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Multinational Corporations and Transaction Costs

TAMARA TODOROVA



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Tamara Todorova

American University in Bulgaria, Bulgaria

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Author: *Tamara Todorova*

Department of Economics, American University in Bulgaria,
Bulgaria.

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Preface

This book is a study of the multinational corporation from the transaction cost perspective. The firm is a system of administrative relationships based on a nexus of contracts and the strong interdependence of specific assets. The firm substitutes the market mechanism when, in view of resource allocation and the existing transaction costs, it is a more costly instrument than the entrepreneur with his coordinating role. Using the theory advanced by Ronald Coase and Oliver Williamson we investigate some key features of the multinational corporation. We analyze the role of technology for the emergence of multinationals. This emergence is predetermined by scientific discoveries and technological innovations which shorten the geographic distances among economic resources in the world and allow cutting on organizational costs within the firm. The multinational firm is a complex hierarchical structure dispersed in many countries and aimed at replacing the international market in the allocation of global resources.

The firm performs this task at less cost than the market. The more costly the different regional or national markets in which multinational firms operate, the greater the advantage of the bureaucracy, the more centralized the company and the lower the autonomy of the subsidiaries.

Some further findings are that there are specific risks for multinationals in their operations in the global market since there are various market failures present. Firms overcome those by internal organization, horizontal and vertical integration. Through intrafirm trade and transfer prices companies manage to capture externalities becoming thus a cheaper instrument of resource allocation than the market. The international division of labor transforms into intrafirm division, market pricing turns into transfer prices and the technological transfer turns into intrafirm exchange of technological knowledge and innovations.

Multinational firms are faced with transactional and behavioral opportunism in Eastern Europe, both from employees and contractual partners in market dealings. Multinationals have difficulty finding skillful management with western education and experience in the tradition and practices of the market economy. This hinders the role of management in substituting the market mechanism. Additional sources of risk and instability for multinational corporations in the region of Eastern Europe are the underdeveloped capital market, macroeconomic instability, consistent corruption and crime, political risks, lack of property right enforcement, etc.

T. Todorova
June 8, 2020

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Introduction

Without any doubt multinational corporations (MNCs) play a key role in the globalization of the world economy. In the era of interdependence, they become a major actor in the world economic system, a key factor for bringing national economies together, bridging their borders economically and overcoming long geographic distances. The very globalization could be viewed as a process of surmounting the economic isolation of countries and their gradual integration in the global economy. Globalization owes much of its scale to the MNCs which expand and become primary agents of the cross-border transfer of goods, capitals, technologies, and human capital. As a driving force of the process of globalization MNCs create in the world economy large integrated production systems aimed at the optimal allocation and usage of the factors of production. Not knowing the economic essence of contemporary MNCs makes us uncertain about the prospects and future of the global economic system. With

the ongoing globalization it is no longer possible to understand the economic linkages and the trade that takes place in the world, without knowing the behavior of big international firms. They practically carry out much of the global trade, concentrating substantive market, production, technological and capital power. In short, MNCs play a primary, indisputable role in the world economy.

The immense importance of MNCs necessitates their thorough analysis and disentangling the research problem of their economic essence. The recent trends in the global economy make it pressing to study the nature, causes and mechanisms of operation of the contemporary MNC. Multiple theories study the MNC from the perspective of international economics, international management, or international business but few of them border fundamental economic theory. Even fewer are the attempts in these fragmented theories to explain the nature and specific traits of the MNC by means of standard microeconomic analysis. Given their growing importance, it becomes vital to create a comprehensive economic model of the MNC, which answers the questions why and how these large companies emerge, how they operate in the global market, and how they interact with the individual regional markets.

It seems like issues such as why and how MNCs evolve, by what mechanisms they function, what is their true potential remain of less importance to the academic community than the results and effects of their activities on the world economy. The number of scholars busying themselves with the theoretical essence of the contemporary global corporation is surprisingly small, to name a few.

At the same time knowing the exact mechanism by which MNCs operate allows predicting with great precision the impact they have on the global economic system, the regional or national markets. Predicting the effects of their activities cannot be based solely on random guessing or

probabilities but requires a more detailed knowledge of the nature and peculiarities of the multinational firm. A suitable instrument of studying the phenomenon of MNC is Ronald Coase's theory of the nature and size of the firm. The postulates of this theory find proof in contemporary multinationals operating as sizable firms in widely dispersed markets. With its giant size the MNC is the most extreme illustration of the laws formulated by Coase (1937) in his theory of the firm. The theory allows to thoroughly study the global firm in its interaction with the world market, putting resource allocation on a global scale and a level much more significant than the national market. Transaction cost theory and substitution at the margin between the market and the administrative form of economic organization are the right plane for studying the nature of MNCs and explaining the reasons for their emergence and complex operations using the instruments of contemporary economic analysis.

Studying MNCs is relevant to developing countries which need fresh capital. This need is evident despite the various theories in support of or against foreign direct investment (FDI), the fear of losing national sovereignty, the fear of environmental pollution or other. It is crucial to know how MNCs operate in order to determine their effect on the local economy. The purpose of this book is to apply the fundamental theory of transaction costs to the MNC by formulating a model of this organizational form. The subject of research is MNC's structure, its investment decisions, market behavior, etc. The scope of the book includes:

- Clarifying the economic essence of the firm within the framework of transaction cost theory and the choice between the market and bureaucracy as two alternative ways of distributing economic resources.
- Revealing the diverse character of transaction costs in economic reality.

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- Defining different types of markets and market structures based on the different levels of transaction costs.
- Formulating a transaction cost model of the MNC explaining its character while following the two approaches, the market and the administrative mode of allocating global economic resources.

The book is based on a number of scholarly works, information bulletins by world organizations focused on MNCs, empirical studies of MNC's activities, MNC reports, etc. It is very readable and friendly to non-experts in the field of MNCs, the theory of the firm, foreign investment, or international trade. Chapter 1 discusses the transaction cost aspects of the firm in general terms. Chapter 2 seeks the transaction cost dimensions of contemporary MNCs trying to delineate a transaction cost model of the multinational firm. Chapter 3 is a brief discussion of the role that MNCs play in the process of transition of former socialist countries and some transactional risks and failures in their stepping in those markets. The motivation for this last chapter is the fact that the author is a transitional economist coming from Eastern Europe.

1

The firm from a transaction cost perspective

Some general remarks

Standard economic theory describes the firm as an organization which transforms different inputs into a final output. Contemporary economists are concerned with why there are firms, what is their *raison d'être*, and which factors affect firm activity. Until the early 1980s the firm was not sufficiently studied as part of economic reality (Hahn, 1981). Ronald Coase's theory of transaction costs is undoubtedly the greatest contribution to the study of the firm. Coase (1937) provides the most comprehensive setting for analyzing the firm as an element of the economic system, accounting for the interaction between the two.¹ To define the reasons for firms to exist and the functions they perform he introduces the concept of transaction costs as the costs of

¹ Ronald Coase is a Nobel Prize winner in economics in 1991 and has taught law and economics at the Chicago School of Law. He was an honorary member of the American Academy of Arts and the British Academy.

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using the market mechanism or the costs of organizing a transaction through open market exchange or simply some marketing costs (Coase, 1988).

The word “transaction” originates from the Latin “transactio” which has a dual connotation and can be interpreted as a single commercial operation, a business deal, on the one hand, and a contract, agreement under mutual compromise, on the other (Wallace & Flynn, 1984). This dual character of the word “transaction” describes well the circumstances which give rise to transaction costs. They arise in commercial operations and are inevitably related to the complex and strenuous process of contracting between the two parties. Specialized business dictionaries define transaction costs as “legal and other expenses incurred in the course of business dealing” (Wallace & Flynn, 1984).

Dahlman (1979, p.148) defines transaction costs as “search and information costs, bargaining and decision costs, policing and enforcement costs.” It is hard to picture the functioning of the economic system without the concept of transaction costs. In his revolutionary article “The Nature of the Firm” Coase (1937) assumes that it is possible to organize production in an utterly decentralized way through contracts among individuals but the fact that there is a cost to such market transactions implies that transacting will take place within firms when it is less costly than organizing it through market exchange.

Thus, Coase assumes that firms exist in order to internalize market operations and take over the functions of the market when it pays to do so, that is, when the costs of internal operation are lower than those of free market exchange. Coase sets the boundaries of the firm where the costs of organizing a transaction equal those of organizing it through the market while the ratio of the two types of costs determines what the firm buys, produces, or sells. This dependence is of primary importance for large firms which

achieve substantive economies of scale, operate in multiple markets and are particularly suited for transaction cost analysis.

The neoclassical view assumes that the economic system can regulate itself and there is no single central mechanism or entity which coordinates or controls its functions. In all aspects of human activity relevant to satisfying human needs demand follows supply while production follows consumption, a process which Sir Arthur Salter calls “automatic, elastic and reciprocal” (Salter, 1921, p. 16). Economists base this process on the price mechanism which allocates resources in the economic system. For instance, factor *A* moves from place *X* to place *Y* to the point where its price is higher in *Y* than it is in *X*. This movement of factor *A* continues until the prices in the two markets become equal. Prices move production factors in the economic system maintaining it in equilibrium. Prices are the mechanism by which the market allocates resources and determines the volume and structure of production. In effect, this principle is rarely followed. If a worker is moved from department *X* to department *Y* it is not because the price of his labor rose in the second department but because he is ordered to do so. Outside the firm price fluctuations guide production by series of market exchange operations at given price levels. Within the firm these market transactions disappear, and the place of the complicated, uncontrolled and automatic market structure is taken by the coordinating and conscious operations of the entrepreneur. This intentional human activity turns firms into living organisms, which Robertson (1923, p.85) compares to “islands of conscious power in this ocean of unconscious cooperation like lumps of butter coagulating in a pail of buttermilk.” Outside the firm prices drive resource allocation through market exchange. Within the boundaries of the firm these market transactions are absent, and allocation is done by administrative decision

making. In his capacity of a firm owner the entrepreneur manages inputs and coordinates production, that is, allocates resources internally.

It is logical then to conclude that these are two alternative ways of organizing production, one being chaotic and random, while the other resulting from the conscious human actions and administered decisions. While the first one, the market mechanism, is based on exchange, equity and mutual benefit for both transaction parties, the second one, that of firm structure, is peculiar. The employer-employee relationship is often based on hierarchy, with the supremacy of the employer. Although this relationship reveals some interdependence and there is power delegation from the executive to the worker levels, the worker is often inferior to the employer and the two parties hardly benefit equally in the contractual relationship. The benefit is unevenly shared in favor of the manager-entrepreneur who sets the terms of the employment contract, the price of labor and its use. The firm is more of a compact, orderly structure based on hierarchy. Some firms are strictly organized along obedience, centralism, and the superiority of one individual over another. Yet, some other firms are truly democratic, decentralized and less focused on obedience and hierarchy. Why are there both types of firms in the competitive environment and what factors shaped their character? Why do both types exist in the economic system and why does the organization of production take place within the firm and not through bilateral contracts concluded on the free market where every individual could offer the product of his labor to some other individual on equal grounds. Coase poses this same question and stresses that it is important to understand why in one case resource allocation is left to the price mechanism while in the other it is the task of the entrepreneur. The purpose of his analysis is:

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“to bridge what appears to be a gap in economic theory between the assumption... that resources are allocated by means of the price mechanism and the assumption... that this allocation is dependent on the entrepreneur-coordinator” (Coase, 1937, p.389).

The reason for the existence of firms seems to be the fact that there is a price to pay, some costs to using the price mechanism. The most obvious costs of organizing production through the price mechanism are those of researching the various prices of resources on the market and finding information about the price levels.² The cost of price search could be reduced substantially by hiring a consultant who could provide the information but cannot be eliminated fully. The costs of using the price mechanism are also those of leading negotiations and concluding a contract along every single transaction through the market. These costs can be reduced significantly by use of standard, formal long-term or continuous contracts but can hardly be avoided completely. Finally, there are costs of enforcing the concluded contract and the need to protect the interests of one party in case of breach by the other party. It is possible again to limit the size of those costs by hiring a lawyer to defend the affected party.

All the costs of market exchange arise for all participants in the process of bargaining. At the same time, similar costs arise within the firm, too. The costs of open market transactions decrease if one transaction substitutes for a series of transactions. But this gives rise to a new cost category – the costs of bureaucracy. According to Eggertsson (1990) the administrative costs of firm organization can be identified as the transaction costs of forming and maintaining a community of producers. Coase claims that

² According to Kaldor (1934) one of the assumptions of static theory is that all prices are known to individuals which apparently is not true in the real world.

they are much lower than the costs of using the market. The worker does not have to conclude a series of contracts with other workers, as the market mechanism would dictate. Instead, there is only one contract, that between the employer and the employee.

It is important to stress the uniqueness of the labor contract.³ The worker, supplying labor as a factor of production, accepts to follow the commands of the entrepreneur for a certain remuneration. The contract delineates some rights for the entrepreneur, more specifically the right to coordinate or combine the factors of production along his managerial function, which modern economics defines as a fourth factor of production. The longer the term of the labor contract, the less likely and less desirable it is to stipulate the details of the labor service to be provided. That is why the type of labor or service to be provided is only generally defined while the specific tasks of the worker are formulated later in the course of business. This employer-employee relationship which emerges of resource allocation and which aims to cut some costs of market exchange is what Coase (1937) calls a firm.

Hence, the firm is a system of administrative decisions or a “nexus of contracts” which come into existence when resource allocation is left to the coordinating role of the entrepreneur. His task is to coordinate the factors of production more cheaply than the transactions on the market which the manager can resort to in case it pays to do so. The two approaches are two alternative modes of economic organization, market and administrative control.

³ Alchian & Demsetz (1972) model several types of organizations depending on the type of contract and contractual relations which represents their major contribution to transaction cost economics.

The boundaries of the firm

The logic behind the existence of the firm naturally leads to the question why some firms are large while others small. A firm is likely to grow bigger the more transactions it undertakes at the margin which could be carried out through the free market but instead are organized by the entrepreneur. It is likely to be smaller the greater the tendency of the entrepreneur to give up on those. Such an approach helps analyze the size of the firm and the reason why the manager carries out one more transaction or less. Meanwhile, if the administrative coordination of production saves on marketing costs, then why are there market transactions at all and why is not the whole production taking place within one large firm?

A possible explanation could be that there are diminishing returns to the managerial function, that is, there are increasing costs to the last transaction within the firm. As the firm grows larger, a point is reached where the costs of some marginal transaction become equal to those of organizing it through the market or through another entrepreneur. The more activities the entrepreneur undertakes in coordinating production factors, the less likely he is to allocate factors optimally where the marginal product of each factor would be maximized, and the value of production would be highest. Williamson (1970) maintains that this is the standard treatment of the problem of management in economic theory. A point would naturally be reached where the loss of the inefficient use of resources equals to the costs of market exchange. The choice of economic organization between the market and bureaucracy is known as the “make-or-buy” decision in the modern management theory and depends on the relationship

$$MC_M \leq MC_E$$

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where MC_M is the marginal cost of the last market transaction, while MC_E is the marginal cost of the last transaction carried out by the entrepreneur.

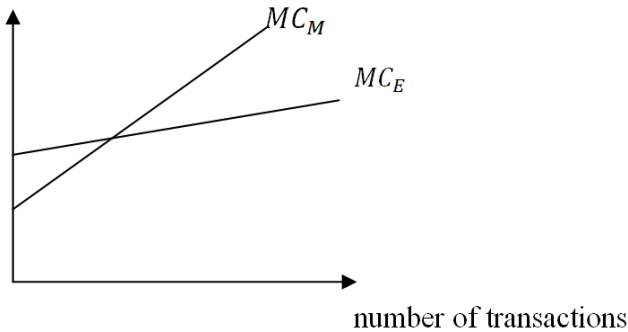


Figure 1. *Choice of economic organization*

As long as $MC_M < MC_E$, it is preferable for the firm to obtain a factor of production through market exchange since the market is cheaper to use. When $MC_M = MC_E$ the firm can choose whether to undertake the given transaction or leave it to the market in the make-or-buy decision. If $MC_M > MC_E$, then the marginal cost of transacting through the market is higher than the marginal cost of the last transaction carried out by the entrepreneur. In this last case the market is already a more expensive instrument of resource allocation which drives the firm to internalize more of its functions and grow. This is the exact mechanism by which transaction costs shape the size and boundaries of the firm. The tendency for expansion would be stronger,

- (a) the lower the costs of internal organization and the more slowly those costs rise, as more transactions are undertaken by the firm,
- (b) the lower the propensity for managerial mistakes and the more slowly those mistakes increase with the number of transactions within the firm,

(c) the lower the increase or the faster the decrease of the supply prices of inputs for the larger firms.

So far, we have assumed transactions to be homogeneous. The costs of organizing productive activity and the losses stemming from the managerial mistakes are expected to rise with the variety of transactions undertaken. Nothing is more diverse than the different types of contracts economic agents conclude where each contract is unique in its terms and specific circumstances upon which the need for contracting arises. The costs of transacting would also depend on the intensity of market dealing, the spatial distribution and magnitude of the transactions, as well as on the fluctuation of market prices. That is why prices and price information affect firm transactions, but the nature and direction of this influence will be revealed later in our analysis.

At this point it is important to stress the role which the spatial distribution and geographical distance of production factors play on the spatial distribution and scale of transactions and, therefore, on transaction costs. This is most visible with multinational corporations (MNCs) which secure and combine factors of production from distant markets. Transaction cost theory which assumes that the costs of internal coordination increase, as transactions become more diverse in type and place, leads us to believe that factors such as technological innovations which shorten the distance between resources are likely to expand firm size. Scientific discoveries and inventions facilitate the geographical concentration of the factors of production and bring them together which, in turn, reduces the internal costs of bureaucracy and expands firm size. For instance, innovations such as the phone and electronic networks which reduce the distance among various factors of production, would lead to a larger firm size.

The effect of new technical discoveries is not one-sided. They affect not only the costs of intrafirm coordination but

also the costs of using the market mechanism since innovations bring the factors of production together on the very markets. Whether the firm will grow or not would depend on the relative effect of the innovation on the two alternative types of costs. If the innovation cuts the costs of using the market more drastically than the costs of internal organization, then the market mechanism is likely to replace the firm in certain activities. At the same time, if the innovation affects firm coordination more strongly than the market, it is likely that the firm will internalize some market operations. In both cases we see transaction cost economies where technology increases the geographical proximity between economic resources.

The problem of innovation and technological development in transaction cost economics is of primary importance in explaining the existence and functioning of MNC. They must overcome long distances in order to obtain certain factors of production to be employed in production and sold in the complex and diverse global market. In this context Coase (1988, p. 64) states:

“But as firms expand their functions, it seems to me that they are likely to embrace activities which are more widely scattered geographically, and which are, in other ways, more diverse in character. This, I think, must play its part in limiting the expansion of the firm. This is, in fact, a special case of the effects on costs of the combining of different activities within a single firm – not all of which will be adverse. But the existence of such interrelationships suggests that an efficient distribution of activities among firms would involve particular (and different) groupings of activities within the firms (which is, indeed, what we observe). We would not expect firms to be similar in the range of activities that they embrace; but, so far as I am aware, the distribution of activities among firms is not something on which we have much to say.”

A good research question in this respect is the distribution of tasks with every firm as well as the distribution activities among firms in the respective industry. Some of these firms perform different activities, while others are more specialized. Some are vertically integrated, while others not. The distribution of tasks among firms in the economic system shapes the structure or the organization of the industry. The firm participates in the market by contracting with other firms. It must perform its task at a price much lower than the costs of market operation because one can always resort to the market if the firm fails in its role. The organization of industry is strictly related to the interdependence between the market transaction costs and the managerial transaction costs within the firm.

According to Caves (1967) the problem of industry organization allows to implement price theory in practice. It is important to study how industry is organized in order to comprehend how it functions today, how it differs from what it was in the past, what forces shaped it and how they evolved with time. It is also essential to know the structure of industries in which MNCs operate, how this structure changed and what the effects of changes in the legal system were. Industry structure is crucial in scrutinizing MNCs. As Stigler (1968) maintains, industry structure influences firm size and structure, their determinants and most of all economies of scale, the consequences of concentration on competition, the effect of competition on prices, investment, and innovation.

The classical concept of scale economies is key to the treatment of firm size. It fits perfectly in the study of MNCs and industry structure. The concept of economies of scale is strictly related to the linkage between the costs and the total output produced within the firm where the envelope cost curve is derived. Such a treatment is, in fact, narrow as the analysis does not account for the costs of a single activity, the

costs of undertaking a second activity, or the relative costs of undertaking a number of activities by a number of firms. The focus is on the production of particular products or a single product, and not on a variety of products turned out by the firm. At the same time, classical analysis focuses on short-run and long-run production costs while ignoring transaction costs completely.

We should emphasize the difference between production costs and transaction costs. While production costs stem from the generation of a single product within the firm aimed at the market, transaction costs are incurred by the firm in the process of contracting with the other market participants. To Arrow (1969) transaction costs are those of organizing economic activity which can be varied in the mode of resource allocation while production costs are those of technology and would be the same in all economic systems. According to Matthews (1986) production costs are the costs which the firm commits to in following a particular contract, while transaction costs include the *ex ante* costs of signing a deal and the *ex post* costs of contract observance. The production and transaction costs coexist in the business of the firm, in a sense, and, taken together, form its full economic costs.

The classical school treats economies of scale in a short-run and a long-run perspective. The envelope long-run average cost curve is obtained based on a set of short-run average cost curves connecting the points of tangency of those curves to derive the envelope one. Furthermore, classical analysis assumes that the optimal point of production in the long run is the point of minimum average costs of production since the producers can determine not only the volume of output but can also vary the number and size of production plants of the firm. The standard envelope curve undergoes a stage of economies of scale where the long-run average costs are falling, followed by the stage of

neither economies, nor diseconomies. This point of minimum efficient scale is considered optimal by classical analysis because, without going into the section of diseconomies of scale, the firm produces the maximum amount of output long term.

The classical model of production costs and the optimal scale of the firm considers scale economies vital to firm size. When the firm operates at its minimum efficient scale or full capacity it can produce at lower unit costs which gives it a competitive advantage over other firms. The presence of continuous economies of scale in some sectors of the economy such as energy production explains why such industries favor monopoly. Constant returns to scale allow a number of sizes for the production firm. In the long run, medium-sized firms can achieve the same minimal unit costs as the large firms.

It is different with industries in which economies of scale are insignificant or easily exhausted and the stage of diseconomies of scale is quickly reached (as in the business of repairs or dry cleaning). Such businesses tend to be small due to the lack of substantive economies of scale. Scale economies are inevitably related to the economic essence of MNCs to the extent that they are large firms concentrated in industries of significant scale economies. One can hardly find them in spheres where economies of scale are insignificant or absent.

Transaction cost theory does not deal with the classical view of scale economies. Rather, by use of transaction costs it offers an alternative explanation of firm size. We note that the two concepts, of transaction costs and scale economies, could be used as complementary explanations of the nature and boundaries of the firm. In the make-or-buy decision as well as its buying and selling behavior the firm is faced with both production and transaction costs. The two concepts are

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intertwined in the firm choice where the prevalence of one type of costs over the other cannot be absolute.

Economies of scale are also relevant to industry structure in that it could be dominated by large MNCs. This, on its own, determines the distribution of power in the sector, the type of competition, the presence or absence of monopoly or oligopoly. Later throughout the analysis we will study transaction costs with relevance to market structure, including their nature in perfect or imperfect competition. Oligopoly deserves special attention, as most global companies are concentrated in oligopolistic sectors. Coase (1988) stresses the importance of industry structure in the study of firm behavior and especially the oligopolistic case.

Essence of transaction costs

The thorough analysis and proper understanding of the mechanism by which transaction costs determine the existence and functioning of the firm requires a detailed breakdown of transaction costs. In order to properly place transaction costs in the economic model of the MNC one should understand their nature attempting at their contemporary interpretation. Eggertsson (1990) defines transaction costs not as information costs generally, but as information costs of market exchange.⁴ Arrow (1969) defines transaction costs as the costs necessary for the operation of the economic system, while Barzel (1997) relates them to the transfer, definition and enforcement of property rights.

A more precise definition of transaction costs is the following: costs of bringing down market risk and guaranteeing a mutually beneficial and sustainable market

⁴ Eggertsson (1990) distinguishes between information costs and transaction costs. He thinks that a man living on a deserted island would be faced with information costs, at least in terms of his own production on the island, but would not be faced with transaction costs, as there will be no exchange.

behavior. This definition reflects properly the essence of transaction costs as the costs made by businesses to ensure themselves against certain risks, which could arise in the process of bargaining in a broad sense. Firms and participants in the free market sign contracts as part of the market process. The alternative to this type of economic organization is the administrative approach and coordinating decisions of the entrepreneur within the firm. Even in this second case the contracts, and consequently the risk of non-compliance, are unavoidable, as the interaction employer-employee is based on labor contracts, a relationship which Coase calls a "firm." This definition of transaction costs is most appropriate in the dual context in which they arise, market and bureaucracy.

What does our definition incorporate and what is implied by "bringing down market risk" and "guaranteeing a mutually beneficial market behavior?" These two conditions dictate finding the least risky commercial partner. What is necessary is finding information about the market and the prices and terms. In the process of bargaining it is necessary to negotiate and then conclude a contract with the right attributes and legally required terms. The need to minimize risk and ensure mutual benefit oblige the parties to observe the contract and in case of force majeure or breach by one party to protect their interest soliciting the help of a professional lawyer. Transaction costs could as well be seen as the costs one makes in carrying out a transaction, to determine who it is he wishes to trade with, under what terms, to lead negotiations, to sign a contract and to follow its fulfillment.

Transaction costs are also the costs of protecting the property rights of market participants. Transaction costs help lower the risk and uncertainty associated with commercial deals, the definition and enforcement of the property rights of the parties involved. Hyman (1994) finds

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that property rights and transaction costs are interlinked because if individuals want to trade, they must dedicate resources to the definition and enforcement of property rights. He defines transaction costs as the costs of protecting property rights, finding commercial partners and striking a deal. To Hyman (1994) examples of search costs are advertising costs, brokerage fees, the salaries of sales staff as well as the costs of transporting commodities to the point of sale. Like Coase Hyman believes that the high level of transaction costs can hamper the normal functioning of markets and the process of exchange.

Marginal analysis assumes that transactions incur not only marginal costs but marginal benefits, too. Marginal cost reflects the price of every transaction in the form of material expenses of negotiation, time, and energy. Marginal benefit, on the other hand, is the monetary value which the entrepreneur attributes to the transaction. In choosing whether to undertake one more transaction he compares its marginal benefit to what he needs to sacrifice.

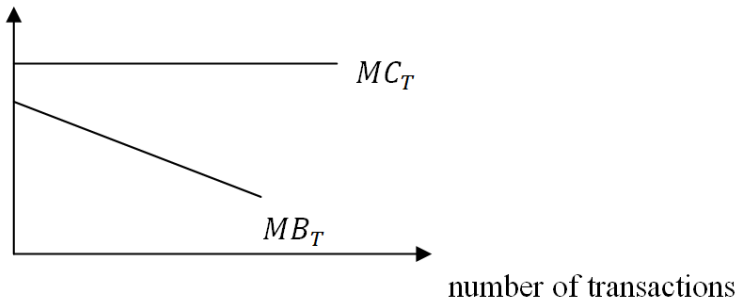


Figure 2. *Lack of a decision for a transaction*

Figures 2, 3 and 4 reveal what possible outcomes exist for the entrepreneur. MC_T is the marginal cost of a transaction carried out within the firm, while MB_T is its marginal benefit. At any given number of transactions in Figure 2, the marginal cost exceeds the marginal benefit. In Figure 2 the

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entrepreneur decides not to undertake a transaction, as the marginal benefit is lower than the cost of the transaction. Figure 3 illustrates the decision of the manager to undertake a transaction, as he sees greater benefit to it. The equilibrium is at one transaction. It is worth noting that any change in the economic conditions which affects the costs or benefits of a transaction would affect the choice of the entrepreneur. The lower the marginal cost of transacting, the more transactions would be undertaken along a given marginal benefit curve.

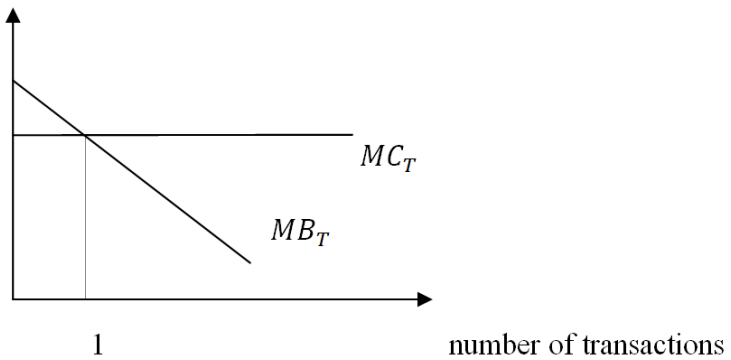


Figure 3. Taking a decision for a transaction

In Figure 4 the optimal number of transactions increases to two. A lower level of transaction costs MC''_T increases the optimal number of transactions. At the original level of the costs MC_T there is only one transaction. Bringing down the marginal cost to MC''_T increases the optimal number to two. If the costs rise substantially to MC'_T organizing transactions within the firm becomes meaningless and the firm can resort to the market to perform this task.

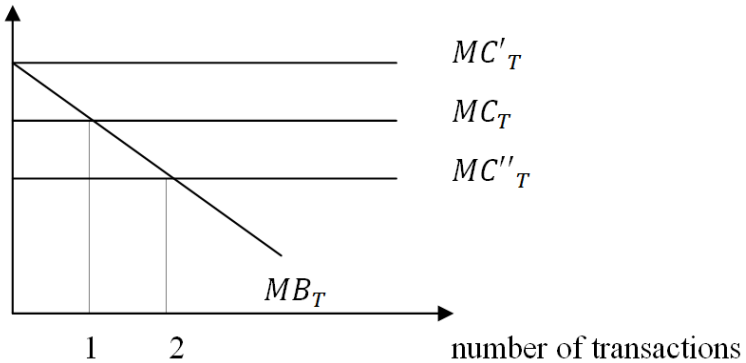


Figure 4. Optimal number of transactions at different levels of costs

The three examples show that marginal analysis illustrates well the nature of transaction costs. It is essential to stress their double-sided character. Transaction costs could be explicit when the firm incurs monetary expenses. An example is the phone bill when leading negotiations with the trading partner. But the cost of transacting could also be immaterial, in the form of time and effort dedicated to the deal. These are implicit costs which the accounting profit ignores. According to Dahlman (1979) transaction costs are part of opportunity costs, similar to some other economic costs. Just like production costs transaction costs are fixed and variable. Fixed transaction costs are the specific costs of setting institutional arrangements, whereas variable costs depend on the number and volume of transactions.

To reflect more fully the nature of transaction costs, let us view the market as an atomistic environment with agents *A*, *B*, *C*, *D*, *E* and *F* operating in it. Economic agent *A* must find out which of the other participants is a suitable commercial partner for him. Let us assume that this is agent *F*. Agent *F* prefers a product similar to that produced by *A* while the other participants do not. Entering the market, *A* is unaware that *B*, *C*, *D* and *E* are not interested in his product and that only *F* is interested in a transaction. To find his contractual

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partner *A* needs to establish 5 contacts with all market participants. However, if *A* has information that it is exactly *F* who wishes to trade with him, then *A* would save costs on making 4 contacts with *B*, *C*, *D*, and *E*, respectively. Figure 5 illustrates *A*'s need to connect with the other market participants.

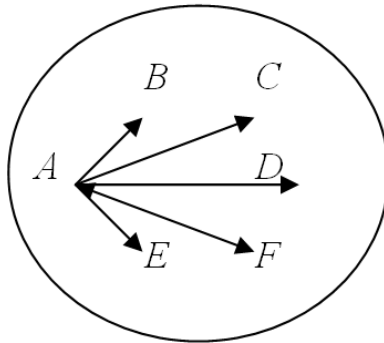


Figure 5. *A market with 6 participants (costs of A)*

Agent *F*, on its own, also incurs costs in search of *A*. In the absence of market information, he, too, will be forced to establish 5 market contacts. If we assume that only one contact is enough for *A* and *F* to meet, then in the absence of information *A* and *F* must establish 9 contacts in total, *A* as the seller and *F* as the buyer.

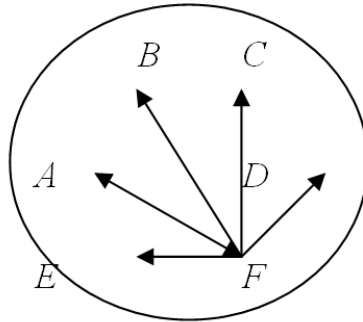


Figure 6. A market with 6 participants (costs of F)

In order to organize one transaction with only 6 market participants the market requires 9 contacts. Had information on all trading preferences been available to A and F, they would have established only one contact, that is, contact each other directly. As a result, transaction costs would be only made on gathering the two contractual partners together while the other encounters would be avoided. Figure 6 illustrates the contact network of agent F. This model of 6 market participants demonstrates unequivocally the need for information experienced by the parties to a transaction. This setting ignores the desire of the other economic agents to exchange other products at other prices. Their desired transactions would also entail some minimum number of contacts and, hence, some transaction costs but they would need reliable market information. Locating a commercial partner from faraway could be a strenuous undertaking requiring lots of money, time, and loss of comfort.

Classification of transaction costs

Furubotn & Richter (2005) distinguish between market transaction costs (as the marketing costs of exchange), managerial transaction costs (as the costs needed to exercise

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the administrative right to issue commands to others within the firm), and political transaction costs (as the costs of running and adjusting the institutional framework of a polity). Datta & Nugent (1989) also attempt at classifying transaction costs. Concluding that bargaining inevitably entails costs, they classify direct transaction costs as the costs of 1) obtaining the information parties need in order to assess what is to be traded and the costs and benefits of the contract; 2) negotiating the provisions of the contract; and 3) communicating the provisions to all relevant agents. According to Datta & Nugent (1989) indirect transaction costs result from the opportunistic behavior of multiple agents involved who represent various sources of risk. Indirect costs comprise those of monitoring the fulfillment of the contract terms.

New institutional economists traditionally divide transaction costs into *ex ante* and *ex post* costs. The *ex ante* costs of transacting arise in the process of search, contract selection and contract formulation. *Ex ante* transaction costs can also result from adverse selection since the wrong choice made by the firm at the initial stage may lead to an opportunistic partner taking advantage of it at a later moment. Adverse selection can increase the costs on each transaction reducing thus its net benefit and rendering the transaction meaningless. A more detailed breakdown of *ex ante* transaction costs includes:

- a) cost of gathering information on market conditions, including competition
- b) cost of revealing the preferences of economic agents
- c) costs of establishing the desire of an economic agent to trade
- d) costs of negotiating
- e) costs of drafting a contract
- f) costs of formulating safeguards
- g) costs of concluding a contract

If contracts could be self-fulfilling, then there would be no *ex post* transaction costs. Market participants operate under bounded rationality and uncertainty which makes contracts incomplete while it is impossible to guarantee their observance. The impossibility to predict the future and the need to secure the parties to the contract cause the *ex post* transaction costs. Datta & Nugent (1989) identify them with the costs of:

- a) formal legal actions in settling disputes and developing control procedures
- b) adaptation of the contract stipulations including renegotiation
- c) monitoring the contract
- d) bonding the parties to the contract for future work

Ex post transaction costs involve the costs of moral hazard which is the tendency of someone insured against certain risks to be more careless and have risky behavior. In relation to *ex post* transaction costs we should also explore the more general term “opportunism,” introduced by Williamson (1975). This is the behavior of risky, careless or unsatisfactory fulfilment or violation of the contract by one party with the purpose of extracting additional benefit in pursuit of its own interest. Opportunism is the intentional non-adherence to the contract which inevitably raises transaction costs. Intrafirm opportunism prevents the firm from achieving the maximum marginal product of labor. It can take the form of simple shirking by the worker employed by the firm. But there could be reverse opportunism on the part of the employer in his failure to pay the full remuneration to the worker. Opportunism raises *ex post* costs, that is, the costs of enforcement and compliance. Traditional for Eastern Europe, opportunism has an unfavorable effect over western corporations incurring losses from worker opportunism and looking for additional safeguards which raises *ex post* transaction costs.

Opportunism is most vivid with specific assets which have a unique use and make the parties strongly interdependent. Opportunism is most likely to arise in hiring employees with specialized qualification or workers for specific jobs. The unique feature of this type of labor, as well as the knowledge and skills acquired as a result of training within the firm, result in human asset specificity for the firm. The more specific the asset is, the greater the advantage of firm organization over the market. This is because the firm can more easily organize a certain activity than carry out market transactions which hardly achieve the specific goals of the task. These market transactions may turn out to be far more costly than organizing the activity using the specific or unique asset the firm has.

Highly qualified labor demonstrates well the superiority of firm bureaucracy over the market. If a firm has invested in training a highly valued expert working on a project, it is human asset specificity which makes it hard for the firm to replace this expert with another one, not so well trained, or to resort to the free market to perform his duties. But there is interdependence, too. This narrowly trained specialist would have difficulty applying his specialized knowledge outside of the firm. Eggertsson (1990) metaphorically compares such firm-specific knowledge with a spring, illustrating thoroughly the interdependence between the firm and its specific asset. Eggertsson (1990) gives the example of a big factory producing spring water and being the sole user of a mineral spring. Without the factory, the spring would have little or no value to its owner. Likewise, highly qualified labor would have no value without its specific application or proper place. Alchian (1984) also finds the essence of the firm in its strong interdependence with its specific assets. He notes that the strongly interdependent assets of the firm, except human capital, become common ownership and,

hence, the firm could be defined as the common ownership of coalition-specific resources.

In the context of the firm and its narrow expert, his opportunistic behavior would lead to *ex post* transaction costs for the firm in the absence of sufficient safeguards. We view *ex post* transaction costs as necessary to avoid, prevent or sanction opportunistic behavior given the bounded rationality of economic agents and the excessive selfishness of individuals. Thus, if we assume that opportunism is the result of human contractual behavior, then *ex post* costs are directed to the human factor.

The opportunistic behavior which results in partial or unsatisfactory adherence to the contract, violation of one or more of its clauses or malperformance on a contractual obligation necessitates the inclusion of penalty clauses. Therefore, we can identify *ex post* transaction costs as the penalty costs of transacting. Obviously, they serve to restrict such behavior, preventing thus potential opportunism in the future. *Ex post* transaction costs aim to prevent future opportunism, rather than handle past opportunism by one of the parties.

The human factor could be a cause of conflicts in contracting. Conflicts presume divergent interests, disagreements among contractual partners. *Ex post* transaction costs serve to align interests or reconcile conflicts. In this sense, *ex post* are all expenses allocated to dispute resolution. Fixed transaction costs necessary to settle institutional arrangements are significant. These sizable costs stem from the disagreements and conflicts among the owners upon setting up the firm and can be measured with the efforts and the means of settling disputes until a final agreement is reached.

Ex post costs are incurred when the contract is enacted and rise if, attempting to minimize *ex ante* costs, market participants fail to stipulate all possible contingencies and

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changes of the initial conditions. It seems that *ex post* costs depend on *ex ante* cost. This is an essential innate feature of transaction costs in their duality, before and after signing the deal. Hence, timing is the best criterion for classifying transaction costs. *Ex ante* costs made before the contract conclusion act as an insurance against market risks and adverse outcomes of the deal and protection of business interests. *Ex ante* and *ex post* costs manifest differently but are interrelated in their magnitude. *Ex ante* costs can substantively reduce the size of *ex post* costs. On the other side, lower *ex ante* costs committed at the initial stage of bargaining can eventually lead to adverse selection and, thereafter, to high *ex post* costs.

Perfectly competitive markets and transaction costs

A natural question to ask when researching the linkage between transaction costs and market structure is whether they will have different levels on the different types of market. In other words, would it be more expensive or cheaper to carry out one transaction in a given market and what is the probability of a firm to choose one market over another or to organize the transaction internally when it is more advantageous to do so. If a transaction turns out to be more expensive in one market than in another, the firm sees the second market as preferable in its activities. How do MNCs approach different markets in their make-or-buy decisions? How do MNCs organize production depending on the costs of transacting in the different markets? A more detailed study of market structure will help us model the MNC in its environment and use fundamental economic theory to explain why there are MNCs and how they operate in the global economy.

Classical theory assumes that prices are easy to detect in perfectly competitive markets. The demand curve faced by the individual firm is flat. It is set by the market price and represents the marginal and average revenue curve of the firm as well. Products are assumed to be homogeneous. Obviously, it is not difficult for the individual merchant, seller, or buyer, to find out the price. For instance, if we want to buy a ton of wheat on the world market, it would not be difficult to establish the price at which wheat trades in the world market. The very nature of perfect competition dictates that prices of homogeneous commodities such as wheat, corn, or gold are almost identical in the world market, with some small differences in place. These markets are nearly perfectly competitive. Market participants have no market power, cannot dictate prices and must take them for granted. Price information is easily available and the costs of market information, therefore, are minimal. Knight (1933, p.267) gives a good starting point in the analysis of the level of transaction costs in perfect competition:

“With uncertainty entirely absent, every individual being in possession of perfect knowledge of the situation, there would be no occasion for anything of the nature of responsible management or control of productive activity. Even marketing transactions in any realistic sense would not be found. The flow of raw materials and productive services to the consumer would be entirely automatic.”

This leads to the conclusion that in perfect competition, when individuals have perfect certainty and are perfectly informed, transaction costs would be zero. Stigler (1966) claims that in this market the private and social costs of production would be equal, a statement which becomes known as the “Coase theorem” in the literature. The very definition of transaction costs, i.e., that they aim to guarantee individuals against risk, assumes that risk exists, and it

logically follows that in the absence of risk, there will be no transaction costs.

Economists often fantasize trying to imagine this ideal world of zero transaction costs. With zero transaction costs resource allocation would be the same, irrespective of legal norms and institutional arrangements. Parties would negotiate on rearranging their rights and duties to the point of maximizing their joint output.

However economic reality shows a completely different situation, that of nonzero transaction costs. It is worth noting that the contemporary world markets, except the ones of homogeneous goods mentioned, are far from the perfectly competitive model. The ideal markets of perfect competition no longer exist and most of the world markets in which MNCs operate are rather monopoly and oligopoly. The concept of transaction costs is particularly relevant to them, as transaction costs turn out to be positive and increasing with the rising imperfection of the market.

Under nonzero transaction costs many mutually beneficial transactions are abandoned because the cost of rearranging rights exceeds the benefit of the transaction. With positive transaction costs some or all of these rearrangements of property rights become excessively costly and the advantages to such an exchange aimed at maximizing the joint output of production vanish. Rearranging rights is only meaningful if the benefit of a greater output achieved exceeds the cost. With nonzero transaction costs some profitable exchanges are not undertaken. With nonzero transaction costs the legal norm plays a major role in the way resources are used. It is just law which determines what institutional arrangements or contracts would be made with the purpose of maximizing economic wealth. This function of the law and the state stems from the fact that when the government introduces

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law in a sphere without laws, it actually reduces transaction costs and enhances exchange.

The more the market gravitates to perfect competition, the greater the incentives of market participants to undertake actions and sign contracts and the lower the transaction costs. The more perfect the market, the greater the benefit to a contract and the lower its cost. Hence, the more perfect the market, the bigger the number of transactions in it.

We can conclude that perfectly or nearly perfectly competitive markets determine low transaction costs. They are characterized by a low level of uncertainty, almost complete information for economic subjects and economic benefit which by far exceeds the cost of trading. These low transaction costs imply that these nearly ideal markets are relatively cheaper from the point of view of the cost of exchange. One could expect many transactions with a large volume of commodities. As competition becomes less and less perfect in certain markets, they are likely to express as expensive from the perspective of exchange and deprived of the mechanisms of free competition.

Imperfectly competitive markets and transaction costs

Imperfectly competitive markets are characterized by market power and uncertainty resulting from the lack of information.⁵ This uncertainty relates to the partial information about the market and future costs. Although we are currently fully informed, that is, there is zero uncertainty at present, the future holds an infinite number of probable and uncertain outcomes. Knight (1933, p.268) again gives the relationship between uncertainty and perfect competition:

⁵ It could be stressed that market power does not imply only the ability of economic agents to set prices but also their ability to influence the cumulative volume of output traded.

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“With the introduction of uncertainty – the fact of ignorance and the necessity of acting upon opinion rather than knowledge – into this Eden-like situation, its character is entirely changed... With uncertainty present doing things, the actual execution of activity, becomes in a real sense a secondary part of life; the primary problem or function is deciding what to do and how to do it.”

Looking into the future, one entrepreneur can try to predict certain events with probabilities and then subject his entrepreneurial decisions to these predictions. Although forecasting techniques evolve, making it possible for the entrepreneur to foresee the future much better than before, there is still a great amount of risk he should consider, since forecasts can never be a hundred percent correct. Coase himself claims that he cannot imagine the firm without risk and the absence of uncertainty. This is because in true markets such as imperfectly competitive ones, information is not perfect and there is the risk of information asymmetry. The necessity to provide safeguards against such future risk predetermines positive transaction costs. The higher the level of these costs, that is, the more expensive the market, the fewer the incentives to undertake steps on maximizing total economic output. The higher the transaction costs on a given market, the lower the chances that the benefits of rearranging institutional rights exceed the costs of doing so.

The role of law and institutions in such expensive markets then increases and drives firm behavior – what contracts they will conclude, with whom and how likely they are to use the relatively expensive market mechanism or internalize its operations. It is exactly these new conditions which will change the modes of interaction between the firm and the market. Positive transaction costs already drive the firm’s operations, structure, and size. It is exactly in this context that one must study the behavior of MNCs, their

decisions to enter certain markets, their structure, shaped by those markets and their level of transaction costs.

We need to emphasize the role of information as a driving factor for market participants. It is crucial and valuable for every party to a transaction. While the classical view of perfect competition is that information is freely available, in real life it is rather asymmetric, that is, either the seller or the buyer has more information. In this sense, parties do not have the same data on the product and the terms of trade and try to get information through all possible channels.

One source of information is the very price of the good. Price has an important information function for each market. It orients the customer who in most cases is the less informed and is led by the price in his buying decision. According to Klein & Leffler (1981) the high price is a signal of quality. Prices to some extent reduce transaction costs when information is deficient. Buyers orient themselves in the sea of prices in different markets exactly due to the informational role of prices. The buyer seeking a high-quality product is oriented by its high price. In the opposite case, when the buyer is searching for a product of lower quality, its moderate or lower price tells the buyer where in the ocean of prices and quality levels he can locate it.

For instance, education is a signal to the employer on the labor market. Like the price of an expensive product, good education could indicate the high quality of labor of a given worker or employee. By providing information to the employer, education saves transaction costs which would be committed to training an improper worker or employee and which can dramatically increase the total economic costs of the employer. Employers use university diplomas as a benchmark for distinguishing a good worker from a bad one when information on the skills and qualification of job candidates is scant. Good education serves as a signal of better quality of labor, perseverance, skills, grasp, risk

taking, and even ability for hard and dedicated work. Quite often the employer prefers to hire more expensive, quality labor, rather than risk with highly opportunistic behavior.

We should mention the importance of the dependence between price and quality for the survival of the firm. It is this dependence which determines symmetric information. The more the quality of the product responds to the product price set by the producer or the seller, the more symmetric the information of the two buyer and the seller. On the other hand, the more the quality deviates from price and the more distorted the buyer's perception of the product value is, the more asymmetric the information.

Akerlof (1970) treats the problem of information on quality in his model of lemon goods. The concept of identifying quality through experience reveals that producers do not have incentives to offer high-quality products about which consumers learn through experience and where they can benefit by investing in reputation only in the absence of quality standards imposed by the state. The upshot of Akerlof's model is that low-quality products drive high-quality products out of the market since the greater the number of low-quality products which sell as high-quality ones, the more people will learn from their experience and the less likely they will be to pay this high price. People will be driven into the low-end market where low-quality items are low-priced, there is no quality misrepresentation and information is symmetric. This will discourage producers to offer high-quality ware and the latter will be driven out of the market.

Like price, advertising plays an informational role in the market. It is widely believed that advertising is an economic waste and is, therefore, meaningless but transaction cost theory finds the role of advertising in saving information costs to buyers (as well as to competitors) to be crucial. First, advertising provides information about the functions and

purposes of a product. Second, it tells consumers where and how they can buy merchandise. But most intriguing is the third informational task of advertising which according to Nelson (1974) is applicable to the lemon-market model and the customer manipulation. Nelson (1974) emphasizes that large advertising budgets convince customers that the firm is solid and serious and is committed to quality. Hence, not only the high price but substantive advertising budgets could convince buyers in product quality.

Distorting the competitive mechanism of the economic system has led to different imperfect markets which relate to different levels of transaction costs. Monopoly synthesizes this distortion most vividly. In pure monopoly there is really no competition and the firm is a sole seller. Its behavior is limited by the indirect competition of other goods, distant substitutes, and the potential threat of competition upon entry in the industry. The firm's demand curve is the market demand curve while the monopolist sets both the price and the output along the demand curve. The monopolist in equilibrium sets marginal revenue equal to marginal cost which gives him excessive economic profit. The monopolist enjoys monopoly rent because the monopoly price is considerably higher than the marginal cost of production. An additional source of rent is the consumer surplus which the monopolist can extract through price discrimination. These are some of the accusations to monopoly – that monopoly has a destructive effect on resource allocation, which would not happen with complete information or zero transaction costs. For instance, Demsetz (1982) claims that the social loss of distortive resource allocation associated with monopoly becomes an issue with positive transaction costs.

Because it is the sole supplier on the market, the monopolist is perfectly informed about prices, quantities, terms of trade, etc. As opposed to monopoly, the

monopolistically competitive firm can hardly achieve economic rent, nor exert market power. The market of monopolistic competition is one of product differentiation, real or perceived, and products have unique features. The very nature of this imperfectly competitive market predetermines a “constellation” of prices. Firms behave competitively but set their own price. They have almost no market power because of limited demand but ignore competitors not following how their prices move. Monopolistically competitive firms also price their product where marginal revenue equals marginal cost but face a much flatter and lower demand curve. Their demand curve is quite elastic due to the large number of competitive differentiated products and the firm supply is a tiny bit of the industry supply.

Firms do not coordinate their prices and changing the price of one firm is not a reason for other firms to change their prices, too. This allows an infinite number of prices of similar products. There are transaction costs of finding the right product in the sea of products. But finding the right price is not the only difficulty for the buyer. He needs to find a product with the right attributes, size, content, etc. Product variety in monopolistic competition is perceived by consumers as a feature of the product, along with other attributes.

Oligopoly, on its own, is an imperfectly competitive market structure and consists of few firms who take a share of the market demand. The productive capacity of each firm cannot satisfy this demand, as in the case of monopoly, and firms need to meet it jointly, thus, interacting in making decisions about the market, but mostly about prices and production volumes. The firm must predict the possible reactions of its competitors in response to its actions. This interweaves the strategies and counterstrategies of the oligopolists in a complex way.

A key aspect of oligopoly is that when deciding on price and output firms consider the actions of their competitors, a behavior known in the literature as strategic. The lower the number of firms, the more sensitive each one of them is to the movements and possible reactions of the rest which dictates its behavior to a great degree. The complexity of oligopolistic markets in relation to prices, terms and uncertainty stems from the fact that firm policies are interdependent and interlinked and the change in the price of one firm immediately brings about quick, sometimes unpredictable reactions on the part of the other firms.

In the simplest case of oligopoly, the Cournot duopoly, each of the two firms knows that its actions affect the competitor and that he will follow suit. In the international market the problem of strategic behavior results in the concept of oligopolistic reaction. This concept, as advanced by Knickerbocker (1973), assumes that two firms *A* and *B* are part of an oligopolistic industry. Both firms export similar products to country *X*. If *A* creates a production plant in country *X*, then *B* perceives its behavior as aggressive since: 1) *A*'s subsidiary may steal a share of *B*'s the market in country *X*, 2) if *A*'s subsidiary gains a key role in the global system of *A*, through integration in marketing or production, then *A* will gain a competitive advantage over *B*, 3) *A* could open up for new opportunities in technology, new product development, human resource development and knowledge, which will allow *A* to change the balance of power in the industry, the country or the world.

B's response could be to make the same investment as *A* and, remaining an equal rival to *A*, to sustain the balance of power in the industry. This strategy is one of risk minimization since the unknowns to *B* in this case are fewer than passive reaction. Even if *B* does not realize great profits in country *X*, it will be positioned well, since *A*'s profits in *X* will also decline. Through oligopolistic reaction oligopolists

create some degree of stability in the market they share. Since *A* knows *B*'s intentions in case it decides to invest in country *X*, the outcome of such a move is somewhat predictable which reduces risk and uncertainty and, thereof, transaction costs. One could say that due to the mechanism of oligopolistic reaction the oligopolistic market is much more predictable and less risky for the participants than monopolistic competition.

As a result of oligopolistic reaction in a market there will be capital accumulation which explains the high concentration of foreign investment by oligopolistic firms in some country or industry. Oligopolistic reaction explains concentration, a phenomenon studied broadly by economists. First Dunning (1958) revealed that two thirds of foreign subsidiaries in the United Kingdom operate in highly concentrated markets. The most comprehensive contribution in the theory of concentration, though, is Knickerbocker's (1973). In 1973 he carries out an empirical study of the effects of oligopolistic reaction on the foreign direct investment of US firms in the sphere of production. Using a sample of 187 big US corporations in twelve industrial sectors in 23 countries, he finds that almost half of the production subsidiaries opened abroad within the period 1948-1967 in some country or sector, have sprung up in a peak period of three years, while three fourths – in a period of seven years. Knickerbocker (1973) also finds that concentration upon entry is positively correlated with the concentration in the respective industry and negatively with the product variety which is explained by the fact that firms producing a wide range of products are less likely to follow their competitors in a particular country, since there are other competitive instruments available to them.

A weakness of the concept of oligopolistic reaction in the context of foreign markets is that, although it explains the mechanism of concentration, it does not answer the question

how the market influences the decision of the firm for entry and what drives the initial investment in the foreign country. A possible explanation could be provided by the transaction cost analysis of the MNCs. At this stage, using the transaction cost approach, we can conclude that the strong interdependence among oligopolistic firms dictates prices and information flow. It follows, therefore, that information costs are relatively low for market participants since prices and terms are well known to them in the process of strategic reaction and could even be the result of bargaining or collusion. At the same time, transaction costs are not negligibly low due to the risk of frequent breaches of cartel agreements and independent pricing decisions on the part of the cartel members. The information costs associated with oligopoly depend on whether it is based on price or nonprice competition.

With price competition, the same product is turned out. In this case the information transaction costs of the buyers stem mostly from searching information about prices. This refers as well to the costs of firms which would not know the pricing strategies of their rivals and will look for ways to find information about those strategies. With nonprice competition in the oligopolistic market products are diverse and competition is not based on price, but on the different characteristics of the product. In this case the buyers need to find out about the qualities of the differentiated product which causes information costs different from those under price competition.

Oligopolistic competition of the nonprice type becomes more frequent. Firms in oligopolistic sectors increasingly compete on quality, model, service and decreasingly on price. The risk of price wars is so high that firms are likely to lower or raise prices together. This type of interaction brings oligopoly closer to monopolistic competition, that is, competition on quality and a spectrum of product features.

Asymmetric oligopoly, on the other hand, requires getting information about the supply and the price of the oligopoly leader, while symmetrical oligopoly implies negotiations among equal participants as a result of which prices are formed.

Given the peculiarities of oligopoly, we can summarize that it has fewer participants, prices, and products in comparison with monopolistic competition. Meanwhile, the information costs with pure monopoly are relatively lower than oligopoly and monopolistic competition which require more costs of searching a differentiated product at a particular price. Substituting for the costly market operations, monopoly economizes the sizable market transaction costs more than oligopoly which economizes those costs more significantly than monopolistic competition. Being part of the global economy more likely as monopoly or oligopoly, MNCs save significant costs of transacting through the global market.

The need to overcome transaction costs has forced economic agents to search for institutional forms which are efficient and optimal. Often this process is unconscious or, opposite to expectations, people see the aim to overcome the high transaction costs of the respective market as an attempt to create organizational forms which enjoy market power. Coase (1988, p.68) concludes:

“The conclusion is immediately drawn: monopoly. What people do not normally do is inquire whether it may not be the case that the practice in question is a necessary element in bringing about a competitive situation. If this were done, I suspect that a good deal of supposed monopoly would disappear, and competitive conditions would be seen to be more common than is now generally believed. In similar fashion, vertical integration (let us say, a manufacturer acquiring retail outlets) is often thought of as a foreclosure, a means of keeping out other

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manufactures, rather than as a possibly more efficient method of distribution. Similarly, mergers tend to be thought of as methods of obtaining monopoly, or they are related to the business cycle, and the possibility that they may bring economies, although not ignored, tends to receive less attention.”

It is worth discussing whether individuals try to make market exchange more efficient and smoother. Let us take commodity exchanges and organized markets as an example. Commodity exchanges are strictly organized. They have the tendency to self-organize and self-regulate by standardizing contracts, freeing them of their individual elements and making them generalized, while traders are depersonalized. Every activity is being monitored at the commodity exchange – what can be traded, what the obligations of the contractual parties are, what the terms of trade are, etc. There are standardized procedures and channels for resolving conflicts as well as sanctions for those, violating the rules. Such a market is often seen by economists as analogous to perfect competition where transactions are strictly regulated even without the strong presence of the state. It is the complex system of formal or informal rules imposed which fosters competition.

A key problem of exchange in formulating legal norms is enforcing the agreement between the members of the commodity exchange and fulfilling its stipulations. At the commodity exchange reaching an agreement is easy since members meet at the same place and trade with identical goods. Fulfilling the clauses of the contract is possible because the very trading rights serve as a guarantee and taking away the right to trade at the exchange is itself a harsh punishment which forces traders to abide by the rules. Commodity and stock exchanges are smooth and efficient in that they have adopted private legal rules and systems of standardized contracts such as futures and forward

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contracts.⁶ These systems of uniform rules substantially bring down transaction costs by setting common standards about trade, volumes, prices and terms.

The exchanges themselves facilitate the meeting of buyers and sellers, observe contracts and handle disputes in case of nonperformance. The stock market is regulated and dispute resolution in case of nonperformance by one party is much simpler than with ordinary commercial deals. It is just these rules which economists wrongly interpret as an attempt at limiting competition. Rules are normally seen as strict procedures or restrictions for dealers to trade on the exchange. It is forgotten that traders have a reason to introduce procedures which guarantee them against risks and transaction costs.

In international trade a role similar to exchange rules and standardized exchange contracts is played by the numerous procedures stemming from the special attributes of commercial offers and adopted in the long-term practice of standardizing and formalizing transactions. The purpose of standardization is speeding up the process of negotiations and adapting to the changing interactions between the contract parties. Formalized and impersonal market transactions are freed from the direct contacts between market participants and save on costs when it is not possible or worthy to establish direct contacts.

There are low transaction costs in some markets where information is complete, and certainty is perfect, and high transaction costs in markets where information is incomplete, unreliable, or totally missing. The former are markets which resemble perfect competition. The latter are markets where competition is imperfect or there is market power present. The uncertainty associated with the behavior

⁶ On the organized futures markets and their role in standardized transactions see Telser & Higinbotham (1977).

of contractual partners forces firms to get ensured. This differentiation between the two types of markets will be a starting point in formulating a transaction cost model of the MNC.

Summarizing our findings about the nature and boundaries of the firm, the essence and forms of transaction costs and the different types of markets depending on the level of transaction costs, we draw the following conclusions:

1. The firm is a system of administrative relationships based on a nexus of contracts and the strong interdependence of specific assets. The firm substitutes the market mechanism when, in view of resource allocation and the existing transaction costs, it is a more costly instrument than the entrepreneur with his coordinating role.
2. The firm has the tendency to grow as the costs of making transactions on the free market increase and decrease as those costs diminish compared to the costs of organizing the same activities within the firm structure.
3. Transaction costs are the costs of reducing market risk and guaranteeing a mutually beneficial and sustainable market behavior.
4. There are different criteria for classifying transaction costs but broadly they can be defined as *ex ante* and *ex post* (according to the timing of their emergence), explicit and implicit (according to their expression). *Ex ante* transaction costs serve to find market information on competition, the preferences of economic agents, the desire to sign a contract, negotiations, contract formulation, contract safeguards and contract conclusion. *Ex post* transaction costs relate to the legal actions of dispute resolution, control, and the need for renegotiation with maladaptation of the contract. Explicit transaction costs are the direct costs of obtaining information, bargaining, and familiarizing all agents with all contract

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clauses. Implicit transaction costs refer to the avoidance of subjective risks such as opportunistic behavior.

5. Based on the level of transaction costs we can distinguish between high-transaction costs markets where there is market power, risk and uncertainty, and low-transaction cost markets which are competitive or nearly perfectly competitive.

2

Transaction cost model of multinational corporation

Prerequisites for the emergence of the multinational corporation

By MNC it is usually meant the large corporation which has branches or develops activities in many countries and turns out products for different markets. The literature treats the MNC as a system which consists of a parent company, its production and marketing divisions in other countries, as well as the flows of products, services, capital, technologies, and the managerial experience they exchange. The intrafirm transfers which cross national borders distinguish the multinational firm from the national one turning it into a whole, living organism spread over the global market.

The gigantic scale and the high degree of diversification are distinctive features of the contemporary global firm. Some multinationals such as McDonald's and DHL are present in almost all countries. These units or subsidiaries of

the corporation dispersed in various countries are under the control of the headquarters located in one country.

We use the terms transnational, multinational or global interchangeably. According to the UN Center on Transnational Corporations, “multi-nationalization” or “trans-nationalization” is the internationalization of market transactions within a given decision-making unit, more specifically, the MNC.¹ In view of the term “multinational” it is worth noting that until the 1980s scholars perceived transnational and multinational companies as two different entities. It was believed that the capital of transnationals is owned by the nationals of one country, while multinational companies are international in the application and type of their capital, which is owned by two or more countries. Today these companies are viewed as same.

A 1974 report prepared by a group of notable scholars on behalf of the UN Economic and Social Council gives a broad definition which is used by numerous MNC studies. MNCs are enterprises which own or control assets in production or services outside the country of their origin. These enterprises are not necessarily private or joint stock companies: they could as well be cooperative or state-owned.² One of the first researchers of MNCs is Professor Raymond Vernon of the Harvard Business School who in 1965 is in charge of a large-scale project on US multinationals. Vernon (1971) defines the MNC as a company which controls a system of corporations in other countries.

In an early publication Dunning (1971) defines the MNC as an international or multinational enterprise which owns and controls assets (production plants, mines, commercial

¹ For reference see the United Nations Center on Transnational Corporations. (1988). *Transnational Corporations in World Development*. New York: United Nations, p.16.

² United Nations. (1974). *The Impact of MNCs on Development and on International Relations*. The Group of Eminent Persons. ST/ESA/6, p.2.

enterprises, offices, etc.) in more than one country. MNCs can be considered solid capital formations which have a network of foreign subsidiaries and operate as unified production, technological, research, financial, distribution and other complexes. They own assets located in different countries but manage them by a single, uniform, concerted strategy (Behrman, 1969).

The first interpretations of the nature and role of MNCs date back to the 1960s when MNCs gained momentum in the global economy. These early interpretations ignore the structural differences assuming the firm to be a production function aimed at profit maximization. This is the view of political economists such as Baran & Sweezy (1966) and Cowling & Sugden (1987) who see the internationalization of firms as the inevitable result of the capitalist system and a means to increase the monopoly power of investing firms.

At the other extremum are business analysts and organizational theorists who try to identify the key determinants of the firms' decisions to invest abroad (Aharoni, 1966). In-between these two extremes are several streams of thought. The first originates from a group of scholars who take a macroeconomic approach to the activities of MNCs and try to clarify why countries invite FDI. These economists such as Kojima (1973) normally use neoclassical-type models of trade as a starting point and then expand them to explain the scale and the character of production exported abroad. Others, mostly concerned with the behavior of the individual firm, develop the theory of the national firm (trying to answer questions quite different from those about international trade) in order to explain the appearance and growth of MNCs. This school of economic thought led by Buckley & Casson (1976), Hennart (1980), Rugman (1982), and Teece (1981) treats the MNC as an organizational hierarchy which undertakes the functions of

the international market for raw materials, components and finished products.

A third group of analysts, closer to the second than to the first one, pose the question why single-national firms can better penetrate foreign markets than the local firms and why they want to control activities creating value outside of their national borders. Hymer (1960) is the predecessor of this explanation of production exported abroad. He thinks that this production could not start without the investing firms having some monopoly advantage over local competitors. In modeling the monopolistic advantage of the MNC Hymer (1960) does not use the theory of the firm as much as the theory of industrial organization developed by Bain (1968) in order to explain the direction and modes of ownership in US industry.

Vernon (1966) intertwines his product life cycle concept with FDI in order to reveal the multinational structure of contemporary industrial giants, accounting for the technological factor. A more recent theory is that of internalization aiming to explain why transborder transactions with semi-finished products take place within hierarchical systems rather than being driven by market forces. This stream includes Lundgren (1977), Swedenborg (1979), and McManus (1972). A further development of this stream is the so-called eclectic paradigm theory advanced by Dunning (1979) who introduces the concept of the spatial distribution of production and ownership in the context of the costs of using the market and the firm.

Theoreticians like Kravis & Lipsey (1988) and others apply the cost approach to explain the rise of contemporary MNCs. They use production, transportation, marketing, and other costs as grounds for the emergence of MNCs. Our study of MNCs gravitates around this group but in contrast to these scholars we treat the MNC specifically from the perspective of transaction costs. While production costs

result from turning out a product aimed at the international market, transaction costs are those made by the MNC in its interactions with the other participants in this market. This involves the costs of search for commercial partners to supply the necessary raw materials from abroad or sell the ready-made product in the global market, the costs of bargaining on supplying or distribution, as well as the costs arising from the uncertainty in international business deals.

The various academic studies and publications cover a wide spectrum of criteria characterizing the MNC: size, geographic distribution, sphere of activity, degree of multinationalization (number of countries, in which the company operates, a minimum number of foreign subsidiaries), form of ownership of capital, organizational structure, management philosophy and style, etc. We consider particularly important the following traits of MNCs:

- (1) Organizational structure: the parent company controls a large network of corporations in various countries.
- (2) Ethnic mix of managers: the managers of the headquarters are citizens of several countries.
- (3) Ownership: the parent company or headquarters are owned by citizens of at least two countries.
- (4) Business strategy: the different national markets are treated as one common; a single strategic center of control directs the operations of foreign subsidiaries.
- (5) Market orientation of management: depending on the market orientation of management firms are ethnocentric, polycentric, and geocentric.³ MNCs are viewed as geocentric or global.

³The terms ethnocentrism, polycentrism and geocentrism were coined by Perlmutter (1969).

Some major principles which are valid about MNCs and relevant to the analysis are the following:

1. MNCs are a primary agent of moving factors of production from one country to another. This principle related to the spatial distribution of geographically distant resources is critical in formulating a transaction cost model of the MNC.
2. MNCs are large firms in oligopolistic industries. They produce differentiated products and are subject to large economies of scale.
3. Horizontally or vertically integrated across national borders, multinational firms carry out much of the international trade as intrafirm trade.
4. MNCs are technologically more intensive compared to national firms.
5. With their international information networks MNCs are able much better than other firms to overcome information vacuum and risk limiting international trade.

Following the dynamic development of MNCs we need to stress that they are a relatively new phenomenon. According to Wilkins (1970) their roots could be traced back to the end of the 19th century, but their emergence becomes a fact much later. Between the two world wars there was a slump in the sporadic and free FDI and intensification of the foreign operations of the large firms. The growth of production exported abroad takes the form of vertical integration or horizontal diversification. In this period the average number and size of internal firm transactions increase drastically. Transborder mergers and acquisitions grow compared to green field investment. The FDI related to appropriating assets increase while firms try to strengthen or protect their market position and reduce their production or transaction costs. National oligopolists attempt to follow an expansion strategy, aimed at conquering new markets. This is the dawn of the emergence of the contemporary multinationals.

The MNC, as we know it today, is a novel phenomenon appearing in the 1950s. Just in the 1950s and 1960s some US firms started to enter foreign markets on a large scale in response to the new opportunities those markets provided them with. Tsurumi (1977) reports that the growth of FDI by US firms investing abroad has seen a sharp increase after 1953 reaching its peak in the mid-1960s, staying at that level for a while and then declining. A little later they are being followed by many production firms from West Europe, and then by Japanese firms. A curious investigator would ask why exactly in the middle of the 20th century did MNCs spread massively, why in the new era and not in the first half of the century when firms no doubt desired to go international. Root (1990, p.581) gives a possible explanation of the prerequisites for the development of MNCs:

“Before that time the inadequacies of the global infrastructure of communications and transportation, as well as the pervasive influence of restrictive government policies, rendered global business strategies nothing more than utopian dreams in the minds of a few entrepreneurs. The emergence of multinational enterprise systems directed and controlled by a single decision center had to await the dramatic postwar improvements in communications and transportation and the massive liberalization of international trade and payments that gathered steam in the late 1950s.”

The technological revolution affects substantially the international transactions and the costs of organizing them. It drastically changes the nature and organization of activities generating value and being carried out by firms. Technological change brings about new and more effective forms of transportation, much lower interfirm and intrafirm communication costs. From its very outset this revolution predetermines changes in the legal and financial status of companies and changes the character of exchange. The

interpersonal transactions based on trust and mutual respect are replaced by impersonal transactions based on legal contracts tying trading parties and containing perfect safeguards as measures of control.

If the development of communications and transportation infrastructure is a necessary condition for the birth of global corporations and if the technological revolution has stimulated MNCs' growth, how did this happen exactly and what is the economic logic behind this birth? It is vital to ask why MNCs did not emerge before the development of communications and infrastructure. Why are these technical improvements so essential for the operations of MNCs and how does technological determinism set the direction of MNC's growth?

There must be an economic explanation which, following fundamental economic theory, could help us understand the MNC like in the first part transaction cost theory helped explain the firm generally. We will again apply the transaction cost approach. We are motivated to search for an explanation in view of Edward Mason's concern about not knowing the corporate system well enough (Mason, 1959, p.4):

"The man of action may be content with a system that works. But one who reflects on the properties or characteristics of this system cannot help asking why it works and whether it will continue to work."

A transaction cost model of the MNC

In explaining the firm, we began from the idea that the market and the administrative mode of resource allocation are two alternatives and that the firm comes in to substitute the market when it is too costly to use it. The firm grows when the transaction costs of market exchange are too high and resource allocation is more effectively done within a hierarchical organizational structure. The problem of

resource allocation is key to deciphering MNCs because when there is great geographical distance among the factors of production, there are sizable transaction costs of extraction and allocation. MNCs must overcome immense distances in bringing certain factors of production together so that they can employ them in production and sell in a complex and diverse market such as the global one.

Transaction costs are bigger, the greater the spatial distribution and the scale of transactions undertaken to shorten the geographic distance among factors of production and to combine them within a given production. Transaction cost theory which assumes that the costs of intrafirm coordination grow, the more diverse the transactions in type and in place, accounts for the fact that factors such as technological innovations, shortening the distance and the spatial distribution among economic resources, contribute to the expansion of the firm.

The developed transportation systems allow transferring raw materials, products, or other tangible resources globally. The new telecommunication technologies turn into means of translating information from one country to another. Dicken (1992) symbolically calls them electronic highways of the information era which play a role as important as railways in the era of industrialization. This comparison is extremely precise in that both communication and transportation networks facilitate the movement of factors of production on a global scale and assist in concentrating these factors in one place. The evolution of the world transportation system and global communications reduce the transaction costs of internal organization within the firm thus enlarging its size.

Technological revolution is an accelerator for the global economy. It creates the physical and technological grounds which foster, diversify, and make accessible international transport and delivery. The development of transport

communications, on its own, leads to a deeper division of labor and more sophisticated forms of economic activity.

Once initiated, the firm has the task to supplant the marketplace but cannot overcome the distance in the factors of production and acts on a narrow perimeter, the national or regional market. As it becomes easier to overcome the distances in the geographic location of inputs, by means of modern communications and the advanced transportation infrastructure, the firm becomes a cheaper instrument of organizing production. The production process involves factors which are geographically dispersed and procuring them through the market is a strenuous and costly undertaking. The absence of developed communications and infrastructural improvements prevented the emergence of the large firm since, with long distances, it was more efficient to obtain resources through open market instruments. With the launch of technical discoveries, the new, multinational firm overtakes the market, regional or global. The new inventions make the firm a preferable instrument of resource allocation in comparison with the world market where the cost of transacting is much higher than internalizing those operations within the boundaries of the multinational firm.

This, in a sense, is the mechanism by which MNCs appear. This explains why their emergence occurred in the middle of the 20th century, a period of proliferation of communications and immense improvements in infrastructure. It is exactly the developed transportation systems and communication technologies that become the precondition, though not the reason, for the rise of the multinational firm. The reason is the sizable costs arising in the process of international transacting. The mass introduction of computers and new transmission mechanisms leads to the dramatic transformation of the telecommunication industry from one based on centralized, mechanical, on-ground operations to wireless, decentralized

network systems where information and data could be accessed easily in various ways. This transfer of information significantly reduces the costs of consolidating, transforming, and transmitting company information.

A substantive element of the advancement of information flow is the dramatic drop in the price of information. This facilitates and precipitates commercial contacts which can now take place more easily and quickly. The new technologies allow the fast transfer of information within the system of the world corporation. The improved access to information reduces the risks of international market transactions.

Herewith we should include not only technical inventions but also all innovations which improve management as a factor of production by increasing its marginal product. This effect increases the returns to management. Innovations improve the managerial function. Modern innovations and scientific discoveries allow the manager to better procure, combine and allocate inputs which increases output. Due to innovations the administrative mode of coordinating resources within the multinational firm is a more convenient way of organizing activities. Furthermore, the task of the international manager is much more sophisticated and responsible than that of the national or regional one. He needs to better coordinate and allocate economic resources which are far more dispersed. The linking role of communications helps him perform his task of bringing them together but to do that he must have much more extensive managerial skills in comparison with his analog in national terms.

We should again emphasize the dual effect of technological improvements. They influence not only the costs of bureaucracy but also the market transaction costs since they bring the factors together on the market as well. In this case the MNC will grow or shrink depending on the

relative effect of these two types of costs. In other words, if the respective innovation reduces the costs of international transacting more than those of administrative decision making within the MNC, then the international market will likely replace the MNC in certain areas or activities. If the innovation affects the MNC more seriously, then the firm will supersede the firm in performing those activities. Innovations seem to have had a stronger impact on the MNC which is what we owe the rise of the large world corporation to.

A possible explanation is that MNCs are far more receptive in terms of innovation and much more technologically intensive than the global market or other firms participating in it. Research indicates MNCs as technological innovators oriented to the generation, transfer, and diffusion of scientific discoveries.

In 1971 Vernon (1971) carries out a survey of the top 500 corporations in the USA, 187 of which having strong presence in foreign markets. He finds that these 187 firms have much more substantive costs of research and development than the rest of the firms. Vernon (1971) argues that multinational firms are more frequent innovators in the sphere of technologies, when they make their initial investment abroad.

Independent of each other Galbraith (1967) and Schumpeter (1950) reach the conclusion that innovation and technological change are a priority of big firms enjoying monopoly power. They find the costs of research and development too high for small firms. This leads them to believe that only large corporations in highly concentrated industries have the funding and abilities to carry out technological change and take the risks associated with it. There are opponents to this view. Jewkes, Sawersand & Stillerman (1969) argue that some major discoveries are

being made by ordinary people with limited finances who work in “their backyard garage.”⁴

Williamson (1985) finds that a high concentration of FDI in production is reported exactly where technological transfer is of special importance. Technologies represent a large part of the activities and profile of MNCs which turn out to be key generators of new scientific and technological discoveries in the contemporary global economy.

The technological factor in the operations of the MNCs is most visible in the context of intrafirm trade. Research explicitly shows the link between the dynamics of technological change in an industry and the size of intrafirm trade. US data firmly demonstrate that intrafirm trade is concentrated in highly technological sectors (Kang, 1990). Buckley & Casson (1976) test the hypothesis that there is a positive relationship between the importance of intrafirm trade in different industries and the research and development budgets. They find that the more intensive the process of research and development in a sector, the larger the volume of intrafirm trade.

The MNC turns into a cheaper mode of organizing production and is so successful in superseding the mechanism of remote markets in resource allocation that it is today impossible to imagine the world without it. Under certain circumstances, as with large distances, it is practically impossible to bring factors of production together. The costs of transacting are so insurmountable that even the market cannot overcome those distances and transactions do not, in effect, take place. At the same time, MNCs, having a magnificent scale and optimizing on the costs of internal organization, manage to overcome them.

⁴ See examples in favor of or against Galbraith and Schumpeter in Scherer (1980).

Coase's words become a prophecy – with the expansion of their functions, firms are likely to undertake activities which are more dispersed spatially and more diverse in type. His article “The Nature of the Firm” comes much before the emergence of the contemporary MNC, it is as if he foresees the rise of the multinational firm and sets the foundation for building a coherent theory about it.

The higher the transaction costs of the international market, the more likely the MNC is to take over its functions and activities, thus growing. MNCs would likely grow, the more costly the international market transactions. Whether those costs are low or high will be essential in clarifying the link between the MNC and market structure. It is necessary at this point to answer whether we could set limits to MNC's growth and whether it will expand infinitely.

The transaction cost approach and the substitution at the margin between the market and the bureaucracy make us believe that the multinational firm, like the national one, cannot grow infinitely. It will grow if the marginal cost of using the international market exceeds the marginal cost of organizing within the firm. When the marginal cost of carrying out international market transactions becomes lower than that of firm organization, the MNC would stop expanding. The process of growth will be followed by a process of shrinking, vertical integration will be followed by outsourcing or firm disintegration in the make-or-buy decision. Which process will occur exactly depends on the cost of using the market. Whether the market is one of perfect or imperfect competition will delineate the limits of the firm since different market structures are related to different levels of transaction costs. We can postulate that in the more expensive markets with higher transaction costs the firm would be a more efficient instrument and, therefore, likely to grow. In the more competitive markets with lower transaction costs the firm is likely to be small.

Meanwhile, the international firm tries to supersede the global market where costs are significant. The marginal benefit of transacting must be higher than the marginal cost. In other words, the firm does not target markets where transaction costs rise unlimitedly. Only those transactions would be attractive for which the benefits exceed the costs. The international firm will take the high risk and uncertainty only when they are justified. Although an efficient mechanism, the global firm will not take over the world market at any rate. It will do so only when this is economically feasible.

The global market is more costly than the national one. There are sizable costs of guaranteeing against the high risk, uncertainty, imperfect competition, or undefined rules. With excessively high costs in certain markets, no firm structure of any kind is in a condition to overcome those since no firm structure would find it beneficial, if costs exceed benefits for any number of transactions.

This follows from the rule that with positive transaction costs some or all contractual arrangements on the distribution of property rights become too costly and the incentives to undertake actions which maximize output disappear (Coase, 1988). Therefore, the higher the transaction costs, the lower the probability of a transaction since it is less beneficial to carry it out. With excessively high costs of exchange in each international market no form of firm organization can replace it and there are no transactions of any kind – neither firm, nor market transactions. With prohibitively high transaction costs no exchange can take place.

To summarize the arguments above, we will try to define the MNCs briefly. It is a complex hierarchical structure which has divisions in various countries and aims to substitute the international market when in the process of resource allocation, the costs of market exchange exceed the

costs of firm organization of the same activities. The transaction cost approach necessitates viewing the MNC as an alternative to the international market.

The words “division” or “subsidiary” are intrinsic in the concept of the MNC. One naturally relates the idea of the MNC to the presence of a parent company and its branches. It looks like such a diversified, dispersed structure is typical of multinational or global firms. But are the geographic distance and the need to step in different countries the only reason for this expanded structure? Is there another, economic explanation for the dispersed character of global firms? Such an explanation may be sought in the mechanism by which managerial tasks are allocated within the firm. The presumption that MNCs inevitably face high transaction costs of search and distribution of information, as well as of coordination of internal production processes, which predetermines the large size of the firm, leads to another conclusion.

The high managerial costs of organization can better be handled and coordinated by smaller units within the boundaries of a bigger structure. Relevant to this point is Eggertsson’s claim on agency costs that they could sometimes be reduced when one big organization is partitioned into smaller semi-autonomous units (Eggertsson, 1990). This in a way helps explain the structure of the MNC incorporating semi-independent units and one coordinating center. The diversified structure allows MNCs to handle transaction costs on a global scale. It would be unthinkable to try to overcome such significant transaction costs in a giant, unitary structure.

It is, therefore, necessary to dynamically trace the transformation of the large corporations and their structure. Until the 1930s most US corporations are organized as a unitary structure based on all functional areas of business – finance, marketing, production, etc. As corporations grow

and participate more actively in international markets, they face the problem of control over decision making. Chandler (1966, pp.382-383) describes the situation, as follows:

“The inherent weakness in the centralized, functionally departmentalized operating company... became critical only when the administrative load on the senior executives increased to such an extent that they were unable to handle their entrepreneurial responsibilities efficiently. This situation arose when the operations of the enterprise became too complex and the problems of coordination, appraisal, and policy formulation too intricate for a small number of top officers to handle both long-run, entrepreneurial, and short-run operational administrative activities.”

This leads to the multidivisional structure which according to Williamson (1985) introduces semi-autonomous operational units, mostly profit centers, organized along product, brand or location. The strategic management and control are separated from the ordinary operational decisions and entrusted to one general office. Chandler (1966, pp.382-383) describes the role of this strategic center and the multidivisional structure:

“The basic reason for its success was simply that it clearly removed the executives responsible for the destiny of the entire enterprise from the more routine operational activities, and so gave them the time, information, and even psychological commitment for long-term planning and appraisal... [The] new structure left the broad strategic decisions as to the allocation of existing resources and the acquisition of new ones in the hands of a top team of generalists. Relieved of operating duties and tactical decisions, a general executive was less likely to reflect the position of just one part of the whole.”

This new stage in the development of MNCs changes their structure and reassesses the function of international managers. When the company decides to go international

and undertakes investment abroad, it needs to follow the global trends in manufacturing and not just the traits of national production. The nature of the corporation changes – the management must have better qualification to deal with the larger scale of production and the global problems. It is not enough for the managers to follow the trends of the national economy, the local instruments, or the features of the national economic policy. This behavioral change in management is also shaped by the knowledge of the country in which the company positions its branches.

The separation of tasks between the strategic and operation level in the diversified structure, in effect, diversifies the transaction costs of bureaucracy and rationalizes the organization of internal operations so that the costs of those be minimized. The MNC gets its optimal form which in the modern literature is known as diversified, multidivisional, dislocated, dispersed, etc. All these adjectives imply the same – a spatial form of firm organization which allows decomposing activities among a number of divisions over a large perimeter so that to minimize the managerial costs of internal operation.

It follows that the large corporation is large because it is faced with the transaction costs of the global market. This diverse and vast market involving specific individual markets, cultures, languages, customs, and commercial practices has turned the contemporary MNCs into gigantic formations. This process is often associated with monopoly and oligopoly structures. This is the trivial understanding in neoclassical economic analysis about the process of growth of today's MNCs. The problem of monopoly and oligopoly is inseparable of the study of the MNC. As they grow naturally reaching a large scale and gaining a monopoly position, MNCs are often accused of seeking monopoly intentionally, thus preventing competition. MNCs are blamed that they do

not drive, but instead prevent, the efficient allocation of the factors of production globally.

This last accusation refers to the observation that in the conditions of perfect competition the movement of factors from countries with higher opportunity costs to countries with lower ones would continue to the point where the marginal productivity and prices of a factor get equalized across the globe. Then, it is believed, the international allocation of the factors of production will be optimal because any further movement of the factors would be less desirable, reducing cumulative output and overall customer satisfaction in the world. The greater the mobility of factors of production in the world, the better their allocation and the more efficient the world economic processes. By facilitating the movement of factors MNCs improve the efficiency of the global economy.

International trade equalizes factor prices since in countries where one factor is more expensive the price of the factor falls, while in other countries where the factor is relatively cheap, its price increases. By buying factors from the open market or transferring them from one branch to another as part of intrafirm trade at transfer prices, the MNC turns into a major agent of the equalization of factor prices across the world. The transfer of capitals, qualified labor or technologies has led to the economic growth of western countries. Multinationals not only move labor and capital in the world economy, but also contribute to world investment, capital formation and economic growth.

MNCs engage in contacts with local companies which stimulates local businesses. MNCs improve the overall technological level of the recipient country, educate local labor, and help improve the skills of local management in line with western managerial practices. MNCs increase the productivity of factors of production in the receiving country. Some believe that MNCs prevent the optimal

allocation of global resources in that they are not part of perfectly competitive markets but are rather oligopolistic firms. Indeed, most of the largest corporations in the world today are pure oligopolies. Such examples in the aviation business are Raytheon (United) Technologies, Boeing, Rockwell, and Lockheed Martin. In the automobile industry such companies are General Motors, Ford Motor, Toyota Motor, Volkswagen, Daimler, Nissan, Fiat, Honda, Peugeot, Citroen, Volvo, etc.

But the transaction cost approach dictates otherwise. MNCs do not participate in less competitive markets with the purpose of monopolizing them. In effect, the reasons for the emergence of MNCs are identical to some of the entry barriers giving a competitive advantage to MNCs over newly created businesses or national firms. While classical analysis maintains that MNCs intentionally seek monopoly of some kind, the transaction cost analysis argues that MNCs turn out to be monopolies in their capacity of a substitute for the costly international market. MNCs do not purposely seek monopoly power. Rather, they aim to overcome the imperfections of the global market and replace it in pursuit of greater economic efficiency.

The system of MNC and regional markets

Economic reality shows that large MNCs embrace many more activities in geographically distant places. Irrespective of their size, large global corporations today continue to grow. The process of enlargement in the last decades is accompanied by a wave of mergers and acquisitions. Data show that if in the 1950s and 1960s green field investments were a major way of penetrating foreign economies and MNCs expanded primarily through organic growth, in the middle of the 1980s such a method are mergers and

acquisitions. In 1996 they reach the record number of USD 275 billion, which is 78% of the cumulative flow of FDI.⁵

For example, there is a steady trend in expanding the scale of operations in the automobile industry. This industry is full of examples of mergers and acquisitions, especially when it comes to Europe. Volkswagen bought Audi, then took ownership of the Spanish SEAT and a large share of the Czech Skoda. The Italian Fiat absorbed the national Alfa Romeo, Lancha, Auto Byanka, Ferrari and Maserati. The French automobile maker Peugeot gained control of Simca and Citroen. In 1994 BMW bought Rover, while US firms General Motors and Ford bought European competitors. General Motors acquired Swedish SAAB, while Ford appropriated British Jaguar and French Volvo. The merger of Chrysler and Daimler-Benz in 1998 led to the new automobile giant Daimler-Chrysler. The merger of Renault and Nissan was announced in March 1999. Presently Fiat and Chrysler are merged into Fiat-Chrysler.

Along with these, there are examples of megamergers in the oil industry. In 1998 alone there were three such major mergers, of Total and Petrofina at a total of USD 39 billion, of British Petroleum with Amoco at USD 50 billion, and of Exxon with Mobile at a total of USD 80 billion.

It looks like the bigger the firm, the more activities it can absorb. It turns out that for the MNCs the clustering of activities and forming of groupings is preferable to free market transacting. Entering a foreign market, the MNC finds it suitable to carry out operations by itself. If the local market is well organized and less risky, it would be less likely for the MNC to expand its activities in a country. The MNC will likely keep a small scale of operations in the country. It is possible for the MNC to maintain a small production, an assembly line or simply a sales office. But if

⁵ For reference see the *World Investment Report*, 1997, p.9.

the local market demonstrates all features of a market with high risk and transaction costs, then the MNC will likely substitute it completely and not resort to outsourcing. It is expected to establish a broad-range production in it.

This is the mechanism by which market structure dictates the behavior of MNCs. Whether they will grow in a national market or not depends on how certain, risky, or competitive it is. Overcoming the high costs of exchange, not monopoly power, is the actual reason for MNCs to pursue expansion. Monopoly power is the result, rather than the goal of expansion. There is the opposite effect. The higher the costs of market exchange, the more likely it is for the costs of bureaucracy to be higher. This is predetermined by the link between the firm and the market. The riskier market requires higher costs of information but the costs of information gathering, processing and transmission grow the more complex and expanded the organization is.

The multinational firm is not an isolated island in a country and its contractual arrangements are strongly dependent on the general legal and institutional framework. This includes the employer-employee contractual relationship, too. MNCs also try to avoid risky markets where transaction costs are staggeringly high. The less perfect and less functional the mechanism of the local or regional market, the less attracted MNCs would be to it. It is natural then for MNCs to be present in some international markets and absent in some others.

In our analysis we already pointed out the inability of the theory of concentration and oligopolistic reaction to explain how the type of market structure affects the firm's decision to enter a given market and what the driving force behind that initial investment in the foreign country is. Transaction cost analysis helps answer what triggers the firm to make its initial investment in the foreign country. MNCs enter a local market not just because it offers cheap and abundant

resources, human capital or other inputs, not only because local demand is high and the market is potentially good for the realization and distribution of products, but because the transaction costs and the risks associated with that market are manageable.

This logic helps explain why Eastern European markets, offering cheap resources and representing high demand and marketing potential, remain outside the scope and vision of MNCs. The world corporations follow the behavior of escapism in the worst case, and delay in the best case when it comes to this region. What detracts western corporations are the prevalent problems of exchange and transition in the region – the high risk and costs of those markets, their uncertainty, imperfection and underdevelopment, the lack of proper, clear rules and established business practices, the lack of experience in the young government institutions in the sphere of the economy. Marginal analysis implies that the costs of transacting in Eastern Europe exceed the potential benefits.

The type of market structure and the costs of using the respective market serve as a possible explanation for the degree of centralism of the MNC. Different MNCs enjoy different degrees of centralization with the diversification and the movement from the unitary form to the multidivisional one. The relative freedom of certain divisions and units versus others, closely monitored by the headquarters, distinguishes the contemporary MNC from the classical international trusts and concerns of the end of the 19th and early 20th century.

How independent of the parent company the individual subsidiaries formed along a product or function would be depends on the transaction cost level of the respective market. The more risky and costly the local market in which the subsidiary or branch operates, the more strictly controlled it would be by the center. MNCs prove the rule

that hierarchy has organizational advantages over the market in such conditions. The more competitive, less costly, or less risky the respective local or regional market, the smaller the control and degree of centralization and the greater the freedom of the subsidiary to make independent decisions.

This dependence of MNC's behavior on the type of market structure explains why some subsidiaries of the same multinational company are subject to strict control by the headquarters while others enjoy greater freedom and independent decision making. An explanation can be sought in the environment in which the branches operate.

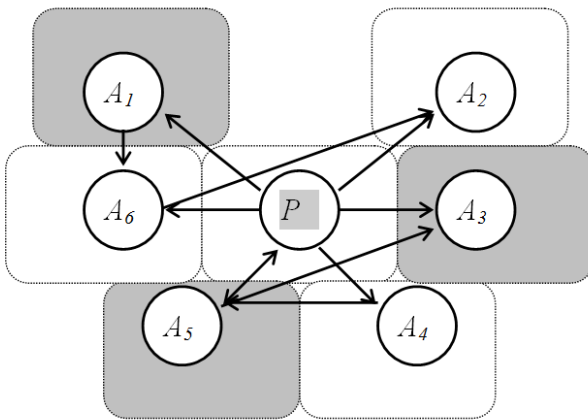


Figure 7. *System of the multinational corporation*⁶

The system depicted in Figure 7 shows the parent company and the foreign branches. The MNC is a system of structures which transfer among themselves products, capitals, technologies, and management. These, in a sense, are large-scale internal operations which resemble open market transactions. In the figure branch A_1 transfers spare parts to A_6 ; A_4 transfers the finished product to A_5 ; A_5 sells

⁶ Some elements in the figure are borrowed from Root (1990, p.584).

the produce on the local market; A_5 can develop a new technology which can be transferred to A_3 ; A_6 transfers a manager to a new position in A_2 . Divisions A_1 , A_3 , and A_5 are based in countries where market imperfections and transactional risks are more strongly expressed than in the other countries. The countries with high transaction costs are marked in gray. Divisions A_1 , A_3 , and A_5 located in such countries and exposed to higher market risks are subject to greater control by the parent company and are deprived of autonomous decision making. At the same time, divisions A_2 , A_4 , and A_6 operate in local markets which are less risky and less uncertain.

The foreign trade operations of the MNC are diverse. Intrafirm trade can include intrafirm deliveries of raw materials and energy for further use in production, exchange of parts, components, or semi-finished products for assembly, shipment of machinery, equipment, and measurement devices, exports of inventory or finished products from the parent company to subsidiaries abroad.

Transaction cost theory obligates us to also analyze the division of tasks among firms. Some questions relevant to our transaction cost model of the MNC are which industries do MNCs operate in, what is the industry structure, what is the place of the MNC in the industry. The organization of industry is tightly related to the dependence between the level of transaction costs and the costs of administrative coordination. We have already concluded that MNCs enter markets and industries in which small firms are unable to function. For instance, Root (1990) claims that the bigger scale and geographic distribution of their operations allow MNCs to take risks which force other firms to step back. To Root (1990) this ability of multinationals to carry immense risks stems from their humungous size, financial strength, magnificent operations spread over many countries, and the complexity of their management.

We should stress the dual character of this relationship, between the industry and the MNC. We have already explored that MNCs do not intentionally seek a monopoly position, as the standard neoclassical view maintains. With its structure and profile, the industry may also affect the behavior and decisions of MNCs. The peculiarities of an industry, its potential to offer substantive economies of scale and attract MNCs are worth examining in the context of transaction costs. Indeed, it is hard to imagine multinationals in sectors and industries which do not present substantial scale economies. But it is even harder to imagine MNCs in industries where the market is a smooth and efficient instrument where resource allocation can be organized along small, competitive firms.

If MNCs are expected to be in some industries where they are absent, then it must be that transaction costs are manageable for smaller firms or there are no significant economies of scale. Those industries perhaps gravitate to perfect competition. The extent to which firms can overcome transaction costs and the certainty of the market shape the profile of the industry, the market structure, the number and size of firms, and the division of tasks among them. In protecting their property rights MNCs may influence directly or indirectly the economic policy of the government, the national market, the legal system, and particularly the property right system. To protect their interest in a country MNCs may insist on or help in strengthening the judicial system. MNCs may try to introduce more competition and clear rules in the recipient country. They could as well strengthen or improve the state and administrative apparatus operating in the economic sphere.

An alternative approach to the MNC views it not simply as a monopoly or oligopoly. Such an approach searches for the capital accumulating effects of scale economies, the

advantages in resource allocation and the perfection of the international market.

Risk in MNC operations and type of market structure

Studying the MNC in detail requires analyzing the risks it is faced with on a global scale. A deep knowledge of the risks and imperfections of markets allows investigating better the role that MNCs play in the contemporary economic system. Adam Smith was the first to note the difference between national and international transactions. Discussing the motivation for the merchant to carry out foreign trade, Smith (1776, p.454) observes:

“In the home trade, his capital is never so long out of his sight as it frequently is in the foreign trade of consumption. He can know better the character and situation of the persons whom he trusts; and if he should happen to be deceived, he knows better the laws of the country from which he must seek redress. In the carrying trade, the capital of the merchant is, as it were, divided between two foreign countries and no part of it is ever necessarily brought home, or placed under his own immediate view or command.”

It is, therefore, inevitable for merchants involved in foreign trade to incur additional costs. International trade unavoidably brings greater risks compared to domestic trade. To Smith (1776) these risks are naturally bigger, as they result from the probability of the merchant to be unaware of the traits of his foreign partners, of the probability of his being deceived, and ultimately of the laws of the foreign country in case of deceit.

The probability of opportunism in market transactions is higher with international trade. Foreign trade risk involves the losses stemming from the impossibility of the trading party to predict processes and phenomena from a distant

macroeconomic or microeconomic environment, which are not directly observable or controllable. This commercial risk is a direct function of the behavioral failures of the market, the result of the opportunistic behavior, incomplete or improper fulfilment of the contractual obligations of the other party in a foreign exchange. Being a mechanism for the MNC presence in foreign countries, FDI are clearly subject to higher risks than domestic investments.

The risk with international transactions is specific, stemming from the peculiarities of international trade. The geographic distance among economic resources or economic agents increases the cost of transacting. The geographic distance separates the factors of production, not allowing thus to combine them easily within a single production unit. Distance, as an objective obstacle to international trade, raises the costs of transacting for economic agents. Geographic distance and the need to overcome it by various instruments cause the emergence of large organizational hierarchies which can more efficiently conduct economic activities than the global market.

The natural risks associated with foreign operations are emphasized by other scholars as well. Williamson (1985) thinks that information markets are more expensive and riskier when firms opt for transborder transfers. The language barrier naturally exacerbates the communication problem and increases the communication load. If, as it often happens, cultural or language differences increasingly feed the suspicion between commercial partners, then the trust necessary to carry out international transactions may disappear. The issue of trust is central in transaction cost analysis since in the absence of trust it becomes harder for economic agents to reach an agreement and take advantage of mutually beneficial contracting. Williamson (1985, p.293, n) states:

“Not only will contract negotiations be more complex and costly on that account, but execution will be subject to more formal and costly procedures than would occur under a regime of greater trust.”

With continuous, recurring opportunism by one of the commercial partners, complex contracting on a long-term business relationship gives way to FDI and the multinational firm. This is how the natural differences in markets, the cultural, political, technological, or economic disparities between the market agents generate risk, uncertainty, and higher transaction costs. It is also the reason for firms to perceive risk in international trade as higher than in domestic conditions.

Lack of information and uncertainty are the primary source of risk for market participants. In the international market there is information vacuum and information is not freely available. We have defined uncertainty as the incomplete information economic agents have about markets and future costs. To safeguard themselves against uncertainty, parties need reliable and timely information. Information relevant to international markets takes much more money and time. Most firms are constrained in obtaining information about the foreign market due to distance, incomplete or misleading data, language or other cultural barriers, higher absolute costs of information transfer and information exchange. Multinationals, which operate on a much larger market, must handle large volumes of information about the market, terms of trade, new technologies, legal systems, the government policies of the respective countries, as well as the general economic and political conditions. MNCs organize systems of strategic intelligence in order to collect data from outside or inside sources. Some scholars point out that the strategic intelligence systems launched by some corporations (such as the large petroleum extracting and

petroleum processing companies) by far exceed those of most governments in the world (Root, 1990). It is just the necessity to reduce uncertainty and secure smoothness of operations which forces MNCs to maintain large databases or intelligence units.

The divergence between the environment in the host country and the home country is at the root of the problem of information vacuum and imperfection. It is worth mentioning some key areas of difference between the two environments. In its activities the MNC is faced with:

- (1) Different languages and customs
- (2) Different levels of political stability
- (3) Sovereign national economic policies
- (4) Different national monetary systems
- (5) Different state regulation of international trade
- (6) Varying degree of availability of information in different markets

These divergences are a peculiarity of international market dealing. The very fact that the contractual partners belong to different countries dictates that the commodity or service subject to exchange crosses national borders, sometimes more than one. The contract, hence, requires special requisites, attributes and provisions based on national and international law, on customs, practices and traditions which go beyond national borders.

These peculiar requirements of the environment set high costs of adaptation for the international firm compared to the local one. These various traits make the international environment less stable and certain. The more stable and safer the environment, the lower the potential costs of information and adaptation for the firm. On the contrary, the more unstable, dynamic, and hostile the environment, the greater care the firm needs to take of its survival. Moreover, the more unstable and volatile the environment, the greater the advantage of centralized structures and strict hierarchical

coordination. If the surrounding world changes gradually, this gives an advantage to the firm to adjust to consumer tastes.

Meanwhile, not all transaction costs arise of objective factors such as geographic distance, cultural differences, or political turmoil. Transaction costs result from the behavioral and transactional failures of the global market associated with the human factor. The problem of deception and opportunism seems to be persistent since the time Smith (1776) wrote about it.

The problem of market failures was not an object of study of international trade and international economics in the past. Until the 1950s standard economic theory believed that cross-border markets of goods and services are a costless mechanism, while resources are considered immobile. But once market failures are accounted for, there is a chance that international transactions be organized within alternative forms and hierarchical structures. Then variables such as market structure, transaction costs and managerial vision enter the equation. The firm is no longer a black box and transactions are not carried out solely by markets. Dunning (1993) stresses that input allocation and the form of economic organization help explain the structure of trade and production, where firms differ in their organizational structure, innovation capabilities, appraisal, and attitude to commercial risks.

The market stops being an efficient instrument of resource allocation. The reasons for the failure of the market are several. First, buyers and sellers do not enter the market with full or symmetric information about it. They do not operate in the conditions of perfect certainty and complete information with respect to the transactions which they undertake. Such cognitive defects give birth to bounded rationality and opportunism, adverse selection, moral hazard, manipulation, distortion of information and

misrepresented quality. All these are innate characteristics of markets.

Such market failures are most vivid in international transactions. To some extent the MNC engages in production abroad to protect itself from the potential opportunism of foreign buyers or sellers. Another reason is the attempt of the MNC to respond to or take advantage of the politically unstable environment. Such risks exist with capital-intensive industries offering primary products, machinery, or advanced technologies where the setup costs and the costs of development are significant. Dunning (1993) claims that the greatest dangers for MNCs in such cases are the interruption of supplies, the threat on property rights, their loss or violation by foreign license holders. Vernon (1971), on the other hand, stresses that the loss of input markets and their overtaking by rival-oligopolists may lead the firm to a “follow the leader” type of strategy.

A second reason for market failure is that it cannot account for the costs and benefits of a transaction, stemming from factors external to the transaction. When products are supplied jointly with other products or are part of the same shipment or batch of shipments, this could be a good reason for the different stages of the value-added chain or the same stage of different value-added chains to be coordinated under some central control or the same management. Transborder transactions could generate additional advantages of common ownership similar to what is happening in international capital or foreign exchange markets operating under different national fiscal policies.

A third reason for the transactional mishaps of the market may be sought in the fact that when market demand is perfectly elastic, it is insufficient for firms to capture all economies of scale, scope, or geographic diversification. In other words, there is inevitably a loss from the joint costs of complex value-added activities and the synergies of joint

production and ownership. Such economies may directly arise out of production, supply, marketing, innovative, financial, or other operations of the firms in their risk-minimizing or competitive strategies. These so-called technical externalities arise when the production of a product continuously benefits from economies of scale. Such economies exist not only in manufacturing but in marketing, too.

In a comprehensive analysis Todorova (2015) studies market failure in relation to transaction costs. She traces all types of market failure to transaction costs. More specifically, externalities, monopoly power, misrepresented quality and absolute market failure can all be attributed to transaction costs, where public goods are viewed by some as a solution to the behavioral or transactional failures of the market. These failures as well as some other imperfections of the market can force the firms, national or multinational, to diversify their value creating activities by reshaping the form of ownership or organization of those activities. They undertake such steps in part in order to maximize the net profits of a smaller production, to minimize the transaction costs of joint ownership or, in part, to guarantee that they have achieved maximum economic rent (Dunning, 1993).

Externalities arise out of the impossibility of the market to optimally organize resource allocation and exchange. These intrinsic defects of the market mechanism are visible with international markets, too. International markets which operate through the game of international prices are less and less effective since the price mechanism does not capture externalities. In contrast to markets firms organize exchange through centralized management and control over employees. Market transactions are supplanted by intrafirm transfers of factor services and intermediate goods. Intrafirm transfers allow firms to capture more externalities than they would if using open market sales or purchases. They capture

externalities relevant to scale economies in marketing or manufacturing, property rights over knowledge as a public good, as well as the market restrictions imposed by governments and regulation.

Natural externalities can result from property rights, the technical effects already mentioned and public goods. Hennart (1980) discusses the externalities of the international market. Externalities resulting from public goods arise when goods like knowledge which is generated by one individual can be used by another individual (such as the inventor of a new technology and the users of his invention). The logic is that information which costs money is valuable to someone when he does not have it. But once he obtains it, he is unwilling to pay for it while the information is valuable only if he uses it. It is impossible for the owner of the information to receive a fair price for it – on the one hand, he has to reveal the information to the buyer in order to intrigue him and so that the buyer can evaluate whether he needs it or not. On the other hand, once the buyer obtains the information and finds out its value, he is no longer inclined to pay for it. This fundamental paradox of knowledge was observed by Arrow (1962) who found that the buyer does not know how valuable information is until he obtains it, but once he does, he obtains it practically free of charge.

Except natural externalities the government interfering in markets causes the so-called artificial externalities, by distorting the market mechanism seriously and by increasing the gap between private and social benefits and between private and social costs. Examples of such government intervention in the functioning of markets are tariffs, subsidies, taxes, price controls, trade barriers, FDI requirements.

The idea that market imperfections cause a process of internalization of operations within MNCs becomes more prevalent in economic theory. Koekkoek & Mennes (1991)

maintain that corporations respond to market imperfections by substituting market transactions with intrafirm transfers. They give the examples of international intrafirm trade and international transfer prices which are strongly influenced by the strategic trade and tax policies of governments. The distortions of the market mechanism which result of import tariffs and other trade barriers force multinationals to conduct intrafirm trade which avoids the effects of tariffs and taxation. Both intrafirm pricing and intrafirm trade are a response of MNCs to the imperfections of the environment. To gain from international transfer prices, the corporation must move its product within its own borders. The result of the growing market distortions caused by the government is the expansion of international intrafirm trade within the MNC and the additional trade flows driven by transfer pricing.

Transfer prices are a special trait of the contemporary MNC since they show it as an alternative to the global market. Intrafirm trade within the corporation is quite different from the trade between corporations on a global scale especially as it concerns prices and pricing strategies within the MNC. Since MNCs opt to organize their activities in a way that maximizes their joint corporate profit, the methods they use to achieve such optimal organization differ substantially from pricing in the open market.

To the extent that transfer prices differ from market, automatic prices and already dominate over them, MNCs play the role of substitutes for the market. Looking deeply into the mode of intrafirm pricing, UN experts explicitly emphasize their nonmarket character and their being “outside of the game of market forces.”⁷

⁷ See, for example, United Nations. (1986). *Information Disclosure Concerning Related Party Transactions and Transfer of Technology*, E./C.10/AC.3/1986, p.5.

The artificial, non-market, administrative character of transfer prices is recognized by MNC researchers. A key feature of this type of pricing is that it is the result of the commands from the headquarters and not the interplay of market forces. To us transfer prices are the best expression of the administrative, nonmarket mode of the functioning of the global firm, of the substitution of the market with the bureaucracy in the conditions of excessively high transaction costs and market imperfections. It is also clear that this mode of pricing is invariably cheaper for MNCs to use than the market mechanism.

Similar is the role of the international specialization of production and the international division of labor. The emergence of MNCs delineates two types of international specialization – interfirm and intrafirm. They also make quite visible the substitution of the market by firm structures. While interfirm specialization is dictated mostly by the market and is the automatic, uncontrolled and unintentional result of the independent investment, manufacturing, commercial or other decisions of companies, which are autonomous both in terms of jurisdiction and capital and which originate in different countries, intrafirm specialization is regulated and administered in a strictly centralized manner by the parent company of the MNC.

A major driving force of the international division of labor is the intense competition on the global market which acts as a natural selection device for the international specialization of countries in some sector or production depending on their advantages or abundance of factors of production. In its typical final form, the international division of labor is the result of the independent investment and manufacturing decisions and separate business deals of many autonomous agents from different countries. The international intrafirm division of labor is similar in type to the division of labor within a single production unit. As

opposed to interfirm specialization, this type of specialization occurs within the boundaries of the MCNs and is not uncontrolled or inspired by market forces, but is rather the result of the intentional, centralized investment and production strategy of the MNC.

Market imperfections change the nature of international economic relations. The international division of labor increasingly turns into intrafirm division, international interfirm flows of goods transform into intrafirm exchange, while international technological diffusion becomes an exchange of technological knowledge among the different subsidiaries of the corporation. The market is more and more absent, and the firm structure increasingly substitutes its mechanisms in the process of resource allocation. In a global context this role of the market is less and less efficient.

The most visible inability of the market to properly allocate economic resources is the sphere of knowledge. We have already referred to the knowledge paradox by which a buyer is unwilling to pay for some piece of information without knowing its value. But once he finds out the value of information, he is unwilling to pay for it. This fundamental paradox is relevant to MNCs as well. When a MNC creates some new knowledge in the form of technology, this knowledge becomes a public good. But a public good cannot be properly allocated by the market because its marginal cost is zero. In other words, the new users of this public good would receive it at no additional cost. At the same time, at zero marginal cost or zero price there will be no incentives for MNCs to create such a technology.

This externality related to ownership can partly be resolved by defining property rights with the help of patents and trademarks in a way that favors the innovative company. The property rights protected by the patent or the trademark would allow limiting the usage of the newly developed technology. However only some of the firm's

knowhow can be protected by legal means. The firm's knowhow can best be protected by the firm's own efforts to keep this good a secret. Unable to properly allocate a public good like the technology generated by the MNC, the market forces the corporation to keep it for itself. The result is that instead of selling it, licensing, or leasing it out to another firm the MNC will exploit this technology bringing it to development, own use, control, and production.

It is exactly in response to this inability of the market to allocate knowledge and other public goods that MNCs undertakes horizontal integration – the process by which activities at the same stage or level of the production are combined and controlled by one entity. MNCs are horizontally integrated when they open foreign offices or branches which repeat the activity of the parent company. They are independent production units, but they sell their produce in foreign markets. Horizontal integration can also be seen as a method to avoid tariffs and customs.

The MNC resorts to horizontal integration when it produces in the foreign market the same product or product mix which it turns out in the country of origin. According to Magee (1977) horizontal integration allows the MNC to receive economic rent for its technology which it otherwise cannot obtain from the market. It is an effective mechanism by which the corporation can protect its property rights over the specific asset it developed. We have already reflected that specific assets increase the ability of the firm to more efficiently allocate resources than the market. The more specific their assets, the greater the advantage of MNCs over the international market.

Due to the unique conditions in which MNCs evolve, the features of each large world corporation are strictly specific. Each MNC develops a character of its own. While the similarities among domestic firms are greater due to the common and identical conditions in the local market, the

variety on the international market, the specific cultures, languages, trade practices, political, economic and other characteristics of every national market have shaped a unique image of every MNC. It can be deduced that the MNC has a greater likelihood of creating and owning specific assets than the national firm.

In an empirical study Pearce (1982) finds that the largest share of intrafirm trade is not in the industries with highest technological intensity and product innovation but in the industries with average such intensity. The reason for this paradox is that MNCs need to protect their technologies and knowhow and that the most dynamic industries, namely the new industries generating new products or the most technologically intensive industries, export a finished product abroad. This way the parent company retains full control over newly designed products or newly developed technologies. When part of the manufacturing or research and development activities get exported abroad, the parent company tries to keep for itself the most essential, key, and innovative components or technologies.

It can be concluded that international intrafirm trade and the whole production cycle taking place within the MNC are organized so that the company can keep ownership of specific assets such as technological and production knowhow and protect its property rights over those. Except generating new technologies, MNCs transfer them from one place to another, from a more developed country to a less developed one. We can say that MNCs allocate scientific inventions better and faster than the international market which does not seem to protect innovations well enough. This argument also justifies MNCs against the accusations that they prevent optimal resource allocation in the global economic system. On the contrary, it may turn out that through horizontal integration MNCs replace a less efficient system. They not only transfer factors of production more

swiftly and cheaply than the market but also contribute to the progress of the world economic system and economically backward countries by importing in them innovations and technological knowhow.

To achieve a more efficient transfer of factor goods and services the MNC adopts the functions of the market with vertical integration, too. This is the consolidation of many activities within the corporation along the distribution channel. In this case, the MNC grows again, likewith horizontal integration, by absorbing activities from the very outset of the production process through the supply of necessary raw materials to the very final stage of realizing the ready-made product. Transaction costs are the prerequisite for vertical integration. More precisely the high costs of coordinating consecutive production processes with few participants in the market, the prolonged period of exchange, as well as the high uncertainty for market participants lead to backward integration. This is when a downstream firm, say a producer, merges with an upstream firm, say a supplier of raw materials or components at the early stage of the distribution channel. Forward integration is the merger of a firm with the downstream firm, which operates at a later stage of the distribution channel, for instance, the merger of a producer with its distributor. Forward integration becomes an effective way of organizing exchange when there is a strong interdependence between the producing firm and the marketing channel, and it is more costly to organize such long-term, uncertain relationships along market contracting and market prices. Protracted bargaining paired with high uncertainty favors firm organization better than market contracting.

Williamson (1985) discusses the so-called comprehensive integration. It is the organizational tool by which sets of products or services are effectively brought to the market. Williamson (1985) defines it as backward integration back

into supplying materials, lateral integration into components and forward integration into the distribution of final products. Backward integration is most common in extraction and the production of raw materials. Examples of vertically integrated MNCs in this respect are firms from the steel industry, extraction of aluminum, copper and crude oil which made foreign investments in mines, extraction sites or processing plants. Grimwade (1989) clarifies that vertical integration within the MNC occurs when it allocates different stages of the production and sale of a product or set of products in different countries.

The multinational firm is vertically integrated when the parent company sets up foreign divisions which participate in producing the final product by delivering some part or component. Examples of backward integration are petroleum extraction and petroleum processing where the production plant is usually located in proximity to the oil well. By exploiting the deposits of natural resources in developing countries international extracting corporations secure cheap raw materials for their processing plants based in the developed world. The most vertically integrated industry is automobile making in which the leading producers optimize their global operations by forming strategic alliances and incorporating all stages along the supply chain.

Through vertical integration MNCs obtain raw materials from their foreign subsidiaries at lower transfer prices. As a result, in the trade with raw materials along with the prevailing market price there is a special, intrafirm price on internal operations. For instance, much of the international trade with crude oil and non-ferrous metals is done through transfer prices.

The main drivers for the MNCs to integrate vertically are several. First, firms need primary resources which are often located in other countries. When raw materials are

concentrated in another firm this form of integration can help avoid marketing costs and the risk of market bargaining between the two firms. Avoiding risk and uncertainty is a key factor for MNC mergers. Backward integration is often motivated by the need to remove the risk associated with interrupted or irregular supplies or price hikes.

A second reason for the vertical merger of MNCs could be a similar move by competitors within the mechanism of oligopolistic reaction which we already mentioned. Finally, backward integration can lead to internal economies of scale when the joining two firms achieve the afore-mentioned technical efficiencies or overcome externalities. The larger size of the newly formed corporation allows economies from the joint coordination of manufacturing and the transfer of goods between the different stages of production. These economies and efficiencies would not exist in the process of coordination between separate producers. The shared management of multiple activities in distant regions could have a better control over related processes. The goal may be to achieve economies external to those activities but internal to the firm which runs them.

Vertical integration can be seen not only with deliveries of primary inputs, but also with spare parts and for the purposes of cutting marketing costs in distribution. More broadly, it could be stated that the motivation behind mergers and conglomerates in the global economy is not always to monopolize the market but rather to achieve cost economies and overcome certain risks.

To Williamson (1985) the main economic goal of vertical integration is economizing on transaction costs, while the key reason for this type of integration is asset specificity. Williamson (1985, p.90) claims that without asset specificity:

“...market contracting between successive production stages ordinarily has good economizing properties. Not only can production economies be realized by an

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outside supplier who aggregates orders, but the governance costs of market procurement are negligible – since neither party has a transaction-specific interest in the continuity of the trade. As asset specificity increases, however, the balance shifts in favor of internal organization.”

The need to protect one’s own technology, trademark, brand name capital or some other asset leads to vertical integration. For instance, in some sectors producing consumer goods or services, the failure of the market to guarantee to the producer of the intermediate product sufficient control over the quality of the final product which carries its brand name or trademark could be the reason for substituting the market with forward integration.

Quality control is an incentive for firms to integrate forward along the distribution channel. Thus, Japanese corporations try to internalize market operations and grow. Their fanatic orientation to quality at all stages of production has led Japanese industrial concerns to internalize their operations more than their European or US counterparts.

The result is the big corporation and the significant share of trade among its units. Casson (1986) reports that out of 111 analyzed MNCs specializing in light industry in 5 Association of Southeast Asian Nations (ASEAN) countries, the subsidiaries of Japanese MNCs export 79% of their produce as intrafirm exchange compared to 68% of US firms and 65% of European branches. Such a tendency can be detected with respect to the imports of those subsidiaries. Japanese divisions get 84% of their import from interrelated companies while US divisions import 53% and European ones 57%.

The overall effect of vertical integration is that it creates competitive advantages for the firms. It helps reduce production costs, achieve technological efficiencies of joining two interdependent enterprises together, reduce transaction

costs arising from market exchange in the conditions of imperfect competition, and resolve permanently the problem of quality control. The strategy of vertical integration affects favorably the innovation activity of the firm and stimulates its growth. It is also a solution to asymmetric information, contractual opportunism, and other aspects of uncertainty.

In the present chapter we presented a transaction cost model of the MNC. The main premises of the model are:

1. The emergence of the MNC is predetermined by scientific discoveries and technological innovations which shorten the geographic distances among economic resources in the world and allow cutting on organizational costs within the firm.
2. The multinational firm is a complex hierarchical structure dispersed in many countries and aimed at replacing the international market in the allocation of global resources. The firm performs this task at less cost than the market.
3. The MNC opts to enter certain markets based on the ratio of the transaction costs and transaction benefits.
4. The more costly the regional or national market is from the perspective of transaction costs, the greater the advantage of the bureaucracy, the more centralized the company and the lower the autonomy of the subsidiaries.
5. There are specific risks for MNCs in their operations in the global market – there are various market failures which firms overcome by internal organization, horizontal and vertical integration.
6. Through intrafirm trade and transfer prices companies manage to capture externalities becoming thus a cheaper instrument of resource allocation than the market.

The fact that the international division of labor transforms into intrafirm division, market pricing turns into transfer

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prices and the technological transfer turns into intrafirm exchange of technological knowledge and innovations, speaks of the persistent failure of the global market.

3

MNCs in Central and Eastern Europe

Sources of risk and uncertainty for MNC in Central and Eastern Europe

The countries of Central and Eastern Europe (CEE) have joined the club of market economies which allowed the entry and expansion of FDI in them. In the early 1990s CEE countries are mostly importers of FDI but there is a recent trend of exporting capital from East European MNCs. In 1991 there are 300 firms of multinational type originating from CEE and the total capital invested abroad by the former members of the Council for Mutual Economic Assistance (COMECON) exceeds USD 1 billion. Toward the end of 1989 state-owned enterprises from these countries own around 827 branches, subsidiaries, or divisions in the countries of the Organization for Economic Cooperation and Development (OECD). Some of the largest CEE

multinational firms are Podravka, the Latvian Shipping Company, Gorenje, Lukoil, Skoda, etc.¹

CEE countries saw the foreign investment from Western Europe, North America, Japan, and Southeast Asia as a panacea for the stagnated and unstable post-communist economic systems. All CEE countries hoped for the favorable and revitalizing effect of these investments and started competing over them. According to UN experts a key issue in the relationship between the different countries in the region and the multinationals is the opportunity to solve some national problems with the help of FDI.² The challenge of building prosperity in CEE sets before their national economic policies the complicated task of intertwining the national economies with the high degree of competitiveness of MNCs. The purpose is to combine the unique competitive advantages of the firms with the advantages which every geographic region of CEE offers. The issue of MNC influence in the countries of CEE sets the most pressing and hardest problem – the relative isolation of these countries from the system of global economic linkages, and the need to integrate them into the world economy.

This relative economic isolation of CEE economies which were primarily oriented to the Soviet Union, but which the Soviet economy was hardly dependent on, is the main challenge for the MNCs entering the region. The lack of strong economic ties and channels with the West, of developed transborder communications, transportation networks and other infrastructure hampers the activities of MNCs in CEE.

The relative isolation of the former socialist countries is most obvious in the lack of functioning markets. It can be

¹ For further reference on CEE multinationals in the 1990s see the *World Investment Report*. 1992, 1999.

² United Nations. (1992). *The Determinants of Foreign Direct Investment. A Survey of the Evidence*, p.60.

argued how much of the economic instability is due to economic conjuncture, the inadequate economic policy of the local governments, or the natural result of economic backwardness. Looking more deeply into the peculiarities and chronology of the economic development of the region makes us believe that the last reason is most likely. The underdevelopment of CEE markets is accompanied by backwardness in the financial and banking sphere which has seen a wave of bank runs and financial schemes in the period of transition.

Financial instability in the region of CEE, the underdevelopment of the local markets of financial services and the system of payments in these countries are sources of uncertainty in the operations of MNCs. For example, the series of bank runs of local banks immediately freeze or hinder the activities of foreign corporations using the services of those banks. Another source of financial risk is the volatility of many of the East European currencies which have in the three decades of transition seen a series of collapses in the conditions of inflationary economies. The coupling of a stagnated economy with a strongly devalued national currency reaching hyperinflation levels has been observed in countries such as Russia, Ukraine, Romania, Bulgaria, the former Republic of Yugoslavia, etc.

Pegging some of the national currencies to some western ones at a later stage provided partial stability of the economic systems of these countries. In the first 20 years of transition in the CEE countries the capital market was completely lacking or was just in its inception stage, the credit system was unstable and underdeveloped, and so was the very banking system. Relevant to the adopted system of rules in the financial sphere in CEE is the problem of repatriating the profits of MNCs to their home countries as well as the countries of their divisions in which the corporations would like to infuse capital.

The FDI policies of CEE countries refer also to the scant exemptions for foreign corporations in the form of tax, tariff, ecological concessions or reliefs, the trade barriers as well as the restrictive requirements towards foreign investment. The unsystematic government policy leads to artificial externalities in the functioning of the international market such as the tariffs, subsidies, taxes, price controls, etc. For instance, the chaotic tariff codes and customs laws often hinder the shipments for MNCs carried out as intrafirm trade within the boundaries of the firm or aimed at contractual partners. The contradictory or changing laws in CEE are a major source of transaction risk for multinationals, which are unfamiliar with the rule of law and legislature in these countries. The dynamically changing legal environment and the need for up-to-date and diverse information impede the functioning of the large corporations further.

With lower transaction costs and greater legal, political, and economic stability in other, less advanced but low-risk regions in the world, MNCs are more inclined to invest in those rather than CEE. A shortcoming of the local legislature is the weak and ineffective laws on the protection of industrial and intellectual property, which present risks and threats for MNC property rights in the sphere of licensing, franchising, management contracts or other non-ownership forms of international business. Many MNCs find it a lost battle to protect their property rights over new technologies, trademarks, tradenames, brands, managerial or other knowhow in the region of CEE.

Sources of business risk and uncertainty for MNCs in CEE are also the low purchasing power of the local households and firms, the relatively high levels of inflation, and weak private sector. The demand for goods and services in Eastern Europe has an infinite potential for MNC manufacturing, yet income levels and standards of living are still low 30

years since the start of reforms. This explains why the expectations of amazing market results for these firms were not met. For instance, data show that even in the first years of transition when a great consumer demand for Coca Cola products was predicted, the company achieved a growth of 6% in 1991 and 4% for 1992, instead of the forecasted 10% and 8%, respectively (Moore, 1993).

Economically there are difficulties caused by the underdeveloped and poorly functioning distribution systems and commercial networks of the socialist type. The existing infrastructure built in the years of socialism does not meet the needs of MNCs perfectly and serves them only partly. In the period of transition infrastructure has deteriorated more. The dramatic impoverishment of CEE countries has made it impossible to maintain and modernize many transportation, communication, and other means.

The undergoing privatization, a logical and natural way of transitioning from a state-owned to a market economy hides other obstacles for MNCs. The CEE countries carry out privatization of the state property at different speed and by different schemes. Just in the period 1991-1994 through privatization the countries attracted USD 8.6 billion which is 48.5% of the total foreigninflows for the period.³ The privatization of former socialist enterprises poses a major problem before foreign buyers – to incorporate into their global network of branches the existing production and other structures which do not exactly fit their global strategies. A serious obstacle in acquiring East European enterprises is the differences in the technological base of the acquired and the acquiring enterprise. The inadequate and often outdated technologies used by East European production firms are totally inadmissible in performing the tasks of multinationals. Misunderstanding the global

³World Investment Report. 1996, p.6.

strategic goals, plans and activities of some global corporation, the local community criticizes its tactics and actions with respect to the newly purchased enterprise. People often forget that once it becomes property of the foreign company after the post-privatization control, the enterprise becomes a prerogative and subject to the economic freedom and decisions of the appropriating company. At the same time, starting from scratch through greenfield investment is a less preferable strategy for MNCs, which in the conditions of high economic risk rely on the existing industrial complexes and enter the East European market by investing in local firms put up for sale.

With respect to the management of the privatized enterprises MNCs face the overwhelming problem of the local managerial staff. To operate smoothly and efficiently in CEE markets, MNCs need quality managers with western expertise and qualifications paired with a long-term experience in the local commercial practices. The international managers have an extremely difficult task to perfect the function of the entrepreneurial factor which, as we already know from transaction cost economics, plays the role of a substitute for the market as a form of economic organization. Finding such managers turns out to be an impossible undertaking since it is hard at all to speak of managers with experience in the market economy. The massive brain drain which has taken place in the 30 years of transition has exacerbated the problem of human capital further.

In the former COMECON countries MNCs get stumbled by different trade practices, customs and traditions, cross-cultural differences and language barriers, lack of knowledge of local business partners and lack of tradition in trade relations. All these hardships are complicated by the lack and cost of information as a whole. Sometimes the data foreign investors receive are meagre or misleading while the

dynamic economic reality necessitates updating firm databases on a regular basis. MNCs are also subject to dishonest competition by local firms in the region where experience in the legal practice of protecting competition is lacking.

It is worth stressing that in the sphere of human resources MNCs face a strongly opportunistic behavior – the workers in the privatized enterprises rarely have good work habits, are not committed to quality and do not understand the mission, strategic goals and corporate culture of western companies. In realizing the strategic plans of restructuring the enterprises and the need to close certain productions down, to downsize or requalify some of the personnel, there is an inevitable conflict between the employer and the employees. Such developments in a region of high unemployment, gloomy demographic trends, and a burdened social security system spur social unrest with regards to the operations of MNCs, which strengthens the arguments against multinational capital and the negative perceptions of it.

A threat to the safety of MNC capitals in CEE is not only the social tension but also the persistent political instability in the region. The frequent change of governments, the lack of solid macroeconomic and foreign economic policies, the widening corruption in the state apparatus, as well as the sizable crime of all kinds prevent MNCs from launching large scale operations in the region. MNCs meet with different national economic policies, different treatment of MNC and different degrees of advancement of economic laws.

FDI flows in CEE

The countries in the region are at a different stage of their economic development. The best performers Hungary, Czechia, Poland, Slovakia, and Slovenia joined the European

Union (EU) much earlier. They have also received the large chunks of FDI. As opposed to them, the countries, which are slow movers, turn out to be less desirable for foreign capitals.

Thirty years since the start of reforms western corporations in CEE still struggle with an incredible number of economic, financial, transactional, legal, political, and social risks which explains the unsatisfactory amount of FDI in the region despite the great hopes in the beginning. While in 1991 the FDI in CEE represent 1% of the world FDI inflow, in 1995 they already reach 4.3% but the increase is insignificant and CEE's share in the world FDI is minimal. These numbers compare with 63.4% for the same year for the developed industrialized countries and 32.3% of the world FDI flows for developing countries. In 1998 the share of CEE is just 2.7% of the world inflow of FDI. This comes with a high concentration of investments in few countries. In 1995 only 70.4% of FDI are directed to Hungary, Poland, and Czechia. The same countries have 73.5% of all accumulated FDI in the region at the end of the same year.⁴

Table 1 reveals the world FDI inflows in the second half of the 1990s as percentages. In 1998 CEE countries imported USD 17.5 billion dollars which is a reduction of USD 1 billion from the previous year.

⁴*World Investment Report. 1996, p.232, 242.*

Table 1. *World FDI flows in 1995-1998 as percentages*

Region (country)	1995	1996	1997	1998
Developed countries	63.4	58.8	58.9	71.5
European Union	35.1	30.4	27.2	35.7
USA	17.9	21.3	23.5	30.0
Japan	-	0.1	0.7	0.5
Developing countries	32.3	37.7	37.2	25.8
Africa	1.3	1.6	1.6	1.2
Asia	20.7	22.9	20.6	13.2
Central and Eastern Europe	4.3	3.5	4.0	2.7
Total	100	100	100	100

Source: World Investment Report, 1999, p.20.

FDI inflows in the region of CEE in 1995 exceed their volume for 1994 almost twice but maintain a relatively steady level until the end of the period in Table 1. Thus, CEE nearly catches up with the rest of the world with a highest increase in the world. For instance, within the period 1993-1997 the increase is an average 28.5% per year, while in the developing countries it is just 23% followed by 16% for the developed countries and 19% for the world. Poland, Czechia, Romania, Hungary, and the Russian Federation hold the largest share of it, or 74% of all investments in 1998. The negative developments in Russia related to the deep financial crisis and the depreciation of the ruble, led to the sharp decline in investment there by 60%.⁵

Table 2. *Inflow of FDI in the region of CEE in 1987-1998 in millions of dollars*

CEE Country	1987-1992 (annual average)	1993	1994	1995	1996	1997	1998
Albania	-	68	53	70	90	48	45
Belorussia	-	18	11	15	73	200	144
Bulgaria	34	40	105	90	109	505	401
Czechia	533	653	868	2561	1429	1301	2540

⁵World Investment Report. 1999, p. 69-72.

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Estonia	-	162	214	201	151	267	581
Hungary	675	2339	1146	4453	1983	2085	1935
Latvia	-	45	214	180	382	521	274
Lithuania	-	30	31	73	152	355	926
Moldova	-	14	28	67	24	72	85
Poland	183	1715	1875	3659	4498	4908	5129
Romania	61	94	342	420	265	1229	2063
Russian Federation	-	1211	640	2016	2479	6243	2183
Slovakia	91	168	245	195	251	177	466
Ukraine	-	200	159	267	521	624	743
CEE total	1576	6757	5932	14266	12406	18532	17513

Source: World Investment Report, 1999, p.480.

Despite the initial interest and inflow of foreign capital which is mostly in the form of joint ventures, the institutional, organizational, and cultural problems of transition from a central plan to a free market significantly impede the help by which MNCs could stimulate the economic development of CEE countries. The qualified and inexpensive labor, the relatively good manufacturing infrastructure and production facilities, the scientific and technological potential, and the relatively convenient geographic location turn out to be insufficient to attract MNC investment.

A leading researcher of FDI in CEE, McMillan (1991) predicts that there will be no dramatic increase in those investments until the educational, technological, and institutional infrastructure improves. This is especially relevant to transaction cost theory and the transaction cost model of the MNC which gives a great weight to the institutional and technological framework. It is hard to expect solid investments in CEE, except in few countries, given the high costs of market transacting, resulting from opportunism and the behavioral failures in the region. The ineffective work of state institutions and the bad state of transportation and communication infrastructure detract MNCs.

MNCs do not find a proper ground for their capitals. Their environment is characterized by a newly introduced capital market, underdeveloped and unstable bank systems, a weak private sector. Despite the macroeconomic instability, the controversial laws, the political instability in some countries, the sizable corruption and crime, as well as the negative attitudes to foreign capital, CEE countries are trying to move forward. They have adopted special laws for foreign investments, investing firms have received tax, tariff, and other reliefs, and many international treaties have been signed with the purpose of attracting investment, avoiding double taxation of profits, etc.⁶

In this last chapter we have sought the FDI dimensions of transition. A brief review of FDI in the region of CEE indicates that:

1. MNCs are faced with transactional and behavioral opportunism in Eastern Europe, both from employees and contractual partners in market dealings.
2. MNCs have difficulty finding skillful management with western education and experience in the tradition and practices of the market economy. Inefficient management is prone to mistakes in substituting the market mechanism.
3. Additional sources of risk and instability for MNCs in the region of Eastern Europe are the underdeveloped capital market, macroeconomic instability, consistent corruption and crime, political risks, lack of property right enforcement, etc.

⁶ For instance, Bulgaria has adopted a Law on Foreign Investment, a Law on Privatization, a Law for Protecting Competition, etc.

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Tamara Todorova

Tamara Todorova is a full-time associate professor at the American University in Bulgaria. She holds a PhD in economics from Varna University and an MBA from Columbus State University. Her main teaching areas are Microeconomics, Mathematical Economics, economics of Reform and Transition, and New Institutional Economics. In 2006 professor Todorova was a Fulbright fellow at the University of California at Berkley where her faculty sponsor was Oliver Williamson. Her research interests are in the field of new institutional economics, the theory of the firm, transaction costs and transitional economics.

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