can perfectly be described by a production function, entirely ignoring the diversity of organizations and behaviours in the given industry, that is to say it assumes a surviving and equally successful firm population. This production function contains the set of possible productions. From these possibilities with perfect information the leader of the firm chooses the production level that generates the maximum profit. Consequently the leader of the firm does not have to be what we know today as an entrepreneur, whose job is to implement new conceptions, to establish a new system of goals and targets, to lead and to inspire the organization. There is obviously no need for this, as the standard neoclassical theory – since the decision maker has all the necessary information – is a collection of optimizing methods (Archibald, 1993/1987, p. 27). And if the decision maker knows the circumstances perfectly and the decision is only a question of calculation, then the decision maker can make optimal decisions. The leader of the firm is a manager in this sense: a person, who is responsible for the present efficiency of the processes. The leader makes the optimal decisions by looking over the available technologies and processes, combining them so that the future output will be adequate. The ability of managing the firm is actually a factor of production, the objective of which is to decrease the costs of combining the other factors into outputs (Kapás, 2000a, p. 4). It considers learning to be a cumulative finding of the already existing information (Hodgson, 2002/1998, p. 54).

In the above-described decision environment, where the information is available free of charge and unrestrictedly, the perfect decision can always be made and the efficient state can always be attained, the firm is always in equilibrium.

The fact that the firm can be described by its production function (also) means that the internal processes of the firm are completely unknown and uninteresting. The firm is a 'black box': it operates to satisfy the limiting conditions of inputs and outputs, maximizing its profits by doing Jensen-Meckling (2008, p. 311). That does not matter how it does it exactly. The theory does not deal with what is going on inside the firm, how the hierarchical structure of the firm is built up, what kind of connection is there between the hierarchical levels and units of the firm, why certain institutional solutions come into general use and why others disappear. And if in course of the analysis some institutions, other than the market appear in neoclassical works they always stay in the background (Kocsis-Szabó, 2000, pp. 65-66).

It can be seen from above that the standard neoclassical price theory is not really a theory of the firm, since it cannot answer to any of the big questions:

- 1. There is no cause of the existence of the firm,
- 2. It considers the boundaries of the firm to be given,
- 3. It considers the internal processes to be uninteresting, to be like a 'black box'.

#### 2. Contract theories of the firm

Although the modern theories of the firm are based upon the above-mentioned theses, the chronology of 'The' theories of the firm begins with the famous article of Coase (1993/1937). In his renowned work Coase focused on the ascertainments of Knight in the first place, establishing the science of the theory of the firm.

The theory of Knight (1921) is not a neoclassical theory, because it is about an uncertain, dynamic, changing world; it is rather some kind of theory of the profit. According to Knight under perfect competition there would be no profit (Székely, 1995, p. 7), because the residue attained by the entrepreneur can only occur if the demand and the supply are unequal. That is to say the profit originates from uncertainty<sup>2</sup>. Primarily the price of raw materials and the production costs mean this uncertainty. Knight thought that every firm is uncertain, and the entrepreneur – who exercises the final control – has to take the consequences and reduce the effects of this uncertainty. So the leader of the firm is responsible for the firm (Knight, 1964/1921, p. 271).

What Pigou added to this was that profit can be considered as an income that is due to the entrepreneur for making his decisions in such uncertainty (Székely, 1995, p. 7).

Knight also contradicts the neoclassical approach saying that the firm cannot be described by a production function. Choosing the combination of the production is one of the most important tasks of the entrepreneur, this is why the entrepreneur has to determine the objectives of the firm. So this new thought, that the firm does not have to produce what it can, but what the consumers need was already drafted in 1921 - it remains a new feature in most industries to this day. However the demands of the consumers change from time to time, and so do the reactions of the competitors, making the economic environment and the adaptation even more uncertain. As a matter of fact the entrepreneurship - according to Knight involves the evolvement of the entrepreneurial judgement. The evolvement of the entrepreneurial judgement is significantly based on the implicit knowledge, and it exists in the individual's mind as such and it is cannot be the subject of a market contract, that is to say there is no market, where the specific knowledge of the entrepreneur can be communicated towards others, for this reason an own firm has to be established to carry out the entrepreneurial perceptions. Therefore the entrepreneur is able to evolve adequate judgements, and trusting them completely he holds out against uncertainties, taking the responsibility for the firm he is entrusted with.

Individuals and groups can produce to the market without establishing a company. If firms are not indispensably important, then why are they established? If organizational coordination is not necessary, then why are there firms? – Coase raised these questions, then answered them: the principal reason for why it is worth to establish a company is that the use of price mechanism has costs (Coase, 1993/1937, p. 39) and these costs are usually higher than if one organization (firm) coordinated them on its own.

According to Coase (1993/1937, p. 419) it is worth keeping the contracts inside the firm (make) until the costs of arranging another transaction inside the firm are equal to the costs of performing the same transaction by exchange on the open market or in another firm (buy). This is one of the reasons why companies do not grow over a certain size and why big companies collapse in time.

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<sup>&</sup>lt;sup>2</sup> The Knightian uncertainty refers to a situation, where adding calculation or numerical probability is not possible: the price of copper or the rate of interest in 20 years... There is no scientific basis according to which any kind of probability could be calculated to these factors (Hodgson, 2002/1998, p. 60). Since entrepreneurs are not able to optimalize, they have to make the best decision they can. First they have to estimate the available individual resources, abilities and competences, secondly missing supplements and thirdly the economic situation have to be estimated (Solt, 2003, p. 115).

The theories of the firm maintained the efficiency analysis frame of the standard neoclassical theory; on the other hand they replaced the unreal assumptions of the model by more real suppositions, so they oppose the completely competitive model to some extent. The more realistic starting point means that an information imperfection and asymmetry is assumed that describe the real world better. In case of imperfect information Pareto efficiency is not ensured, the market is imperfect. These market imperfections mean the cause of the existence of the firm. That is to say the theories of the firm consider the firm to be an efficient answer to the information asymmetry, where the nature of the contract is destined to minimalize the transaction costs of specialized factors of production (Holmström and Tirole, 1989, cited by Kapás, 2000b, p. 10). The contract itself is a provision of limits the supplier of the goods and services has to function within (Coase, 1993/1937, p. 39). Thus the objective is to make an efficient contract so as to decrease the transaction costs.

According to Coase these so-called transaction costs (although he did not use this very expression) may be costs of finding the adequate prices, costs of the negotiation and signing the contract (Coase, 1993/1937, pp. 39-40). Appel enlarged this scope and he talks about costs occurring in any phase of the transaction (Appel-Behr, 1996, pp. 2-3), that is:

- Searching costs: costs of searching the transaction partners.
- Information costs: costs resulting from ceasing the lack of information during interactions.
- Decision costs: costs resulting from the different aims of the parties (e.g. time delay).
- Bargaining costs: costs of negotiations (e.g. lawyer's cost).
- Control costs: costs of controlling the results of the transactions.
- Handling costs: costs of arranging the transactions.
- Adjustment costs: costs of adjusting to the changing conditions.
- Disincentive costs: costs resulting from the opportunist behaviour.
- Execution costs: costs of expired fulfilments and payments.

So the contract theories of the firm are all built on the grounds described earlier being criticized and completed by Coase they are often called post-Coasian theories (Kapás, 1999, p. 824). They can be sorted into two groups: in one of the groups the parties are able to make complete contracts, that is to say they are able to regulate every future condition at the present time, since they enable obtaining the best results possible according to the available information at present. Such theories are:

- The firm as a nexus of treaties Alchian-Demsetzt (1972); Jensen-Meckling (1976) and
- The principal-agent theory *Holmström-Milgrom* (1994).

In the other group the parties are only able to make incomplete contracts, so when making the contract the parties do not foresee every possible outcome of their relation, thus they cannot enter into a contract. If a contract is not complete, the future result of a person's present action depends on the marketability or bargaining power of the given person to such an extent that it cannot be regulated by the original contract (Hart-Moore, 2002/1990, p. 16). In this case the contracts are re-negotiated over and over again. Such theories are:

- The transaction costs theory Williamson (1975, 1985) and
- The property rights theory *Hart-Grossman* (1986); *Hart-Moore* (1995).

### 3. The firm as a nexus of treaties

The contractual relations give the essence of the firm. The precise description of the individual rights determines how the costs and remunerations are divided among the members of the organization (Jensen-Meckling, 2008, pp. 311-312), consequently the firm can be

considered as a set of contracts. The theory does not make a distinction between market and firm-level transactions (like e.g. Coase did 1993/1937, p. 41), because it says that the market and the firm only differ in the nature of the contracts. That is to say the only difference is that inside the firm long-term contracts are made, while on the market shorter terms are more common.

The firm makes contracts with the workers, which include the expected performance and the wages. However of course the workers try to work as less as possible for the given wages, this is why an expert is needed to monitor the expectations laid down in the contract, comparing them with the real performance of the workers. If the expert finds these two to be different he has the right to dismiss the given worker and employ someone else, while he gets the residual income as motivation (and so as not to cheat either). That's how the firm comes into existence the measuring/monitoring can be implemented and the total costs of operation can be as low as possible, ensuring efficiency. As a matter of fact this theory emphasizes those ex post transaction costs (costs of monitoring, measuring), which can be lowered by ex ante statements (Kapás, 2000a, pp. 20-21). Eventually the cause of the existence of the firm is the information asymmetry and the opportunist behaviour of the employees (Alchian-Demsetz, 1972, pp. 775-795). This idea is carried on and is extended by Jensen and Meckling (2008, p. 314), who say that the contractual relations form the essence of the firm, but not only regarding the contracts with the employees, but also with the suppliers, consumers, creditors and so on. In case of all such contracts the problem of agency costs and monitoring exists, irrespectively of whether it is joint production. According to their theory the aim of establishing the firm is to minimalize these agency costs.

The agency costs are as follows:

- The monitoring costs of the principal: the costs of controlling the behaviour of the agent.
- The costs of agency commitment: costs aiming at assuring the principal that the agent will not cause damages to him, or in other case the agent will compensate for the damages.
- The residual costs: losses met by the principal, resulting from the difference between the decisions of the agent and the principal since the agent does not make the same decisions as the principal would have made (Jensen-Meckling, 2008, p. 312).

According to these the firm concept of the nexus of treaties can be made more precise. The firm is a special contractual agreement that solves the efficiency problem by specializing in the property rights and the monitoring function (Kapás, 2000b, p. 23).

## 4. The principal-agent theory

The principal-agent problem is originated from the recognition that in most of the modern companies the owner and the management of the firm are quite often not the same persons. Their relation can be defined by a contract, in which one or more persons (the owner of the firm – principal) hire another person (management of the firm – agent), to pursue a certain activity on behalf /instead of the principal, which include delegating some of the decision-making authority to the agent (Jensen-Meckling, 2008, p. 312). Naturally this leads to different conflicts of interests. Since while the management makes the decisions concerning the firm, the owners obtain most of the profit (unless the management prevent it), moreover the owners cannot control the management in effect, so the management impairs the interests of the owners, in spite of the fact, that they were hired by the owners to represent their interests.

The basis of the conflict of interests is information asymmetry, which originated from the managers knowing more of the firm and how it works, than the owners. So the parties have to make a contract in which the salary system offered by the principal is based on the observable consequences of the agent's actions. That is to say there are certain mechanisms available for the principal that restrain the agent from self-interested efforts. One of them is the capital market, which evaluates the activities of the participating firms (mainly listed on the stock market) 'objectively', so it provides information to the owners to judge the managerial activities; the other one is the manager market, where the managers compete for the leading positions of the most significant firms, so in effect they control each other's performance.

According to this model – though the data of the tasks are not known with full confidence – the principal is able to make such an optimal contract in the zeroth moment that remains optimal all along during the implementation. Thus there is no need for conformity (Foss, 2002/1996, p. 162). However it is easy to realize, that the role of the unexpected in economic life is getting more and more stronger, so conformity is one of the most important factors in case of firms. This logical reasoning leads us to theories of the incomplete contracts.

# 5. The transaction cost theory

The transaction cost theory is usually identified as the theory of the firm of Williamson (1975) based on the ideas of Coase (1937). Williamson's theory represents a branch of the new institutional economics providing microeconomic analysis, which considers the economic organization to be a contractual problem.

Williamson added three new components to the theory of Coase. These three factors explain why transaction costs exist and why a complete contract cannot be made<sup>3</sup>:

- 1. Bounded rationality: limited human ability of foreseeing and solving complicated problems. Problems occur if uncertainty is coupled with bounded rationality, or the managers of the few firms of the industry behave in an opportunist manner (Carlton-Perloff, 2003, p. 32).
- 2. Opportunity: contracting parties follow their self-interest in the first place, so opportunism motivates the parties to evade their treaty engagements. For the sake of the cause they are even ready to cheat, so cautiousness and mistrust are needed between them.
- 3. Asset-specificity: in this model a lot depends on whether a given asset can be used for an alternative purpose without decrease in its value.

Asset-specificity and bounded rationality enable only incomplete contracts, which favour opportunism increasing the transaction costs.<sup>4</sup> Thus it is understandable that Williamson does not assume complete contracts, since in a world of great uncertainty it is too difficult or expensive to make contracts that cover every possible event. Consequently it is quite common that a firm produces for its own purposes even if using the market would be more cost-efficient. The latter will be used principally when uncertainty is smaller or there are many firms on the market (competition), so there is not much chance for opportunist behaviour (Carlton-Perloff, 2003, pp. 32-33). Beside all these the contracting parties build in a defence line, which was already elaborated – though it was not named alike – in the firm as a nexus of treaties theory; its purpose is to offer *ex ante* protection in the contract against *ex post* opportunism.

Williamson found that the existence of firms in case of uncertainty and bounded rationality decreases the costs of the otherwise expensive explicit contracts (Archibald, 1993/1987, p. 28). Consequently the cause of the existence of the firms is that due to

<sup>&</sup>lt;sup>3</sup> See also Hart (2006/1995, pp. 36-42).

<sup>&</sup>lt;sup>4</sup> See also Foss (2002/1996, pp. 163-165).

transaction costs market failures occur, while beside hierarchical coordination it is easier to limit opportunist behaviour.

The contracting parties try to perform their transactions on the market as long as they can, that is until the market transaction means serious costs. So it assumes two extreme coordination mechanisms: the hierarchy and the market, which are distinguished by the nature of the contracts that have different transaction costs. The market cannot imitate the firm, because it cannot apply orders and because it is supported by a completely different contractual right. There are of course several hybrid types between the two extreme coordination structures (e.g. business networks, joint venture, strategic alliances), which are more realistic, than the two extremities: the perfect market and the complete organizational integration. *Table 1* sums up the most important characteristics that distinguish the market and the organization.

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Table I Characteristics	Of the	different	coordination	mechanieme
Table 1. Characteristics	or the	unit	Coordination	meemamsms

Characteristics	Coordination mechanisms					
Characteristics	Market	Hybrid types	Hierarchy			
Division of	Unilateral decision making	Unilateral decision control	Separated decision			
ownership of	and decision control, when	and residual risk-taking and	making, decision			
resources among	residual risk are suffered by	periodic common decision	control and handling of			
transaction parties	the transaction partners	making at the same time	residual risks			
Resource flow	Rare and individual exchange	Periodic partner-specific	Collection of			
among parties	of resources	exchange of resources	specialized resources			
Mutual	Restricted to the contract	Wider: it contains responsibilities and mutual expectations that are not covered by the contract				
expectations of the	Short term, economic	Long term, social				
parties regarding their relation Fixed-te	Fixed-term	Fixed-term (conditioned to attainting the aim) or indefinite duration	Indefinite duration			
Information flow among parties	Restricted to the conditions of the contract (price, quality, etc.)	Greater share of information on a wider spectrum of information				
The main coordination mechanism	Bargain and competition	Negotiation and agreement	Authority and identification			

Source: Own design according to Buzády (2000, p. 27).

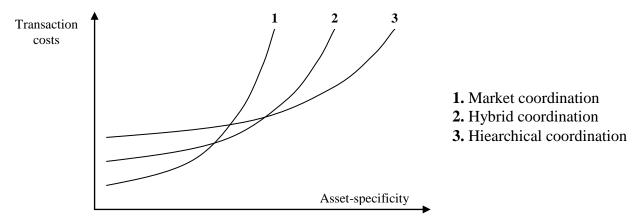


Figure 1. Model of different coordination forms referring to transaction-costs *Source*: Appel-Behr (1996, p. 6).

Figure 1 shows well that the market coordination is efficient in case of low assetspecificity (it is the most inexpensive), because it does not require any coordination infrastructure that is used for the frame of the transactions. As the asset-specificity increases the coordination demand of transactions also increases; its costs in organizations - based on the already developed infrastructure – do not increase to such an extent than in case of market coordination. After a certain level hierarchy proves to be more efficient, because it is able to keep the opportunist behaviour well in hand by using orders, but certain investments are needed to attain this, which are only refunded at a certain level of opportunism. The hybrid coordination types are positioned between the two extremities. In a certain range these types prove to be efficient: at that moment the costs of the transactions on the market exceed the costs of the hybrid coordination types requiring certain infrastructural investments, but the investments of the hierarchical coordination at such a specificity level are too expensive and unnecessary. Consequently the advantages of the coordination types prevail only at a certain level of asset-specificity. In Williamson's (1975) imagination the economic actors have to choose the adequate coordination mechanism on the given asset-specificity level, with that opening the 'black box'.

## 6. The property rights theory

This theory examines the contracts and thus the firm from the aspect of the property rights of the assets. It assumes that one asset can be used by more persons at the same time – some of them possess property rights (employers), while others do not (employees). That is to say the owner of a machine may decide who can work with that machine and who can not; the owner of a building may specify who can enter the building and who can not; the owner of a customer list of an insurance company may decide who can get on the list and who can not (Hart-Moore, 2002/1990, pp. 14-15). Property rights are important in contract theories, because they influence the behaviour of individuals, especially in case of incomplete contracts, as not every property right can be determined in case of incomplete contracts and incomplete information (Kapás, 2000a, p. 32). Let us examine two firms, A and B and assume that firm A buys firm B. The question to be discussed is what does firm A exactly get for its money? The answer is legally unambiguous: firm A becomes the owner of the assets of firm B (Hart, 2006/1995, p. 43), and in this way the firm is the aggregate of the possessed assets (Hart-Moore, 2002/1990, p. 14). The control right over real assets leads us to the concept of the control over the human capital.

There are two known types of the property rights (Grossman-Hart, 1986, p. 692):

- Residual rights of control: the right to decide about any use of the asset, that does not oppose a former contract, practices or laws. That is to say that the possession of the residual rights of control assumes the possession of the assets of the firm, meaning that these rights determine the boundaries of the firm.
- Special control right.

The theory accepts the assumption of Williamson regarding opportunism, and the importance of examination of asset-specificity, but it does not deduce the incomplete nature of contracts only from bounded rationality. Hart says that though the parties may be able to draw up the future consequences in the present, they cannot describe them so thoroughly in a contract that e.g. the court would be able to verify whether the contract was fulfilled (Hart-Moore, 2002/1990, p. 16).

# Summary of the contract theories of the firm

From the 70's the contract theories of the firm integrated the problem of uncertainty, information asymmetry, bounded rationality, opportunism, asset-specificity to their conception, significantly extending the rigid limits of the neoclassical theory. However they kept the – today out-of-date – 'dogmas' of balance and maximalization that led to the formation of new and new theories of the firm.

Table 2. Summary of the contract theories of the firm

	Firm as a nexus of treaties theory	Principal-agent theory	Theory of transaction costs	Property rights theory		
	Efficient answer to the information asymmetry					
The firm	Legal category: set of contracts	Set of resources operated by a special leading skill	Efficient form of managing	The aggregate of assets in common property		
Contract	Com	plete	Incomplete			
Behavioural assumption	Moral hazard, opportunism, maximalization	Opportunism	Bounded rationality, opportunism, maximalization	Opportunism, maximalization		
Central cost	Agent costs: - measuring - commitment - residual	Monitoring, motivation costs	Coordination costs	Transaction costs		
Explanatory factor	Monitoring activity	Motivation system	Asset-specificity	Residual control right		
Authors	Alchian, Demsetzt, Jensen, Meckling	Holmström, Milgrom	Williamson	Hart, Grossman, Moore		
What can it explain the best?						
	Limiting opportunism					
1. Existence of the firm	Implementation of measuring, minimalization of agency costs		Due to transaction costs market failures occur	Formation of residual rights		
2. Boundaries of the firm	Assuming complete contract the boundaries of the firm cannot be run, because not much can be said about the ownership <sup>5</sup>		Changes according to the transaction costs and asset- specificity of the competing mechanisms	According to the possession of the residual rights of control		
3. Structure		Information asymmetry among parties regarding the performance of the organization				

Source: Own conclusions, based on the method by Kapás (2000a, p. 35).

<sup>&</sup>lt;sup>5</sup> See also Foss (2002/1996:163)

#### References

- Alchian, Armen-Demsetz, Harold (1972), Production, information cost, and economic organisation, *American Economic Review*, 62, évf. 5, szám pp. 777-795.
- Appel, Wolfgang-Behr, Rainer (1996), Towards the Theory of Virtual Organizations: A description for their formation and figure, *Arbeitspapiere WI*, Nr. 12/1996, Hrsg.: Lehrstuhl für Allg, BWL und Wirtschaftsinformatik, Johannes Gutenberg-Universität, Mainz, 1996.
- Archibald, George Christopher (1993/1987), *Vállalatelmélet*, in A vállalat és működése (Czakó Erzsébet ed.), AULA Kiadó, Budapest.
- Baumol, William (1968), Entrepreneurship on Economic Theory, *American Economic Review*, 58, no. 2, pp. 64-71.
- Buzády, Zoltán (2000), Stratégiai szövetségek szervezetelméletei, *Vezetéstudomány*, 31, évf. 7-8, szám, pp. 25-43.
- Carlton, Dennis-Perloff, Jeffrey (2003), Modern piacelmélet, Panem, Budapest.
- Coase, Ronald (1993/1937), *A vállalat természete*, in: A vállalat és működése (Czakó Erzsébet ed.), AULA Kiadó, Budapest.
- Foss, Nicolai (2002/1996), Vállalatok, nem teljes szerződések és a szervezeti tanulás, in Vállalatelméleti szöveggyűjtemény (Chikán Attila ed.), Aula Kiadó, Budapest.
- Grossman, Sanford-Hart, Oliver (1986), The Costs and Benefits of Ownership: A Theory of Vertical Integration, *Journal of Political Economy*, vol. 94, pp. 691-719.
- Hámori, Balázs-Kapás, Judit (2002), *Merre tovább a vállalatelméletben?* Egy lehetséges fejlődési út. Competitio, I, évf. 1, szám, pp. 13-26.
- Hart, Oliver-Moore, John (2002/1990), *Tulajdonosi jogok és a vállalat természete*, in: Vállalatelméleti szöveggyűjtemény (Chikán, Attila ed.), Aula Kiadó, Budapest.
- Hart, Oliver (2006/1995), *Vállalatok, szerződések és tőkeszerkezet*, Nemzeti Tankönyvkiadó, Budapest.
- Hodgson, Geoffry (2002/1998), *Evolúciós és kompetencia alapú vállalatelméletek*, in: Vállalatelméleti szöveggyűjtemény (szerk.: Chikán, Attila), Aula Kiadó, Budapest.
- Hodgson, Geoffry (2007), What is a Firm? And why this question has to be answered rather than ignored, Analyse(s) et transformation(s) de la firme: confrontation entre économistes, gestionnaires et juristes című konferencia. Université Lumière Lyon 2, 2007, november 22–23.
- Holmström, Bengt-Tirole, Jean (1989), *The theory of the firm*, in: Handbook of Industrial Organisation (Schmalensee, Richard-Willig, Robert ed.), Vol. 1, North-Holland, Amsterdam.
- Jensen, Michael-Meckling, William (2008/1976), *A vállalat elmélete: menedzseri viselkedés, ügynöki költség és tulajdonosi struktúra*, in: Tulajdonosok és menedzserek: A vállalatirányítás természete (Kiss Zsófia, Nagy Eszter, Tranker Bea ed.), Alinea Kiadó, Budapest.
- Kapás, Judit (1999), Szükséges-e többdimenziós vállalatelmélet? Az evolúciós vállalatelmélet kritikai összefoglalása, *Közgazdasági Szemle*, 46, évf. 10, szám, pp. 823–841.
- Kapás, Judit (2000a), *A vállalatelméletek általánosítása: többdimenziós vállalatelmélet*, Doktori disszertáció, Miskolci Egyetem.
- Kapás, Judit (2000b), A tranzakciós költségek tana a vállalatelméletben: Összefoglalás, kritika és új megközelítések, *Vezetéstudomány*, 31, évf. 7-8, szám, pp. 10-24.
- Knight, Frank (1964/1921), Risk, uncertainty and profit, Kelley, New York.
- Kocsis, Éva-Szabó, Katalin (2000), *A posztmodern vállalat: Tanulás és hálózatosodás az új gazdaságban*, Oktatási Minisztérium, Budapest.

- Solt, Katalin (2003), *Gondolatok az evolúciós közgazdaságtanról és a vállalatelméletről*, in: Evolúció és közgazdaságtan (Meyer Dietmar, Solt Katalin ed.), SZIE, Győr.
- Székely, Csaba (1995), Vállalkozás menedzsment, Egyetemi jegyzet, GATE, Gödöllő.
- Tirole, Jean (2003), The theory of industrial organization, The MIT Press, Cambridge, US.
- Veblen, Thorstein (1904/1962), *Az üzleti vállalkozás elmélete*, Közgazdasági és Jogi Kiadó, Budapest.
- Williamson, Oliver (1975), Markets and hierarchies: analysis and antitrust implications, The Free Press, New York.
- Williamson, Oliver (1985), *The economic institutions of capitalism*, The Free Press, New York.