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BACHELOR THESIS



**Development of Transnational Corporations
In Kazakhstan:
Comparative Analysis and Aspects
Of International Trade**

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V Praze dne 21. kvetna 2009

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ABSTRACT

The purpose of this work is to examine the nature of transnational corporations and different ways of their economic and political influence. The thesis is constructed on deductive bases telling about transnational corporations all over the world whereupon analyzing their certain activities in the Republic of Kazakhstan as an example of transition economy. In the beginning of the thesis, there is a definition of transnational corporation and discussions of common economic theories. Business of transnational corporations and its consequences for host economies are in concern of the first chapter. However, the impacts are not clear for every country. The overall effect depends on particular industry, government regulation, and behavior of foreign affiliates. The second chapter is fully related to the Republic of Kazakhstan. It deals with the economic context of the country and preconditions of transnational corporations' appearance and analyzes Dutch disease presence. There is a linear regression model with the data from 1993 and 2008 in the third chapter where FDI inflows are explained by few significant variables. Summarized results suggested by the research prove that Dutch disease has not taken place in Kazakhstani economy. Last chapter is devoted to particular companies operating in oil and gas industry – Shell Corporation and KazMunayGas national company – comparing their business and social activities. Conclusions based on these two particular examples suggest that both types of companies might be beneficial for the host economy. Wise external and internal government policies, improved legislation, and competition will guarantee health economic environment for both local and foreign investors.

ABSTRAKT

Cílem této práce je zkoumání podstaty nadnárodních společností a různých způsobů jejich ekonomického a politického vlivu. Práce je zkonstruována na bázi dedukce – popisuje nadnárodní společnosti ve světě a poté analyzuje jejich specifické činnosti v Kazachstánské republice. Na začátku práce je definice nadnárodní společnosti a diskuse o obecných ekonomických teoriích. Obchody nadnárodních společností a jejich důsledky pro hostitelské ekonomiky jsou obsahem první kapitoly. Dopady však nejsou jednoznačné pro všechny státy. Celkový efekt závisí na daném průmyslu, vládní regulaci a chování zahraničních poboček. Druhá kapitola se zabývá Kazachstánem. Popisuje ekonomický kontext státu a předpoklady pro objevení nadnárodních společností a zkoumá přítomnost Holandské nemoci. Ve třetí kapitole je lineární regresní model s daty od roku 1993 do 2008, v němž jsou přítoky přímých zahraničních investic vysvětlovány několika signifikantními proměnnými. Dosažené výsledky naznačují, že Holandská nemoc se v Kazachstánské ekonomice neobjevila. Poslední kapitola je věnována jednotlivým firmám v ropném a plynovém průmyslu – společnosti Shell a KazMunayGas – porovnává jejich obchodní a sociální činnosti. Závěry, založené na těchto dvou jednotlivých příkladech, naznačují, že oba typy firem mohou být pro domácí ekonomiku přínosné. Rozumná vnější a vnitřní vládní politika, lepší legislativa a konkurence garantují zdravé ekonomické prostředí jak pro domácí, tak i pro zahraniční investory.

„Drive thy business or it will drive thee.“

Benjamin Franklin*

* Quoted from Quotations page: [<http://www.quotationspage.com/subjects/business/>],
Quotation #2689 from [Laura Moncur's Motivational Quotations](#)

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Introduction

The purpose of this paper is to describe and analyze operating activities of transnational corporations in developed and developing economies, countries in their transition period and, particularly, in the Republic of Kazakhstan. However, an important question must be answered first. Why should transnational corporations and their activities be in our concern? The answer to that question is laying down in the idea of global integrated economy that recently have tended to even more closer cooperation.

Economic and political integration have created strong and intensive relations among all countries. Indeed, nowadays not only developed countries are involved into the process of cooperation, but also industrial and developing countries in Central and East Asia. It makes states and countries all over the world so dependent on each other, especially on large economies as the United States of America, the European Union, or China. The mortgage and financial crises showed how interdependent all economies are. Movements and changes in finances, debt, or reserves of one large country are immediately transferred to the others through financial, trade or banking markets. It is impossible to shut some country off from the world events, and problems of one turn out to be common problems for everyone.

Also, the opening up for free trade is one of the reasons for interdependence among nations. Exports and imports are inalienable parts of prosperity in any economy. As historical evidence shows, one single country's capacities cannot fully satisfy all population needs to the same level as it is offered by opening trade. The Ricardian models of comparative advantage (See *The Principles of Political Economy and Taxation*, Ricardo 1817) have evolved enormously in the last fifty years. Membership in such organizations as the GATT/WTO or being a part of FTA¹ forced member-country to diminish trade barriers and offers excellent opportunities for trade. The advantages from trade for leftovers are decreasing with enlarging number of members. Trade transactions become global and combined.

Transnational corporations are doing business across the political borders of the states and countries. These types of firms are incredibly powerful, even though very often their riches are dubious. For example, the General Motors Company's revenues were \$191.4 billion in 2004 that is greater than GDP in 148 countries (Joseph E. Stiglitz 2006). However, GM had for long problems with profitability and in 2008 was effectively in bankruptcy. Transnational corporations are politically powerful as well. If conditions in the home country are not favorable for the business, they can affect government activities (for instance, the US government contributions) or move their production and business to other countries.

That is the reason, why they can freely influence not only home country, where they were originally set up, but also all other countries they operate in or have their affiliates in. So, we have to admit the fact that transnational corporations must be taken into account when building a prosperous and welfare state. Any decision on macro level that made by host country government is whether made because of transnational corporations interests or might have an impact on their behavior. As a response to that, many other changes in real growth, employment, or investment inflows may appear in the economy.

¹ The GATT – the General Agreement on Tariffs and Trade; the WTO – the World Trade Organization; FTA – Free Trade Area

Chapter 1

Emergence and importance of transnational corporations

1.1 Definition and background

There were many attempts to give a proper definition for transnational corporation. It is not so easy as it seems to be. First, this type of business has variety of names. They also were called as Multinational Enterprise, Multinational Corporation or International Firm. All these names mean the same: this is a firm, which is registered and operates in more than one country at a time. Moreover, to avoid misunderstanding, transnational corporations must be distinguished from the firms whose operating activities on foreign markets are presented by exports only. In the case of transnational corporations, the issue is foreign direct investment, which is clearly connected with their operations and by which corporations either invest into other's business or are involved in mergers and acquisitions.

In the literature, an attentive reader could find out that terms "multinational" and "transnational" are used equally for describing the nature of this particular form of business. For the instance, "A multinational enterprises may be defined as large firms whose operations and functions span national borders, an enterprise which owns and controls activities in different countries and adjusts products and practices to each at a higher costs" (Buckley and Casson 1976). The term "transnational corporation" is often used in American literature and a satisfactory definition of it can be "...a corporation that organizes and controls production and/or related activities in more than one country" (Jetto-Gillies 1992, p.8). In this thesis the expression "transnational" will be used more often, it is does not make any difference in the meaning though.

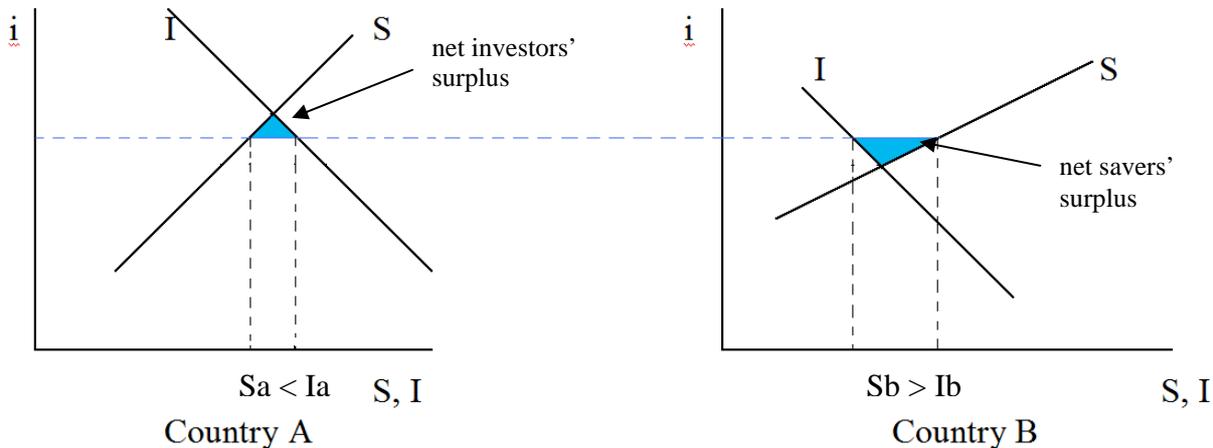
Activities of transnational corporations – or TNCs - are always linked with foreign direct investment (FDI). A definition of FDI must be given so to complete definition section in this thesis. FDI is an acquisition of foreign assets for the purpose of control. The US Department of Commerce describes FDI as "ownership or control of 10 percent or more of an enterprise's voting securities, or the equivalent interest in an unincorporated business". The objective of FDI is the active participation in and control of a foreign firm's activities (Rugman 1986).

Nowadays, the international FDI network already exists and is still enlarging. "The high level and diverse forms of FDI represent an important force generating greater global economic integration. FDI has three attractive features:

- It brings scarce capital where capital is needed and productive (See Figure 1.1);
- It stimulates the domestic market for corporate control and hence serves to discipline managers;
- It is the bearer of knowledge to enhance productivity, potentially to the levels of international best practice." (Mody 2007, p.1).

Figure 1.1 shows capital movement from Country A to Country B due to the difference in the interest rates. Additional surpluses are made in welfare of both countries because of capital mobility. Capital in the form of FDI seeks for the best allocation and productiveness.

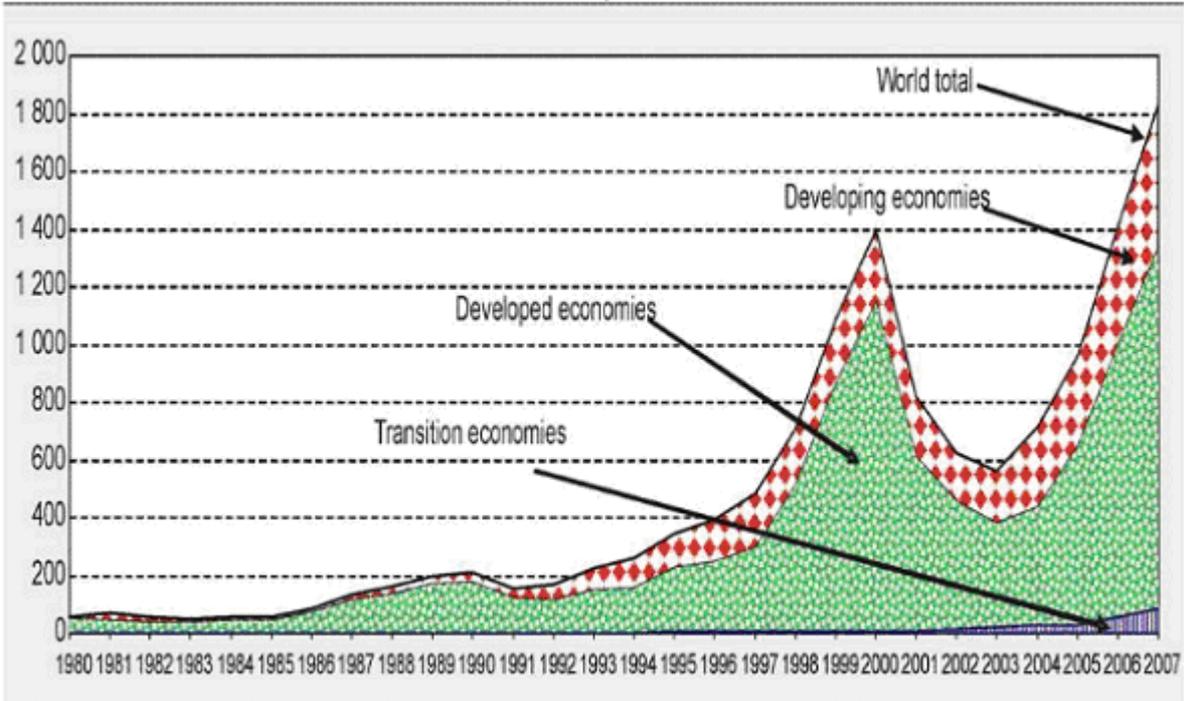
Figure 1.1 Creation of welfare by Capital Mobility



Source: International Finance course, IES FSV

FDI is divided into inflows and outflows, i.e. inward or outward FDI from the perspective of the host country. FDI inflows will be considered here more often rather than FDI outflows because this thesis aims to analyze the impact of TNCs on host economies and FDI inflows are more relevant in this approach.

Figure 1.2 FDI inflows, global and by group of economies, 1980-2007 (\$ billion)



Source: UNCTAD², World Investment Report 2008
Transnational Corporations and the Infrastructure Challenge

As it can be seen from the chart above, FDI inflows are enhancing each year and currently are forming a considerable part of world financial capital. They reached a peak in 2007, which

² UNCTAD – United Nations Conference on Trade and Development

was over \$1,800 billion, however, due to financial crisis there will be a decrease in FDI flows till 2010 according to UNCTAD estimation. Important observations are increasing shares of developing and transition economies in FDI total inflows and cyclical nature of foreign direct investment. They will be discussed in next sections.

1.2 Transnational corporations around the world

The appearance of TNC is an evolutionary step in terms of globalization and fast developing progress in the world. Indeed, these corporations have become winners of all forms of business that existed before. As historical experience shows, they are the most efficient and profitable models of business that can survive under conditions of high competition and tough rivalry.

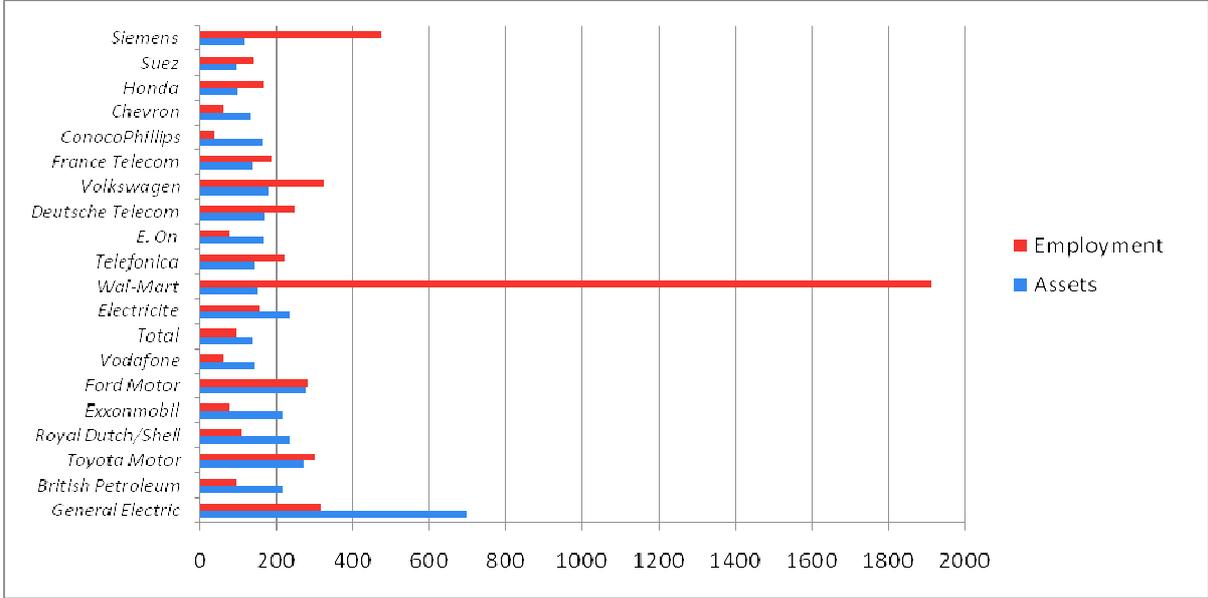
It was a primary economic idea that led to the emergency of TNC. The two most important things for business are: maximizing profit and minimizing costs of production. These two criteria were reached by creating the form of business, which maximizes profits by enhancing production and supplying own goods and services on foreign markets, and minimizing costs due to “economies of scale”, when costs for production of additional unit are lower than costs of the very first unit.

When expansion of a company approaches the level of exporting production on foreign markets managers usually have to make a decision whether it is more beneficial to allocate their production or at least part of it in trade-partner country or not. If top management decides to shift production, other choice has to be made: introducing a license or forming a joint venture. This process of decision-making approaches its completion by creating the wholly owned subsidiary company. So, the firm is transforming into TNC when it starts organizing and elaborating its production on large-scale. Additionally, promoting of products now includes marketing, research and development. Business organization as a whole enters a new higher stage of evolution.

Surprisingly, TNC is not a new phenomenon in economic history. The first evidence of TNC can be easily found much earlier than the term “transnational corporation” appeared. Originally, these were trading companies on the bases of monopoly contracts from the local government. When government power in trade field weakened, chartered companies almost vanished to reappear as TNCs later. Only in the mid-sixties, TNCs and their activities got public attention and interest. They were assumed specifically American form of business management because they came back to the world stage after the Second World War particularly in the States. Currently, TNCs spread out all over the world and are doing business in many different locations and industries.

Transnational corporations have an invaluable ability to let producers know almost immediately, what exactly international consumers want (Stiglitz 2006). Of course, it is useful for both groups and simplifies demand - supply transactions.

Figure 1.3 The World's top 20 non-financial TNCs 2006 (in thousand of employees and billion of assets)



Source: Data from UNCTAD 2008

This chart was constructed using the data from the UNCTAD 2008 that are fully displayed in the Appendix A. Only the first twenty largest TNCs employ over five million people in the world. Interestingly, the value of foreign assets in corporations hardly corresponds with number of employment. Unfortunately, richer and larger firms do not offer more job opportunities on labour market. Probably their demand for labour is driven by industry factor rather than the size of corporations.

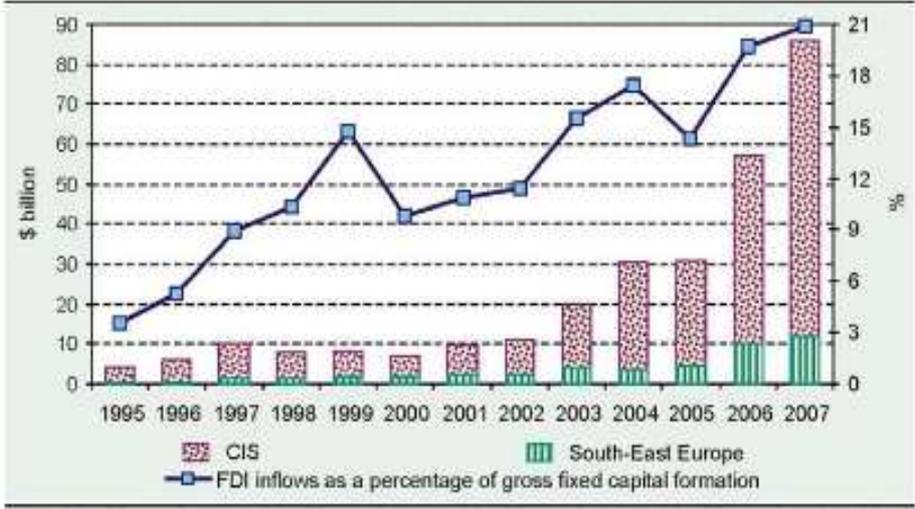
Transnational corporations’ activities can be displayed by FDI inflows that unexpectedly grew faster than world production and trade, particularly in mid-1990s. During these years, there was formation of relations between return-seeking investors with excess of financial resources and developing countries that attracted foreign investment capital.

Foreign direct investments may be in form of “Greenfield projects” (those projects where new investments are undertaken) and mergers and acquisitions (which entail the acquisition of ongoing domestic operations by foreign investors). Mergers and acquisitions – or M&A – always played significant role in capitalistic countries relations. Recently, they have become a relevant part of FDI into developing countries as well. It reflects privatization process in public sector that was started in the regions of Latin America and several Asian economies after the crisis in July 1997 (Mody 2007).

Traditionally, FDI was directed to the development of natural resources and manufacturing enterprises. However, there was a shift in the 1990s to service sector – such as finance and telecommunications and more recently into wholesaling and retailing. Therefore, it is can be said that FDI is developing together with world progress and is helping integrate the global market. Also, three main reasons for FDI must be mentioned here. These are market seeking, efficiency seeking and knowledge seeking motives for transnationals to invest. Indeed, when corporation is about to enhance its production it starts looking for additional markets and

locations for exploiting it. The other reasons are optimizing efficiency costs of that production and discovering alternative ways for improvement already existing strategies. Common sense suggests that the poorest countries with a huge need in capital and investment should provide higher marginal returns on capital than richer countries. And that is why all new investment in form of FDI “Greenfield” projects must occur in developing countries. In reality, that does not take a place. From the Figure 1.2 it is clear that main movements of FDI inflows are between developed countries. Robert Lucas first stressed this phenomenon in 1990 in his paper “Why Doesn’t Capital Flow from Rich to Poor Countries?” Economists explain this “Lucas Paradox” by lack of complementary facilities in the countries. For instance, poor infrastructure, absence of skilled labour, high government control of business, etc. make capital unproductive in these locations. The other trend that can be seen in FDI behavior is “follow the others tendency”. Capital moves to the locations where investment way was already pioneered by previous and current investors. It lightens business difficulties in the very beginning of setting up a new project. Of course, the first investors bear the whole risk and uncertainty but their initiative is often compensated by huge profits in the end.

Figure 1.4 FDI inflows in value and as percentage of gross fixed capital formation, 1995-2007 (Billion of dollars)



Source: UNCTAD, World Investment Report 2008, Transnational Corporations, and the Infrastructure Challenge

According to UNCTAD 2008, there was a sharp decline in worldwide FDI flows as well as in developing countries FDI inflows in 1999-2000. It can be explained by declining the scope for privatization in developing countries and cyclical nature of FDI in general (Figure 1.4).

1.3 Theories and hypotheses about Transnational corporations

Due to the reasons, which are mentioned above, TNCs became a popular topic to discuss in the debates among economists. Many of them tried to create their own theories or at least summarize previous theories about TNC. Only the most important hypotheses will be described in this thesis because of a high number of different points of view on the transnational corporations’ emergence and development.

In the literature, there are two contrary opinions on TNCs and their operations. They can be defined as:

- Neoclassical approach, which includes variety of theories of international trade and economics that generally express positive influence of TNCs on progress and development;
- Critical approach represents the opposite side of TNC functioning; it combines all unpleasant impacts of TNCs' activities and expresses the notion of TNC negative influence.

Heckscher-Ohlin theory of international trade

Early literature on TNC includes the theory developed on the basis of Heckscher-Ohlin theorem. Two Swedish economists Eli Heckscher and Bertil Ohlin broadened comparative advantage theory of international trade that initially was formulated by British economist David Ricardo.

The Heckscher-Ohlin theorem says that capital-abundant country will benefit from supplying capital-intensive products to the common market, whereas a labour-abundant country will provide labour-intensive products. This approach emphasizes advantages of inter-industrial specialization and trade. Countries must specialize in products they can produce relatively cheaper than others. The perspective of international trade may be applied on firms as well.³ This interpretation of Heckscher-Ohlin theorem is often called the Factor Proportion Theory. Companies are producing goods and services, in which they are relatively "abundant" by inputs or have a comparative advantage of know-how, and therefore exporting them into foreign markets. The main idea is that production will be always moved when the conditions of cost minimization and profit maximization are met:

MP-MC>TC Where ***MP*** - marginal product
MC – marginal costs
TC – transaction costs.

Company compares transaction costs of moving production and benefits of producing elsewhere. If the difference between marginal product and marginal costs, which equals to profit from one unit of production, is still higher then company relocates its business somewhere where it can earn more.

Although, this theory presents an explanation of location decision-making process, it is unable to provide clear arguments for existence of FDI flows and reasons for success of TNCs on foreign markets.

Product cycle theory

The other theory that can be linked to early neoclassical stream of the literature is the product cycle theory by Raymond Vernon in 1966.⁴ It describes four cycles of product life that are

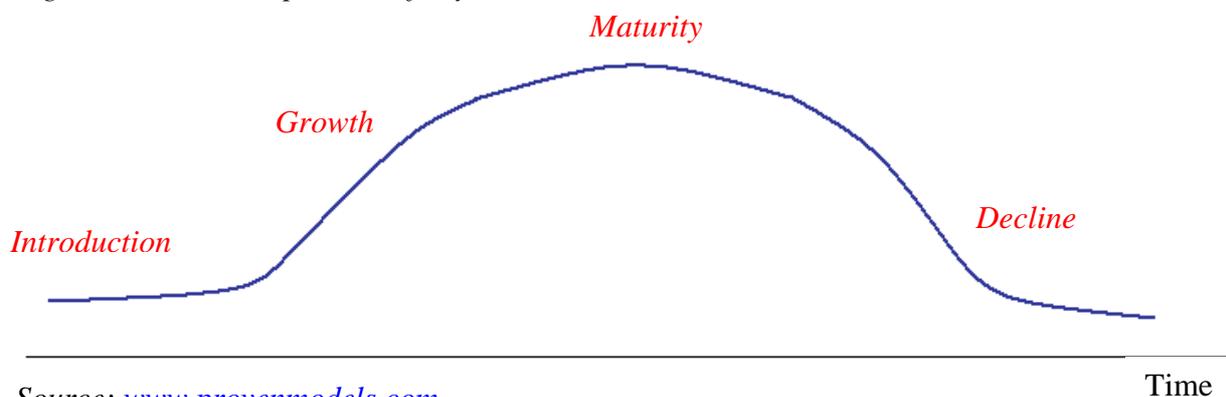
³ See differences and similarities between firms and states that are well described in the book "Foreign Direct Investment, Location and competitiveness" by Dunning and Gugler 2008, p. 23-27.

⁴ Vernon, R., International Investment and International Trade in the Product Life Cycle, Quarterly Journal of Economics, 1966, pp. 190-207.

introduction, growth, maturity, and decline. The original theory was developed for countries but the product cycle model can be applied on firm perspective as well.

- (1) *Introduction*. The firm creates a new product that is specific due to its inputs or technology only to this original company. More often, the product is firstly introduced in developed countries.
- (2) *Growth*. Later this product becomes popular among consumers and the company expands its production that starts to be more standardized. Copies of the original appear everywhere including home country. This forces company to relocate its business on the basis of lower costs of production into the less developed countries.
- (3) *Maturity*. There is tough competition in this industry because the production is simple and standardized that leads to the winning of less cost producers in poor countries. Obviously, in poor economies labour is relatively cheaper than in well-developed nations.
- (4) *Decline*. Last stage of the cycle is characterized by disappearance of original producers that ended up by importing their own product from more successful producers.

Figure 1.5 Vernon's product life cycle



Source: www.provenmodels.com

It is important to stress that the model is based on the premise of slow knowledge dissemination that allows company benefit from being the trailblazer. Owing to the profits, companies are stimulated to innovate and invent some new products.

However, this theory was stressed by globalization of the world economy and fast development of technologies that make copying of the original product much easier and faster. Moreover, increasing number of short life products is also bringing down explanatory power of the product cycle model.

Unfortunately, neither international trade theory nor product cycle theory was able to give a full and deep concept of TNCs appearance. Stephen Hymer⁵ first in 1960 discovered the fact that TNCs come up because of market failures. Hymer started with the notion of additional costs that were bore by foreign firms on host country market. For instance, there are unknown cultural traditions, government restrictions, foreign language, and so on. It means that in order to be successful on new markets firms must have specific advantages that are exclusive only to their owners but that does not implicate that they are more efficient than local firms. They

⁵ Hymer, S., The International Operations of National Firms, 1960.

just can do something that others cannot.⁶ His theory has clarified two fundamentals of TNCs' activities that can be summarized as followed.

Question	Answer
How do these corporations benefit on the foreign markets with limited or less opportunities in comparison with local producers?	The TNCs have a unique asset , which is often intangible, and that gives them an advantage even on foreign markets where TNCs operate.
Why do they move their production across the borders?	TNCs expand their market power into other locations through FDI outflows.

Internalization theory

The internalization theory can be related to later sources on TNCs' literature. It ties together Hymer's assumptions and theory of transaction costs by Ronald Coase whose theorem has many different interpretations nowadays. Coase theorem says that if there are no transaction costs and property rights are well defined and protected then bargaining will lead to an efficient outcome regardless of who is the initial owner of the property.⁷

Internalization theory attempts to elaborate the question why corporations prefer FDI instead of arm's length trade transactions. Economic relations are not perfect in reality, hence market failures arise what implicates formation of transaction costs. In order to reduce them TNCs create internal markets where they set the price and management strategy for the whole net of affiliates and subsidiaries. Therefore, TNCs are more steady and protected from trade barriers and other government restrictions and interventions. The transaction costs can be related with such company's outlays as: managerial costs, buyers, and sellers searching costs, negotiating costs and others. Internalization of all those costs minimizes overall outlays on production.

Additionally, there is always an element of "moral hazard", which might lead to opportunistic and unfair behavior of trade partners. Especially, when property rights cannot be enforced properly that makes innovators being unprotected from "free riders" and creates more space for cheating in business environment. To compare, when corporation sets up an affiliate in the host country, the hierarchic structure of organization allows parent company to order and simply force the daughter company to follow the rules. Obviously, it eliminates risk in business.

Moreover, while creating an internal market corporations' aim is not only to minimize the costs but also to expand production. Market seeking and resource seeking motives drive them looking for new markets, cheaper production factors and optimizing all these features in one system. It leads to formation of a new vertically integrated organization that produces intermediate products in the chain of production located in different countries where are the most favorable conditions for manufacturing these specific intermediates.

The other factor in favor of formation of internal market and consequently TNC is presence of economies of scale that appear whenever production is enlarged so much that the cost for additional unit is much lower than the marginal product of this unit.

⁶ Dunning, J., Gugler, P., Foreign Direct Investment, Location and Competitiveness, Elsevier JAI, 2008, pp. 29-47.

⁷ Ronald Coase received the 1991 Nobel Price in Economics for this theorem and his working paper „The Nature of the Firm“ (1937).

Among the authors that contributed on the internalization theory, there are Oliver Williamson⁸, Peter Buckley, and Mark Casson⁹. Williamson emphasizes the TNC's possession of a specific asset that gives TNC the advantage over local firms, while Buckley and Casson stress that it is not simply possession but also the way of organizing the terms of use of the asset instead of selling it to others. The theories are slightly different, however they all share a core that can be displayed in the diagram below:

Market failures ⇒ Transaction costs ⇒ Internalization of transaction costs ⇒ Internal market ⇒ Transnational Corporation

One condition must be fulfilled though – the costs spent on internalization must not be higher than the profits from internalizing activity. Therefore, TNCs have to find the most efficient way for organizing their business.

The definition of TNC according to the internalization theory might be expressed as a heterogeneous organism, which manages all activities of its parts and does it more efficiently than if these parts were separated.

The internalization theory as well as previous ones has some defects. For example, when discussing the knowledge and technology flows from parent company to subsidiaries, it underestimates value of inward flows to Parent Company from subsidiaries that have become significant recently.

Evolutionary theory

This theory is similar to internalization one in the sense of understanding TNC from transaction costs perspective and concluding that TNC is supreme because as firms they have certain characteristics. TNC must be conceptualized as “social communities” that serve for creation and transfer of knowledge across borders. Kogut and Zander in 1996 developed the concept that knowledge transferring and learning process are realized through the sharing identities between individuals. Shared identity not only lowers the cost of communication but also establishes explicit and implicit rules that facilitate coordination and learning, which consequently leads to the superior performance of TNCs (Kogut and Zander 1996, p.503). There is an absence of common knowledge between all units of one corporation, however there is a common knowledge between similar units in many subsidiaries among one corporation.

OLI paradigm

The theory introduced by John Dunning attempts to combine and organize in one concept of various previous theories and hypotheses. Dunning integrates in this paradigm all essential points that seem to be crucial for author's analysis. Thereby, OLI – or eclectic – paradigm integrates Hymer's assumption about specific asset, transaction costs theory and theories of international location.

⁸ Williamson, O.E., The Modern Corporation: Origins, Evolution, Attributes. Journal of Economic Literature, 1981.

⁹ Buckley, P., Casson, M., The future of the Multinational Enterprises, 1976.

The letters in OLI abbreviation stand for each factor that is examined within this framework:

O – represents the ownership advantage factor that is high enough to make profits in foreign locations after relocating firm’s production;

L – corresponds to location advantage factor, there must be some favorable conditions abroad;

I – symbolizes internalization factor, it is more efficient for the firm to internalize all advantages in one integrated system.

The first factor or the ownership advantages is in compliance with Hymer’s perspective of a unique asset possession. This asset is rather intangible and has a public good nature – the marginal usage cost is zero or minimal (Dunning 1977). And it can be easily spread over into the other firms or locations. Typical example of such kind of asset is new technology, qualified managers or innovative know-how. Clearly, the benefits from possession must exceed costs of operating in foreign markets.

The second factor is related to the choice of a country where corporations will relocate their production. A foreign country must offer some advantages from doing business particularly there (see the “subsidy game” in next subchapter). Moreover, transnational corporations choose countries with resources that domestic country does not possess. Ideally, these resources should be complements to domestic ones rather than substitute them (Dunning & Gugler, 2008).

Last factor directs conclusion from internalization theory, which expresses the notion of more efficient internal organization of production rather than engaging in arm’s length trade transactions. It was already discussed in previous section.

A firm is transforming into transnational corporation after fulfilling these factor-conditions and organizing process of production between interdependent branch stores that are often located in more than one country.

New Trade Theories

During past decades, another direction was developed in international trade theories. Elhanan Helpman, Paul Krugman and James Markusen are considered as main contributors to New Trade Theories. This stream is completely different from the classic economic theories that were used for explanation of economic events before. For instance, the “old” economic theory suggests that countries trade because they have diverse natural resources. South states grow tropical products and export them while north states can offer for trade grain or wheat products. Although, this seems very logical it does not clarify existence of trade between neighbor countries that takes place even more often than long distance trade. Usually such countries possess similar resources and have almost the same natural conditions. New Trade Theories aim to explain this fact since “old” theories fail to do so.

There are many goods, which create economies of scale during their production, and the only thing is needed to take advantage of these products – just industrial plants that in fact can be elsewhere. Often the factories are historically located in specific countries but the crucial thing is that every state or country is able to produce some economies of scale products and benefit from them. New Trade Theories do not deny importance of natural and climate presumptions but at the same time, they also justify existence of trade between similar

countries due to specialization in economies of scale goods. What transnational corporation does is identifying the most favorable locations where it is easier and cheaper to produce goods and services and developing conditions for economies of scale production. That is the reason why New Trade Theories are closely related to New Geography. Instead of using labour and capital mobility and spreading production in few countries, it is more sensible to locate production in one place and achieve higher profits from economies of scale. This is the evidence for agglomeration effect. TNC does not allocate the whole production to the countries where it has affiliates in; it simply transfers knowledge and technology there. To summarize, New Trade Theories stress agglomeration effects and thus the geography of production, the TNCs operations are taken as multi-factory locations because of optimization the cost structure and the presence of internal and external economies that in the end create agglomeration area.

Critical approach to TNC

Curiously, Hymer is regarded as a first critic of TNCs. While discussing his theory about country specific advantage Hymer argued that the benefit from possessing it and internalizing production costs in fact create monopolistic system on the market. Corporations avoid conflicts, competition and trade negotiating by FDI in form of mergers and acquisitions, thereby getting enormous power that is not pure economic nature but also can be easily transferred into political.

Disciples of this approach emphasize “side-effects” of TNCs’ operating activities all over the world and in developing and transition economies particularly. It is clear that these economies do not have legislative and law regimes developed enough to protect local producers, government or local environment. Monopolistic nature, possession of a unique asset, experience, and technology make transnationals considerably strong players on the market. It is quiet obvious that they have power to influence social, political and economic conditions in host countries.

Though, this approach to TNCs did not get further than just critique of their superior nature and fear from market distortion by monopoly and have not got any theory that can be applied. This criticism proliferated mainly in labour and environmental groups that are concerned about working conditions of labour force and industrial and manufacturing wastes of TNCs production in our environment (World Bank 2003, Box 4.2).

1.4 Impact on the world economy as a whole and particularly on developing countries

Views and opinions on foreign investors’ activities and TNCs in general are diversified as it can be seen from the two contrary perspectives. However, this thesis does not aim to judge TNCs but accept them as inevitable characteristic of our times and try to take advantage of their presence in any sector of industry. Thereby, here there will be only described different points of view that can be found in the literature on TNCs without any conclusion whether TNCs are prosperous for host countries or not.

Transnational corporations can contribute to the host economies by increasing domestic flows of investment. Barry Bosworth and Susan Collins (1999) while analyzing the impact of FDI on local business environment concluded that a dollar of FDI to developing economies could be translated into a dollar of domestic investment in comparison with bank loans and bond funds that are less effective in generating new investment. That can be explained by primary nature of FDI flows that are mainly presented by Greenfield projects.

One of the most meaningful impacts of TNCs operations is spillover effect that can be either horizontal or vertical. Horizontal spillovers are defined in the empirical literature as “the productivity benefits accruing to domestic firms with the same sector¹⁰” and similarly, vertical spillovers – the benefits from supplier-consumer relations of domestic and investment sectors. For example, making an informal contract or training of workers by transnationals is an opportunity for local producers to boost their productivity only if they are willing and able to accept and absorb that knowledge.

There is some evidence that in the beginning TNCs’ presence hurt local companies instead of raising their productivity by spillover effects (Brian Aitken and Ann Harrison 1999). Tough competition with foreign investor weakens domestic firms whose productivity is much lower and they lose their market share. Even charity donations made by TNCs do no offset the effect of reducing local producers’ share on the market (Joseph Stiglitz 2006). However, as it is observed, the companies those survive after such kind of a “market cleaning” they have higher productivity and in general are much stronger and efficient.

Foreign investors have their own interest in increasing suppliers’ (domestic producers’) productivity by providing them with knowledge in vertical-hierarchic relations. Thus, the spillover effect must be significant here. However, the circumstances in host countries play an important role in this process of transferring knowledge. Evidence shows that infrastructure and capabilities are needed in local environment, so for easy transfer knowledge available (Mody 2007).

Another positive effect of TNCs presence in transition economies is privatization process. Often local firms do not have financial instruments for purchasing state-owned plants and thus corporations can help these countries to transform into the capitalistic economies. In addition, foreign corporations offer a large number of new jobs on the labour market thereby decreasing unemployment rate in the countries and stimulating aggregate demand.

In order to get the benefits that TNCs promise to bring along with their businesses countries entered the “subsidy game” trying to get these advantages from TNCs’ operations in these particular locations. Recently significance of incentives was underestimated; there was a dominant notion that TNCs invest only into specific locations with sufficient conditions for business. Earlier belief was based on the assumption that TNCs are looking for strong economic fundamentals in host countries – level of real income purchasing power, market size, trade policies and other facilities (Dunning 1993, Globerman and Shapiro 1999 and Shapiro and Globerman 2001). Incentives that offer host countries consist of tax breaks including tax holidays, other fiscal measures, accelerated depreciation, allowances for training and R&D as well as government subsidies (Herrman and Lipsey 2003). The other question is how to measure transaction costs for attracting TNCs and benefits from having them.

¹⁰ Mody, A. 2007 Is FDI integrating the world economy? Page 12.

Also, negative externalities may occur if foreign investors claim for a large portion of limited resources, hence, phasing out local producers from the market. For instance, a number of foreign investors are financing their investments from domestic market credits (Ann Harrison and Margaret McMillan 2003). While local producers in developing countries already have credits and loan, the fact of foreigners' borrowing worsens market conditions.

Mergers and acquisitions are in concern of an earlier debate as well. Loungani and Razin (2001) argue that foreign corporations may just "skim the cream" – through mergers and acquisitions investors are taking control over other firms and, obviously, possess invaluable information about these firms performance while domestic producers are not aware of it. Foreign corporations sell unproductive firms to the uninformed local financial operators using this information in their benefit.

A Nobel prizewinner Joseph E. Stiglitz admits that with FDI inflows to host countries inflation and interest rates decrease, though, he argues that TNCs negatively affect developing countries. When operating in home country, corporations take some responsibility for their actions but in other states, managers' responsibility for crimes is often hidden. Unfortunately, developing countries are afraid of FDI flows abandonment and do not sue corporations in case of illegal issues.

It is inconclusive effects of TNCs expansion in the world and their presence in developing countries especially according to existent empirical evidence. Thus, in this thesis I cannot contend that corporations are prosperous for either less developed or strong economies but making the right policy and building up the "game rules", in my opinion, any country can find benefits of TNCs operations.

Chapter 2

Emergence and Development of Transnational Corporations in the Republic of Kazakhstan

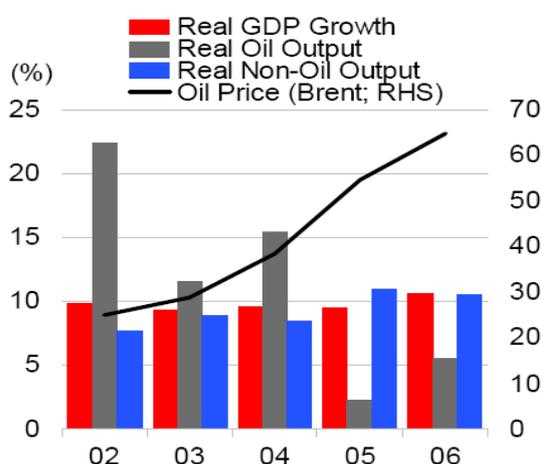
2.1 Premises for Emergence and Development of TNCs in Kazakhstan

Before discussing activities of transnational corporations in the Republic of Kazakhstan, I will make a general overview of main reasons that brought corporations there. Kazakhstan is the 9th largest country in the world and because of its geopolitical location takes up an important position between Europe and East Asia. Being a part of socialistic block in USSR, the country was exporting mainly agricultural products and its natural resources. Mineral and natural reserves in the Caspian region provide Kazakhstan with the place between top world exporters of oil and gas. Nowadays, Kazakhstan is in the regional organization Commonwealth of Independent States – or CIS – since the USSR break down in 1991.

Kazakhstan is perceived to have the fastest developing economy among all transition countries. It got the status of market economy as the first one between the CIS countries. Starting from 2000 the Republic of Kazakhstan posted annual GDP growth of over 9%.

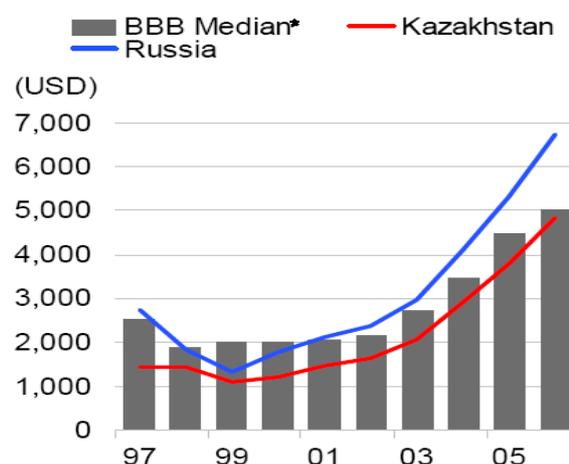
Figures 2.1 GDP Growth and GDP per Person in Kazakhstan

GDP Growth



Source: IMF, Fitch

GDP per Person



Converted at market exchanged rates

Source: Fitch

* - BBB Median is the median of all countries with BBB ratings, which indicate that expectations of default risk are currently low

Growth of the country's real GDP in 2002-2006 surprisingly reflects the real non-oil output growth while the oil output was decreasing during this period in spite of increasing oil price. GDP per person in Kazakhstan is slightly lower than in Russian Federation, however, in comparison with BBB Median, Kazakhstani GDP per capita is still satisfactory (Figure 2.1).

The country is incredibly rich in natural resources, particularly hydrocarbons, minerals, oil, and gas. Kazakhstan accounts for 83% of proven oil reserves and 25% of proven gas reserves in Central Asia (the National Fund of the Republic of Kazakhstan). Originally, it was an agrarian country with livestock farming but as a part of USSR Kazakhstan developed important industries such as chemicals, metal and food processing, textiles, and plant growing. In the sixties “Tselina” campaign¹¹ opened to the republic new horizons of grain production, and Kazakhstan has got a leadership in this field.

Since 1991, Kazakhstan has reached a very high level of development of its oil and gas reserves. Although this branch of Kazakhstan’s economy was not considered as the main one in the past, it now receives large volumes of foreign investments and produces a significant part of export profits. The aim of the country is to become one of the top ten oil and gas exporters in the world by 2020 (“Khabar” National Agency).

In 2006 Fitch Corporation Ratings put positive outlook in Kazakhstan’s “BBB” rating that reflects sustained real economic growth, strong public finance, and remarkable progress in structural reforms. (Fitch Report March 2007. Kazakhstan: Sovereign Overview¹².) As table 2.1 shows, Kazakhstan declared itself as a stable economy with a huge potential for capital and investment absorption.

Table 2.1 Kazakhstan’s rating history

<i>Date</i>	<i>Rating*</i>
Dec 2006	BBB Positive Outlook
Dec 2005	BBB
Oct 2004	BBB-
Oct 2002	BB+
July 2001	BB
May 2000	BB-

* Long-Term Foreign Currency Issuer Default Rating

Source: Fitch

It is clearly unarguable that exports and foreign investments are remarkably prosperous for country growth¹³ that is why joint ventures and other foreign investments into Kazakhstan are not just permitted but also actively encouraged. Nowadays, according to estimation of World Bank, Kazakhstan is in top twenty countries that are the most attractive for investments all over the world. Foreign direct investment in Kazakhstan averaged \$966 million in 1998 (Freedom House Report at 20 Table B). In 1999, Kazakhstan ranked third among former socialist-bloc countries in terms of total volume of foreign investment at \$1.5 billion, behind only Poland and Hungary. In 2000, FDI rose to 2.7 billion USD, further increase to 3.5 billion USD was observed in 2001. All sectors of the economy are open to foreign investment and foreign investors are allowed to participate in privatization (Freedom House Report at 344). They are involved in the energy sector, the steel industry, extraction industries, and many other sectors.

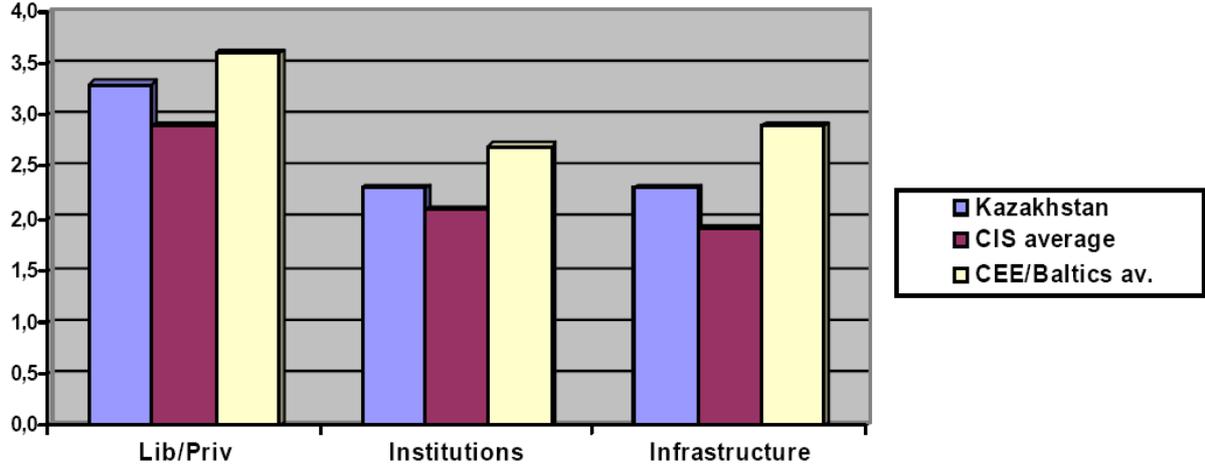
¹¹ The Virgin Lands campaign that was followed by communistic government in KazSSR.

¹² See Fitch Rating’s www.fitchrating.com

¹³ Frankel, J. A., Romer, D., „Does Trade Cause Growth?“ American Economic Review 89, June 1999, pp.379-399.

There have been favorable policy changes in Kazakhstan such as a new law that allows the government to change natural-resource contracts unilaterally (World Investment Report 2008, Policy Developments). Laws on foreign investment, the Agency of the Republic of Kazakhstan for Investment (ARKI), and the Foreign Investors’ Council all encourage and support foreign investors. The Law “On Foreign Investment” (27 December 1994) protects foreign investors from nationalization/expropriation, changes in legislation, and illegal action by state agencies or officials and guarantees the unrestricted use of income and currency convertibility for dividends and other uses (IBRD Memo at 69-70). In addition, the Law “On the State Support of Direct Investment” grants state assets and concessions, income, land and property tax holidays for five years with additional periods at reduced rates, plus duty and VAT exemption for imported machinery and inputs for varying periods. Furthermore, foreign investors may own and lease land according to the Law “On Land” that was introduced on the 24th of January 2001 (World Bank, “Kazakhstan: Joint Private Sector”).

Figure 2.2 Reform Progress in Kazakhstan, CIS and CEE/Baltic States



Source: EBRD Transition Report 2001.

Although Kazakhstan is a leading reformer among the CIS countries, it is still behind the advanced transition economies in Central and East Europe and the Baltic States. Figure 2.2 presents a typical path of transition economy where the process of relatively early liberalization and privatization is followed by backward reforms in institutional framework and infrastructure.

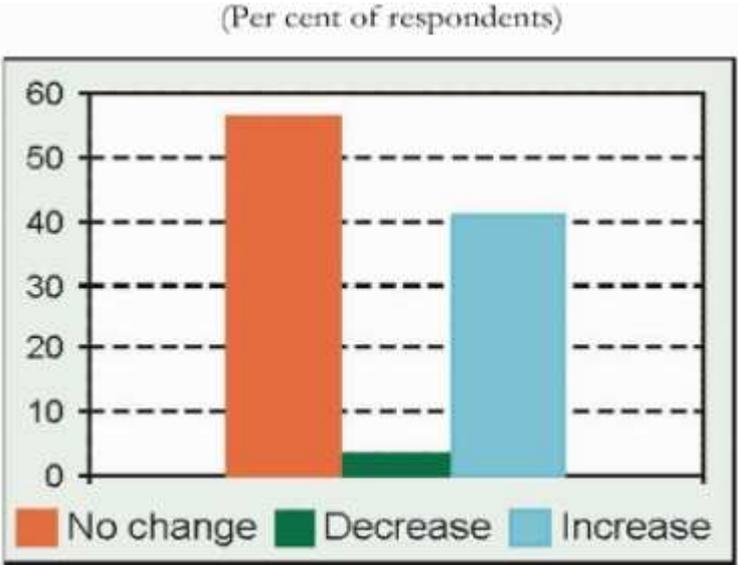
Taking into account all mentioned information I can summarize the main important reasons for foreign corporations to invest in Kazakhstan as follows:

1. Geopolitical location;
2. Enormous reserves of natural and mineral resources;
3. Fast growing economy;
4. Country’s favorable political and economical reforms;
5. High capacity of capital and investment absorption.

In terms of financial crisis that has shaken the world economy since last year worldwide FDI flows are set to decline after its peak in 2007 – Global FDI flows are estimated to be \$ 1.6 trillion, 10% lower than in 2007 according to the World Investment Report 2008 (UNCTAD 2008). However despite the financial and credit crises, the FDI into developing and transition economies are resilient and going to increase marginally at range of 7-10%. Firms are seeking

bigger consumer markets and natural resources in the industry-arising CIS countries and South-East Europe countries. As Figure 2.3 indicates, Kazakhstan and other attractive destinations in Central Asia and Middle East countries will remain in the center of foreign investors attention. Moreover, because of the financial crisis, there are many firms, which need a bailout and foreign corporations through mergers and acquisitions may purchase the whole production or just parts of it for very cheap prices.

Figure 2.3 FDI prospects in South-East Europe and CIS, 2008-2010



Source: UNCTAD, World Investment Report 2008
Transnational Corporations and the Infrastructure Challenge.

2.2 Natural Resources and Country Growth

General view is that if country is abundant in natural and/or mineral resources it develops easier and faster than less lucky neighbors. However, according to empirical evidence this is not even close to real situation. For example, Gylfason (2001) argues that very often it happens that natural resource-rich countries experience slower growth and progress than others with no significant reserves in possession. Usually it refers to developing or transition economies with immature institutions and lack of government transparency. Growth lagging in these states can be explained by few factors:

1. Government’s myopia;
2. Dissuasion from human capital accumulation;
3. Disincentives to save and invest capital;
4. Transferring all resources to one particular industry;
5. Dutch disease appearance (with overvalued local currency as one of the symptoms).

Indeed, economies that were blessed by nature with resources in the end are worse off than the other states because they simply do not make any effort for improving or enhancing their economic position and rely only on raw-materials exports that finally phase out other exports.

It calls trouble not only for growth and prosperity but also might lead to even worse position than it was before opening up the natural resources deposits.

Governments in these countries are myopic in the sense of not caring about future generations lives. They do not spend earned money on development of favorable economic environment and creation conditions of free trade. On the contrary, profits from raw materials exports are wasted on unneeded military defense, luxuries for elites and political authorities or on bribes for deterring the power in their hands. All these factors negatively affect institutional framework and deepen corruption that in the end prevent economy from growing.

Moreover, these economies are often exporting mainly the products they have comparative advantage in. Of course, someone can see that this does not contradict with Heckscher-Ohlin theorem, and countries just follow the way that was advised and described by international trade theory. However, it must not be confused that the original theory suggests industry specialization because of the production factor, which country is abundant in, not due to natural resources that might easily end during next few decades. Furthermore, primary mining of resources do not demand any special preparation or qualified education in general. Thus, people are discouraged from spending money, time and effort on getting specific education or qualification and then they cannot offer any additional value for employers in other industries. Human capital dissolves in natural capital.

Spurious feeling of welfare state makes leaders believe in long run prosperity and they do not save or invest for future profits and rewards. Also, natural resources abundance can be blamed for governments' non-diversification of portfolio investments and non-distribution of rents earned from that natural wealth.

Thereby the leading strategy in these countries' external and internal policies becomes subsidizing and supporting of booming industry that leads to decreasing the share of other exports in total value of exported products. Additionally, inward foreign direct investment – exports of capital - might be hurt by economy biased toward one particular sector. Main production factors are expensed in the newly growing industry and it is lack of resources for other needed activities.

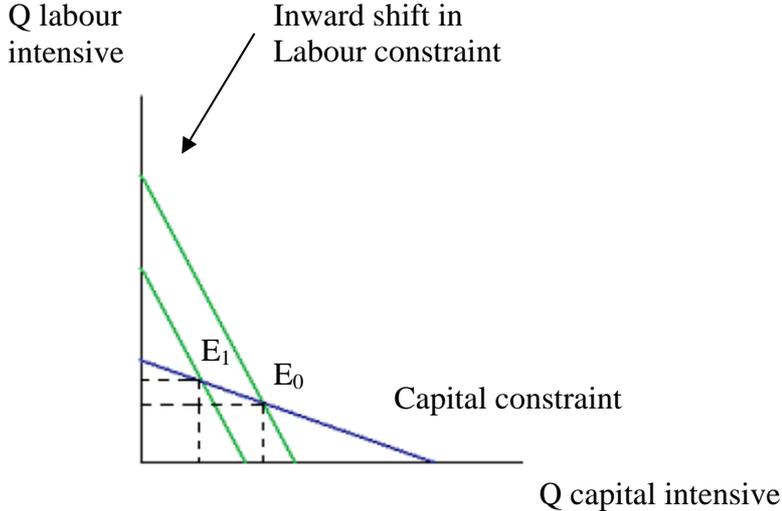
I will especially focus on Dutch disease presence in Kazakhstan because it linked to transnational corporations activities that are in the concern of this thesis.

2.3 Dutch Disease in Kazakhstan

In this subchapter, I will attempt to diagnose symptoms of Dutch disease in Kazakhstan. Of course, I must explain what it is like and why it is dangerous for the nation economy before starting my analysis.

This term reflects apprehensions of de-industrialization because of discovering of natural resources' reserves in a country possession. The newly booming sector of minerals mining absorbs labour needed for sector expansion. Hereby, other industries are suffering from lack of labour and their production contracts (Figure 2.4 – movement from E_0 to E_1); wages in non-expanding sector are growing what makes prices of the products higher. And what is more hurtful and, hence, significant, the national currency is appreciating because of investment flows and country's exports that obviously paid in foreign currency.

Figure 2.4 Rybczynski diagram



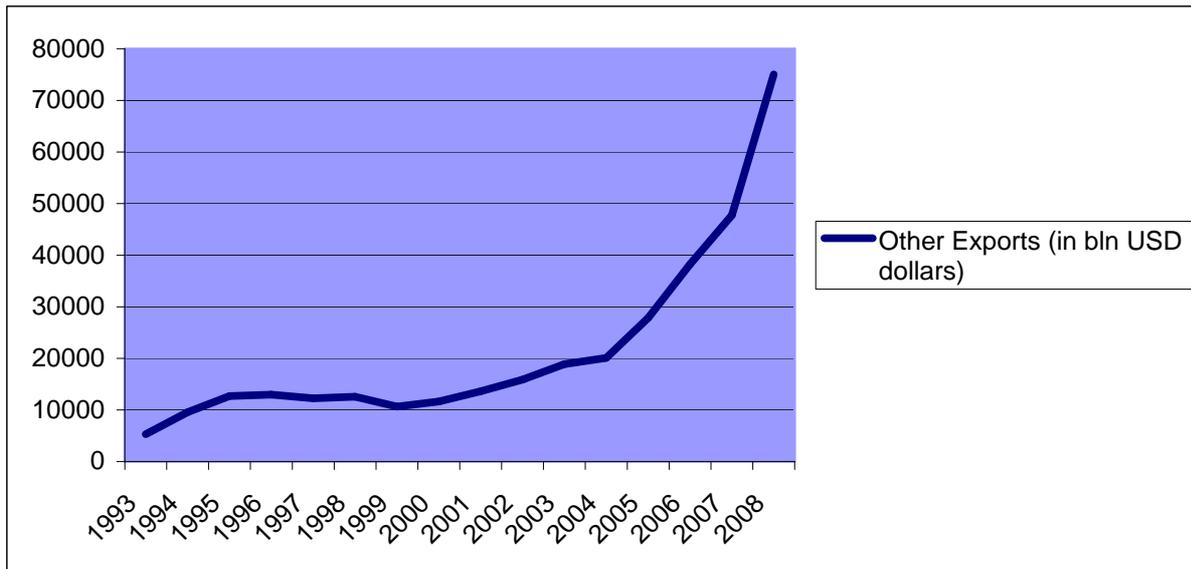
Source: www.wikipedia.org

All of that makes costs of other exports (often manufacturing nature) more expensive and, therefore, these exports are less competitive on global market. Finally, manufacturing and service exports might stagnate or even fall relative to GDP. The name for this phenomenon was given because of the origin where event first occurred, although, the consequences of the Dutch disease did not materialize in Netherlands (Gylfason 2001).

Dutch disease presence negatively influences the economy where the booming natural resources industry becomes the main source of national income and country's growth slows down and might even stop.

Let us firstly look at other exports from Kazakhstan (Figure 2.5). The Ministry of Finance of the Republic of Kazakhstan granted data of exports that include such products as meat, wheat, grain, barley, rice, flour, phosphate, lime, cement, asbestos, ores, coal, fertilizers, etc.

Figure 2.5 Non oil and gas exports, 1993-2008 (in bln USD)

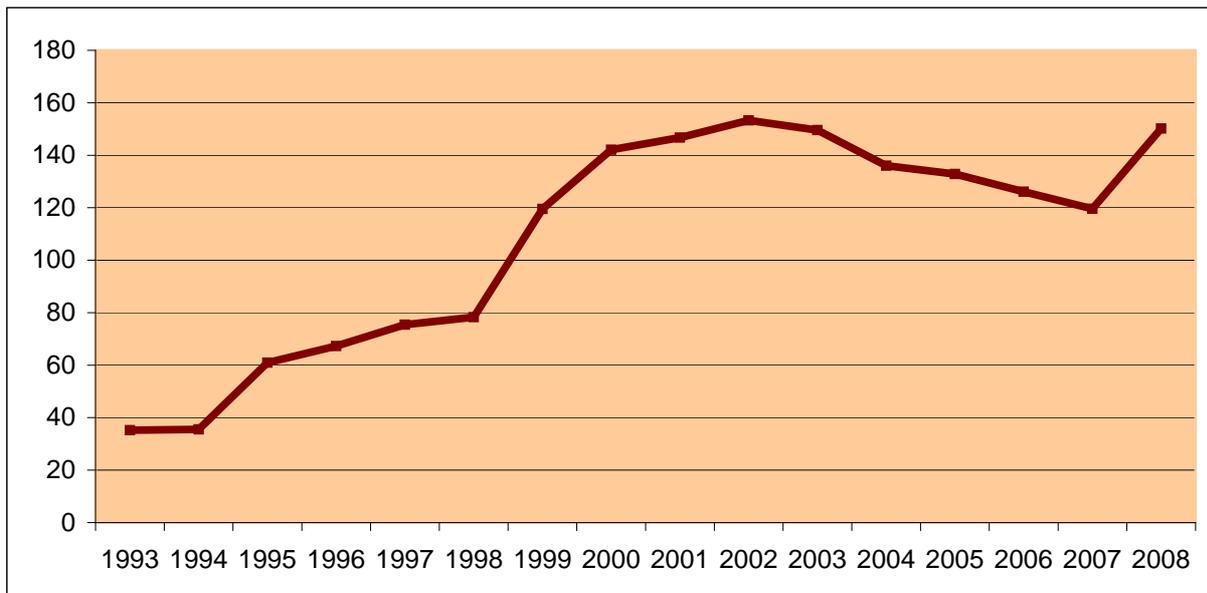


Source: the Ministry of Finance of the Republic of Kazakhstan

According to given data I can conclude that non oil and gas exports since 1993 were growing in volumes despite the increase in costs of these products due to inflows of foreign currencies and consequently appreciating of the national currency.

It will be reasonable to cast a glance at the real exchange rate during these years. If the national currency is overvalued and appreciated in real terms, it will be indicated on the next graph. Figure 2.6 represents changes in exchange rate of the Kazakhstan national currency – tenge – over time in relationship to USD dollar. Tenge was not overvalued during the given period and it was even undervalued because of increasing value of US dollar.

Figure 2.6 Exchange rate movements, 1993-2008 (tenge for \$1)

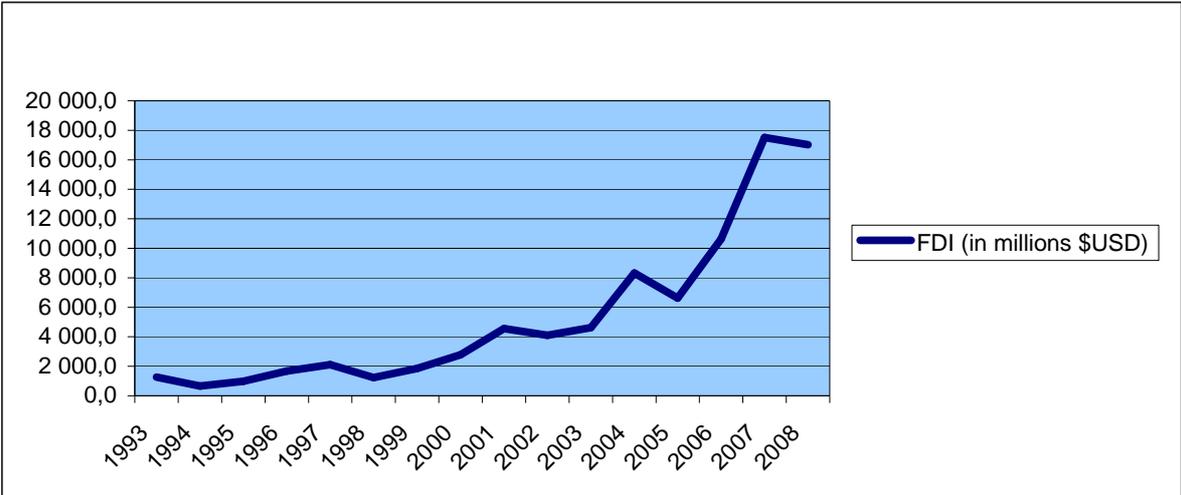


Source: the National Bank of Kazakhstan

Figure 2.6 actually explains the previous graph about non-oil exports that were growing. It means that the first symptom of Dutch disease did not show up in Kazakhstan so far. And other industries were not hurt by boom in the oil and gas sector.

Figure 2.7 indicates a relatively stagnated trend in FDI during 1993 and 2000 that started growing in 2001 and currently remains at the value of around \$18 billion. According to available information, there is no significant change in FDI flows into transition and developing economies in next few years despite the current financial crisis.

Figure 2.7 FDI inflows into Kazakhstan, 1993-2008



Source: the National Bank of Kazakhstan

To summarize all of my research I can insist that Dutch disease has not appeared in the Republic of Kazakhstan thus far. Non-natural resources exports were not hurt neither by overvalued currency nor contraction of production due to the lack of labour force. Of course, I do not claim that there is no mistake in the estimation or interpretation of the results; however, I believe that in general my conclusions are quite reliable.

Chapter 3

Regression analysis of FDI inflows

In this thesis, I will try to identify and map the determinants of FDI inflows into Kazakhstani economy. Being aware of the key factors that affect investments and their weights in the FDI structure gives to policy-makers an ability to manipulate TNCs' activities and possibly turn them into favor of domestic economy. As a next step, there will be a regression model that aims to explain the nature of FDI inflows by few significant variables. There is a lack of data for the first two years from country's independence that is why the time series starts from 1993 year.

Model specification and interpretation

Summarizing different resources of literature on FDI determinants, I assume that FDI inflows into Kazakhstani economy can be captioned by variables that seem to be important for the analysis. Market-seeking determinants are GDP and index of openness; unit labour cost and economic freedom ranking belong to efficiency-seeking variables as well as infrastructure development level.

I will use a power function to display FDI inflows by variables mentioned above. The function is a type of Coubb-Douglass function and my model is constructed as follows:

$$FDI_t = A * (GDP_t)^\alpha * (GDP/N_t)^\beta * U_t^\delta * O_t^\gamma * E_t^\sigma * I_t^\psi * v_t$$

$t=1993, 1994, \dots, 2008$

Where A is a constant variable,

GDP is real Gross Domestic Product for the end of the year t ,

GDP/N is Gross Domestic Product per capita by Purchasing Power Parity for the end of the year t ,

U is unit labour cost for the end of the year t ,

O is index of openness¹⁴,

E is economic freedom ranking,

I infrastructure level in corresponding year t ,

$\alpha, \beta, \delta, \gamma, \sigma, \psi$ are coefficients that must be estimated in the model,

v_t is disturbance in the model with zero mean value and constant variance.

All data needed for analysis are fully represented in the Appendix B. The National Bank of Kazakhstan provided information about real GDP and GDP per capita by Purchasing Power Parity. Unit labour cost was calculated as average of nominal monthly wages that were drawn from the database of the Ministry of Labour and Social Protection of Kazakhstan. The Kazakhstan Statistic Agency provided information for index of openness. The Heritage

¹⁴ Index of openness was calculated as a sum of country exports and imports divided by real GDP in given year.

Foundation granted the economic freedom ranking information.¹⁵ Data about infrastructure were found in the Kazakhstan Infrastructure Report (March 2009).

In order to use the Ordinary Least Squares method the data were transformed into logarithmic scale. Therefore, all coefficients from microeconomic point of view represent elasticities, i.e. the responsiveness of dependent variable (FDI) on the percent change of corresponding independent variable. In the analysis, I will use software called R program that is freely downloadable from www.r-program.org. After logarithmic transformation my model looks as follows:

$$\ln FDI_t = \ln A + \alpha \ln(GDP_t) + \beta \ln(GDP/N_t) + \delta \ln U_t + \gamma \ln O_t + \sigma \ln E_t + \psi \ln I_t + \ln v_t (*)$$

Model validity

There are few premises I have to check before I can absolutely rely on the estimates that my model offers. These are assumptions of the linear regression model. I suppose that the data used in the analysis originated from random selection and expected mean values of disturbances are zero. Moreover, the model is linear in its parameters because of data transformation in logarithmic scale. Further assumptions must be tested:

- Multicollinearity of data
- Autocorrelation of disturbances
- Normality of disturbances
- Homoscedasticity of disturbances.

Multicollinearity of data takes place when two or more predictor variables are correlated and, therefore, estimates have large variances (which implies that they are meaningless for the analysis). In my case, I tested multicollinearity issue by index of conditionality: $\mu=23$. This value is less than 30, which is the limit border for “allowed” correlation. Thus, I do not have to deal with multicollinearity in the data.

Autocorrelation of disturbances has a negative impact on the model making estimated coefficients inefficient, however, they are still unbiased. In my case, I will check autocorrelation presence by Durbin-Watson test. The Durbin-Watson statistics equals to 1.737765. The statistical values that are close to 2 implicate less probability of residuals autocorrelation in the model. I will double-check this issue by constructing the linear regression model only for residuals and will test the null hypothesis about zero correlation between residual in t time and $t-1$ time.

$$v_t = \rho v_{t-1} + \varepsilon_t, t=1994, \dots, 2008$$

Residuals needed for the construction of that model I will calculate as

$$v_t = \text{EXP}(\ln FDI - \ln A - \alpha \ln(GDP_t) - \beta \ln(GDP/N_t) - \delta \ln U_t - \gamma \ln O_t - \sigma \ln E_t - \psi \ln I_t)$$

¹⁵ Economic freedom includes ten components such as business freedom, trade freedom, fiscal freedom, government size, monetary freedom, investment freedom, financial freedom, property rights, freedom from corruption and labour freedom. Ranking is between 0 and 100.

Where $\ln A$ is intercept and $\alpha, \beta, \delta, \gamma, \sigma, \psi$ are estimates from the model (*). So the null hypothesis I test is if the first order autoregressive coefficient $\rho=0$. The results for the test are in the table below:

Table 3.1 Autocorrelation test results

	Estimator	Std. Error	t value	Pr (>/t)
ρ	-0.03745	0.11054	-0.339	0.736

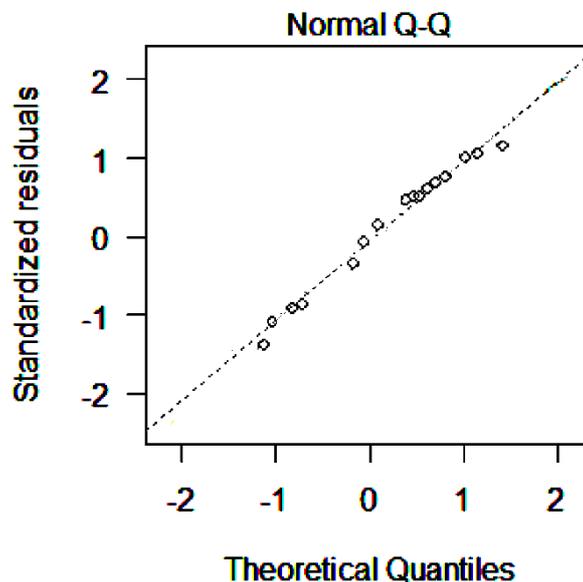
According to the achieved results, the null hypothesis **cannot be rejected** on the 1% and 5% levels of significance. Therefore, I assume that there is no residuals autocorrelation in the time series data.

Assumption about normal distribution of residuals is a compulsory requirement of the linear regression model. Distribution of residuals will be checked by Shapiro-Wilk test of normality:

$$W=0.9785, p\text{-value}=0.1729$$

High value of p-value indicates that normality assumption in the model cannot be rejected on any reasonable level of significance. Normal plot will show the full picture about residuals distribution. In the R-program, there is function that displays residuals standardization. Figure 3.1 represent residuals standardized positions. The more residuals approach the line on the graph the more normal distribution appears.

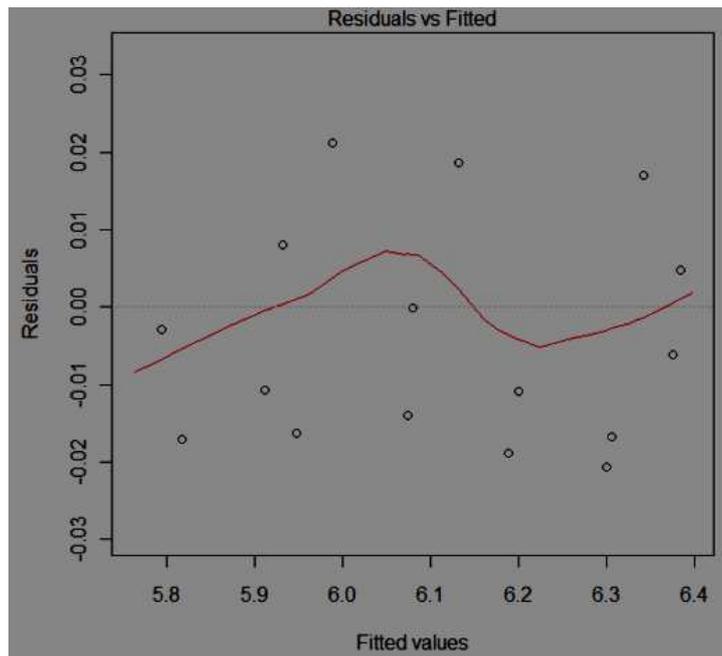
Figure 3.1 Normal plot of residuals distribution



So relying on the graphical analysis I take the data as normally distributed. It is left to test homoscedasticity of residuals.

Although there is a trend on the graph in Figure 3.2, I tolerate its fluctuations because the range is just between -0.01 and 0.01 and assumption of homoscedasticity is not broken.

Figure 3.2 Homoscedasticity of residuals



After testing and checking all assumptions of the linear regression model, I finally can introduce the estimated results. The whole set of data was divided into three parts: 1) oil and gas industry, 2) other sectors, 3) all data available. The estimated results are summarized in the next table.

Table 3.2 Results from the linear regression model

	Dependent Variables		
	Ln FDI		
	Oil and gas	Other	All
Intercept	-4.9722	-13.2871*	-10.8744
Ln GDP	3.1992	5.3574**	2.1973**
Ln GDP per capita	1.3920*	1.6065**	1.2198***
Ln Unit Labour Cost	-3.6494	-1.7948***	-2.5379**
Ln Index of Openness	1.6678**	-0.5489**	-0.3567*
Ln Econ. Freedom	1.6149***	2.0906**	1.1522**
Ln Infrastructure	4.23***	5.67**	3.78**
R²	0.85	0.76	0.81

Signif. codes: *, **, *** Significant at 10, 5 and 1% level respectively.

Interpretation

The best model is the one constructed with oil and gas industry data ($R^2=85\%$). It is the most inquisitive one as well. Results suggest that neither real GDP nor Unit labour cost is significant for explanation of FDI inflows into this particular industry. The possible reason for that may be very strong incentives in the form of high profits so investors are indifferent to the low or high level of income in the country and the need to pay any wage for the labour force. GDP per capita variable acted as slightly significant in the analysis of natural resources

FDI structure. The value of estimated coefficient implicates that 10% increase in GDP per capita will reflect 14% growth in FDI volumes. Index of openness in this model was indicated as valuable variable on 5% level of significance. Two other variables – Economic Freedom Ranking and Infrastructure Development Level – turned up to be very significant for FDI explanation. The value of last estimated coefficient suggests that 10% improvement of infrastructure will affect FDI by more than 40%.

The worst model is the one that was devoted to other non-oil and gas sectors. The coefficient of determination is only 76% and the rest of FDI data must be explained by variables that are not included in the model. This is the reason for the intercept significance on the 10% level. According to my estimation, it is an inverse relationship between FDI and Index of Openness. There is a notion about FDI driving out by too intensive trade. When country is involved in the world trade and performs well there is no need for attracting more investments that are intended to serve the local market. Economy becomes self-sufficient and investments are substituted by imports (Wheeler 1992). However, the value of this coefficient is not high at all and in my opinion, there is no fear of investment substitution in general. The rest of results are not surprising: FDI in other sectors is very sensitive on Unit Labour Cost and responds on changes in GDP, Economic Freedom, and Infrastructure.

Estimated results for all data are similar to the previous discussion about other investments. Although in this case given data of suggested variables accounts for 81% of FDI data variability.

One variable was rejected while examining FDI determinants. Corporate income tax did not appear to play much of role in the analysis. It has been at the rate of 20% since 1993 and it was changed to 30% in 2000. The explanation for insignificance is clear – the change in the rate was just once and hardly affected FDI inflows.

To conclude the regression research on FDI determinants, I can assert that oil and gas industry is sensitive mainly to the changes in infrastructure and economic freedom while non natural resources industry, as well as the whole economy, responds to the changes in all explanatory variables to different extent evidently. I would suggest diversifying nominal wage in the country in order to attract more investments to the national economy and surely expand infrastructure, legislation process, and openness in economic and business environment.

Chapter 4

Efficiency Analysis of Companies' Activities

4.1 Local Corporation

Now I would like to look with profound interest at individual firms that operate in the republic. The Kazakhstan national oil and gas company called KazMunayGas¹⁶ was chosen as an example of Local Corporation. The history of the company starts from the formation of joint-stock company (JSC) with 100% share of the state in 2002. National company KazMunayGas is a successor of CJSC¹⁷ National oil and gas company KazakhOil and CJSC national company Transport of Oil and Gas. Nowadays, the Company and its subsidiaries work on prospecting and production of oil and gas, transportation and oil products processing. Furthermore, because of the state total share in ownership the company acts on behalf of Kazakh government in all aspects concerned oil and gas field. Among the main Company's subsidiaries there are:

- JSC KazMunayGas Exploration Production (KMG EP)
- JSC KazTransOil (transportation of oil);
- JSC KazTransGas (transportation of gas);
- Trading House JSC KazMunayGas (sales of oil, oil and gas derived products and other services).

Obviously, the KMG EP is the most important affiliate in KazMunayGas Group of Companies. It was created in March 2004 through the merger of JSC Uzenmunaigas and JSC Embamunaigas. The KMG EP shares are listed on Kazakhstan Stock Exchange and the global depository receipts (GDR) are listed on London Stock Exchange. In 2007, the KMG EP became the second largest Kazakh oil producing company; its exports in 2008 accounted for 78% of 2006 sales in volume terms (73% in 2006). International rating agency Standard & Poor's (S&P) increased the Corporate Governance Score of KMG EP from CGS 5+ to CGS 6 and confirmed its «BB+» corporate credit rating in November 2008 (S&P 2008).

Table 4.1 KMG EP Key Figures

<i>Years ended 31 December</i>	2005	2006	2007
Production (thsd tones)	9 341	9 530	10 639
Total Revenue (bln. KZT)	348.89	412.21	486.97
Export (thsd tones)	6 489	6 876	7 354
Profit from operations (bln. KZT)	141.85	218.81	276.14
Profit for the year (bln. KZT)	45.28	122.56	157.12
Capital expenses (bln. KZT)	61.92	49.29	49.09

Source: KMG EP web site: http://www.kmgep.kz/eng/investor_relations/key_figures/

In the table 4.1 is shown general information about the KMG EP performance during last three years. Profits from operations significantly soared while capital expenses declined in 2006 and total profit for this year was more than doubled. Curiously, production and exports did not experience any consequential changes at that time. The reason for this sharp increase

¹⁶ „Munay“ is translated as „oil“ from Kazakh language. It is written as Munai in some sources.

¹⁷ Closed Joint-Stock Company

in profits was probably the fact that the KMG EP raised approximately US\$2 billion in its Initial Public Offering in September of 2006.

Currently, the KMG EP possesses 70,220,935 of common shares and 4,136,107 preferred shares. Figure 4.1 represents the share price performance chart during last year where each GDR accounts for 1/6 of common share.

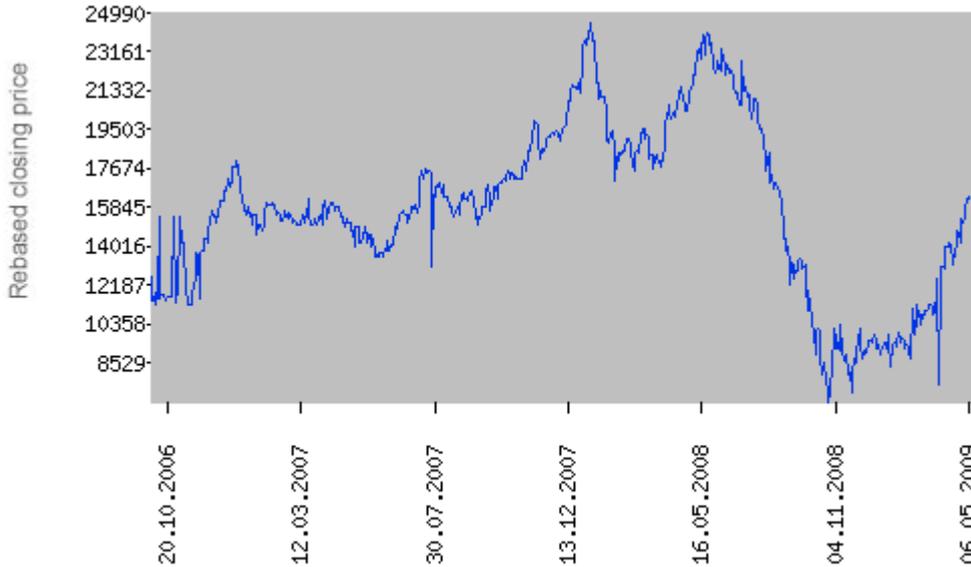
Figure 4.1 JSC KazMunaiGas Exploration Production GDR (LSE)



Source: London Stock Exchange

The share price performance on Kazakhstan Stock Exchange is reflected in Figure 4.2.

Figure 4.2 JSC KazMunaiGas Exploration Production GDR (KASE)

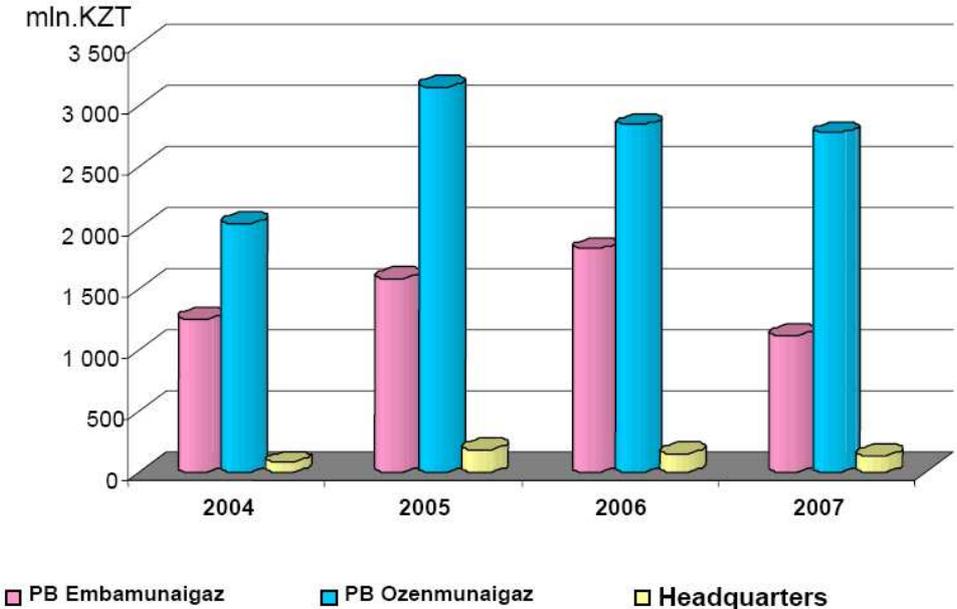


Source: Kazakhstan Stock Exchange

As it can be seen, both charts display similar results – reduction in the share price of the KMG EP since the second half of 2008. However, in November 2008 the share price became relatively stable and started rising in March 2009. Positive forecast for the shareholders proves the company’s firm position in times of financial crisis.

Other challenging issue for examining might be company’s social policies. According to available information, the KMG EP has implemented diverse social programs across a number of areas, including social partnership, educational and sport projects, sponsorship and overall support of its employees and their families (Figure 4.3).

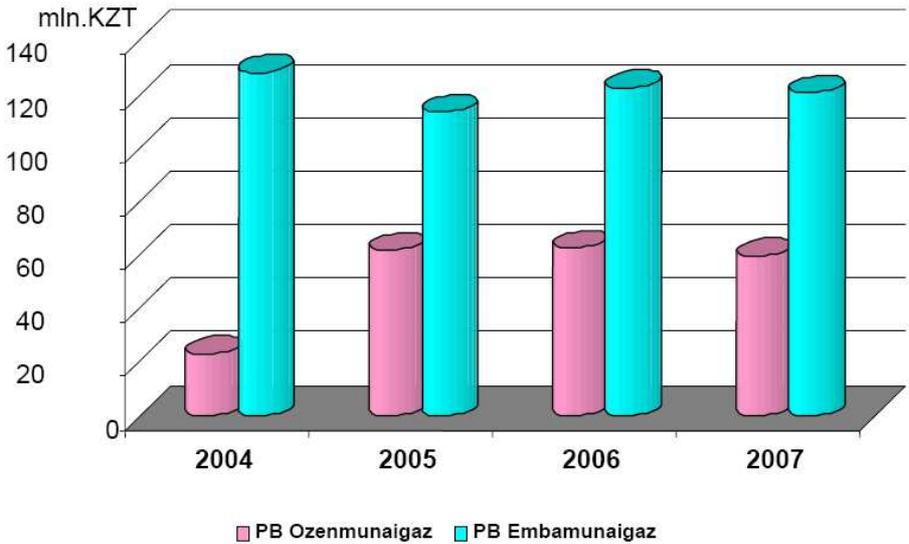
Figure 4.3 Total payments to KMG EP employees as per Collective Agreement and other Company Documents



Source: KMG EP Press Release www.kmgep.kz

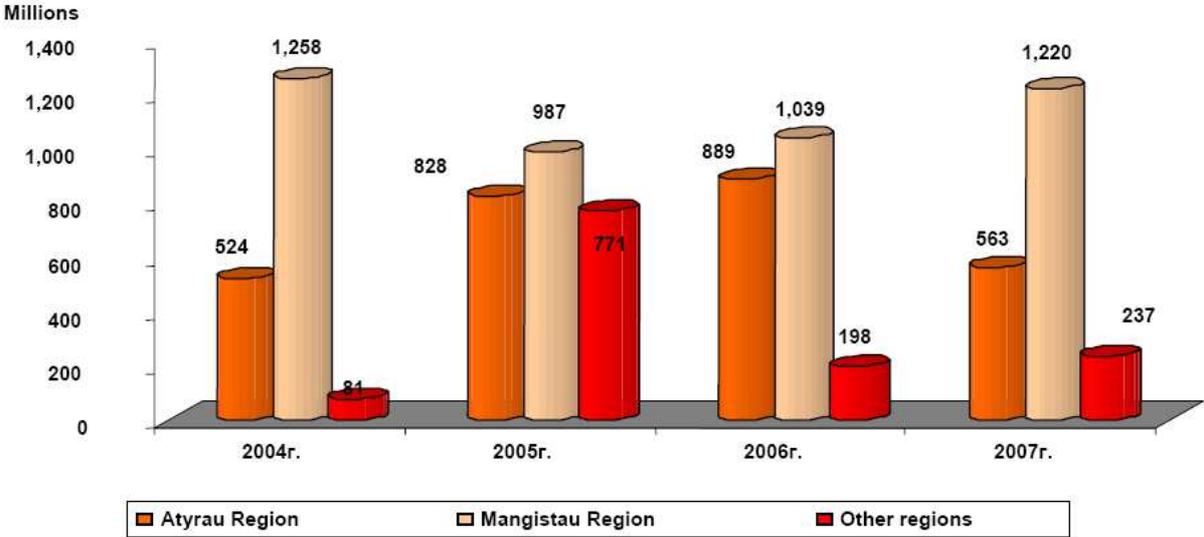
The KMG EP provides financial aid to low-income families, invalids, orphans, pensioners, artists, and athletes and participates in various socially important events organized by NC KMG (Figures 4.4 and 4.5).

Figure 4.4 Total Payment under the Social Support Program for non-working pensioners



Source: KMG EP Press Release www.kmgep.kz

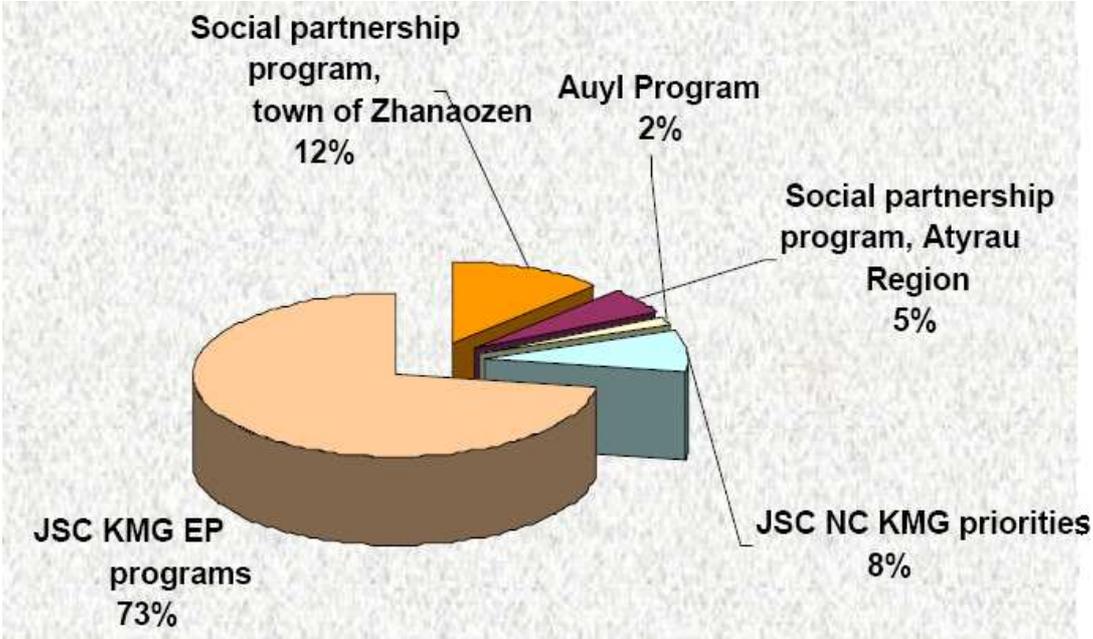
Figure 4.5 Contributions provided to low-income families and advancement of social infrastructure under subsoil use contracts in Atyrau and Mangistau¹⁸ regions in 2007



Source: KMG EP Press Release www.kmgep.kz

Overall, in 2007 the KMG EP spent about \$30mln (3.7bln tenge) on social projects. From this 947mln tenge was allocated in accordance with the subsoil use contracts, 980mln tenge was spent on social sponsorship and 1.8 million tenge on the construction of social facilities (Figure 4.6).

Figure 4.6 Implementing of Social Projects 2004-2007



Source: KMG EP Press Release www.kmgep.kz

The KMG EP also places a strong emphasis on its responsibility towards the environment in the regions of its operations and beyond. In September 2007, KMG EP acted as a general

¹⁸ Atyrau and Mangistau regions are located close to Caspian sea shelf.

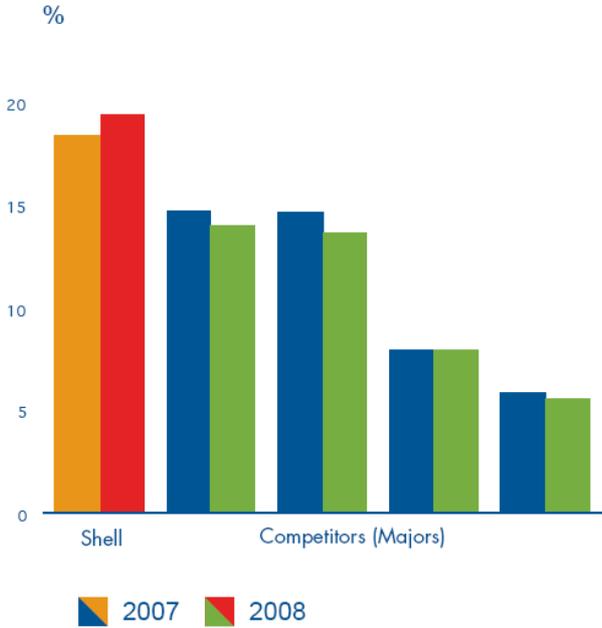
sponsor for the Eco Tech 2007 conference, the main specialized event in Central Asia that focuses on utilization, refining, and storing of industrial waste; water, air and soil purification; and health and safety regulations (www.kmgep.kz).

The KMG EP took a strong financial position after acquisition of a 50% interest in Kazgermunai (1062 thousand tones of reserves were attributed to KMG EP) and additional 50% interest in Karazhanbasmunai (32.8 million tones were signed to KMG EP possession). The company received \$375 millions and \$832 millions respectively since the acquisition. Good knowledge of local markets and political conditions enable the company to expand its domestic portfolio on favorable terms. The company is also considering acquisitions and partnership opportunities on a number of assets both in and outside Kazakhstan.

4.2 Foreign Investor

As a foreign investor in Kazakhstan, I chose Royal Dutch Shell Group of Companies to compare its operations with local company. Shell takes the second place in the annual rating of the largest world corporations according to Forbes Global 2000. According to the Global Brand Tracker – that works in 60 countries and interviews 25,000 people a year – Shell name is among the trustworthiest brands all over the world (See Figure 4.7). There are such corporations as ExxonMobil, Chevron Texaco and British Petroleum among Shell’s competitors.

Figure 4.7 Shell Corporation Brand performance



Source: Global Brand Tracker, Q4.08

Moreover, it formed a joint venture with KazMunayGas in 2008 for oil exploration in the giant Kashagan field in the northern part of Caspian Sea. Estimated potential of that field is about 38mld barrels of oil what makes it one of the biggest oil deposits in the world. So, I consider that comparison of these two companies will be quite curious for examining.

Shell Corporation appeared in Kazakhstan as a part of Offshore Kazakhstan International Operating Company (OKIOC) in November 1997. The consortium OKIOC was founded by seven oil companies: Agip, British Gas, Mobil, Shell, Total, Kazakhstankaspiyshelf and the British Petroleum-Statoil Alliance. Nowadays, Shell is one of the largest investors in Kazakhstan. The volume of FDI inflows that were directed by the corporation to this economy was over \$3mld whereas annual volume of investments is about \$ 700 mln (Shell Corporation in Kazakhstan). Kazakhstan and the Caspian region in general are strategically important areas for Shell with increasing volume and scale of business activity.

Main types of Shell operations are divided into two dimensions:

Upstream -

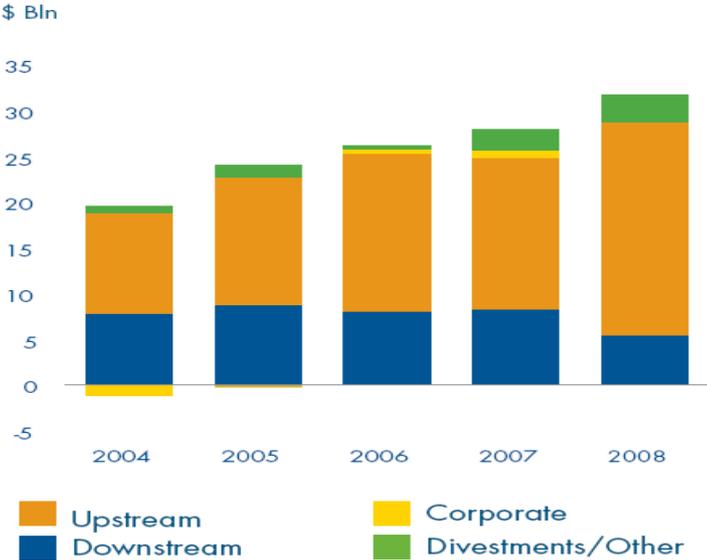
- Prospecting and mining of hydrocarbons (more than 37 countries with over 18 thousand employees)
- Gas marketing and production of electric power (one of the largest world gas producers)

Downstream -

- Oil products (46 thousand of service centers all over the world)
- Products of petrochemistry (more than 70 companies that produce and deliver chemicals for industrial enterprises).

Next chart shows the earnings on a current cost of supplies basis (CCS) during last five years from upstream, downstream, and corporate and divestment¹⁹ perspectives.

Figure 4.8 Shell Corporation’s Earnings



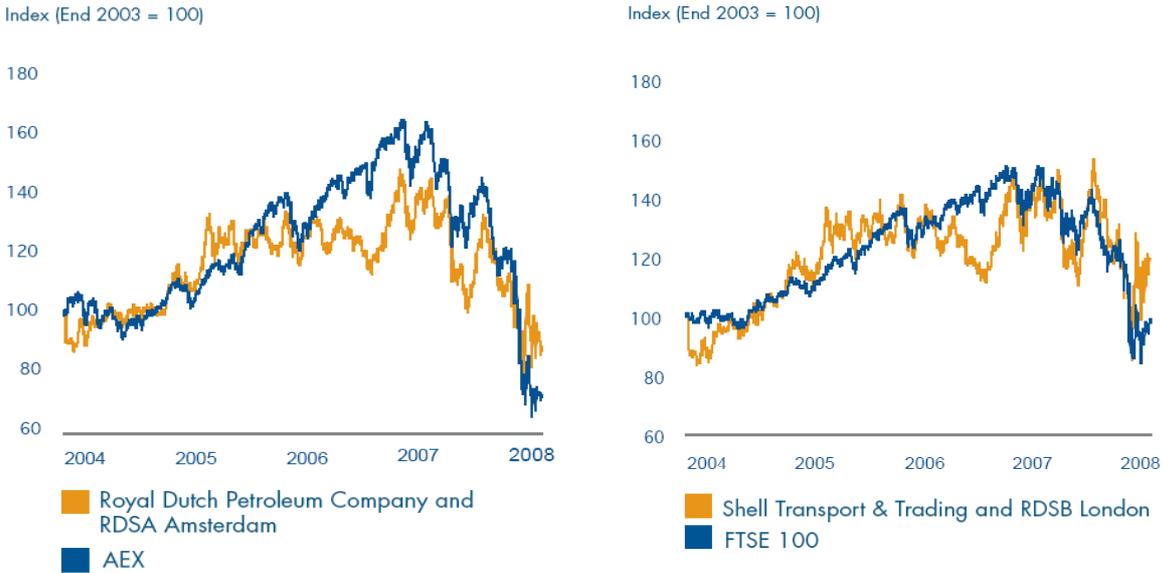
Source: Royal Dutch Shell plc 2009 Investor Fact Sheet

As Figure 4.8 indicates the corporate earnings in 2004 were negative, however, full earnings were growing during these years and in 2008 reached \$31.4 bln (as 16% increase compared to 2007).

Royal Dutch Shell shares²⁰ are traded on London Stock Exchange (FTSE 100 Index), Euronext Amsterdam (AEX Index) and New York Stock Exchange (DJ Industrial Average).

¹⁹ A divestment is oposite of an investment. The term is used to show company’s financial growth.

Figure 4.9 Royal Dutch Shell Petroleum Company, RDS-A & AEX and RDS-B & FTSE



Sources: Amsterdam Stock Exchange and London Stock Exchange

Performances of company’s share on Amsterdam Stock Exchange and on the London Stock Exchange are almost similar. Both trends are slightly below the average but started increasing since last quarter of 2008. A situation on the New York Stock Exchange is different – share price performance of Shell Petroleum Company is above the average (Figure 4.10).

In 2008, according to Shell public announcement, company collected over \$94 bln in excise duties and sales taxes on behalf of governments on the fuel and other products, paid \$26 on corporate taxes and other \$2.3 bln in royalties on the oil and gas.

Figure 4.10 Royal Dutch Petroleum Company, RDS-A & Dow Jones Industrial Average



Source: NY Stock Exchange

²⁰ There two types of shares – Class A and Class B. They have identical rights, except related to the dividend access mechanism.

Obviously, natural resources revenues in developing and transition economies can bring a lot of benefits in case of a good management of the enormous profits. Although, these revenues managed poorly might contribute on stimulation of corruption and social inequality. Frankly, it is responsibility of local governments to transfer these assets to social needs. That is why Shell is a leading corporate supporter of the Extractive Industries Transparency Initiative (EITI)²¹. It supports national programmes in Kazakhstan and other countries such as Azerbaijan, Cameroon, Gabon and Nigeria. Currently, Kazakhstan is a candidate country and has to complete the validation process until 2010.

In 2000 Shell Group established the Shell Foundation that focuses on global development and environmental challenges linked to the impact of energy and globalization. It contributed \$250 mln as an endowment to the Foundation and additional 10-year commitment of \$160 mln.

While conducting a joint venture with other companies Shell requires to apply the Shell Control Framework that include Business Principles, Code of Conduct and Health, Safety, Security and Environment Standards. People in countries with less developed human rights' institutions where local firms do not follow the "rules" will definitely benefit from this policy.

Now I will make an attempt to compare business activities of the local firm KazMunayGas and the foreign investor Shell Corporation. But having said that, I start from a position that evidently, Shell is much bigger and stronger player than KMG. And my target is not to measure their efficiency but to identify which one is more valuable for the host economy.

In the table below there are represented some financial ratios of these two companies whereas the first column reflects KMG data and the second one is devoted to the Shell Corporation.

Table 4.2 Financial Ratios of KMG and Shell

	ROA		ROE		ROIC		Debt/Equity	
2006	0.17	0.18	0.19	0.22	0.16	0.16	0.11	0.12
2007	0.18	0.19	0.21	0.25	0.17	0.18	0.12	0.14
2008	0.16	0.18	0.19	0.21	0.15	0.15	0.15	0.18

Source: Consolidated Financial Statements of Companies

List of calculated ratios:

- $ROA = \frac{\text{Net Income} - \text{Interest Expense} - \text{Interest Tax savings}}{\text{Average Total Assets}}$
- $ROE = \frac{\text{Net Income}}{\text{Total Equity}}$
- $ROIC = (\text{Net Operating Profit-Adjusted Taxes}) / (\text{Invested Capital})$
- $\text{Debt/Equity} = \text{Overall Debt} / (\text{Assets} - \text{Liabilities})$

²¹ The EITI aims to make the revenues that host governments receive from all oil and mineral activities more transparent.

Evidently, these two companies' returns on assets, equity, and invested capital do not differ highly. They became worse in 2008 as well as all other financial indicators on the global market. This similarity in the ratios does not implicate that firms are financially absolutely the same. However, it slightly explains the joint venture formed between them. Main findings that I managed to get from the companies profiles are shown in the table below.

	KMG	Shell
Close cooperation with the local government	<i>Yes</i>	<i>No</i>
The newest technology for oil exploration & production	<i>No</i>	<i>Yes</i>
Branded products	<i>No</i>	<i>Yes</i>
Experienced management	<i>No</i>	<i>Yes</i>
Knowledge of local environment conditions	<i>Yes</i>	<i>No</i>
Promotion of state projects	<i>Yes</i>	<i>No</i>

KazMunayGaz national company is “protected” by government and therefore, grants vast financial resources to the local needs and sponsors state projects. It is also aware of local conditions and closely cooperates with national authorities. Shell Corporation spends huge amounts on charity and sponsorship projects worldwide while KMG operates mainly in Kazakhstan that obviously is more favorable for this particular economy. However, Shell as a world famous brand with a long history of existence can offer invaluable experience, technology, and know-how creating competitive atmosphere. It is clear that both companies have their minuses and pluses. That is why I assume that our government can get advantages from both of them just diversifying and promoting state interests in such an important field as oil and gas industry that nowadays accounts for major part of country's exports. Government must achieve the balance between supporting local producers that are of benefit to national economy and attracting foreign investors that bring technological progress, tough competition, and healthy challenge. Clearly, all foreign and local producers cannot be generalized by these examples, however, the chosen companies represent main players in oil and gas industry, and I believe that this comparison can be applied on other participants on the market.

CONCLUSIONS

Transnational corporations became a specific characteristic of our times. This form of business showed itself as the most profit one among all others. Transnationals appeared in every sector and industry and currently it is impossible to escape their activities for any economy that aims to develop and progress in the future. However, these corporations fetch along not only benefits for host countries but also might destroy local producers and take an advantage of poor financial and legal institutions in less developed countries. Aggregate effect depends mainly on particular industry, government regulation, and behavior of foreign affiliates. Theoretical framework and empirical evidence in this thesis suggest that even though transnational corporations have enormous power, countries can turn their business into favor and prosper from them.

The Republic of Kazakhstan as a new booming economy attracts a bulk of foreign investors to develop and explore its incredible deposits of natural resources. Dutch disease fear was not proved in Kazakhstan according to the data for non-oil and gas exports, exchange rate history of tenge and direct investments into economy. Knowledge of the factors that drive investors' interest to the economy is worthwhile information for government chiefs that with possession of this knowledge are able to influence investment flows and therefore, transnational corporations' operating functions. The key determinants of FDI into the oil and gas sector are infrastructure and economic freedom whereas nominal wage and size of GDP affect FDI inflows into other non-natural resources industries. The national government has to manipulate these variables in order to manage corporations and their business.

On the examples of two companies, foreign and local, the comparative analysis introduced in last chapter represents the notion that both firms have strong and weak sides from the host country perspective. It concerns not only financial aspects but also social and public behavior of corporations. Local producers closely related to the local government, which "controls and protects" them, that force domestic firms to take responsibility for their activities, generate and promote socially needed projects. Foreign investors do not always behave according to generally accepted rules and policies, especially in countries of Second and Third World. On the other hand, they create advantageous economic conditions for the host economy by enlarging job market, bringing know-how, and financial facilities. The result from the comparison echoes conclusions in theoretical part of the thesis: each country involved in operations with transnational enterprises can gain financial and social profit from their contributions and avoid or eliminate their negative impacts on domestic market.

Transnational companies appeared to generate maximum profit for their owners and must be treated as unique systems of modern economic world that transfer experience and technology across the borders. Countries that are capable to find ways to cooperate with them will be among leading economies in the near future.

APPENDIX A

The World's top 20 non-financial TNCs. ranked by foreign assets. 2006 (million of dollars and number of employees)

<i>Corporation</i>	<i>Home country</i>	<i>Industry</i>	<i>Assets</i>	<i>Employment</i>	<i>No. of affiliates</i>	<i>TNI</i> ²²	<i>II</i> ²³
General Electric	US	Electrical & Electronic equipment	697239	319 000	1 117	71	54
British Petroleum Company Plc	UK	Petroleum expl./ref./distr.	217601	97 100	529	14	68
Toyota Motor Corporation	Jap	Motor vehicles	273853	299 394	419	87	93
Royal Dutch/Shell Group	UK. Ne	Petroleum expl./ref./distr.	235276	108 000	926	34	79
Exxonmobil Corporation	US	Petroleum expl./ref./distr.	219015	82 100	346	40	35
Ford Motor Company	US	Motor vehicles	278554	283 000	247	78	64
Vodafone Group Plc	UK	Telecommunications	144366	63 394	130	7	99
Total	Fr	Petroleum expl./ref./distr.	138579	95 070	598	26	51
Electricite De France	Fr	Electricity. gas and water	235857	155 968	249	96	36
Wal-Mart Stores	US	Retail	151193	1 910 000	163	92	18
Telefonica SA	Esp	Telecommunications	143530	224 939	205	37	34
E.On	Ger	Electricity. gas and water	167565	80 612	590	77	88
Deutsche Telekom AG	Ger	Telecommunications	171421	248 800	263	86	82
Volkswagen Group	Ger	Motor vehicles	179906	324 875	272	58	65
France Telecom	Fr	Telecommunications	135876	191 036	211	73	57
ConocoPhillips	US	Petroleum expl./ref./distr.	164781	38 400	179	90	63
Chevron Corporation	US	Petroleum expl./ref./distr.	132628	62 500	226	56	89
Honda Motor Co Ltd	Jap	Motor vehicles	101190	167 231	243	11	75
Suez	Fr	Electricity. gas and water	96714	139 814	884	36	62
Siemens AG	Ger	Electrical & equipment	119812	475 000	1 224	45	48

Source: UNCTAD/Erasmus University Database (World Investment Report. 2008)

²² TNI, the Transnationality Index, is calculated as the average of the following three ratios: foreign assets to total assets, foreign sales to total sales and foreign employment to total employment.

²³ II, the Internationalization Index is calculated as the number of foreign affiliates divided by the number of all affiliates (Note: Affiliates counted in this table refer to only majority-owned affiliates).

APPENDIX B

Data for the linear regression model

Year	FDI (in bln USD)	GDP (in bln USD)	Unit labour cost (in thsd. tenge)	GDP per capita (in USD by PPP)	Exports (in mln. Tenge)	Imports (in mln. Tenge)	Exch ange rate	Index of openness ²⁴	Infrastr ucture ²⁵
1993	1.2	7.7	3.3	579.4	118752.8	134898.3	35.23	0.27	34
1994	0.7	7.36	4.2	630.9	125900.4	187818.2	35.54	0.32	38
1995	0.9	6.76	7.2	778	319999.7	232018.4	60.95	0.55	43
1996	1.7	9.44	8.7	839.8	397810.3	285426.0	67.3	0.48	67
1997	2.1	11.1	10.5	1672.3	583859.6	626095.2	75.44	0.72	74
1998	1.2	11.5	11.1	1892.9	525945.0	604215.3	78.3	0.65	79
1999	1.9	13.4	12.6	2033.7	856229.6	808942.9	119.5	0.83	79
2000	2.8	17.3	13.7	2298.2	1471607.4	1276480.6	142.1	1.06	80
2001	4.6	21.6	21.1	2583.4	1491860.4	1526285.2	146.8	0.93	82
2002	4.1	25.2	24.3	2509.3	1774496.9	1776400.3	153.3	0.94	85
2003	4.6	30.7	28.1	2663.6	2232981.1	1985285.2	149.6	0.92	88
2004	8.3	39.1	32.6	2700	3081844.6	2577504.9	136.1	0.97	88
2005	6.6	50.6	44.9	7800.0	4064191.1	3394967.4	132.9	0.98	89
2006	10.6	68.0	53.5	8300.0	5222951.4	4129127.5	126.1	0.92	91
2007	17.5	167.6	66.9	7127.0	5868228.6	4153404.6	119.6	0.78	90
2008 ²⁶	17.2	77.4	62.5	7200.0	6128734.4	4248465.7	150.2	0.89	90

²⁴ index is defined as (Ex+Im)/GDP

²⁵ Level of Infrastructure ranking is between 0 and 100.

²⁶only three quarters of 2008 are available, figures are estimative

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