

St. Petersburg University
Graduate School of Management

Master in Management

Vertical Integration and Internationalization Strategies of Russian Oil Companies

Master's Thesis by the 2nd year student
Bandarenka Darya

Research advisor:
Associate professor, Olga L. Garanina

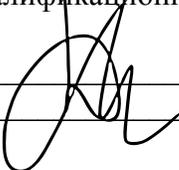
St. Petersburg
2016

ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

Я, Бондаренко Дарья Владимировна, студентка второго курса магистратуры направления «Менеджмент», заявляю, что в моей магистерской диссертации на тему «Стратегии вертикальной интеграции и интернационализации Российских нефтяных компаний», представленной в службу обеспечения программ магистратуры для последующей передачи в государственную аттестационную комиссию для публичной защиты, не содержится элементов плагиата.

Все прямые заимствования из печатных и электронных источников, а также из защищенных ранее выпускных квалификационных работ, кандидатских и докторских диссертаций имеют соответствующие ссылки.

Мне известно содержание п. 9.7.1 Правил обучения по основным образовательным программам высшего и среднего профессионального образования в СПбГУ о том, что «ВКР выполняется индивидуально каждым студентом под руководством назначенного ему научного руководителя», и п. 51 Устава федерального государственного бюджетного образовательного учреждения высшего профессионального образования «Санкт-Петербургский государственный университет» о том, что «студент подлежит отчислению из Санкт-Петербургского университета за представление курсовой или выпускной квалификационной работы, выполненной другим лицом (лицами)».

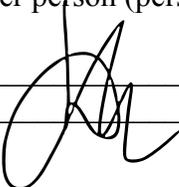
 _____ (Подпись студента)
_____ 26.05.2016 _____ (Дата)

STATEMENT ABOUT THE INDEPENDENT CHARACTER OF THE MASTER THESIS

I, Bandarenka Darya, second year master student, Master in International Business program «Management», state that my master thesis on the topic «Vertical Integration and Internationalization strategies of Russian oil companies» which is presented to the Master Office to be submitted to the Official Defense Committee for the public defense, does not contain any elements of plagiarism.

All direct borrowings from printed and electronic sources, as well as from master theses, PhD and doctorate theses which were defended earlier, have appropriate references.

I am aware that according to paragraph 9.7.1. of Guidelines for instruction in major curriculum programs of higher and secondary professional education at St.Petersburg University «A master thesis must be completed by each of the degree candidates individually under the supervision of his or her advisor», and according to paragraph 51 of Charter of the Federal State Institution of Higher Professional Education Saint-Petersburg State University «a student can be expelled from St. Petersburg University for submitting of the course or graduation qualification work developed by other person (persons)».

 _____ (Student's signature)
_____ 26.05.2016 _____ (Date)

АННОТАЦИЯ

Автор	Бондаренко Дарья Владимировна
Название магистерской диссертации	«Стратегии вертикальной интеграции и интернационализации Российских нефтяных компаний»,
Факультет	Высшая Школа Менеджмента
Направление подготовки	Международная логистика и управление цепями поставок
Год	2016
Научный руководитель	Гаранина Ольга Леонидовна
Описание цели, задач и основных результатов	<p>Целью данной работы является заполнение научно-исследовательского пробела путем отображения особенностей процесса интернационализации российских нефтяных компаний и выявления основных логистических факторов и факторов цепочки поставок, которые влияют на процесс выбора стратегии интернационализации и вертикальной интеграции.</p> <p>Сформулированы следующие задачи:</p> <ul style="list-style-type: none">• выявить и описать основные логистические факторы, которые влияют на выбор потенциального рынка для интернационализации• сформулировать управленческие применения для компаний, работающих в этой отрасли• создать теоретическую базу для будущих исследователей <p>Результаты исследования показали, что логистические факторы влияют на выбор стратегии интернационализации и вертикальной интеграции российских нефтяных компаний.</p>
Ключевые слова	Российские нефтяные компании, интернационализация, вертикальная интеграция, логистические факторы.

ABSTRACT

Master Student's Name	Bandarenka Darya
Master Thesis Title	« Vertical Integration and Internationalization strategies of Russian oil companies»
Faculty	Graduate School of Management
Main field of study	International logistics and supply chain management
Year	2016
Academic Advisor's Name	Olga L. Garanina
Description of the goal, tasks and main results	<p>This paper aims to fill this research gap through an in-depth case study of internationalization of two companies Gazprom Neft and Lukoil, through the primary data obtained via in-depth interviews with experts of industry (Baker Hughes) and managers who represent companies (Gazprom Neft and Lukoil) and analysis of secondary data obtained from annual reports and data books. The objective of this study is to display the peculiarities of internationalization process of Russian oil companies, to understand what are the main logistics and supply chain factors that influence the process of internationalization, to indicate main logistics and supply chain factors that influence the choice of the potential market for internationalization, to formulate managerial implications for the companies operating in this industry, to create a theoretical base for the future researchers of supply chain and logistical factors influencing the decision-making process of Russian Oil companies. Research results revealed that logistical and supply chain factors influence the choice of internationalization and vertical integration strategy of the Russian Oil companies.</p>
Keywords	Russian oil companies, internationalization, vertical integration, logistics and supply chain factors

TABLE OF CONTENT

INTRODUCTION	6
Chapter 1. INTERNATIONALIZATION OF OIL COMPANIES	10
1.1 Theoretical approach to Internationalization	10
1.1.1 Resource-based view theory on the Internationalization process of oil companies	16
1.1.2 Internationalization trends of Russian Oil companies	17
Chapter 2. VERTICAL INTEGRATION OF OIL COMPANIES	21
2.1 Vertical Integration and Value Chain in Oil industry	21
2.2 Downstream sector: logistical aspect in transportation of Oil and Oil products	25
2.3 Factors affecting the choice of vertical integration strategy	26
2.4 Research gap	28
Chapter 3. METHODOLOGY	30
3.1 Description of methodological research process. Methods of study	30
3.2 Case selection.....	33
3.4 Data Collection	33
3.5 Time horizons	36
3.6 Evaluation criteria and validity.....	37
3.7 Limitations of study	37
Chapter 4. CASE STUDY	39
4.1 Case of Gazprom Neft	39
4.2 Case of Lukoil.....	42
4.3 Interview analysis	44
4.4 Application of logistical and supply chain factors in case analysis of Gazprom Neft	52
4.5 Application of logistical and supply chain factors in case analysis of Lukoil.....	53
CHAPTER 5. CONCLUSIONS AND IMPLICATIONS.....	55
5.1 Conclusions.....	55
5.2 Theoretical contribution.....	56
5.3 Managerial Implications	57
5.4 Recommendation for future research and limitations.....	58
REFERENCE LIST.....	59
APPENDIX.....	63

INTRODUCTION

Background

In recent years various changes happened in different industries worldwide. The quick improvement of technology and its accessibility led to rapid increase of transformations. The share of oil in world energy has a direct correlation with the world economic growth. The strategic significance of the oil and the growth of its consumption has lead to the embellishment of the petroleum industry. Variety of new factors arises across industries and changes the internationalization and vertical integration strategies and their implementation while managing the business.

Oil industry is one of the most complex industries engaged in exploration, production, transportation and processing of oil and oil products. The role of the industry in terms of scientific and technological revolution is constantly increasing due to the development of transportation and district heating production, causing the rapid growth of energy consumption. The largest oil reserves (65%) are concentrated in the Middle East region, the main players on the market are: Saudi Arabia, Russia, United States, Iran, Mexico, China. Russia owns a large reserve of oil and development of oil industry and has traditionally been one of the largest exporters of raw materials on the world market. At the same time the oil industry is a major component of socio-economic development of Russia with the diversity of linkages with other sectors of the economy. Oil industry is one of the most important sources of income for Russia. According to the International Monetary Fund Statistics on 2015, export of crude oil reached 10% of total GDP.

The paper examines the process of internationalization of Russian Oil companies (case of Gazprom Neft and Lukoil). Russia has become a very important player in the market on a world scale. The strategic consideration of internationalization and vertical integration are considered in this research paper. Internationalization gives companies new possibilities for the development around the world and creates additional value. Through internationalization company can develop world level capabilities and can increase capitalization and gain a deeper control over all the processes of the value chain, which in Oil industry are: exploration, production and sales. Research on the internationalization process of Russian Oil companies has been increasingly performed in the last decades, this particular paper examines the internationalization process of Russian Oil companies with focus on the logistical and supply chain factors which influence the decision-making process of internationalization and vertical integration of Russian oil companies.

Research problem

In order to state the relevant research problem the literature review was conducted to evaluate the process of Internationalization and vertical integration. The present paper offers common sense bits of knowledge about the justification and factors which influence the process of Internationalization and vertical integration of the Oil companies.

After the literature review was conducted, we identified that inspite of the colossal literature on internationalization and vertical integration processes and factors which influence them, much less is known about the supply chain and logistical factors influencing the choice of location or country for potential internationalization and vertical integration.

Therefore, we are going to concentrate on outward operations so as to investigate the internationalization procedure of Oil organizations in the downstream division and to identify the main logistical and supply chain factors that influence the decision-making process for internationalization and vertical integration strategies.

Purpose of the study

This paper aims to fill this research gap through an in-depth case study of two companies Gazprom Neft and Lukoil, via the primary data obtained through in-depth interviews with experts of industry (Baker Hughes) and managers who represent companies (Gazprom Neft and Lukoil) and analysis of secondary data obtained from annual reports and data books. The cases were selected, taking into account the following criteria: originated in Russia, but operating overseas, vertically integrated, has refinery or production or distribution projects abroad, should represent both private and governmental companies.

The goal of the study is to identify the main main logistics and supply chain factors that influence the choice of the potential market for internationalization and vertical integration.

The objectives of this study are:

- to display the peculiarities of internationalization process of Russian oil companies and to understand which are the main logistics and supply chain factors that influence the process of internationalization, to analyse the importance of this factors while Russian Oil companies choose a market and strategy for internationalization.
- to formulate managerial implications for the companies operating in this industry

- to create a theoretical base for the future researchers of supply chain and logistical factors influencing the decision-making process of Russian Oil companies.

Research questions

In order to reach the objectives, the following research question was formulated:

- 1. What logistical and supply chain factors influence the decision-making process while Russian oil companies choose the strategies for internationalization and vertical integration?*

The research gap can be filled by answering research question through the conduction of qualitative research, method of case study. The principal advantage of this type of research is that it is flexible and adaptable to change, without losing the direction of the enquiry (Matthews & Ross, 2010). A case study is an empirical inquiry that analyses a current situation within its real-life context. Case study relies on a huge amount of sources of evidence. The main focus is upon the details of the situation, the reality behind these details, the subjective meanings and motivating actions (Saunders, 2009). The study generally focuses on the analysis of 2 Russian Oil companies: Gazprom Neft and Lukoil, both companies correspond to the main criteria, which are: Russian company, operating abroad, have a vertical integration degree, has refining and production activities abroad.

Structure of the study

This research paper consists of 4 chapters, four main parts. The first chapter is devoted to the literature review of the concept of internationalization process of oil companies, with focus on trend of Russian Oil companies and main peculiarities. The second chapter analyses the information about the phenomenon of the vertical integration of Russian Oil companies. The third part describes the methods which are used in this research paper and the justification of used tools presented there. The main research tool is case study complemented by in-depth interviews of experts in order to gain primary data and analysis of documents to obtain secondary data. The fourth chapter contains within-case analysis of the case companies: Gazprom Neft and Lukoil, generalization and analysis of the interviews, conclusions. The fifth chapter contains conclusions of the research paper, managerial implications and suggestions for future researchers. This master thesis will be relevant in terms of practical and theoretical application to analysis of feasibility of the internationalization process of

Russian oil companies with focus on supply chain and logistical factors which influence the decision-making process about future internationalization. This thesis will provide companies with practical analysis and future researchers with the theoretical contribution for the potential expansion of the theory.

Chapter 1. INTERNATIONALIZATION OF OIL COMPANIES

Prior to the research of academic articles and studies, that are considered pivotal in the chosen thematic area, they were analyzed in order to understand and assess the state-of-the art of the issue of the internationalization and vertical integration of Russian oil companies. The literature review is done using the thematic approach, starting from the macro level, examining the general theories of internationalization, logistics factors affecting the decision of internationalization of Russian Oil companies. The current literature offers practical insights about the rationalization of Internationalization of the oil companies in terms of vertical Integration of oil companies. We are focusing on outward operations in order to analyze the internationalization process of Oil companies in the downstream sector and to identify and analyse the main supply chain and logistical factors which companies have to take into account developing strategy for internationalization.

1.1 Theoretical approach to Internationalization

For the following research we have to define the concept of internationalization. Internationalization is a subject of research of such authors as: Hollensen, Turnbull, Buckley. Hollensen explains that internationalization is a process which occurs when the firm expands its R&D, sourcing, production, selling, marketing and other activities into international markets. (Hollensen, 2004). By Internationalization is also understood the process of business expansion abroad with partial or full transfer of activities of business units which form an international company (Meyer, 2007). Beamish defines internationalization as the activities through which the company increases its direct or indirect influence on their international business operations (Beamish, 2001). According to Bonaglia, Internationalization it is the process of adapting firms operations (strategy, structure, resource, etc.) to international environments (Bonaglia, 2007). It's also necessary to mention that internationalization is a way to increase direct and indirect impacts on current and potential international operations. To be international a business unit has to adapt its resources and strategies to make them fit into the foreign markets. The decision of entering a new market is not based only on the level of the market, its size or its economic situation, but also on the level of development of the market also on the internal characteristics of the company. According to Fletcher international process is mostly devoted to the factors that cause internationalization, like changes in the environment for international business (Fletcher, 2001).

In the *Table 1* Internationalization theories are presented, the vertical edge is «Alertness for

Internationalization» and the horizontal edge is «Industry Globality» (Katsikeas Constantine S.)

Table 1. Internationalization theories

Alertness for internationalization	Transaction Costs Economics	Global Management (OLI paradigm)
	Incremental Internationalization	Network Perspective
	Industry Globality	

Transaction Costs Economics is a theory based on a hypothesis that the company chooses the entry market depending on the minimization of transaction costs. The main approach in this theory is that costs are the main factors while choosing the market and entry mode. Transaction costs include the evaluation process of the negotiation costs, research costs and monitoring costs, communication charges, legal charges.

Network perspective claims that all the markets and industries are just a set of relationship which have to be created in order to grow externally. That main idea of this theory is that it's based on the social behavior.

Global Management Firms (OLI paradigm) when following this strategy have a widespread global organization and huge international experience. Its members are characterized by a strong financial development. OLI paradigm is one of the main frameworks for the analysis of the determinants of internationalization process and international activities of multinational corporations. According to OLI paradigm there are 3 factors that influence the company's development: Ownership Advantages, Location Advantages and Internationalization advantages.

- O - Ownership factor. To obtain this advantage a firm has to develop special competitive advantage on the domestic market and then go abroad.
- L - Location factor. It measures through such geographical measure components as: climate, natural resources, transportation costs. (Rodrik, 2002)
- I - Internationalization factor explains the firm's propensity to internalize cross-border structural or endemic imperfections in the intermediate goods market (Dunning & Lundan, 2008). It explains how the firm chooses the way to enter a new market: wholly-owned subsidiary, exports, licensing, or joint venture. This three potential sources of beneficial factors that underlie a companies decision

to become a multinational.

Incremental Internationalization or better known as an Uppsala model, was elaborated in Sweden by Johanson and Vahlne. The key aspects of Uppsala model imply that internationalization process is an incremental and long-lasting process.

Traditionally, there are four main stage of the market acquisition:

- No regular export activities
- Export via independent representatives
- Sales subsidiary
- Production/manufacturing

Moreover, Johanson and Vahlne introduce the approach of “psychic distance” to clarify how the companies decide where to expand (Johanson, Vahlne,1990). Solberg suggests that there are 2 main points in this theory. The first one is that at the beginning of an internationalization process companies choose those markets which are closer in terms of culture and distance. The second point is that the company used to start their operations with the minimal expenses (Solberg, 2006).

The preceding discussion implies that the main idea of the model is that companies firstly are supposed to earn experience from the domestic or national market and after, in order to enlarge profits, increase their international commitment. Uppsala model highlights that the key difficulty of the internationalization process is, thus, the unpredictability derived from a absence of knowledge; the more a company becomes familiar with a particular market, the lower the risk becomes, and the higher the investment will be and the more collaboration activities will be performed.

Entry Modes

The choice of the mode of entry depends on a lot of factors such as: level of commitment, costs, experience, ammount of resources, national and cultural special aspects and the giant part depends on the companie’s strategy. In the Table 2 we can see possible entry modes, which are based on the company’s peculiarities. There are 10 main Entry Modes and their variants

Table 2. Entry modes

Entry Mode	Application and Description
1. Normal FDI	Entrant has facilities for a transportation and production
2. FDI in production	Entrant invests in production and owns it but outsource the transportation and distribution
3. FDI in distribution	The entrant has export activities to his distribution facility.

4. Exporting/Franchising	Entrant exports to particular facilities.
5. Licensing	Entrant shares technology to independent distribution facilities
6. JV in production	Entrant owns a production facility
7. JV in distribution	Entrant owns a distribution facility
8. JV exporting	Entrant exports to a jointly owned distribution facility
9. Mix of FDI and JV	Entrant owns foreign production and has JV with international distributor.
10. Mix of JV and FDI	Entrant owns foreign distribution and has a JV in international production

Source: Buckley and Casson (1998)

It's also very important to categorize the factors which influence the internationalization process of companies. Hollensen was the first to distinguish 16 factors of internationalization. Hollensen (Hollensen, 2007) This factors can have positive and negative impact on the internationalization process. All the factors are divided into 4 groups, Appendix 1. Hollensen distinguishes 4 main groups of factors:

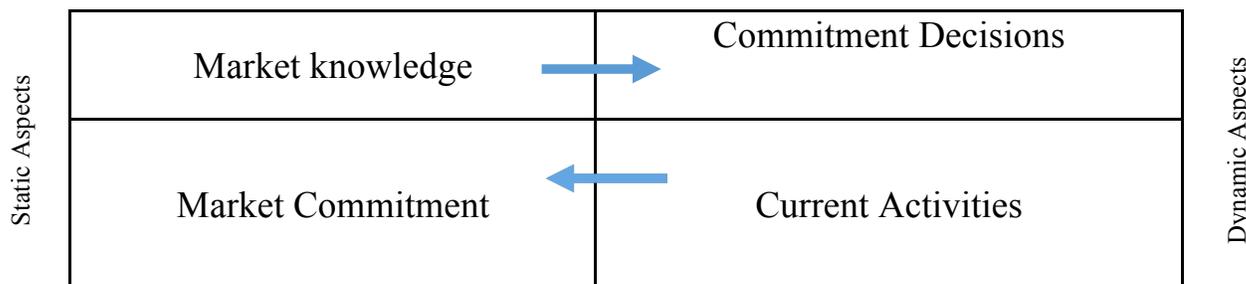
- Desired model
- Transaction-specific factors
- External factors
- Internal factors

As a matter of fact, the market influences the stimulation of international activities, the main factors that drive internationalization are stagnation at home (national) market or fast development of international market or decreasing demand for a particular product. Among other drivers of internationalization globalization should be mentioned, because the higher the level of globalization, the higher the development of international transactions and investments. (Hollensen, 2007)

Referring to Russian oil companies it should be mentioned that there are key factors that influence the internationalization process of Russian oil companies, for example: Russia is considered as an emerging market and companies coming from Russia are described as latecomer firms (Marinov, 2012). As leading latecomer firms internationalize fast and the internationalization process of firms from emerging economies has posed questions concerning the influence of this process on the models of developing of developed economies and their firms. Internationalization theory views firm internationalization as an incremental learning process. In the Table 3 we can see the basic principles

of internationalization theory, all these aspects are connected. It's necessary to analyze the internationalization theories which could be used by companies in order to develop their internationalization strategy trying to use their advantages depending on the industry they are operating in.

Table 3. The internationalization process



Source: Jan Johanson and Jan-Erik Vahlne

Static aspects include Market knowledge and Market Commitment which refer to the resource commitment to the foreign market and the data and knowledge about the foreign market.

Market Knowledge in our model is a knowledge of interest. First of all it's necessary to mention that knowledge of risks and opportunities is the main driver in decision-making. Secondly, the assessment or evaluation is based on some particular knowledge about market environment. In general, market knowledge is the description of supply and demand in the market, channels of distribution in particular market, law restrictions and other important features that vary from country to country. It's also necessary to differentiate general knowledge and market-specific knowledge. General knowledge is all about common marketing methods, present context, common characteristics of types of customers, while market-specific knowledge is characteristics of special national market- it's business climate, cultural patterns, characteristics of individuals. (Johanson,1997)

Market Commitment is based, among other factors, on two main factors:

- The amount of resources committed
- Degree of commitment

The amount of resources can be measured by the size of investments in this particular market while the degree of commitment is related to the difficulty to find an alternative use for the resources and transferring them to it. The more specialized the resources are to the specific market, the greater is the degree of commitment to that particular market. We can also conclude that the market

commitment is the size of investment in the market, including investment in marketing, organization, human resources and other spheres. (Johanson,1997)

We think that there is a direct correlation between market knowledge and market commitment. Knowledge is an intangible resource, the better the quality of the knowledge about the market, the more beneficial and valuable this resource is, so the higher and stronger is the commitment to the market.

By *dynamic aspects* we understand the changing aspects as current activities and decisions to commit resources to international operations.

Current Activities

Current business activities are the prime source of experience. This experience can be gained through the hiring of human resources with experience or through advice or consulting suggestions from those who already have experience. As a result, both types of gathering knowledge can be implemented, both experiences are compulsory. It's also necessary to mention that the more the activities are production oriented, the easier it will be to substitute hired personnel or advice for current activities. (Johanson,1997)

Commitment decisions

The second factor in Dynamic aspects is the decision to commit resources to international operations and assets. It can be assumed that this types of decisions depend on which decisions are made and how they are taken. Another approach shows that Russian Oil companies use REM model of internationalization. according to Liuhto in REM model, the R-factor is the reason for internationalization, this factor creates the base for the model because it's literally the answer why the firm decided to internationalize. The E-factor is devoted to the process of making a choice of business environment. There is a long list of factors which influence the environment selection. The M-factor is responsible for the explanation of how firm implements internationalization. The REM model has been designed in order to have a tool for the deep analysis of internationalization in the company's level. It's necessary to analyze the internationalization theories which could be used by companies in order to develop their internationalization strategy trying to use their competitive advantages depending on the industry they are operating in. (Johanson,1997)

1.1.1 Resource-based view theory on the Internationalization process of oil companies

In addition to home country specific advantages, the literature also highlights differences in institutional endowments between developed and emerging market economies. Russia is an emerging market and exportation of oil is one of the main economic activities. Porter assumes that firms within the industry are identical in terms of strategically relevant use of resources which they control, that's why it's logical to analyze the Resource-based view. As Cumberland says Resource-based theory looks at the enterprise as at a unique set of activities with specific resources and capabilities which are very important for the diversification of the company. The Internationalization strategy depends on its assets and capabilities (Cumberland, 2006). Company is supposed to consider its specific resources and the demand of the market which it plans to enter. According to Rothaermel the resource-based view (RBV) is a framework which sees resources as the main criteria to evaluate the firm's performance. If a resource exhibits VRIO (Value, Rarity, Imitability, Organization) the resource enables the firm to gain and sustain competitive advantage (Rothaermel, 2008). RBV is a way to access to achieving competitive advantage through resources (tangible or non-tangible). The two critical assumptions of RBV are that resources must also be heterogeneous and immobile:

- competences, capabilities and other resources that organizations possess differ from one company to another.
- capabilities and resources are not mobile and do not move from company to company, at least in short-run period of time

Over the last years, a lot of literature about the strategy has described resources as the firm's principal driver of profitability and as the main strategic advantage. This transition in academic and managerial attention from an Industrial Organization (IO) economic view towards a resource-based view of strategy has occurred recently. In case of Russian Oil&Gas companies, in a continuously developing environment, firms must acquire, develop and upgrade their resources and capabilities if they want to continue growing not only in domestic market, but also in the international. (Kostopoulos, 2008). From the resource-based view perspective, innovation does not come simply from scanning the external environment for growth opportunities, but from looking inside and build on the resource endowment and core competencies of the organization. Moreover, the RBV takes into account not only resources possessed by the company, but also knowledge and learning processes in order to create a competitive advantage. In other words, Resource-based View strategy admits the value and effect of intangible knowledge resources in gaining a competitive advantage. Finally, the resource-based view (Barney, 1991; Kogut and Zander, 1996) considers the factors, which determine firm's vertical

integration. RBV sees firm's boundaries, growth, diversification decisions as the main factors and base of firm's competitive advantage.

1.1.2 Internationalization trends of Russian Oil companies

As we are analyzing Russian Oil&Gas companies it's necessary to describe the Country of origin - Russia and its impact on the internationalization processes of companies in that industry. Among emerging economies, the Russian Federation is the second largest outward investor (UNCTAD, 2015). The Russian government supports and stimulates the expansion to international markets. The size of country of origin has a direct impact on the expansion. The larger the national economy (country's GDP), thus, faster is the process of expansion.

From the point of view of Value Chain, Russian National oil companies have access to resources, speed and flexibility are crucial not only for the exchange of physical goods and services but also for information flows within GVCs. High level of rivalry among Oil&Gas companies oblige oil giants to look for the strategic solutions about investing abroad in order to satisfy the final customers and to reach a higher level of vertical integration in the international operating markets. A particularly important driver for upgrading in GVCs is investment in knowledge-based capital. The highest level of value creation in a GVC is often found in certain upstream activities such as new concept development, R&D or the manufacturing of key parts and components, as well as in certain downstream activities marketing, branding or customer service. (OECD, 2013)

During last decades Russian Oil&Gas companies have participated in outward investment, ensuring their control over the value chains of their products in natural resources (mostly oil). The sanctions are intensifying difficulties already faced by Russian companies following the onset of the financial crisis. In addition, as the amounts involved in large international transactions require the active participation of banks and other financial institutions, the ongoing crisis is intensifying difficulties already faced by Russian companies following the onset of the financial crisis. Sanctions against State-controlled banks such as VTB, Sberbank, Gazprombank and Vnesheconobank, as well as other big financiers of Russian MNEs investing abroad, represent one of the biggest threats of internationalization of Russian companies. There is a threat of restricted access to long-term lending.

It's common knowledge that such Russian companies as Gazprom and Lukoil have already become globally known, but there is a constant change in their international strategies due to current activities in economic situation.

Main players in the market

PJSC Gazprom

PJSC Gazprom is supported by government and it's vertically integrated. It is engaged in all the activities: exploration, production, transportation, storage, processing, and marketing of gas and other hydrocarbons. Gazprom generally operates in Russian market and delivers its products to Central Asia and Europe. Gazprom operates in the next segments: production of gas; production of crude oil and gas condensate; transportation; gas storage; distribution of gas; refining; electric and heat energy generation and sales; and other (Market Line). The activities related to the improvement of the company's oil reserves are centralized within Gazprom Neft and are primarily taking place in the Yamalo-Nenets and Khanty-Mansi Autonomous Areas, Omsk, Tomsk, and Irkutsk regions.

Gazprom Neft refineries occupy dominant positions in the Russian oil refining sector. The company exports oil products to Europe and Commonwealth of Independent States (CIS) countries. Gazprom Neft's major refinery asset is Omsk Oil Refinery, one of Russia's most advanced and one of the world's largest oil refineries. The capacity of the installation is 20 million tons of crude oil per year. Gazprom Neft also is the owner of the Moscow Oil Refinery. In European market Gazprom is the owner of NIS's oil refineries in the cities of Panchevo and Novi Sad (Serbia), and an oils and lubricant plant in the city of Bari (Italy). It's also necessary to mention that Gazprom Neft has access to the possibility for the refination in Slavneft-Yaroslavnefteorgsintez thanks to its interest in NK Slavneft.

PJSC Lukoil

PJSC Lukoil is a vertically integrated oil and gas company based in Russian Federation. The key activities are presented through the whole chain: from the exploration of oil and gas till the production and marketing of the products. Lukoil is the largest private oil company in the world. The exploration and production processes are directly related with the exploration, development, and production operations of oil or gas. These activities are generally located around Russia, but PJSC Lukoil also has some activities in Azerbaijan, Uzbekistan, Kazakhstan, the Middle East, South America, and Northern and Western Africa. The main exploration and production processes of Lukoil are located in Western Siberia.

Lukoil is the owner of some refineries in Ukraine, Bulgaria, Romania, and a 49% stake in ISAB refining complex (island of Sicily, Italy) and a 45% stake in TRN refinery in the Netherlands. The marketing campaign of Lukoil is huge and is presented in more than 26 countries: Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, Georgia, Hungary, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Moldova, Montenegro, Poland, Romania, Serbia,

Slovakia, Turkey, and Ukraine in Europe and it's presented in US as well.(Lukoil Annual Report, 2015) The retail network capacity in Russia is 2,336 filling stations (including franchises) and 109 tank farm facilities and in international markets there are 3,658 filling stations (including franchises) and 74 tank farms.

Current international projects of Russian Oil Companies

Table 4. Current International Projects of Russian Oil Companies

Company	Name of the project	Country	Project
Gazprom Neft	Naftna industrija Srbije (NIS)	Serbia	<p>Exploration and production of hydrocarbons in the territory of Serbia, Angola, Bosnia and Herzegovina, Hungary and Romania.</p> <p>The company owns two refineries with total refining capacity of 7.3 million tons per year in Pancevo and Novi Sad, more than 400 petrol stations and tank farms. In general, the company sells about 2.5 million tons of petroleum products a year.</p> <p>In 2013, NIS has produced 1.3 million tons of oil and 0.6 billion cubic meters. meters of gas. On the NIS refineries processed 2.5 million tons of oil.</p>
Gazprom Neft	Badra, Garmain, Shakal, Halabja	Iraq	<p>Participates in the development and exploration of deposit “Badra“, «Garmian» blocks (share - 40%), deposit “Shakal” (share - 80%) and deposit “Halabja” (80%), located in the south of Iraqi Kurdistan.</p>
Gazprom Neft	Junin-6 Block	Venezuela	<p>In order to study the geological features five platform were built for drilling exploratory wells, the first exploration well</p>

			has been drilled. Current situation: Development of infrastructure.
Lukoil	West Qurna 2	Iraq	Exploration and production of hydrocarbons. The second Field re-activation.
Gazprom, Lukoil, TNK-BP, Surgutneftegas	PetroMiranda	Venezuela	Joint venture created between PDVSA and Russian companies to rejuvenate Junin-6 block nearby by Zuata

Source: Composed by author

Theoretical outcomes

In this chapter we have analysed the main strategies of internationalization of oil companies and came up with the conclusion that the main goal of the internationalization is to gain access to a new market and specific resources.

The theoretical overview was made given into account the motives and obstacles to internationalization, different internationalization strategies and entry modes were analyzed. Special attention was given to the trend of internationalization of Russian oil companies and its main projects abroad.

The literature review was conducted in order to understand and analyze the main theories of internationalization of oil companies. In order to perform well in the international arena, it's necessary to formulate an international strategy for the firm in each particular country, taking into account a number of additional factors.

Chapter 2. VERTICAL INTEGRATION OF OIL COMPANIES

2.1 Vertical Integration and Value Chain in Oil industry

There is a vast majority of theories that describe and support idea of vertical integration and explain it's main goal as the deeper control over the value chain processes. Vertical integration in Oil industry is the process when a company coordinates different stages of the value chain. According to Porter (Porter, 1985) "value chain" is a list of actions that add value to the activities. Vertical integration, from the point of industrie's perspective vertical integration's main idea is to spread risk and capture the potential profits. According to Al-Moneef (1998), profits of single phases of vertical integration (exploration, production, trading, distribution and marketing) fluctuate up and down asymetrically. Vertical Integration helps to balance the company's operations anf protect it from market instability. Thus, when the crude prices are low, refining and marketing margins are expected to be positive.

From the point of view of the Russian oil companies, vertical integration has many advnatages, among them we can name the following:

- Helps to capture the value added from refining and marketing
- Gives a possibility for oil giants to keep their share in the market and provide them with potential growth

This list of actions includes both upstream and downstream activities, such as finance, R&D, planning, procurement, production and distribution. In the Table 5 we can see the existing theories of vertical integration with its authors and main ideas.

Table 5. Theories of Vertical Integration

Name of the theory	Authors of the theory	Main Idea
Transaction cost theory	Coase 1937; Williamson 1985	The main idea of this theory is that it's a result of market failure and it focuses on single transaction without any systematic approach
Competence based view on the firm	Barney 1991; Hall 1992; Porter 1980,1985	The main idea of this theory is to create a competitive advantage through the vertical integration.

Global Value approach	Gereffi 1994, Kaplinsky 1998, Gibbon and Ponte	The main idea of this theory is that the authors focus in the value chain by itself without paying attention to the external factors.
Property Right Theory (PRT)	Grossman and Hart (1986)	Emphasize the importance of incomplete contracts and ex post opportunistic behavior on ex ante relationship-specific invest- ments.

Transaction cost theory. The foundation of transaction cost economics theories is the admission that contracts are incomplete and that contractual incompleteness can lead to fair risks that adversely affect investment incentives and the efficiency of performance. Contractual incompleteness and its interaction with different types of transactional aspects, including asset specificity, involvement, and ambiguity, occupy a central role in the interpretation of the relative costs of governance through market-based bilateral contracts versus governance through vertical integration. The managerial and incentive costs associated with internal organization are the other side of the estimation of costs and assets. (Hollensen, 2007)

Competence based view on the firm. This is the capacity or competence of the company to rule the company from the resource based view point, by this is meant the usage of the resources in an effective way in order to increase the effectiveness and company’s performance. By resources we understand all the possible assets, information, knowledge which can influence the company’s performance. There is a tendency to focus more not on general resources, but on company’s specific resources that lead to the creation of competitive advantage. (Hollensen, 2007)

Global Value approach is one of the most modernized theoretical approaches that are related to the vertical integration. Global Value chain approach is devoted to the fact that geographical factors influence the development of business. Global Value chain approach describes the full list of international activities that should be taken into account in order to bring additional value. The main assumption of the Global Value Chain approach is that it doesn’t take into account any expert’s opinions or external data, but is straight relying on the value chain investigation. A company can

create value if understands the specifications of each target group. A Value Chain is a systematic approach to examining the development of competitive advantage and was created by M. Porter. The chain by itself consists of a components or activities that create value for the company. (Porter, 2010)

In the Petroleum value chain consists of 3 main components: upstream, midstream and downstream. (Figure 1)

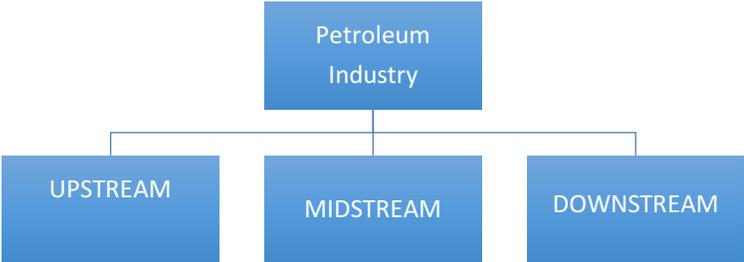


Figure 1. Sectors in Petroleum Industry

The **upstream** sector main duties are: searching for potential underground or underwater crude oil and natural gas fields, drilling of exploratory wells. On this stage oil companies collaborate a lot with service companies like Schlumberger and Baker Hughes. Most of the oil production in the world is made by national oil companies. These companies are controlled by the Government, and carry out their activities mainly in their country. **Midstream** operations are usually included in the downstream category. **Downstream** sector usually refers to the refining of petroleum crude oil and the processing, as well as the marketing and distribution of products derived from crude oil and natural gas. In addition to the downstream refining, distribution and sale of petroleum products also include storage of oil and oil products. (American Petroleum Institute, 2014) The MNEs like Gazprom and Lukoil are performing in upstream and downstream sectors, they are highly vertically integrated. These oil giants basically cover all the activities, so all the value chain, which gives a possibility to obtain sustaining superior performance. The processes are the following:

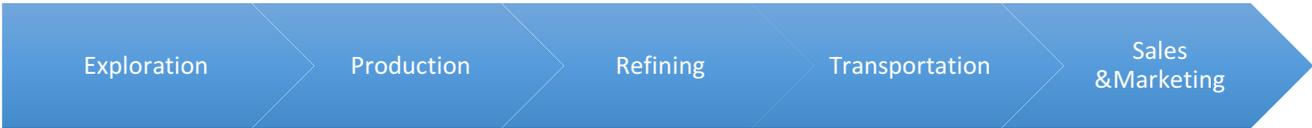


Figure 2. Activities of oil companies.

Gainsborough also states that vertically integrated Oil company gains a potential advantage within the oil industry by having great control all over the chain, through the vertical integration.

(Gainsborough, 2006) The right position of the downstream segment can reduce the bullwhip effect. According to Hall, the usage of right transportation mode and the placement of inventory and the possibility of permanent inventory control and management increases the consumer's satisfaction, because additional value can be created and faster availability of the product can be achieved (Hall, 2002). In Oil Industry the optimization of Supply Chain is a chance to cut costs and enhance the flexibility. Rivalry among firms depends, among other things, on whether companies can use all the resources in a timely and cost-efficient manner. Vertical integration is studied by a lot of authors, like Hart and Tirole (1990) and Bolton and Whinston (1993). From the perspective of the petroleum industry vertical integration has a lot of benefits, it extends the process of searching for value creation and diversifies the sources of income. The vast majority of the companies in the industry use vertical integration strategy, they have international assets, but the use of the strategy and its processes differs from company to company. (Schweller, Sowar, 2010) Moreover, vertically integrated companies tend to have a deeper internal access to a broader firm-specific knowledge and accordingly vertical integration is a valuable strategic priority. The choice of vertical integration is more likely to protect imitable resources and there is a positive relationship between vertical integration and financial performance. There are particular criteria for integration decisions, Table 6.

Table 6. Principles of integration decision

Setup costs	Transaction costs	Transaction risks	Coordination effectiveness
Capital (e.g., Equipment)	Information collection and processing	Possibility of unreasonable price changes	Run lengths, inventory levels
Systems development	Legal expenses	Supply or outlet foreclosure	Capacity utilization

In the Oil industry two types of Vertical Integration are possible, see Figure 3.

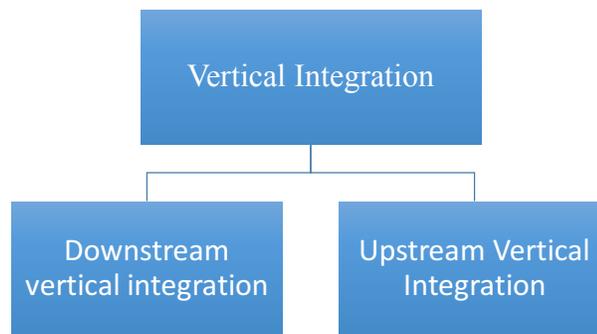


Figure 3. Types of Vertical Integration

The Oil company can integrate downstream through the acquisition of pipelines, refineries in order to integrate into producing, trading and distribution of the products, while the upstream integration is considered as the process of acquisition of oil-producing fields and exploration leases. In the literature downstream and upstream vertical integrations are also named Forward and Backward integration, where Forward integration is about the extension of activities in retailing, tightening and Backward integration is focused on the control over the exploration, production and refining, through the Backward integration company gains more advantages controlling the source of materials and augmenting its control over the supply chain. (Lin, Parlakturk, Swaminatham, 2012).

2.2 Downstream sector: logistical aspect in transportation of Oil and Oil products

In the oil industry, the supply-chain network is composed of shipping via vessel, oil tankers, and pipelines that are running across a huge number of countries. This network is used to transport crude oil from reservoir to refinery for refining, to transport between multi-site refining facilities, and to transport finished products from product repository to distribution centers and finally to the consumers. Any disruptions emerging in the global supply chain can have vast adverse effects in achieving operational performance, controlling quality, profitability, and customer satisfaction.

The adverse events can happen because of the uncertainty in supply of crude, demand, transportation, market volatility, and political climate. Hence, Shah, Li, and Ierapetritou (2011) identify that to effectively model a supply-chain design problem, the dynamics of the supply chain ought to be considered and data aggregation techniques for the extensive data set should be employed. With the increase of production of oil the transportation has increased as well. The transportation methods have been improved for the last decades. The main transportation methods of the oil and oil products are the following:

Pipeline transportation. This type of transportation is the cheapest one and eco-friendly. The oil is moved at a speed of 3 m / sec under the action of the pressure difference created by pumping stations. This stations are placed at intervals of 70-150 kilometers, depending on the road topography. At a distance of 10-30 kilometers in pipes the valves are placed, which allow to block some parts of the accident. The inner diameter of the pipes is usually from 100 to 1,400 millimeters. They are made of superplastic steels that can resist temperature, mechanical and chemical influences. Now the popularity of reinforced plastic pipes is increasing because they do not corrode and have a virtually unlimited service life. The peculiarity of the modern oil such that they can be stretched in any environment, whether it is the bottom of the sea or ocean, or underground.

Railway transport. Geography of railroad oil transportation from production to refineries to storage or consumers depends on so-called oil basin. The global volume of oil transportation through the railway increases each year by 3-4%, while in Russia it's 6% of growth per year.

Road transportation. It's profitable when distance is 300-400 kilometers, which determine their local character - from the tank field to a gas station and back.

Air transportation. It's the fastest way of transportation, but it is very expensive, moreover requires special security measures. This method of delivery is used rarely - in case of emergency, for example, for military purposes, or in cases of actual unavailability to deliver by road or railway.

The policy of the transportation tariffs is determined by public authorities in order to ensure the balance of interests of the state and all the participants of the transportation process. The tariffs depend on the direction of the transportation, supply volume, distance to destination and some other factors.

Over the last 10 years the export strategy in the field of oil of Russia has changed, the main aim was to reduce transit through neighboring countries. The transportation via sea terminal of the Baltic States and the CIS countries has decreased. The Baltic Pipeline System (BPS-1) is used now in order to increase oil exports to Europe.

2.3 Factors affecting the choice of vertical integration strategy

According to Shan, Li and Ierapetritou (2005) any disruptions arising in the global supply chain can have terrific adverse effects in achieving operational productivity, maintaining quality, profitability, and customer satisfaction that's why while choosing a country and strategy for potential internationalization activities companies should concentrate on Oil-industry factors and Oil-companies levels. In order to understand the main factos of vertical integration in both Oil industry and oil companies levels, author has developed Table 7.

Table 7. Industry and firm-level factors for Vertical Integration

Oil Industry-level factors	Oil Companies -level factors
Demand dependence on oil or oil products use in every region	Lack of control over final goods quality
Pressure from downstream compression	The level of profitability is not sufficient
Domestic market saturation	There are operating margins
High level of competition, oversupply in the industry	Addition of the value to the final product

Source: Composed by author

The main goal of the analysis of Oil-industry-level factors and Oil companies-level factors is to come up with the conclusion that Oil industry-level factors influence the Oil company-level factors and affect decisions whether to integrate vertically or not. For example, in the Oil industry, a vertically integrated company means to own oilfields, refineries, tankers, trucks and gas (petroleum) filling stations and to have a total control over all the processes. In the petroleum industry vertical integration is supposed to save costs on: storage, refinery design and most of the transaction. It's necessary to mention that a vertically integrated company has a benefit of planning capital investments in different stages with excellent coordination. According too Griffin and Steece vertically integrated companies have dominance in the logistics of handling fluid flows.

The petroleum industry is involved in global supply chain that includes national, international transportation, control, import and export activities that's why additional attention should be payed to the logistics factors that could influence the performance of Russian Oil company abroad.

According to Schweller, Sower *logistics and supply chain factors are those factors which characterize the way resources are obtained, stored and moved to the location where they are required.* Logistics and Supply chain factors how accessible and effective they are and establishing profitable supply chain.

Schweller and Sower state that the following logistical and supply chain factors should be taken into account while choosing a strategy of internationalization and vertical integration as:

- Constrained Infrastructure
- The number of warehouses depends on the geographical size of the distribution area

- Transshipment points

This factors influence a lot on the decision of the internationalization process, on the choice of the country. After a transcript of interviews with experts of the industry we came up with the conclusion that there are a lot of significant logistical factors that are not analyzed and little or no research at all has been done. Iyer states that despite the vast literature on internationalization and performance of supply chain in the petroleum industry, much less is known about the logistical factors influencing the choice of the country for the internationalization. (Iyer, 2011) Author concludes that this research gap has to be fulfilled.

2.4 Research gap

The analysis of existing literature of internationalization and vertical integration with focus on Russian Oil industry has lead us to the conclusion that there is a research gap in the logistics factors which influence the internationalization and vertical integration strategies of Russian Oil companies, the following research questions were formulated:

- 1. What logistical and supply chain factors influence the decision-making process while Russian Oil companies choose the strategies for internationalization and vertical integration?***

The research question in a qualitative study is a statement that identifies the topic area and explains the reader the main peculiarities of this particular topic.

Theoretical outcomes

Vertical integration is an approach which the company uses in order to achieve control over its Supply Chain (distributors and suppliers). The main aim to integrate vertically is to increase the company's power, reduce transaction costs and improve efficiency, it may reduce risks and optimize the costs by consolidating inputs and processes under a control of a single company. From the perspective of petroleum industry, vertical integration is spreading risks and takes profits at every stage of the chain between wellhead and the gasoline station.

When an Oil Company chooses to internationalize it has to integrate and the most common way for the companies in Petroleum Industry is to integrate vertically. As soon as the company decide to inegrate backward, exploration and production of its own crude engages. Backward integration reduces uncertainty and enables the refiner to select the appropriate amount of crude materials and is

important that the company can control its expenses and quality. The most successful type of internationalization is through vertical integration, this type of integration creates an essential element for the creation of competitive advantage- reliable source of supply. It's common knowledge that the more uncertain the supplier of crude oil is, the higher the refiner's propensity to allocate more resources to secure an adequate flow of the crude material. Therefore, vertical integration reduces uncertainty and enables the refiner to create appropriate supply chain. It's also necessary to mention that vertical integration is one of the most expensive strategies to coordinate. It's all because the strategy is based upon sequential interdependence where resource flows from one division to the next must be coordinated.

Chapter 3. METHODOLOGY

This chapter describes the methodology that has been used in this master thesis. This research is based on a qualitative research. It's common knowledge that qualitative research is used to work with approximately low number of case studies and we pay much more attention to the details. The topics of case study research vary greatly, like the topics of the research. This type of research permits different types of collecting and analyzing data. We can choose a case study in order to get necessary data. One of the main advantages of case study is that there are many alternative sources of data.

3.1 Description of methodological research process. Methods of study

A case study is an empirical inquiry that analyzes a present-day within its real-life context. Case study relies on a huge amount of sources of evidence. In a qualitative inquiry it's important to obtain as many perspectives on a topic as possible

Our research is a multiple case study and we justify it because this type of study is relevant for the chosen topic, each study is analysed integrally to prevent result adjustment. The multiple case study best enables to answer “what” and “how” questions, that's why it perfectly suits for our research.

In the multiple case study the main focus is upon the details of the situation, the reality behind these details, the subjective meanings and motivating actions (Saunders, 2009). According to the Yin there are 5 components of a research design which are very important:

1. Research's question
2. It's propositions, if any
3. its unit(s) of analysis
4. the logic linking the data to the propositions
5. the criteria for interpreting the findings

The first component «Research's question» has been already explained and analyzed in the Chapter 1 and 2. The second component «Propositions» is responsible for including an importance of theoretical issue. This condition reflects that sometimes may have an official reason for not having any propositions. The third component is «Unit of analysis» and its main goal is to define the problem by itself. The unit of analysis might be the economical situation of the country, particular industry, economic trade or policy.etc The forth component «the logic linking the data to the propositions» and the fifth component «the criteria for interpreting the findings» will be developed during the study. (Yin, 1994)

This particular research is aimed to fill the gap in the existing theory about internationalization and vertical integration theories of Russian Oil companies, specifically what supply chain and logistical factors influence the decision-making process of the choice of internationalization and vertical integration strategies. It will also provide the managerial vision on the findings. This research is based on the case study approach to define and to evaluate the current situation in the internationalization strategies of oil companies. In order to visualize the research method it's necessary to create a research framework. In the Figure 4 we can see the main methods used in this qualitative research.

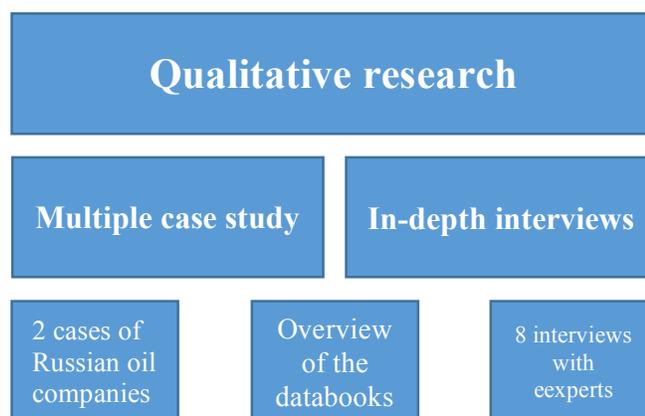


Figure 4. Research Framework

Starting from the purpose of the research, the research can be descriptive research, which portrays profiles, events or situations, exploratory research, which is the study of a new phenomenon to understand what is happening, and finally explanatory research which focuses on cause-effect analysis (Saunders, 2007). This research can be considered as exploratory. The principal advantage of this type of research is that it is flexible and adaptable to change, without losing the direction of the enquiry (Matthews & Ross, 2010). Saunders underpin that exploratory research can be conducted through a literature review, interviewing experts and analysing the data. Bryman and Bell, on the other hand, suggest that there can be more than one ways used (Bryman and Bell, 2007). Thus in this study, apart from the literature, the researcher is conducting interviews with experts in oil industry.

Case study is reliable in the real-life context and its main goal is to use singularity of each case and to obtain understading of a complex issue. As in each method of research there are a lot of benefits and disadvnatges, among the main advantages we can name:

- Usable form
- A lot of sources are applicable

- Deep analysis of the subject

There are also some clear disadvantages that are:

- Subjectivity
- Time-consuming
- Problem of validation of managerial implications

The framework for the case analysis (Table 8) was developed and it's necessary to follow it in order to have the same criteria for comparison.

Table 8. Case study framework

Aspect to consider
General information
• Date of establishment
• Operating foreign markets
• Main goal of Internationalization
Strategy
• Strategy focus
• International strategy
Production and Refining data
• Total Oil production
• Export of Oil, total
• Refinig volume
Financial performance
• EBITDA
• Net Income
• Net Debt
• Free Cash Flow
General overview of transportation segment

3.2 Case selection

The choice of strategy “is guided by the research question(s) and objectives, the extent of existing knowledge, the amount of time and other resources available to the researcher” (Saunders, 2007). Each strategy can be used for exploratory, descriptive and explanatory research (Saunders, 2009). The most common research strategies are the experiment, the survey, the case study, the action research, the grounded theory, the ethnography and the archival research (Bryman and Bell, 2007). This research used the strategy of the case study. The case companies for this study have been chosen with purposeful selection. Purposeful selection «is a strategy in which particular settings, persons, or activities are selected deliberately in order to provide information that can't be gotten as well from other choices» (Maxwell, 2005) The selection method of this study is also known as theoretical selection, as the cases are chosen for theoretical and not for statistical reasons (Eisenhardt, 1989). “The cases may be chosen to replicate previous cases or extend emergent theory, or they may be chosen to fill theoretical categories and provide examples of polar types” (Eisenhardt, 1989). The choice of companies was based on the presumable possibility to gain the best insight to internationalisation process of Russian Oil companies posed for the selection of companies, to engage in the replication logic within multiple case studies.

In order to select an appropriate case we need to list the main criteria, they are the following:

- Originated in Russia, but operating overseas
- Vertically integrated oil company
- Has refinery or production or distribution projects abroad

The criteria were identified in order to fulfill the research gap and research questions requirements. The following companies were selected: Gazprom Neft and Lukoil. Both companies correspond to the main criteria.

3.4 Data Collection

Normally, the data are gathered from a variety of sources, by using several different methods to gather data like, for example: observations, surveys, interviews. According to Corbin and Strauss, in any study, the researcher can use one or several of these sources alone or in combination, depending upon the problem to be investigated. (Corbin and Strauss, 2008) Other considerations can be the desire to obtain various types of data on the same problem, such as combining interview with the observations.

The data, upon which this study is based was obtained mostly via discussions and interviews with the industry specialists and executives of the largely integrated oil companies. In this particular

research a case is a company. We have used multiple case studies in order to develop the deeper research. Each case is chosen in order to conduct a deep analysis and a clear answer to the research questions. Robert K. Yin (1994) defines the case study method as a research strategy and explains it as an empirical study that covers contextual conditions.

Moreover, case studies can be used for theory testing. A case can be any subject - a firm, a business unit, a network. We have used multiple case studies in order to develop the deeper research. Each case is chosen in order to the deep analysis and a clear answer to the research questions. Robert K. Yin (1994) defines the case study method as a research strategy and explains it as an empirical study that covers contextual conditions.

Primary data collection and analysis (interview).

The main goal of this type of data collection is to get as much information as possible. This part includes in-depth analysis of the interview. Interviewers give a lot of additional information that can be obtained only from the primary source. This study consists of several methods which were used to analyze the topic deeply. It's necessary to show the process of primary data collection, Figure 4.

The interview method of research, typically, involves a face-to-face meeting in which a researcher makes individual questions. During the interview it's very important to pay attention to the following aspects:

- Confidentiality
- Bias
- Accuracy

Lofland states that one of the central obligations that researchers have to respect is confidentiality, "assurance of confidentiality" is important, where the real names of persons, places and so forth will not be used in the research report.

Literatre highlights 4 types of interviews (informal, general, open-ended, fixed-response). (Corbin and Strauss, 2008) In this study The Open-ended type of interview was chosen because it's flexible and provide uniformity. From our point of view, the first 2 types of interview can't be used because they don't correspond to the type of study, and the third type was rejected because answers can't be predefined. The main threat and disadvantage of the interview method is that it requires your communication skills to be on a high level.

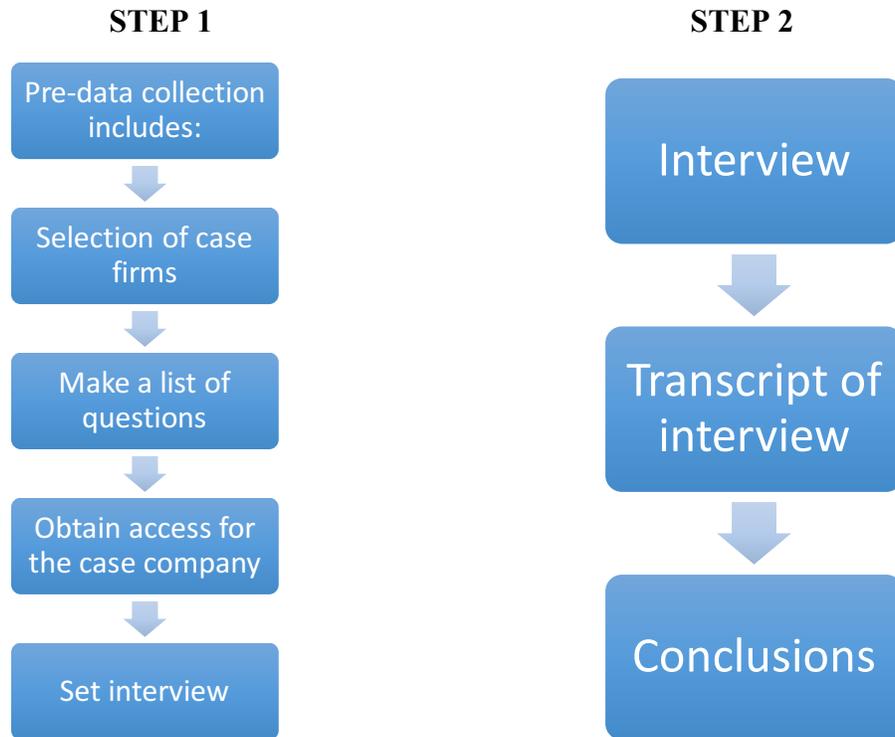


Figure 4. Primary data collection

The main goal of an interview is to get information from the first source. Before the interview, I have sent a brief description of my research, it helped experts to know what my thesis is about and to be ready for the interview. All the interviews were carried in March-April 2016. The language of all the interviews was Russian. They all were based on the Interview framework (Table 9).

Table 9. Framework for the interview with experts

Question number	Question
1.	What in your opinion is paramount influence on the choice of internationalization strategy?
2.	What are the geographical criteria while selecting the target country? Does the country's remoteness influence the potential international development of the company?
3.	When purchasing a refinery abroad, what are the main factors to which initially the company pays attention?
4.	Which logistics factors influence the internationalization process of the company?

5.	How critical are the differences of the transportation system between countries in the selection of the target country?
6.	Does the company pays attention on the economic development of the host country?
7.	Does the company pays attention on the host and home countries relationship?
8.	Does logistics and supply chain process influence the internationalization decision?

As an outcome of the interview we have the transcript, the description of international activities of the firms and some additional documents.

The interviews were held with the managers of Oil companies: Gazprom Neft and LUKOIL, and one service company: Baker Hughes, the managers represented the following departments:

- Pipeline logistics
- Refinery operations
- Supply Chain department
- Information Technology
- Strategic Development

It's also very important to mention that the qualitative research can be deductive and inductive and abductive as well. Abductive reasoning is a way of logical reasoning which goes from observation to a theory. I took notes on all the answers and in case I need more information I send my questions via email. It's necessary to mention that the collaboration between the students and companies is on a very high level. What is very important is that the case study method allows to use different methods such as interviews to obtain primary data. In the interview the direct citation is used in order to obtain the transparent data.

Secondary data collection: Observations of documents

The method seems to be very useful because observations allow to analyze specific data on performance of oil companies, of profits and company's performance and to make particular conclusions.

Generally speaking, these notes are made by the author according to the primary data collected from the industry representatives and the secondary data was obtained through the analysis of such documents as: annual reports of the companies, market description, databases.

3.5 Time horizons

Regarding the time horizon of the research this analysis is considered as a cross sectional one.

According to (Saunders et al, 2007), in terms of time, the research can either be cross-sectional, time horizon or longitudinal which is more like a “day-to-day” perspective. Qualitative studies are supposed to be long-term studies. However, this analysis could not be a long-term one, due to time limitation since it is conducted for academic reasons which makes it necessarily time constrained. In addition, this research is trying to build a theory based on the data that are present at the particular moment of the writing and the literature. The research is being made at a specific period of time, and the time perspective is fairly cross-sectional.

3.6 Evaluation criteria and validity

“Validity is a goal rather than a product; it is never something that can be proven or taken for granted” (Maxwell, 2005). Validity is involved in the “objective truth” and there is no eventual accuracy that can resolve whether analysis is useful. The most important is to identify and obtain desirable effectiveness in a study. The validity of this particular research will be established on Yin’s four criteria for case studies: Construct validity, Internal validity and Reliability.

Construct validity can be maximized by a lot of sources of evidence which is also called data triangulation. In this paper the validity is increased by 8 experts, 8 interviews were conducted. The qualitative data collected will be compared to company publications to increase construct validity. The interviewees have furthermore been asked to review a draft of the case study report, to establish a chain of evidence.

Internal validity is only used in causal and explanatory research – which is the case in this research, as this study tries to identify and explain the factors behind internationalisation of Russian Oil companies

Reliability represents the validity of replication of the study. The researcher will be an active part of the research and be influenced by the data collected. Therefore, researcher-bias and influences are unavoidable, and the results of the findings and conclusions cannot be replicated identically. It is important to understand the influences and use them productively. (Maxwell, 2005).

3.7 Limitations of study

It’s necessary to explain some limitations of the research analysis. To begin with, there was limitation of time and sample. The limitation of time affected the sample that was limited too. If there was not a short deadline we could even extend the research not only to the Russian companies

operating in the industry but also to the international oil companies and we could have more results and opinions on which logistical and supply chain factors influence the decision-making process while choosing a strategy for internationalization. Only 8 interviews were conducted because the strategy and supply chain departments in Oil companies are not that big. 8 interviews were conducted with experts from the following companies: Gazprom Neft, Lukoil, Baker Hughes. There may be some subjectivism from the research because the conclusions that were made are based on the qualitative data.

Chapter 4. CASE STUDY

The case study deals with vertically integrated Russian oil companies. Margins for performance of these companies varies widely in the industry depending on such factors as geographical location, distance, the business relationship.

4.1 Case of Gazprom Neft

General information

According to the Global energy company Gazprom Neft occupies the 43rd place in the world. Currently, Gazprom Neft operates crude oil refining facilities. Its major refining facility is situated in Omsk, Russia, its capacity is 19.5 million tonnes per year. The company also controls 33.3 % of shares of Moscow Oil Refinery (its capacity is 12.2 million tonnes per year). Gazprom Neft also is the owner of 50% of two refineries Slavneft-Yaroslavnefteorgsintez and the Yaroslavl Oil Refinery. Gazprom Neft distributes its refined products in central Asia through three subsidiaries: Gazpromneft Asia, located in Kyrgyzstan, Gazpromneft in Tajikistan and Gazpromneft in Kazakhstan. Gazprom Neft Exports to 25 foreign countries: Germany, Ukraine, Italy, France, Belarus, Turkey, Czech Republic, Hungary, Slovakia, Poland, Austria, Finland, Romania, Bulgaria, Moldavia, Lithuania, Greece, Croatia, Yugoslavia, Latvia, Slovenia, Estonia, Switzerland, Bosnia and Macedonia. Planned production in Iran, Turkey and Asia.

Strategy

Gazprom Neft has a strategic plan up to 2025, where it is mentioned that the main goals are:

- Geographical Expansion
- Increase of Scale
- Retention of Leading positions
- Development of better marketing strategies
- Higher efficiency in the transportation of oil and oil products

International operations

The main way of expansion is through acquisitions. In April 2009 Gazprom acquired oil-producing facility in Bari (Italy). The capacity of the refinery is 30,000 tonnes of oils. The main feature of this refinery is that the production facility is 150 types of oil used in cars and transport and oils for industrial use. The second important acquisition is the expansion in the Serbian market through the purchasing of 51% of Naftna Industrija Srbije (NIS) in January of 2009. NIS still needs a lot of investments in order to produce the oil according to the European standards. NIS is one of the biggest vertically integrated companies in Central Europe and through this acquisition Gazprom Neft got a

possibility to expand to the Eastern Part of Europe. NIS is the owner of the refineries in Pancevo and Novi Sad, with a total capacity of 7.2 million tonnes annually and produces 85% of oil products consumed in Serbia.

Gazprom's internationalization can be characterized by two concepts: their inherited internationalization and pipeline internationalization. Gazprom is following the pipes in its internationalization. Besides following the existing routes, the company is constructing, via strategic alliances, new connections. When the westward routes have been put into practice, it would allow Gazprom to decrease its transit through the Ukraine. Currently, the main development of production and refining activities of oil is taking place in Cuba and Venezuela.

Transportation Segment

"Gazpromneft-Transport" - a subsidiary, part of the structure of the company "Gazprom Neft", provides services for the delivery of petroleum products by road. The broad geography of activity allows the company to quickly provide fuels and lubricants materials consumers across Russia. "Gazpromneft-Transport" has its offices in Omsk, Moscow, St. Petersburg, Yaroslavl, Chelyabinsk, Yekaterinburg, Tyumen, Novosibirsk, Kemerovo. The Corporate Center is located in Yekaterinburg.

On the basis of "Gazpromneft-Transport" integrated whole benzovoznaya machinery company "Gazprom Neft", excluding units owned marketing enterprises of CIS countries, the Middle and Far abroad. Car companies include modern tankers. For delivery of oil-tankers used trains and tankers, tank trucks of leading European manufacturers of 17, 23, 32, 38 m³. The presence of multi-tank trucks can carry multiple types of products at the same time for one or more clients. Benzovoznaya equipment is certified and complies with all requirements of the Russian legislation. Highly driving part has all the necessary permits. The main feature of this company is that they don't operate overseas.

Production and Refining data

Table 10 represents the data on production and refining data during 2012- 2014 and export in volume and refining in volume.

Table 10. Production and Refining data

Year	Total production, mln tons	Export, mln tons	Refinig in Russia, mln tons	Refinig abroad, mln tons
2014	66	8.63	64,35	2,78
2013	62	8	62,34	2,80

2012	60	12	57,46	3,08
------	----	----	-------	------

Source: Eikon datastream

Financial Performance

Table 11 shows the financial data of the company during 2012-2014. Company shows the growth of positive Free Cash Flow.

Table 11. Financial performance

Year	EBITDA, mln rub	Net Income, mln rub	Net Debt, mln rub	Free Cash Flow
2014	342 614	122 093	433 602	653,629
2013	336 752	177 917	185 922	344,609
2012	323 106	176 296	156 922	123,665

Source: Eikon datastream

4.2 Case of Lukoil

General information

Lukoil is one of the largest oil companies in Russia and according to the Global energy company rankings it's the 13th in the world. The company is vertically integrated, it's operating in all the sectors, exploration, production, marketing. The company was founded in 1991 and now owns around 1.1 per cent of global oil reserves. Top managers of the company own around 27% of the shares and it's important to mention that Russian Government has very reserved influence on the company.

Strategy

The Company's strategy is to consistently increase the value of LUKOIL stock, by continually increasing efficient oil and gas reserves and production abroad in priority countries and regions of activity. The Company's main goal is to lead its peer group of transnational corporations in terms of main performance indicators, production volume and scale of operations.

International operations

The Internationalization of Lukoil was basically the way to bigger profits and more economic advantages. Abroad the company is operating in all the stages: exploration, production and marketing. The main countries of operation are 1. Azerbaijan 2. Belarus 3. Belgium 4. Bulgaria 5. Cameroon 6. Croatia 7. Côte d'Ivoire 8. Cyprus 9. Egypt 10. Finland 11. Estonia 12. Georgia 13. Italy 14. Iraq 15. Kazakhstan 16. Latvia 17. Lithuania 18. Luxembourg 19. Macedonia 20. Moldova 21. Montenegro 22. Netherlands 23. Norway 24. Poland 25. Romania 26. Russia 27. Saudi Arabia 28. Serbia 29. Sierra Leone 30. Spain 31. Turkey 32. Ukraine 33. USA 34. Uzbekistan

Transportation Segment

Development of the transport segment helps the company to improve logistics management and control transport costs. Lukoil delivers its oil and petroleum products via infrastructure of partner companies (Transneft, Gazprom, etc.) and its own infrastructure. The Company is continuing to develop its own export terminals, which significantly reduce transport spending and make transport arrangements more flexible. Thanks to development of its own transport capacities and creation of a highly efficient and flexible logistics system, the Company has succeeded in the last 3 years in keeping growth of transport costs per barrel of production on a level with growth of tariffs for transport through pipelines of Transneft (the Russian pipeline monopolist). This is a significant achievement, since tariff

increases for transport by alternative routes have been much greater than Transneft tariff increases, and transport volumes have grown more quickly than production due to increase of international trade.

The right transportation in the marketing segment is crucially important to Lukoil, because it provides guaranteed outlets for Company products. The key objective in this segment is to create additional value by selling to the final consumer at the maximum market price and ensuring reliable cash flows by reducing price volatility. Lukoil sells crude oil, petroleum products, gas processing products and petrochemicals wholesale, and also carries out retail sales of petroleum products and petrochemicals. The Company's strategic aim is to increase the share of retail sales, generating extra income and competitive advantages. International trade is another distinct business within LUKOIL. It enables the Company to sell its own products efficiently and to obtain extra profit from sales of third party production.

LITASCO (Lukoil International Trading and Supply Company) has been the sole agent for the Company's international trading operations since 2000, carrying out all Lukoil Group deliveries and trading operations outside Russia. Transfer of all export operations to a single Company simplified export arrangements, optimized export flows and assured transparency of Lukoil's oil and petroleum product exports. LITASCO is consistently increasing margins on trade operations by optimizing management of Lukoil's delivery channels and by increasing the volume of trade with third parties. LITASCO has offices in 9 countries and its main trading offices are in Switzerland, the USA, Germany, the Netherlands, Sweden, UAE and Singapore. Expansion by LITASCO to new markets in Central America, China, and the Middle East has helped to make Lukoil into one of the leading oil companies in the world.

Production and Refining data

Table 12 represents the data on production and refining data during 2012- 2014 and export in volume and refining in volume.

Table 12. Production and Refining data

Year	Total production,mln tons	Export,mln tons	Refinig in Russia,mln tons	Refinig abroad,mln tons
2014	102	19	45	2,78
2013	102	20	45	2,80
2012	99	25	45	3,08

Source: Eikon datastream

Financial Performance

Table 11 shows the financial data of the company during 2012-2014. Company shows

Table 13. Financial performance

Year	EBITDA, mln \$	Net Income, mln \$	Net Debt, thousands \$	Free Cash Flow, thousands \$
2014	15,982	4,746	192,548	10,368,128
2013	16,666	7,832	4,000,097	7,088,724
2012	18,915	11,004	1,616,538	7,841,859

Source: Eikon datastream

4.3 Interview analysis

In-depth interview revealed new perspective on the topic of logistical factors that influence the decision of vertical integration and internationalization, factors which influence the choice of particular country. Apart from the logistical factors which were mentioned in the literature review,

experts in the industry have mentioned additional logistical criteria. Thanks to their participation and support additional logistical factors were identified.

Following Table 14 is summarizing general factors mentioned by experts (managers of the companies). Thus helping to distinguish most influential factors that Russian Oil companies take into account while making decision about internationalization and vertical integration. Managers and expert's names and positions are hidden because of non-disclosure agreement and the experts are coded by numbers and 3 letters (i.e Exp). In our interview participated 8 experts, 5 of them are representatives of Gazprom Neft, 2 of Lukoil company and 1 representative of Service company Baker Hughes. All the managers are experts in their sphere and are responsible for the decision-making operations in their company.

Pluses in the Table 14 indicate that the manager agreed that this particular factor is significant and is important in decision-making process of vertical integration and internationalization.

In order to interpret obtained results and to come up with managerial implications there is a detailed description of each factor presented below. A factors have to be established for approaching this question for potential observation.

The factors, listed by the managers can be divided into 2 categories:

- General Factors
- Specific: Supply Chain and logistical factors

General Factors

Among the general factors which were mentioned by the experts and managers we can indicate the following:

- *Home country's remoteness*

Remoteness increases the natural protection afforded to industries within an economy because high transport costs limit activities in some or all markets. This means that remoteness may reduce the expected level of internationalization

- *The presence of competitors*

Competition, the process of rivalry between firms striving to gain sales and make profits, is the driving force behind markets. Competitive markets allow a nation's resources to be used to best effect in the production of goods and services. For example, both theoretical and empirical research in recent years has emphasised the productive and dynamic efficiency gains from competition. Competition gives firms continuing incentives to make their production and distribution more efficient, to adopt better technology, and to innovate.

«The presence of competitors in theory is not important, but in practice it is very important.»

- Manager of the Strategy Development department

- *Legal and Regulatory Environment differences*

Business activity tends to grow and thrive when a nation is politically stable. When a nation is politically unstable, multinational firms can still conduct business profitably. Most firms prefer to engage in the export business rather than invest considerable sums of money in investments in foreign subsidiaries.

«Is not critical. Expensive lawyers are easily hired and everything is structured. »

- Manager of the Strategy Development department

- *Economic development of the host country*

A variety of historical and geographical conditions, the combination of material and financial resources available. To somehow estimate the level of economic development of the country, there is a whole system of indicators, among which stand out above all the following:

- GDP / per capita;
- structure of the economy;

- *Political issue*

Political issue is considered by the management as one of the main factors that influence decisions of oil companies.

- *Level of protection of the environment*

Another factor mentioned by experts is safety of industrial processes and the protection of the environment. Contributions that deal with new developments in safety or environmental aspects of plant or processes and that can be given quantitative expression are encouraged.

Pluses in the Table 14 indicate that the manager agreed that this particular factor is significant and is important in decision-making process of vertical integration and internationalization. The more the pluses in the cell “Total”, the more important is the factor.

In the part of General Factors we can identify the following:

- The presence of competitors
- Political issue
- Protection of the environment

Table 14. Factors influencing the internationalization process of oil companies

General factors	Exp	Total							
	1	2	3	4	5	6	7	8	
Country's remoteness	-	+	+	-	-	-	-	-	2
The presence of competitors	+	+	+	-	+	+	-	-	5
Legal and regulatory environment differences	-	-	-	-	+	-	-	+	2
Economic development of the host country	+	-	-	-	-	-	-	+	2
Political issue	+	+	+	+	-	+	+	+	7
Oil price	+	-	-	-	+	-	+	-	3
Protection of the environment	+	+	+	-	+	+	-	+	6
Specific factors:									
Supply Chain and logistical factors									
The transportation infrastructure	+	-	+	-	+	+	+	+	6
Information technology development in the host economy	+	-	+	-	+	+	-	-	4
The location of refinery	+	-	-	-	-	-	+	-	1
Present of crude oil storage as a transshipment point	+	+	-	-	-	-	-	+	3
Presence of mainland or trunk pipeline	+	+	+	+	-	+	+	+	7
The owner of the pipeline	-	-	-	+	-	+	-	-	2
Expenses on transportation to the refinery	+	-	-	-	+	-	+	+	4
Transportation time	+	+	-	+	+	-	-	+	5
Control over supply chain	+	+	+	+	+	+	+	+	7
Previous experience of supply chain disruptions	+	+	+	-	+	-	-	-	4

Specific factors: Supply Chain and Logistics factors

Among the specific factors, the interviewees were focused on the supply chain and Logistics factors, because of the peculiarities of this particular research paper, the experts and managers named the following factors:

- The transportation infrastructure

The indirect contribution of infrastructure to internationalization process of Russian Oil companies arises through a multitude of channels, including the enabling of productive private investment, the creation of new activities (supply chains), or the reshaping of economic geography. Evaluating this factor there are particular challenges, especially:

1. Lack of clear and commonly agreed definitions for a number of critical terms used;
2. Lack of critical data;
3. Absence of methods to estimate missing data;
4. The lack of clear definitions and common practices to measure transport infrastructure spending hinders meaningful comparison between countries and across spending options, leading to less-informed decisions.

- Information technology development

Experts mentioned it as one of the very important factors, because in today's competitive market on international scale, it's necessary to have the monitoring of supplier deliveries, to provide supplier with information from inquiries. Experts state that this factor is important because the complex nature of the oilfield supply chain and the contemporary business environments consists of high levels of uncertainty and complexity in terms of what methods and balance of practices should be considered in controlling and managing international supply chain and it's one of the important factors on which is necessary to put attention. Factor of the development of the technology development is important, whether it is inventory management or reduction in lead times across the various functions of supply chain, control plays a very important role when it comes to implementing the plan or a system because planning and operational controls remain significant responsibilities of management but for SCM, it is fundamental and is considered as a key activity of management (Boddy, 2008)

- The availability and location of the refinery

Few experts mentioned it as a significant factor. In terms of refinery in supply chain the opinions were the following:

“The company pays attention to the following aspects of the refinery: At invest attractiveness of the project for synergy, the growth of the regional market, the country's market, guarantee of the safety of investments, tax regime, and its preservation on the privileges and preferences”

- Manager of the Supply Chain department

«NPV, personal agreement between the CEO, cultural differences, the ability to integrate.»

- Manager of the Strategy Development department

- Crude Oil Storage

As soon as the project is attractive there is no difference if there is a Crude Oil storage, companies, while internationalizing don't consider it as a relevant and important factor.

- Presence of mainland or trunk pipeline

The availability of the pipeline is a significant factor during the process of decision-making about internationalization and vertical integration, while the owner of the pipeline is not that significant because the companies can collaborate on profitable and beneficial base for each other.

- Transportation time required

Includes the time after the loading to reach the final destination. Experts mentioned it as one of the very important factors, because in today's competitive market on international scale, it's necessary to have fast and reliable transportation system

- Previous experience of Supply Chain disruptions

Supply chain risks and disruptions can be caused by natural disasters, unexpected accidents, operational difficulties, terrorist incidents, and industrial or direct action. In any case, supply chains need to be flexible enough to recover from any disruptions at the earliest possible time. Moreover, it is possible to consider two different types of flexibility within the supply chain context; volume/capacity flexibility that allows to decrease or increase production according to the observed demand and delivery flexibility that allows to make changes to the deliveries, e.g. adapting new delivery amounts or delivery dates. In line with these ideas, Schutz and Tomasgard (2009) analyse volume, delivery, storage and operational decision flexibilities in a supply chain under uncertain

demand and arrive at a trade-off between volume and delivery flexibility and operational decision and storage flexibility.

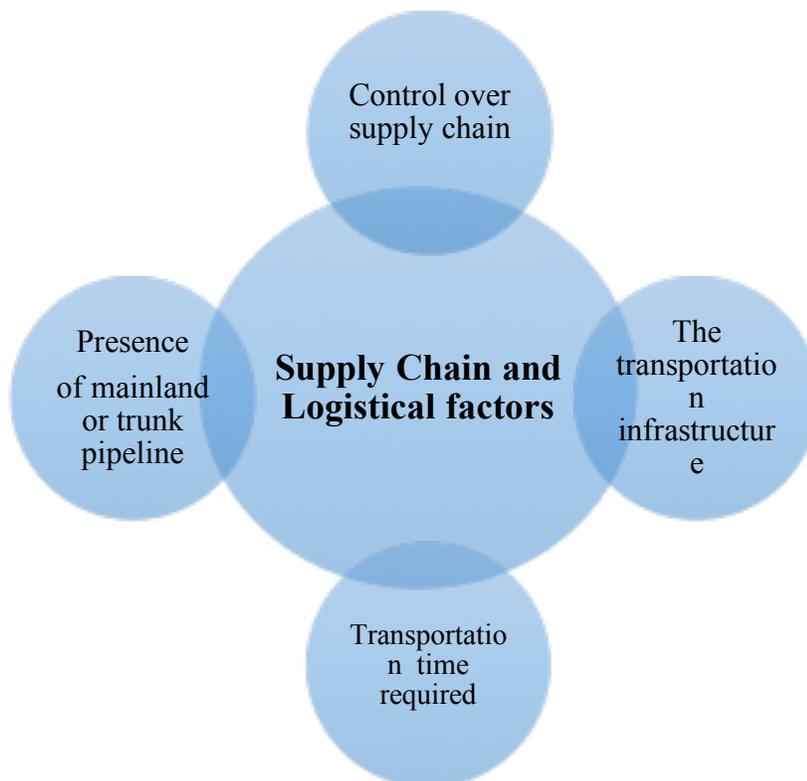
“Because of Current instable situation in the world, the companies should pay attention to the previous experience in the supply chain disruptions because otherwise risk to loose control over the supply chain is to high.

After the Table 14 was finished, all the factors were graded by the experts in order to range the factors and highlight the significant and insignificant ones.

The main logistical factors which influence the decision-making process about internationalization and vertical integration are (Figure 2):

- The transportation infrastructure
- Transportation time
- Presence of mainland or trunk pipeline
- Control over supply chain

Figure 5. Significant Supply Chain and Logistical factors



Source: Composed by author

All the managers indicated logistics and supply chain is one of the most crucial aspects which influence the decision-making process of Internationalization and Vertical Integration of Russian Oil companies. Experts state that efficient integration between various components of a supply chain i.e. suppliers, manufacturer's, warehouses and stores is very important. The main challenge being the coordination of activities across the supply chain so that the organization can improve performance: reduce cost, increase service level, reduce the bullwhip effect which is based on demand amplification (Forrester 1961), better use of its resources, and respond effectively to changes in the market.

4.4 Application of logistical and supply chain factors in case analysis of Gazprom Neft

As the result it's common in Gazprom Neft to take into account supply chain and logistics factors during the process of decision-making about internationalization and vertical integration.

In order to validate in practice, the factors, which according to the literature review and experts are significant we have developed the following framwework in order to show in practice the validity of this particular factors. We have chosen recent projects of internationalization and vertical integration of companies and analysed if supply chain and logistical factors were taken into account.

Gazprom Neft	
Project: Naftna industrija Srbije	
<i>Logistical and Supply Chain factor</i>	Case implementation
Control over supply chain	The company owns two refineries with total refining capacity of 7.3 million tons per year in Pancevo and Novi Sad, more than 400 petrol stations and tank farms. In general, the company sells about 2.5 million tons of petroleum products a year.

The transportation infrastructure	According to the Logistics Performance Index (LPI) ¹ , in 2014 Serbia was in Top-50 countries with best infrastructure.
Presence of mainland or trunk pipeline	No presence of mainland or trunk pipeline, even though there were a lot of projects focused on the construction of pipeline in Serbia.
Transportation time required	Serbia was a perfect step in internationalization, because of its close geographical location to the target customers (countries). The project was successful in terms of the fact that Gazprom had a possibility to sell product directly in Serbia without transportation costs.

4.5 Application of logistical and supply chain factors in case analysis of Lukoil

As the result it's common in LUKOIL to take into account supply chain and logistics factors during the process of decision-making about internationalization and vertical integration.

LUKOIL	
Project: ISAB refinery in Sicily, Italy	
<i>Logistical and Supply Chain factor</i>	Case implementation
Control over supply chain	Acquisition of 49% of the in the JV of ERG SpA and ISAB. Increase of refining capacity by 13% and refining capacity abroad by 60%. Control over supply chain, delivering oil to Balkans, Turkey and Western Europe.

¹ LPI is an interactive benchmarking tool created to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance. The LPI 2014 allows for comparisons across 160 countries.

The transportation infrastructure	According to the Logistics Performance Index (LPI), in 2014 Italy was in Top-20 countries with best infrastructure.
Presence of mainland or trunk pipeline	Two trunk pipelines: Central European Pipeline and Transalpine Pipeline
Transportation time required	Italy was a perfect step in internationalization, because of its close geographical location to the target customers (countries). The project was successful in terms of the fact that Lukoil had a possibility to sell product directly in Italy without transportation costs. This JV brought a lot of benefits, notably improved earnings via improved local networking.

CHAPTER 5. CONCLUSIONS AND IMPLICATIONS

5.1 Conclusions

The research in this paper derives the trends and strategies of vertical integration and internationalization of the Oil companies. Despite a number of well-established theories and a prominent on the internationalization and vertical integration of Russian oil companies there is little evidence on the logistical and supply chain factors which are taken into account while making a decision about the choice of the expansion strategy.

We have concentrated on outward operations so as to investigate the internationalization procedure of Oil organizations in the downstream division and to identify the main logistical and supply chain factors that influence the decision-making process of internationalization and vertical integration.

We have reached the main aim of the paper which was to fill this research gap through the in-depth case study of two companies Gazprom Neft and Lukoil, through the primary data obtained via in-depth interviews with experts of industry (Baker Hughes) and managers who represent companies (Gazprom Neft and Lukoil) and analysis of secondary data obtained from annual reports and data books. The case study was complemented by 8 experts.

We have reached the objectives stated in the beginning of the research:

- Have displayed the peculiarities of internationalization process of Russian oil companies and to understand which are the main logistics and supply chain factors that influence the process of internationalization, to analyse the importance of this factors while Russian Oil companies choose a market and strategy for internationalization.
- Have indicated the main logistics and supply chain factors that influence the choice of the potential market for internationalization
- Have formulated managerial implications for the companies operating in this industry
- Have suggested the potential theoretical studies for the future researchers of supply chain and logistical factors influencing the decision-making process of Russian Oil companies.

The research gap was filled by answering research questions through the conduction of qualitative research, method of case study and in-depth interviews.

The primar focus of the study was based on the international activities of 2 Russian oil companies. Results of the research allowed to come up with managerial and theoretical implications.

5.2 Theoretical contribution

The thesis contributes to the sphere of Russian oil companies and process of their internationalization and vertical integration and identification of the logistical and supply chain factors which are taken into account while choosing a strategy of internationalization and vertical integration. Theory of internationalization and vertical integration is developed and there are a lot of scientific papers devoted to this topics, however there were little research done about the logistics and supply chain factors influencing the decision-making process whether to choose one or another strategy of vertical integration and internationalization.

As a theoretical implication we can list the following, first of all we have identified the supply chain and logistical factors that influence the decision-making process while choosing a strategy for internationalization and vertical integration. This theoretical input was made thanks to the experts opinions and scientific articles which highlight this particular topic. Furthermore, the traditional general perspectives of internationalization theories which were discussed in conjunction with the vertical integration of Russian oil companies in order to identify the list of factors which influence the choice of internationalization and vertical integration strategies and then out of this factors we have listed the most important ones from a theoretical and practical point view. The list of identified factors have demonstrated that theoretically, similar factors influence the choice of strategies of internationalization and of vertical integration. It was concluded that 4 supply chain and logistical factors determine the choice of the strategy of internationalization and vertical integration.

5.3 Managerial Implications

Today's companies are forced into functioning in a challenging business world with extensive uncertainties. Frontrunners turn out to be those companies that are able to foresee the market swings and react swiftly with minimal adjustment costs and effective response strategies. In order to choose the right strategy of the internationalization and vertical integration for the Russian oil companies it's necessary to analyze all the factors that could influence the successful performance in the international market. Oil industry is a very competitive one and special attention should be paid to the supply chain and logistics factors. Supply chain is a stage in the value chain where there is a development of flexibility in adapting to sudden changes in global markets, resource availabilities and outbreaks of financial and political structures. Supply chain management presents an especially important domain where such flexibility is critical to achieving a consistently successful performance, that's why Russian oil companies should pay attention to the following factors:

- The transportation infrastructure
- Transportation time required to deliver crude oil or oil products to the destination
- Presence of mainland or trunk pipeline
- Control over supply chain

Managerial implications of undertaken research have a practical usage of logistical concepts and systems allows companies to accelerate the turnover of working capital, reduce production costs, to ensure full customer satisfaction in the quality of goods and services. Logistics and Supply chain potential improves organizational and economic sustainability of the company in the market, that's why it's crucial to pay attention to logistical factors while planning internationalization and vertical integration activities.

The information by itself can be useful for the managers of strategic departments and supply chain departments of Oil companies especially when they plan to internationalize to a new country. This research paper can be useful and can help to understand to which logistical factors the oil company should pay attention and which factors are critical, so it will give the companies a possibility to gain additional advantage on international market. It's also important to highlight that this report and this key finding can be useful for both government and private-owned companies, as our research was made on the cases of Gazprom Neft (Government-owned) and Lukoil(100% private-owned company) .The managerial implication of this paper are proved by the managers and experts who were interviewed.

5.4 Recommendation for future research and limitations

Further research is required on a bigger list of companies, both Russian and international in order to understand the world tendencies in this sphere, moreover more logistical and supply chain factors should be identified in order to have a possibility to run a Factor analysis and understand which factors are more significant and which are less significant.

Although there is no general agreement on how to define and evaluate the supply chain and logistical factors, specifically in oil industry, so, the area has tremendous potential for researchers providing opportunities for modelling and application of flexibility and evaluation of the supply chain factors, interrelationships and trade-offs between different types of flexibilities, industry-specific or business function-specific impact of supply chain factors, and potential barriers to the implementation of the identified factors.

Limitations of this research can be connected to the 4th part of this research, where the main logistical and supply chain factors were identified. While searching for the quantitative information and data to analyze the current situation of the case companies there were very small of relevant and trustful sources.

In order to validate the identified factors author had to create a theoretical framework while the Factor analysis would be more useful in this particular research. The Factor Analysis is impossible to run because the sample size should be large enough to yield reliable estimates of correlations among the variables: Ideally, there should be a large ratio of N / k (Cases / Items) e.g., $> \sim 20$.

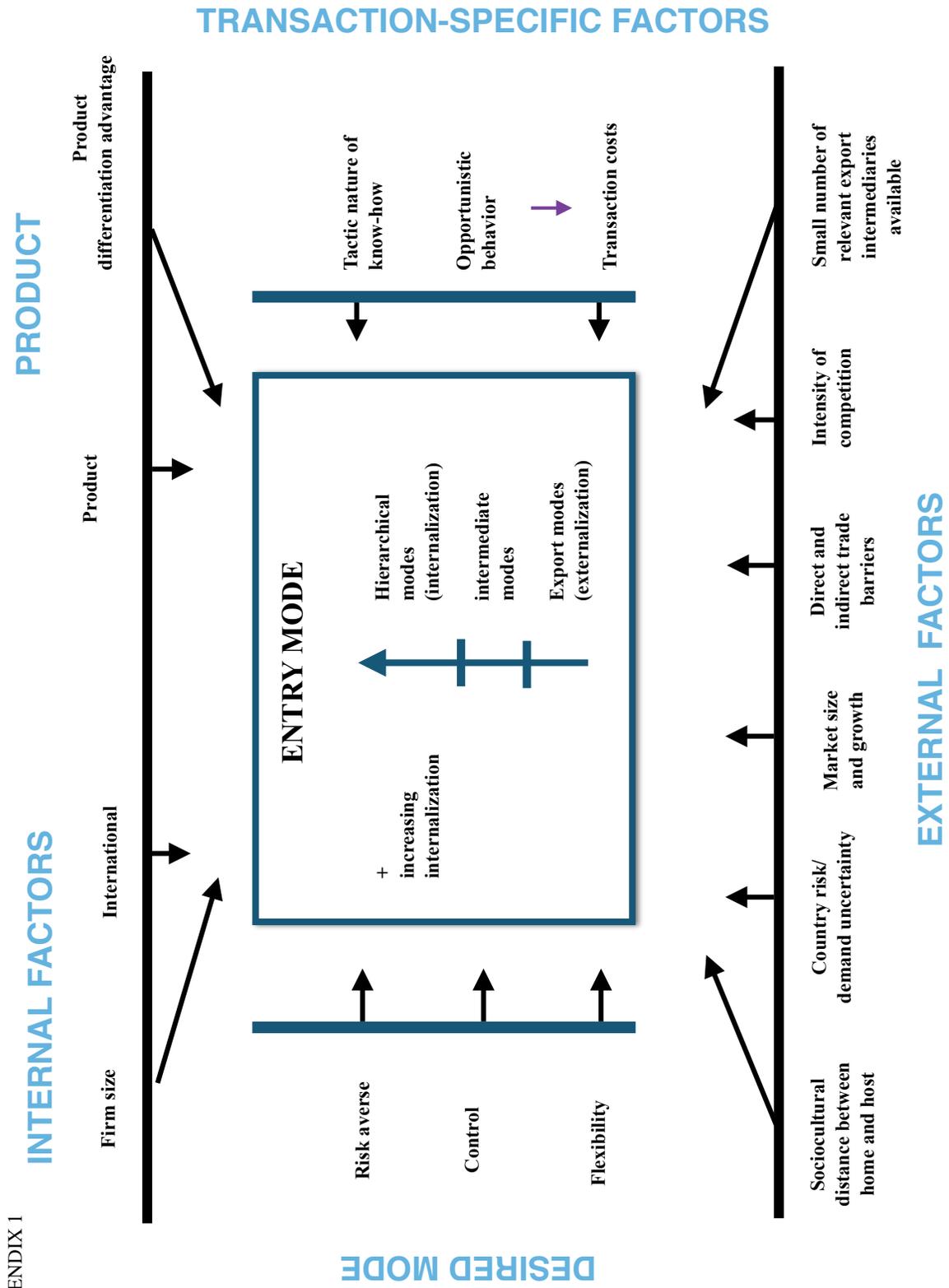
REFERENCE LIST

1. Al-Obaidan, A.M. and Scully, G. W. (2001) The economic efficiency of backward vertical integration in the international petroleum industry. *Applied Economics* 25, 1529-1539.
2. Al-Moneef, Majid A. (1998) Vertical Integration strategies of the national oil companies. Emirate Center for Strategic Studies and Research, Abu Dhabi.
3. Andersson, H., Christiansen, M., & Fagerholt, K. (2010). Transportation planning and inventory management in the LNG supply chain. In E. Bjørndal M. Bjørndal, P. M. Pardalos, & M. Rönnqvist (Eds.), *Energy, natural resources and environmental economics* Berlin: Springer
4. Aarstad, J., Pettersen, B., Jakobsen, S. (2015) Assessing drivers of export orientation in the subsea oil and gas industry. Faculty of Engineering and Business Administration, Centre for Innovation, Bergen University College
5. Barney, J (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, vol 17, No.1.
6. Beamish (2001) The internationalization and performance of SMEs. *Strategic Management Journal*. Volume 22, Issue 6-7, pages 565–586,
7. Bonaglia, F. (2007). *Strengthening Productive Capacities in Emerging Economies through Internationalisation: Evidence from the Appliance Industry*. Paris: OECD Publishing.
8. Borghini, S., Caru A, and Cova B. (2010). «Representing BtoB reality in case study research: Challenges and new opportunities» *Industrial Marketing Management*, 39, 1, 16-24.
9. Bryman, A., & Bell, E. (2007). *Business research methods* (2d edition). Oxford: Oxford University Press
10. Buckley, P. J., & Casson, M. (2010). *The multinational enterprise revisited: The essential* Buckley and Casson. Basingstoke, UK: Palgrave Macmillan.
11. Corbin, J. M., Strauss, A. L., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Los Angeles, CA: Sage Publications.
12. Cumberland, F. (2006). Theory Development within International Market Entry Mode. An Assessment. *The Marketing Review* 6:349-372.
13. Cross James.S(1991). Vertical Integration in the Oil Industry. *Management International Review*, Vol. 49, No. 4.

14. Dunning, J. H., & Lundan, S. M. 2008. *Multinational enterprises and the global economy*. 2nd edition. New York: Palgrave Macmillan.
15. Dyer W.G. and. Wilkins A. L.(1991). "Better Stories, Not Better Constructs, To Generate Better Theory: A Rejoinder to Eisenhardt", *Academy of Management Review*, 16, 3, pp. 613-619.
16. Eisenhardt Kathleen M. *Building Theories from Case Study Research*. *The Academy of Management Review* Vol. 14, No. 4 (Oct., 1989), pp. 532-550 Published by: Academy of Management Stable URL: <http://www.jstor.org/stable/258557> Page Count: 19
17. Elango, B., Sethi Prakash, S. (2007) *An Exploration of the Relationship between Country of Origin (COE) and the Internationalization-Performance Paradigm*. *Management International Review*, Vol. 47, No. 3, Internationalization and Firm Performance, 369-392
18. *International Monetary Fund Statistics* <http://www.imf.org/en/Data>
19. Forrester, J. W. (1961). *Industrial dynamics*. Cambridge, MA: M.I.T. Press.
20. Fletcher, M., Harris, S. (2013) *Internationalization Knowledge: What, Why, Where, and When?*. *Journal of International Marketing*. Vol 21. No 3.
21. Gazprom Neft annual reports 2012-2015. <http://ir.gazprom-neft.com/news-and-reports/annual-reports/>
22. Goldstein, A.E. (2007). *Multinational Companies from Emerging Economies: Composition, Conceptualization and Direction in the Global Economy*. Basingstoke: Palgrave Macmillan, 30- 36
23. Gratz, J. (2013) *Home-country specific advantages and foreign investment of Russian oil and gas companies: a network approach*. *Int. J. Technological Learning, Innovation and Development*, Vol. 6, Nos. 1/2, 2
24. Halvorsen-Weare. (2010). *Routing and scheduling in a liquefied natural gas shipping problem with inventory and berth constraints*. Norwegian Marine Technology Research Institute (MARINTEK)
25. Heidi Kreppel, Dirk Holtbrügge (2012) "Determinants of outward foreign direct investment from BRIC countries: an explorative study", *International Journal of Emerging Markets*, Vol. 7 Iss 1 pp. 4 - 30
26. Heinrich, A.(2005) "Why corporate governance in the Russian oil and gas industry is improving?" *The international journal of business in society*, Vol. 5 Iss 4 pp. 3 - 9
27. Hollensen, S. (2004). *Global marketing: A decision-oriented approach* (3rd ed.). Harlow,

- England: Financial Times, 154-159 .
28. Iyer, P. (2011). *Insight*. United States: Parkwood Press.
 29. Johanson J./Vahlne, J.E. (1990): The Mechanism of Internationalization, in: *International Marketing Review*, 7, 4, 11-24.
 30. Johanson J./Vahlne, J.E. (1997) The Internationalization Process of the Firm-A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies* Vol. 8, No. 1 (Spring - Summer, 1997), pp. 23-32
 31. Katsikeas S. Constantine&Morgan E. Robert . Theories of international trade, foreign direct investment and firm internationalization: a critique *Management Decision* 35/1 [1997] 68–78
 32. Kogut, B., & Zander, U. (1991). *Knowledge of the firm, technology transfer, and the theory of the multinational corporation*. Stockholm: Institute of International Business, Stockholm School of Economics.
 33. Kostopoulos, C., Spanos, E , Prastacos, P. (2008) The Resource – Based View of the Firm and Innovation: Identification of Critical Linkages. Athens University of Economics and Business.
 34. Meyer, K. (2007). Acquisition strategies in European emerging markets. Basingstoke [England: Palgrave Macmillan, 36-39
 35. Platt J. (1992). ‘Case Study’ in American Methodological Thought’, *Current Sociology*, 14-4
 36. Porter, M., Wood, J. C., & Wood, M. C. (2010). Michael Porter: Critical evaluations in business and management. London: Routledge.
 37. Rodrik, D., Subramanian, A., & Trebbi, F. (2002). Institutions rule: The primacy of institutions over geography and integration in economic development. Cambridge, MA, NBER Working Papers: 9305.
 38. Rothaermel, F. (2008). Competitive advantage in technology intensive industries.
 39. Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students*. Harlow, England: Financial Times/Prentice Hall.
 40. Scweller N & Sower D (2009) . Global Oil Majors Maintain Acquisitions Focus
 41. Solberg, C. (2006). Relationship between exporters and their foreign sales and marketing intermediaries. Amsterdam: Elsevier JAI.
 42. Lai, H ., O’Hara, S., Wysoczanska, K (2015) Rationale of internationalization of China's national oil companies: seeking natural resources, strategic assets or sectoral specialization? *Asia Pacific Business Review*, Vol.21. Nos.1, 77-95
 43. Lu, J.W and Beamish, P. (2001) «The internationalisation and performance of SMEs», *Strategic Management Journal* 22, 565–586

44. Luostarinen, R. (1980), "Internationalisation of the firm", *Acta Academica Series A: 30*, The Helsinki School of Economics, Helsinki.
45. Levy, D.T. 1984, "Testing Stigler's Interpretation of 'Division of Labor is Limited by the Extent of the Market'," *Journal of Industrial Economics*, 32: 377-389.
46. Lieberman, Marvin. 1991. "Determinants of Vertical Integration: An Empirical Test," *Journal of Industrial Economics*. 39:451-66.
47. Marinov, M. (2012). Internationalization of emerging economies and firms. New York: Palgrave Macmillan.
48. Masten, Scott, James Meehan and Edward Snyder. 1991. "The Costs of Organization," *Journal of Law, Economics and Organization*, 7: 1-25.
49. Mason, Charles F and Owen R. Phillips. 2000. "Vertical Integration and Collusive Incentives: An Experimental Analysis," *International Journal of Industrial Organization*, 18:471-93.
50. Mathewson, Frank and Ralph Winter. 1986. "The Economics of Vertical Restraints in Distribution," In *New Developments in the Analysis of Market Structures*, ed. Frank Mathewson and Joseph Stiglitz, Cambridge, MA. MIT Press.
51. Maxwell, J. A. (2005). Qualitative Research Design: An Interactive Approach (2nd Ed. ed.). Thousand Oaks, CA: Sage.
52. Lukoil. Annual Report 2012-2015, www.lukoil.com/materials/doc/AGSM_2015/LUKOIL.pdf
53. Vannoni, Davide. 2002., "Empirical Studies of Vertical Integration: The Transaction Cost Orthodoxy," *International Review of Economics and Business*, 49:113-141.
54. Webster Frederick A. (2002) A model of Vertical Integration Strategy. California management review,40-45
55. Whinston, Michael. 2003. "On the Transaction Cost Determinants of Vertical Integration," *Journal of Law, Economics and Organization*, 19: 1-23.
56. Yin Robert K. (1994) Case Study Research. New York: Palgrave Macmillan.
57. UNCTAD report. (2015). Globalization, Interdependence and Development. Retrieved October 1, 2015 from <http://unctad.org/en/Pages/Home.aspx>
58. OECD. Synthesis report. (2013). INTERCONNECTED ECONOMIES: BENEFITING FROM GLOBAL VALUE CHAINS. Retrieved October 1, 2015 from <http://www.oecd.org/>
59. American Petroleum Institute (2014) Committee Information. Retrieved September 8, 2015 from <http://www.api.org/Publications-Standards-and-Statistics/Publications/API-Redistributor-ContactList>



APPENDIX 1