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GAZPROM ON THE NEW EU ENERGY MARKET

Master's Thesis

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Tartu 2012

I have written the Master's thesis independently.

All works and major viewpoints of the other authors, data from other sources of literature and elsewhere used for writing this paper have been referenced.

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ABSTRACT

In recent years the dependence of the Russian economy on gas exports has risen. In this situation the main Russian aim is to maintain Gazprom's position in the EU and keep revenue flow from the gas exports. But, changing situation on the energy market makes some people think that the Russian company is losing its position in Europe. It is half true, because for now Europeans can not live without Russian gas and Gazprom cannot exist without European contracts. The future European alternatives for the gas supply and also alternatives for gas itself forced Gazprom to become more flexible in the terms of long-term contracts. First concessions made by Gazprom will work only temporary and in the long-term the company needs to revalidate its whole export policy. In the frames of the plan focused on the new markets outside the EU, Gazprom in the nearest future will start exporting gas to Japan and South Korea but their demand, particularly for Russian gas, is low. The main customer - China is dictating its own rules. It only proves that Gazprom can possess less demanding customers and when it meets a player stronger and with alternatives for energy sources, the company is not flexible enough to be competitive. If Europe develops alternatives for Russian gas, it will be able to dictate the rules like China. If Gazprom finds new customers outside the EU, it will be able to redirect its export paths. Now both are in a "gas deadlock". Until the EU is not changing its energy mix, Gazprom is going to retain its position on the European market but the financial benefits attached to it will be smaller.

Acknowledgements

I would not have completed this thesis without the support of many people. I would like to thank my supervisor Prof. Viatcheslav Morozov for his guidance. I need to thank my interviewees who significantly contributed to my work and were willing to share their knowledge: Boris Medvedev, Isabel Murray, Howard Rogers, Kevin Rosner, Jerzy Rutkowski, Shadurskiy Andrey, René Snijder and Jonathan Stern. I owe my deepest gratitude to Marcin Wnuk who inspired me before the work on the thesis and explained the mechanisms of the European energy market. My girlfriend, Kinga Załuska deserves a special mention, as she was my biggest supporter in the moments of weakness. Finally, I am indebted in so many ways to my parents Iwona and Ireneusz Pietrzak. Without their support for my education I will not be where I am now.

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List of abbreviations

BCM billion cubic meters

EU European Union

EUR euro currency

LNG liquefied natural gas

MMBTU one million British thermal units

RUB Russian ruble

TCM trillion cubic meters

USD United States dollar

1. Introduction

1.1. Background and significance of the work

Exports of natural gas to Europe carried out by Gazprom in 2010 reached a level of 148,1 bcm¹ and according to the official data by Gazprom Export, the summarized volume of gas sold in 2011 was 150 bcm,² 5-8 bcm less than it was expected.³ Compare to the previous years volumes are smaller, but higher prices are recompensing lower export rates and Gazprom beats new records in profits and revenues for 2011.⁴ There are other suppliers and different energy sources for the European countries, but nowadays Gazprom plays a major role, even if it is mainly a natural gas supplier and gas in the EU is responsible for 24,5% of the energy mix.⁵

Changes in the structure of the EU energy balance (increased share of renewable energy, supply of LNG, shale gas), diversification of directions and sources of supply in the near future will have an impact on Gazprom presence in Europe. Gazprom in line with the national energy strategy⁶ has taken steps towards diversification of its natural gas export routes. Due to the dynamic development of economic conditions and steady increase in consumption of natural gas, Asian countries may become new consumers of Russian gas in the near future. However, until then, Gazprom is too much dependent on

¹ Gazprom. 2011. Databook. Available at: <http://www.gazprom.com/investors/reports/2011>, accessed February 12, 2012.

² Delivery statistics. Available at: <http://www.gazpromexport.ru/en/statistics/>, accessed April 5, 2012.

³ Александров, В. 2011. Прорубая новые окна [Hacking new windows]. *Нефть России*, 10/2011, 66.

⁴ Мазнева, Е. 2012. «Газпром» получил историческую выручку и прибыль [“Gazprom” got historical revenue and profit]. *Ведомости*, 02.02.

⁵ Eurostat Press Office. 2011. Share of renewables in the EU27 energy supply almost doubled between 1999 and 2009. Available at: <http://europa.eu/rapid/pressReleasesAction.do?reference=STAT/11/53>, accessed February 12, 2012.

⁶ “Energy Strategy of Russia for the period up to 2030” was approved by the Government of Russian Federation on 13 November 2009, No. 1715-p. This document replaces previous “Energy Strategy of Russia to 2020”.

the European market to resign from exports to the Union. Countries of the EU-15 have well diversified structure of the gas imports by three main supply routes from Russia (31%), Norway (30%), Algeria (18%) and additional LNG imports from Libya, Nigeria, Qatar, Oman, Australia, the United Arab Emirates and Egypt. Situation in the EU-12 is significantly different. There, the dominating role belongs to Russia, which covers in overall 85% of the gas demand.⁷ To maintain this position, Gazprom needs to face new challenges and costs.

In 2011, there were significant changes in the European and global energy markets. They shape the new EU market, which is different than 5-10 years ago. Also Gazprom undertakes actions that were not considered as adequate in the past. Rising world oil prices, brought increased profits to the Russian business, but caused customer dissatisfaction while gas prices were rising adequately to the price of oil. In the last year, there was initiated the second phase of European contracts renegotiations with Gazprom, which aim to reduce the price of imported gas. In addition to the countries which, in accordance to the rules of long-term contracts have the right to renegotiate the price, there are countries that are demanding lower prices for political reasons (Belarus and Ukraine). However, despite the public opinion, number of those political motivated cases is decreasing. Some countries have successfully negotiated discounts (Germany, France, Austria, Italy, Slovakia),⁸ others are in negotiations (Poland),⁹ and there are countries which could not achieve an agreement and did not renew contracts (Turkey).¹⁰

When the largest customer of Gazprom - Europe - seeks to limit imports of natural gas from the East, the main task is to diversify the Russian export directions. One of the

⁷ Łoskot-Strachota, A. 2009. *Ekspansja Gazpromu w UE – kooperacja czy dominacja* [Gazprom's expansion in the EU - cooperation or domination]. Ośrodek Studiów Wschodnich, 6.

⁸ Paszyc, E. 2012. *Gazprom obniża ceny dla wybranych klientów* [Gazprom lowers prices for selected customers]. Ośrodek Studiów Wschodnich. Available at: <http://www.osw.waw.pl/pl/publikacje/tydzien-na-wschodzie/2012-01-25/gazprom-obniza-ceny-dla-wybranych-klientow>, accessed March 30, 2012.

⁹ Булавкина, М. 2011. Польша подает в суд на «Газпром» [Poland takes "Gazprom" to the court]. *РБК daily*, 07.11.

¹⁰ РБК daily. 2011. Турция аннулировала контракт с «Газпромом» [Turkey has canceled a contract with "Gazprom"]. *РБК daily*, 03.10.

major new client may be Asia, where demand for energy resources increases with a rapid economic development and growing fears of nuclear power plants. Expansion in the Asian markets, particularly in China, Japan and South Korea, is dictated more by economic than political reasons. The Japanese after the accident in Fukushima I Nuclear Power Plant are open to foreign energy investments.¹¹ The situation in China is more complicated due to unclear rules of cooperation with foreign investors and relatively closed energy market. The negotiations on Russian gas supplies to China are under way for a long time, the final price and volume of supply are still a subject of negotiation.¹²

Since 2009, Gazprom's export strategy due to changes in the global gas market undergoes reconstruction, which justifies the relevance of the research and its significance. In the short-term, Gazprom is determined to defend the old position and maximize benefits. But in the long-term, position of the Russian monopoly regarding European customers will change. The nature and depth of changes in contracts for supplies is going to be dependent not only on economic conditions but also on the European Commission's determination to implement new regulations, liberalizing the internal gas market in Europe. The other important factors determining the change in Gazprom position (as a key supplier of gas to Europe) can be weakening the position of the company on the internal market and problems with finding new customers outside the EU.

1.2. Research aims and questions

This Master's thesis is focused on changing Gazprom's export policy towards European energy market, including the factors inside and outside the EU. Moreover, the current position of the Russian monopoly on the European market is examined and how failures

¹¹ Gazprom. 2011. *Alexander Ananikov and Manabu Miyagawa emphasize high potential of Russian-Japanese cooperation*. Press Release, 30.11. Available at: <http://gazprom.com/press/news/2011/november/article124592/>, accessed February 25, 2012.

¹² Булавкина, М. 2011. Китай «Газпрому» не светит [China is not shining for "Gazprom"]. *РБК daily*, 30.12.

in different regions and sectors influence Gazprom's actions. The thesis calls into question validity of Gazprom's strategy of intimidating the EU by possibility of "redirection" of gas export routes from the West to the East, to the new customers.¹³ The most important point is interdisciplinary approach to the research, however with focus on the economical reasoning rather than political issues. Politics play still an important role in Gazprom's decision-making process, but the changes on the energy markets and various problems concerning Gazprom activities push political motivation aside and strengthen more and more economical driven solutions.

The aim of the Master's thesis is to examine and evaluate costs and benefits of the current Gazprom's activities in the European energy sector and global markets in the framework of rational choice theory. The study tries to find the answer to the main research question: Is Gazprom's position on the European gas market weakening? The additional questions are: What factors weaken the company? Is changing situation on Russian gas market influencing external policy? What kind of problems Gazprom meet while maintaining its market position in the EU? How important role play external actors in the relationship between Gazprom and the EU?

1.3. Methodology

On account of interdisciplinary topic and Gazprom as such being a very individual entity the research that I am conducting intends to be characterized by openness, flexibility and wide context sensitivity.¹⁴ Moreover, because of the analyzed actors, research is less generalized and is aimed at insight about the phenomenon such as Gazprom on the European energy market.

¹³ Куликов, С. 2011. "Газпром" пугает Евросоюз Китаем ["Gazprom" scares the EU with China]. *Независимая*, 06.06.

¹⁴ Mason, J. 2006. *Mixing methods in a qualitatively driven way*. Sage Publications, 21-22.

My Master's thesis uses two types of qualitative data: structured interviews and analysis of documents with focus on importance of the context. Observation and analysis of documents are a source of information for the process-tracing method used in this thesis. Process-tracing method helps in understanding casual mechanisms which guides Gazprom in choosing its future actions, and assess predictions with alternative hypotheses.¹⁵ The main values of process-tracing are advantageous in case of such phenomena like Gazprom, because they enable casual inferences, show alternative casual paths for solutions and narrow down the list of potential causes.¹⁶

Thanks to process-tracing method I can include different costs and benefits which Gazprom meets on each level of its investments. Each decision has its costs like losing clients and leverage in the international negotiations, bearing bigger investments, making concessions in the agreements and more. In overall it comes to the financial costs. But each decision despite costs have its benefits for the company like expansion of the export portfolio, guarantee of the income balance from different sources, expansion to other branches of the industry. Everything contributes to the development of the company and its worldwide position.

In case of Gazprom, there are multiple interactions which affect its decision-making process. The process-tracing allows to include all those interactions in a casual chain and analyze their impact on the final outcome.¹⁷ "In cases that consist of a sequence of events, some of which foreclose certain paths in the development and steer to outcome in other directions".¹⁸ The process-tracing can assess how possible outcomes of a case were influenced by the key decision points made in the described path.

¹⁵ George, A. L., Bennett, A. 2005. *Case Studies and Theory Development in the Social Sciences*. The MIT Press, 217–220.

¹⁶ *Ibid.*, 204–210.

¹⁷ Hall, P. A. 2000. *Aligning Ontology and Methodology in Comparative Politics*. Paper presented at the Annual Meeting of the American Political Science Association in Washington, D.C. September, 14, 18.

¹⁸ George, A. L., Bennett, A. 2005. *Case Studies and Theory Development in the Social Sciences*. The MIT Press, 212.

Despite that researches widely use process-tracing within a general rational choice framework to create narratives,¹⁹ it includes serious limitations. Process-tracing is weakening when there is not enough of sufficient data on key steps in alternative paths.²⁰ It is a relevant problem for the thesis, according to the fact that materials are biased and data is not consistent like it is mentioned in the literature review section. Likewise, in the process-tracing, each step in the chain is necessary and implies that in the absence of it, the next should not occur. This forces to make a counterfactual assumption which is very difficult to verify. The thesis requires also a quantitative research via statistical techniques based on annual reports, outlooks and policy papers which support my empirical investigation.

Interviewing is a supplement of the analysis of Gazprom actions based on the widely accessible literature. Interviews were conducted by phone or Skype. For easy analysis and comparison of experts' views, conducted conversations were standardized open-ended interviews.

1.4. Literature Review

The range of the literature, which has been published by accredited scholars and researchers, relevant to Gazprom presence on the European energy market is wide. Many ideas have been established on the topic, each of them having their strengths and weaknesses. Among various publications it is hard to identify unbiased and valid studies. Publications written in the Central and Eastern Europe appeals to emotion, one-sided examples, rhetorically - charged language and sometimes are losing analytical approach to the topic. It is due to diversified spectrum of prejudices towards Russian foreign policy. Character of the narrative is victimizing countries who are dependent on Russian gas. It leads to many areas of controversy in the literature, mainly related to the

¹⁹ Bates, R. H. 1998. *Analytic narratives*. Princeton University Press, 252.

²⁰ George, A. L., Bennett, A. 2005. *Case Studies and Theory Development in the Social Sciences*. The MIT Press, 222-224.

politicization of the monopoly, validity of the investments and grounds of the export policies.

Examining the publications, helped me in defining a gap in the academic research and thus assist in providing a research question. Each publication that I have read was focused on the interacting players in narrowed area. Researchers constructing the narratives and looking for the answers about future scenarios for Russian monopoly in Europe, are not including external actors having, in my opinion, impact on the Gazprom next moves in the EU. There is no deep research compiling main problems of Gazprom both in and outside Europe, which gathered together, lead to new consequences for the European customers and Gazprom itself.

My thesis is placed in the area of research established by several books and publications on the Russian gas issues. The research starts from the market, where Gazprom has the biggest control and ends on the emerging markets, where Gazprom tries to establish its share in gas supplies. First of all, I focus on the internal Russian gas market and I highlight the potential of other non-Gazprom producers, especially Novatek like it does James Henderson in “Non-Gazprom Gas Producers in Russia” (Oxford University Press, 2010) and Organization for Economic Co-operation and Development in “Reforming Russian Infrastructure for Competition and Efficiency” (OECD Publishing, 2001) in the chapter “Regulation of Natural Monopoly Parts of the Natural Gas Industry”. The same part also tries to find connection between internal and external market mechanisms, how did Simon Pirani et al in “Russian and CIS Gas Markets and Their Impact on Europe” (Oxford University Press, 2009).

Secondly, I put the attention to the current situation on the European energy market, ongoing changes in the long-term contracts, new pipelines and their impact on the whole market. Transit is an important issue, which is well described by Katja Yafimava in “The Transit Dimension of EU Energy Security: Russian gas transit across Ukraine, Belarus and Moldova” (Oxford University Press, 2011) and Ernest Wyciszkievicz in

“Geopolitics of Pipelines. Energy Interdependence and Inter-State Relations in the Post-Soviet Area” (Polski Instytut Spraw Międzynarodowych, 2009).

My thesis ends with the prediction of new potential clients and current problems of entering the Asian market. Those problems have been underlined by Jonathan Stern in “Natural Gas in Asia The Challenges of Growth in China, India, Japan, and Korea” (Oxford University Press, 2008) and in the chapter “Energy Implications of China's Growth” of the book by Fred Bergsten “China's Rise: Challenges and Opportunities” (Peter G. Peterson Institute for International Economics, 2008).

Books and publications about Gazprom in compare to the daily newspapers, sometimes lose their relevance in several months due to the new developments which change the previous plans of the monopoly. A good example is the book by Jonathan P. Stern “The Future of Russian Gas and Gazprom” (Oxford University Press, USA, December 29, 2005). Despite deep analysis, author's scenarios are not valid due to the significant changes on the energy market brought by the Ukrainian gas disputes, Third Energy Package and changes in the domestic Russian market. Similar problem with validity over the time have other publications like excellent “Gazprom and the Russian State” by Kevin Rosner (GMB Publishing, May 25, 2006) or “Natural Gas and Geopolitics: From 1970 to 2040” by David G. Victor, Amy M. Jaffe and Mark H. Hayes (Cambridge University Press, October 14, 2008).

News are less biased than other publications, even published by recognizable institutions. Personal conviction decides if the publication is biased or not. Personally, an example for me is the book by Goldman, M. I “Petrostate: Putin, Power, and the New Russia” (Oxford University Press, USA, January 20, 2010). The author approached to the topic mostly from the political perspective, forgetting about the economic perspective. Some of the Central and Eastern Europe scholars give similar biased illustration e.g. “Gazprom’s expansion in the EU: co-operation or domination?” by Łoskot-Strachota, A (Center for Eastern Studies, Warsaw, October, 2009).

The best source of the up-to-date information for my thesis are commercial press releases by related to the topic companies, newspapers and their Internet websites, mainly: business daily Vedomosti, Kommersant, daily newspaper Nezavisimaya Gazeta but also international business newspapers Financial Times and The Wall Street Journal. Relatively objective and used in my thesis are information agency Russian International News Agency, RosBusinessConsulting and international Reuters. Background information is delivered by publications of international and national energy organizations, policy institutions, think tanks and university research centers.

2. Key issues influencing Gazprom's actions

2.1. Academic frames for the research

2.1.1. Rational choice theory

The theory underlying this thesis is rational choice theory which uses narrowed definition of "rationality", meaning that individuals are balancing between costs and benefits to achieve the maximum results and advantage over the others.²¹ In case of Gazprom all its actions are aimed at increasing the income and at outrunning the competition on the energy market. Rational choice theory is a framework for understanding, testing and formally modeling social and economic behavior.²² It is the dominant paradigm in microeconomics. The theory derived from social psychology, political science and economics.

The rational choice theory has been adapted for the analysis of the political and later on economic and social science from neoclassical economics. It is a deductive theory, based on assumptions of formal logic. Its aim is to interpret the results of collective action by reference to the motivation of actions of individuals. Intentions and beliefs of individuals are treated as the cause of the results. Behavior of individuals in accordance with the intentions reinforce the theory, while the empirically observed cases of non compliance with theory, guidelines question of the scientific character of the theory.

The first main contributor of the rational choice theory is the American sociologist James Samuel Coleman. In his book "Foundations of Social Theory", he has made

²¹ Friedman, M. 1953. *Essays in Positive Economics*. University of Chicago Press, 16-19.

²² Blume, I., Easley, D. 2008. *The New Palgrave Dictionary of Economics*. Second Edition. Palgrave Macmillan "rationality".

major contributions towards form of theorizing in sociology, based on rational choice. Second researcher is Israeli-American psychologist Daniel Kahneman who received American Psychological Association's Award for his work challenging human rationality and decision-making. Third and the last from the major contributors to the theory is Satoshi Kanazawa who presents different application of the rational choice theory in various academic fields.

The rational choice theory aims to explain and predict social and economic behavior of a group of people. We have different participants such as group of people. Actors have different choices, each of which is an alternative to another one. Each choice is attributed by a particular consequence. We assess each member's preferences for the alternative choices.²³ In the final stage we try to assess preferences - whether they are positive or negative. The main problem of this theory is measuring the preferences of each member of the group and to relate them to different conflicts.²⁴

In my thesis I have two interacting actors, Gazprom and the EU. The problem is that they are complex subjects and we need to assume that each of them is acting as a single entity. Gazprom despite its complexity is controlled by a small group of top-level decision-makers (see chapter "Behind the decision-making process"). The EU regardless of various national interests of each Member State is a player with a policy binding European countries to play for share benefits. An example can be Poland which has in its national interest not to cut down the CO² emission, while there are no alternative energy sources for the country right now, but it is against EU's 20 20 20 program towards a low-carbon economy. Another example can be a tight cooperation between France and Gazprom in the South Stream project which is not supported by the EU. Despite that, EU tries to bring all the interest together and speak with one voice. Each actor has a choice of alternatives available.

²³ Lindenberg, S. 1992. The Method of Decreasing Abstraction. In James S. Coleman and Thomas J. Fararo (eds). *Rational Choice Theory Advocacy and Critique*. Sage Publications, 9-15.

²⁴ Green, S. L. 2002. *Rational Choice Theory: An Overview*. Baylor University Faculty Development Seminar on Rational Choice Theory, 4-11.

Gazprom has a possibility to create more flexible contracts, price rules for the current customers, cooperate with the EU and by this maintain its position on the European market; do not undergo the UE demands and find another clients; enter to the new branches of industry such as electric power industry and bypass European policy limiting Gazprom's development in the gas market. On the contrary, the UE can diversify own energy sources where are three main alternatives renewables, nuclear power and shale gas; find another gas import routes what is connected with switching the network to LNG; provide deeper dialog with Gazprom and find a consensus, what requires a mutual engagement.

Under this paradigm, individual actors are always looking and choosing only those options that will lead them to achieve and maximize expected, and therefore not certain results.²⁵ "The winning goal is the one that discriminates best [...] by creating the largest difference between the alternatives."²⁶ Basically, the theory delivers a perspective of selfish individuals, such as Gazprom or the EU focusing on self-interest. Interests of individuals and their beliefs determine the choice of course of action. The units are able to create strategies, and rational calculation. They analyze the situation and think about possible choices. The irrational actions in relations to benefits against losses, according to the rational choice theory, are only a deviation of the actual rationality.²⁷

The main problem of rational choice theory is the relationship between actors' preferences, which may be divergent or convergent. Most of the situations described in the theory affect such rational individual action, which can worsen the overall situation, therefore result in a conflict.

²⁵ Green, S. L. 2002. *Rational Choice Theory: An Overview*. Baylor University Faculty Development Seminar on Rational Choice Theory, 7.

²⁶ Lindenberg, S. 1992. The Method of Decreasing Abstraction. In James S. Coleman and Thomas J. Fararo (eds). *Rational Choice Theory Advocacy and Critique*. Sage Publications, 12.

²⁷ Coleman J. 1990. *Foundations of social theory*. Belknap Press of Harvard University Press, 505-506.

2.1.2. Limitations of the theory

The main argument behind choosing the rational choice theory for my thesis was its main assumption that individuals by making calculation of benefits and costs rationally undertake decisions which lead to the maximized profits. Gazprom like any other international enterprise plans to benefit from the sales on the lowest expense, to increase the revenues. An important factor in the expansion and future planning is to be ahead of the competition. In case of Gazprom it means to be competitive with other gas suppliers and new developing alternatives for Russian gas. Despite this match, I am aware that some of the postulations of the rational choice theory must be narrowed for my thesis and adapted to the research.

First of all, the motivation behind actions of individuals is hard to establish. In the past Gazprom was criticized as a tool of Russian foreign policy. It means that main motivations for the company were political benefits in the countries importing Russian gas. The company was mixing financial motivation with political aims. Currently, we can see a shift towards decisions based more on making the money rather than strengthening political influence abroad. However, there are still countries where politics play an important role in the gas price disputes, but this group is limited mostly to Belarus and Ukraine.

Second challenge is assessing Gazprom's preferences for the alternative choices. This problem derives from the issue of the motivation mentioned above. It is again balancing between political and economic options. In case of Gazprom it is hard to distinguish its preferences. However, there are situations where preferences of the company are clearly stated by the officials and are adopted by the public opinion, but it does not mean that are not criticized. Construction of the Nord Stream can be an example. Gazprom preferred to build an expensive gas pipeline under the Baltic Sea to allow direct gas

flow to the Western Europe, rather than decide on expanding the land network and reach an agreement with the transit countries.

Third and the last weakness of using rational choice theory to Gazprom's model economic behavior are alternative choices and their consequences. In the theory an individual decides which path to go after the calculation of costs and benefits connected with different choices. The individual looks for the alternative that is best, brings more profits and on the same time as less expenses as possible compare to other possibilities. Gazprom cannot easily choose between the alternatives because of the structure of its business and the way how it is managed by the Russian Government.

Without a governmental influence the Nord Stream construction would probably be replaced by the cheaper alternative on the land. The problems are predetermined decisions, which do not include alternatives for the future projects. The alternatives exist but in the frames of the already forced projects. An example can be the alternative route of the South Stream planned through Bulgaria or Romania. It is a limited flexibility. Other alternatives for Gazprom actions are rather forced by the current situation on the market but not by the wide portfolio of possible choices. An example of LNG production as an alternative for conventional gas transmitted by pipelines, is a choice dictated by new markets. Entering new alternative markets for Europe is dictated by casual expansion of the international holding. Similar conclusions come from the alternative investments in other branches of industry.

Despite those three major problems with using rational choice theory in my work it helps in addressing issues concerning Gazprom's motivation and preferences. Together with used process-tracing method assists in calculation of the costs and benefits, even if they are predetermined by the Russian Government but continuously changing because of the characteristics of the new EU energy market.

2.2. Short summary of the last 10 years

In the last 10 years the biggest successes forming the current position of the company were retrieval of the control package of shares for the Russian Government, liberalization of the remaining shares, business activity diversification, initiation of the Nord Stream gas pipeline construction, planning from the scratch the South-Stream project, rising internal gas prices, switch to the European prices in the Post-Soviet countries and prolonging most of the long-term contracts with "take or pay" rule including a price formula based on the oil products.

Even with support of the Russian authorities, Gazprom has not transformed into an international energy holding. Outside Europe, Gazprom is failing in its new investments and shares exchanges with international oil and gas companies. After many years of negotiation with Italian Eni, Gazprom signed a partnership agreement for an oil field Elephant located in onshore in Libya's Murzuq Basin.²⁸ But, because of the civil war in Libya, Russians has not started any works there. Another, earlier example is rejection of American companies in frames of the Shtokman project in the central part of Russian sector of the Barents Sea.²⁹ Instead of that, Gazprom established a consortium with French Total and Norwegian Statoil on the basis of the operation contracts.³⁰

Another way of strengthening the company and making it a global class energy holding should be a LNG developing program. The results of it are inconsistent. In 2006 Gazprom, Shell, Mitsui and Mitsubishi signed the agreement on Gazprom's joining Sakhalin Energy as the main shareholder and Gazprom acquired a 51% in Sakhalin

²⁸ Gazprom. 2011. *Gazprom acquires a stake in Libya's Elephant oil project from Eni*. Press Release, 16.02. Available at: <http://gazprom.com/press/news/2011/february/article109011/>, accessed February 25, 2012.

²⁹ РБК daily. 2006. Стоп-лист по Штокману [Stop-list for Shtokman]. *РБК daily*, 10.10.

³⁰ Мазнева, Е. 2007. Штокман наконец поделили [Shtokman finally divided]. *Ведомости*, № 203 (1977), 26.10.

Energy.³¹ In the beginning of 2009 the first Russian LNG plant was authorized in Sakhalin.³² Initially, project was focused on potential gas exports to China, other Asia-Pacific countries and North America. Currently, China and North America the most potential clients are less interested in contracts with Gazprom, thus is rising a problem of the market for Russian LNG. Problems with entering into LNG production signaled by the Sakhalin project, affected another investment, the Shtokman gas and condensate field. The progress in preparing the final investment decision was prolonged and date of starting the production is postponed until 2017.³³

Gazprom's plans to diversify its business activities work out, but only inside Russia. In 2005 Gazprom bought Sibneft, therefore has increased production of oil of its subsidiary Gazprom Neft.³⁴ Thanks to that, subsidiary became the fifth largest oil producing and refining company in Russia and is responsible for about 1/4 of the Gazprom group income (USD 4277 million).³⁵ Gazprom succeed also in establishing another subsidiary Gazprom Energoholding, with initial power of 36,5 GW and plans to increase it up to 50 GW.³⁶ Gazprom's marketing strategy wants to develop the power generation business internationally, however it is not as easy as inside Russia.

The next years can be the toughest in the Gazprom history, challenging the management and questioning the way how monopoly is making a business with its partners. The

³¹ Gazprom. 2006. *Gazprom, Shell, Mitsui and Mitsubishi sign protocol on Sakhalin-2 project*. Press Release, 21.12. Available at: <http://gazprom.com/press/news/2006/december/article63684/>, accessed February 25, 2012.

³² Gazprom. 2009. *First Russian LNG plant launched in Sakhalin*. Press Release, 18.02. Available at: <http://gazprom.com/press/news/2009/february/article64569/>, accessed February 25, 2012.

³³ Gazprom. 2009. *Investment decision preparation on Shtokman Phase 1 meets schedules*. Press Release, 12.10. Available at: <http://gazprom.com/press/news/2010/october/article104034/>, accessed February 25, 2012.

³⁴ Gazprom Neft. 2005. *Sibneft Acquisition By Gazprom Completed*. Press Release, 21.10. Available at: <http://www.gazprom-neft.com/press-center/news/3271/>, accessed February 25, 2012.

³⁵ Gazprom Neft. 2010. *Annual Report*, 55. Available at: <http://ir.gazprom-neft.com/reports/annual-reports/>, accessed February 25, 2012.

³⁶ Федоров, Д. В. 2011. Speech presented at the press conference "The strategy of Gazprom in the power industry", Moscow, 22.06.

failures in the previous years combined with tensions between Moscow and Brussels can have a negative impact on the condition of Gazprom business. From the own observations, importance of many of the internal problems will grow in accordance to the conflict with the EU. Just to name a few key issues: limitation of extraction possibilities, lack of spendings control, loss of the most profitable part of the internal market in favor of Novatek and postponed development of the LNG projects. The value of those failures would have been much smaller if the situation on the European energy market would look like 5 or 10 years ago. In the current situation Gazprom cannot loose Russian customers or construct its business only on conventional types of gas.

2.3. Gazprom as a unitary actor

Before the analysis of the key elements influencing further steps of Gazprom on the EU energy market it is considerable to know who stands for decision-making process in the company and who is responsible the most for the future arrangements. The management structure of Gazprom looks like any other corporation scheme including board of directors, management committee, department heads and structural units. Without regard to any exception.

In the one of the world's largest energy companies Russian state owns a 50.002% controlling stake.³⁷ It means that final decisions are examined by the Russian authorities. This is a generalization, because the real power over the company owns Vladimir Putin, who together with trusted colleagues chooses the objectives and establishes a policy for Gazprom. It is a bold statement, which is supported by many scholars³⁸ and energy experts³⁹ but is not officially validated. In the Russian press well

³⁷ Gazprom shares. Available at: <http://gazprom.com/investors/stock/>, accessed February 20, 2012.

³⁸ Åslund, A. 2009. *The Russian Economy: More than Just Energy?* Peterson Institute for International Economics, 5-6.

³⁹ Nemtsov, B., Milov, V. 2008. *Putin and Gazprom, An independent expert report.* European Energy Review, 4-5.

known is a phrase saying that Gazprom is a Putin's personal project.⁴⁰ He analyzes in detail development of the company, taking directly a part in strategic decisions, and by this leaving Gazprom's management a technical role of implementing his ideas. Once more, this assertion has not any official evidences, however there are indirect proofs that indicate his involvement in decision-making process.

Firstly, one year after when Vladimir Putin became the 2nd President of Russia in May 7, 2000, he ousted Rem Vyakhirev a chief executive of Gazprom and replaced him with one of his cabinet allies from Saint Petersburg - Alexei Miller.⁴¹ They met in 90's when both were working in Committee for External Relations of the Saint Petersburg Mayor's Office. After placing Miller on the position of Chairman of the Management Committee, Putin took a part in choosing top managers for the company, like he did in public administration.

Secondly, Putin is actively participating in important company's events. Publicly, he is not only commenting Gazprom's decisions but is also often demanding specific moves. At the beginning of Miller's post in Gazprom, Putin requested from him a return of controlling stake for the state. He was controlling return of Gazprom's shares by administrative measures.⁴² In 2003 Putin forbade management to exclude from Gazprom a company responsible for gas transport, thus he stopped reforms of Russian gas market.⁴³

Thirdly and finally, during international visits, Putin often is acting as a Gazprom's lobbyist. He is personally trying to encourage authorities of other countries to export plans of Gazprom. The most recent and well known case is lobbying for the Nord

⁴⁰ Мартовалиева, Ю. 2010. Это личный проект Путина [It is a Putin's privet project]. *Новая газета*, № 102, 15.09.

⁴¹ Goldman, M. I. 2008. *Petrostate, Putin, Power, and the New Russia*. Oxford University Press, 104-105.

⁴² Nemtsov, B., Milov, V. 2008. *Putin and Gazprom, An independent expert report*. European Energy Review, 11-12.

⁴³ Ibid., 24-25.

Stream project and using his close ties with former Chancellor of Germany - Gerhard Schröder, to achieve new contract. A few weeks before Schröder stepped down from his post, the German government guaranteed EUR 1 billion loan for the Nord Stream project, which later on was never used.⁴⁴ After stepping down as chancellor, Schröder accepted nomination for the Chairman of the Shareholders' Committee of the Nord Stream AG.⁴⁵

Without any doubt Putin does not make all the decisions on his own. He has a decisive vote, but needs an assistance of others. To the closest persons, who participate in Gazprom's decision-making process belong Dimitri Medvedev former Chairman of Gazprom's board of directors, Alexey Miller Deputy Chairman of the Gazprom Board of Directors, Igor Sechin Deputy Prime Minister of Russia and Viktor Zubkov First Deputy Prime Minister of the Russian Federation and Chairman of the Gazprom Board of Directors. Those are the most trusted persons in Putin's surrounding, therefore they have own contribution in Gazprom's policy making. Selection of those persons was dictated by mutual history in Saint-Petersburg administration and further cooperation on various governmental levels.

Gazprom could be seen as an instrument for achieving geopolitical goals, a base for Russian economy development and source of money for political sphere. It seems that those characteristics are no longer fully valid. Changing rapidly situation on the global energy markets, rising importance of the EU's energy policy and complicated introduction to the new Asian markets will force Putin and his colleagues to review their uncompromising position in dealing with customers for Russian gas.

⁴⁴ Buck, T., Benoit, B. 2006. EU to probe German gas pipeline guarantee. *Financial Times*, 08.05.

⁴⁵ Washington Post. 2005. Gerhard Schroeder's Sellout. *Washington Post*, 13.12.

2.4. The complications that the company faces

2.4.1. Loosing domestic market in favor of Novatek

The analysis of the events which foreclose certain paths in the Gazprom development I decided to start from the Russian internal market of natural gas. The decision is driven by structure of the thesis, starting from the areas where Gazprom has the biggest potential control over the market, to the areas where the company meets competition and thus the business operation is more difficult. It is also an example giving an introduction to foundations of Gazprom struggling for maintaining its position as a gas monopoly. Having problems in keeping up with competition in its own "backyard" shows the weakness of the Russian monopoly. If it loses position on its own market which has created, how it can be successful on the foreign markets?

Table 1. Gazprom sales volume on the Russian market (bcm)

	2003	2004	2005	2006	2007	2008	2009	2010
Gas consumption	426,8	436,0	443,9	458,4	467,4	460,6	*	*
Sold gas volumes	309,1	305,7	307,0	316,3	307,0	292,2	273,5	277,3
Market share	86%	84%	82%	82%	77%	74%	*	*

* to be announced

Source: Gazprom. 2011. Databook. Available at: <http://www.gazprom.com/investors/reports/2011>, accessed February 21, 2012.

Market share of so called independent gas suppliers in Russia was insignificant, making Gazprom a monopoly on a wide scale. Since 2003, the company market share has started to decrease from 86% to 74% in 2008 by official Gazprom data. According to Russian Federal State Unitary Enterprise "Central Dispatching Department of Fuel and Energy Complex" in the period from January to November 2011 Gazprom market share

was 75,87%.⁴⁶ Worth noting is a fact, that the share in the gas extraction is lower because Gazprom has several sale contracts for gas extracted by LUKOIL and subsidiaries like Purgaz and Northgaz.

The year 2011 brought grounds to conclude that the tendency in decreasing market share of Gazprom will continue and the main reason for it, is growing in power the biggest privately owned Russian gas company Novatek. However, the competitor has undertaken first steps towards increasing its role on the market in 2009, when the company started to take over Gazprom's clients from the profitable electric power industry. The first one was a five-year contract for gas supply to the First Generation Company of the Wholesale Electricity Market (OGK-1) executed by Inter RAO, an electricity export and import Russian monopoly.⁴⁷ The gas price is the same as in Gazprom expired agreement, regulated by the Russian Federal Tariff Service. In 2011 Novatek used again another expiring agreement between Gazprom and the Third Generation Company of the Wholesale Electricity Market (OGK-3). Under the agreement Novatek from 2012 is going to supply 60% (2,4 bcm) of gas annually in three power stations of OGK-3. Rest of the demand will still be filled by Gazprom.⁴⁸ Inter RAO in the near future plans to increase the purchases of gas from Novatek up to 15 bcm, while the company's demand for gas in 2010 was amounted to 22,5 bcm.⁴⁹

There are regions in Russia where Novatek is pulling out Gazprom from the market. An example is a contract for gas supply in Chelyabinsk Oblast. The demand in the Oblast is estimated for 16,5 bcm of gas annually. Main supplier is Gazprom covering 11,5 bcm of

⁴⁶ Сафонова, Е. 2011. «Газпром» срывает план по добыче [“Gazprom” plucks the plan for mining]. *РБК daily*, 05.12.

⁴⁷ ОГК-1. 2009. *Акционеры ОГК-1 приняли ряд важных решений, связанных с финансированием приоритетных инвестиционных проектов и поставками газа на ГРЭС* [Shareholders of OGK-1 have taken several important decisions relating to the financing of priority investment projects and supply of gas to the power plant]. Press release, 24.12. Available at: <http://www.ogk1.com/?ch=new&id=1579>, accessed February 21, 2012.

⁴⁸ Исполатов, С. 2011. «Интер РАО» наращивает долю закупок газа у НОВАТЭКа [“Inter RAO” is increasing share of purchases of gas from Novatek]. *РБК daily*, 21.10.

⁴⁹ Мазнева, Е. 2011. Борьба за клиента [Fight for a client]. *Ведомости*, 21.10.

the demand, Novatek is delivering 5 bcm including 1,1 bcm sold by Novatek's subsidiary Yamalgasresource-Chelyabinsk.⁵⁰ To full-fill new obligations Novatek bought 50% shares of SIBUR Holdings from Gazprombank increasing by this its supply capacities.⁵¹ Novatek will diminish Gazprom share market in the region, down to 45%. It is important to note that in 2012 are ending several contracts for gas supply to industrial customers, that Gazprom signed in 2007. It opens new opportunities for Novatek, to take over Gazprom clients and increase its role on the market.

Regardless of diminishing role of Gazprom on the internal market, Novatek have not been an aggressive counterpart for the Russian monopoly. It has changed in the end of 2010 when Novatek has closed a USD 867 million deal to acquire a 51% stake in Sibneftegaz gas producer from Gazprombank.⁵² Purchase of the company contributed to the increase in extraction capacity from 5.8% to 7.9%. According to Russian analysts, such a high rate of output growth will be inhibited in 2012.⁵³

The perspectives for the future growth of Novatek's market share in Russia are mixed. In 2007 Leonid Mikhelson a chief executive officer presented a strategy of growing extraction capabilities of Novatek until 2015. The plan was aiming at extraction of 45 bcm of gas annually in 2010, and up to 65 bcm per year until 2015.⁵⁴ High expectations of the CEO have not been met due to decreasing output of two Novatek's Vostochno-

⁵⁰ Novatek. 2010. *Правительство Челябинской области и «НОВАТЭК» подписали соглашение о сотрудничестве* [The Government of the Chelyabinsk region and "Novatek" signed a cooperation agreement]. Press release, 15.11. Available at: http://www.novatek.ru/ru/press/releases/archive/index.php?id_4=149&afrom_4=01.01.2010&ato_4=31.12.2010, accessed February 21, 2012.

⁵¹ Gazprombank. 2010. *Изменение в составе акционеров ОАО "СИБУР Холдинг"* [Changes in the shareholders group of "Sibur Holding"]. Press release, 23.12. Available at: <http://www.gazprombank.ru/press/news/84336/>, accessed February 21, 2012.

⁵² Мазнева, Е. «Новатэк» купил «Сибнефтегаз» ["Novatek" bought "Sibneftegaz"]. *Ведомости*, 17.12.

⁵³ Сафонова, Е. 2012. Рекордная добыча НОВАТЭКа [Record production of Novatek]. *РБК daily*, 13.01.

⁵⁴ Novatek. 2007. *ОАО «НОВАТЭК» представил стратегию развития до 2015 года* [OAO "Novatek" presented the Development Strategy to 2015]. Press release, 15.11. Available at: http://www.novatek.ru/ru/press/releases/archive/index.php?id_4=345&afrom_4=01.01.2007&ato_4=31.12.2007, accessed February 22, 2012.

Tambeiskoye and Khancheyskoye gas fields. Instead of 15,8 bcm and 5 bcm of gas respectively, in 2010 production from those fields reached 9,7 bcm and 3 bcm respectively.⁵⁵ Aftermath, Novatek extracted 37,8 bcm of gas in lieu of planned 45 bcm.⁵⁶

The decreasing trend of extraction in those fields continued in 2011, what pushed Novatek to increase production power in the major gas field Yurkharovskoye from 24,7 bcm to 32,3 bcm.⁵⁷ Additionally, Novatek bought controlling stake of Sibneftegaz to increase extraction capabilities. In overall, in 2011 Novatek achieved new production record by extracting 53,5 bcm of gas and was closer to achieve the goal of producing 65 bcm per year in 2015.⁵⁸

The company, according to the newly adopted plan up to 2020 is going to double natural gas production to the level of 110 bcm per year, triple the production of gas condensate and crude oil up to 13 million tonnes, and allocate the investment program of about RUR 1 trillion.⁵⁹ It requires from Novatek not only an increase of production in current gas fields but also development of the new ones. Novatek will increase mining power in newly acquired gas fields like Termokarstovoye. But the most important for Novatek is the Yamal LNG Project which calls for the construction of a 15 million ton LNG per annum.⁶⁰ Both projects raise questions. The Termokarstovoye field is currently in the early stages of development and contains 24,6 bcm of proved natural gas

⁵⁵ Novatek. 2011. Annual Review 2010, 22-23. Available at: <http://www.novatek.ru/en/investors/reviews/>, accessed March 30, 2012.

⁵⁶ Novatek Production. Available at: <http://www.novatek.ru/ru/business/production/>, accessed February 22, 2012.

⁵⁷ Yurkharovskoye. Available at: <http://www.novatek.ru/ru/business/producing/yurkharovskoye/>, accessed February 22, 2012.

⁵⁸ Novatek Production. Available at: <http://www.novatek.ru/ru/business/production/>, accessed February 22, 2012.

⁵⁹ Novatek. 2011. «НОВАТЭК» представил стратегию развития [“Novatek” presented a strategy for development]. Press release, 09.12. Available at: http://www.novatek.ru/ru/press/releases/archive/index.php?id_4=461&from_4=01.01.2011&to_4=31.12.2011, accessed February 22, 2012.

⁶⁰ Евпланов, А. 2011. Выгодное меньшинство [Favorable minority]. *Российская газета*, 17.11.

reserves,⁶¹ what makes it a one of the smallest gas fields in Novatek portfolio. The South –Tambeyskoye field where the Yamal LNG Project is under development has proved 417,7 bcm of natural gas reserves.⁶²

Straightening the position of Novatek would be not possible without help of the state. In 2011 Novatek was granted four new license areas for exploration and production: Salmanovskiy, Geofizicheskiy, North-Obskiy and East-Tambeyskiy.⁶³ All the licenses are adjacent to the Yamal LNG project, which is also an example of governmental support for the Novatek on the cost of Gazprom. It is questionable if the Russian Government wants to create a competitor for the state monopoly.

To realize how the state is supporting privately owned company over the state monopoly, it can be used a comparison of two projects of strategic significance for both companies. First one is the Shtokman gas and condensate field developed by Gazprom. Second one is the Yamal LNG Project a 80% subsidiary of Novatek. Both projects will become a resource base for liquefied natural gas supplies to the domestic and foreign markets. Despite the fact that the Shtokman field is already technically revised and Gazprom initiated expansion of the project to the Arctic shelf,⁶⁴ the Russian authorities assist Novatek's project and ignore Shtokman's shareholders calls for governmental concessions.

Initially the South-Tambeyskoye field on which the Yamal LNG Project is based, was owned by the state. Until March 2011, Novatek acquired 51% of the shares in Yamal

⁶¹ Termokarstovoye. Available at: <http://www.novatek.ru/ru/business/projects/termokarstovoye/>, accessed February 22, 2012.

⁶² South –Tambeyskoye Field. Available at: <http://www.novatek.ru/ru/business/projects/southtambey/>, accessed February 22, 2012.

⁶³ Gydan Peninsula License Areas. Available at: <http://www.novatek.ru/ru/business/other/gydan/>, accessed February 22, 2012.

⁶⁴ Мельников, К. 2011. От шельфа не уйдешь [You will not escape from the shelf]. *Коммерсантъ*, №198 (4739), 21.10.

LNG and in September 2011, it increased the shareholding to 100%.⁶⁵ In overall Novatek paid USD 1,64 billion for the complete control over the project. However, in October 2011 Novatek found a strategic partner French Total to whom it sold 20% stake in Yamal LNG.⁶⁶

In 2010 Gazprom Export signed with Yamal LNG preliminary agreement for LNG exports.⁶⁷ Important is the fact, that this agreement made an exception from the rule of controlling all gas exports by Gazprom. Novatek under the agreement can export gas according to its own terms without Gazprom initiation. The state monopoly guaranteed only for itself possibility of purchase 50% of extracted volumes in Yamal LNG. The unprecedented concessions from the authorities for the benefit of Novatek came in the second half of 2010, when Prime Minister Vladimir Putin presented a plan of LNG development in the South-Tambeyskoye field and its importance for the Russian gas industry.⁶⁸ The plan suggests opening LNG plant in Yamal Peninsula with overall capacity of 15 tones per year until 2018.

The most important for Novatek in the plan is relief from severance tax for Yamal LNG Project for a period of 12 years or until the extraction will come to 250 bcm of gas. Putin also guaranteed state help in financing and building infrastructure in amount of USD 10 billion, while cost of the Yamal LNG project is estimated for USD 30 billion.⁶⁹

⁶⁵ Novatek. 2011. *ОАО «НОВАТЭК» увеличил до 100% пакет акций ОАО «Ямал СПГ»* [NOVATEK increases stake in Yamal LNG to 100%]. Press release, 30.09. Available at: http://www.novatek.ru/ru/press/releases/archive/index.php?id_4=431&afrom_4=01.01.2011&ato_4=31.12.2011&from_4=2, accessed February 26, 2012.

⁶⁶ Novatek. 2011. *«НОВАТЭК» выбрал стратегического партнера проекта «Ямал СПГ»* [NOVATEK selects strategic partner for Yamal LNG Project]. Press release, 02.03. Available at: http://www.novatek.ru/ru/press/releases/archive/index.php?id_4=166&afrom_4=01.01.2011&ato_4=31.12.2011&from_4=6, accessed February 26, 2012.

⁶⁷ Novatek. 2010. *«Газпром» и «НОВАТЭК» подписали соглашение о сотрудничестве в производстве сжиженного природного газа на полуострове Ямал* [Gazprom and NOVATEK sign cooperation agreement for LNG production in Yamal peninsula]. Press release, 18.06. Available at: http://www.novatek.ru/en/press/releases/archive/index.php?id_4=36&afrom_4=01.01.2010&ato_4=31.12.2010&from_4=3, accessed February 26, 2012.

⁶⁸ Назарова, Ю. 2010. Ставка на СПГ [Stake on LNG]. *РБК daily*, 12.10.

⁶⁹ Ibid.

Shareholders of Shtokman Development AG demand similar concessions for their project, but the state authorities are ignoring the calls.

Table 2. Shtokman and Yamal LNG technical characteristics

	Shtokman	Yamal LNG
yearly production of gas	23,7 bcm	25 bcm
start of LNG production	2017	2016
full extraction capabilities	2017-2018	2018
approximate costs	up to USD 50 billion	up to USD 30 billion
total reserves	3,8 tcm	1,2 tcm
possible expansion	up to 90 bcm/year	up to 40 bcm/year

Source: Compiled by the author on the basis of official data from Gazprom and Novatek.

From the point of view of the European market, competition between Novatek and Gazprom even only on the internal market, has its outcomes on the external level. Processes which occur in different spheres of the Russian market, undermine the unique status of the Russian state-owned monopoly both inside Russia and in Europe. Attention should be paid primarily to redistribution of Gazprom's properties, Novatek development and mostly on reduction of monopoly's privileges. All together could bring weakening the company's dominance in the internal and external market.

Gazprom's privileges such as monopoly on export of all types of gas, reduced customs duties on export earnings, government program for a gradual increase in wholesale gas prices in Russia, together with full control over Russia's pipeline network have risen first questions in 2005-2008 when monopoly had a problem of keeping the right level of production, necessary to cover the demand of domestic consumers and the projected

increase in exports.⁷⁰ This resulted in the need to mobilize other gas producers to increase production and undermined the legitimacy of the privileges assigned exclusively to Gazprom. Despite a substantial change in the market conditions after 2008 a tendency of growth of gas production by Russia's independent producers persists.

Most of the Gazprom's costs related to the operations on the internal Russian market arise not from the monopoly management decisions but they are a result of the government policy in the energy sector. Until authorities were supporting state monopoly, costs were reduced, Gazprom could benefit from the support of the state, had a stable position on the internal market and focused mainly on the exports. Situation has been changed, governmental decisions still are favoring the monopoly but they are not making such big concessions like in the past.

First change in the Russian energy market that Gazprom will need to face and will bring losses to the company's earnings is a governmental plan for abolition of the “take or pay” rule in long-term contracts on the internal market. The greater flexibility in Gazprom's supplies to the Russian consumers becomes a necessity in light of growing competition of independent gas producers. Announcing the adjustment rules of domestic supply is a signal of weakening the monopoly. The governmental plan makes the Russian market more attractive for other producers. The costs of this plan for Gazprom are clear, bigger competition, what is something that monopoly has not face on the internal market.

Another costs and losses can bring questioned Gazprom's monopoly privileges in exclusive right to dispose of the Russian pipelines. Monopolist makes work of other companies difficult or impossible, limiting or not accepting third-party gas into its pipes and not allowing to connect new deposits to the network. In February 2011 Vladimir Putin criticized Gazprom for an abuse of monopoly rights to dispose of pipelines what

⁷⁰ Мартынов, К. 2008. Азиатский пленник [Asian prisoner]. *Business Guide (Нефть и газ)*. Приложение, №106 (3923), 24.06.

arise again the problem of access to the pipes.⁷¹ The latest draft filed to the government by Federal Antimonopoly Service in October 2011 requires from the monopolist to reveal information on spare transmission capacities, the registration applications for the transport of gas and connection to the network.⁷² The fact of taking this issue to the highest level can be read as a sign that the pressure on the company increases. Authority does not aim on the real weakening of the monopoly, but in the long-term, liberalization of the monopoly networks seems to be inevitable.

Under the new legislation Gazprom can lost also its biggest advantage - exclusive right on the exports. It brings the biggest benefits for the company and can change the position of the monopoly also in Europe. The first breach in the export monopoly of Gazprom has been brought by Novatek. But it is important to underline that it would be not possible without support of the state.

The biggest turnover in the relationship between the government and Gazprom was in November 2001 when there were introduced amendments in the Russian Tax Code which stipulate a gradual increase in the severance tax rate on natural gas from RUB 237 per 1000 cubic meters in 2011 to RUB 509, 582 and 622 per 1000 cubic meters in 2012, 2013 and 2014 accordingly.⁷³ These rates apply only to Gazprom. For other gas producers these rates are adjusted by discounts. It means for Gazprom RUB 440 billion of extra tax payments over the three years. Together with higher taxes comes also governmental plan on raising the gas price for all the Russian customers. In 2011 gas prices have risen by 15% to USD 120 per 1000 cubic meters and this trend is planned to

⁷¹ РИА Новости. 2011. Путин грозит "Газпрому" изменить закон при ограничении доступа к ГТС [Putin threatens to "Gazprom" by changing the law for restricting access to the GTS]. Available at: <http://ria.ru/economy/20110209/332345467.html>, accessed March 20, 2012.

⁷² Сафонова, Е. 2011. Проект постановления о равном доступе к ГТС снова буксует [The draft resolution on equal access to the GTS again stalled]. *РБК daily*, 03.10.

⁷³ Gazprom. 2012. *Severance tax to consume all revenues from domestic gas prices indexation*. Press release, 06.02. Available at: <http://www.gazprom.com/press/news/2012/february/article129127/>, accessed March 21, 2012.

continue until 2014.⁷⁴ However, the real beneficiaries of this plan are companies who had lower taxes, for whom the difference between new taxes and new gas prices is bigger than for Gazprom.

More flexible development of the competition on the increasingly profitable domestic gas market may be an evidence of the governmental plans to focus Gazprom activities on export at the expense of commitment to the company's internal market. It shows that all future costs and benefits for Gazprom depend solely on the decisions made in the Russian White House and Russian Ministry of Energy. When we talk about the alternatives for Gazprom actions on the internal market, we should rather think about the “one right” path for the company given by the state. The major shareholder, the government can make two different decisions, to keep most of the Gazprom’s privileges untouched or to give more freedom to the independent gas producers. Most of the current developments show that the state will still benefit from Gazprom itself, but will open new possibilities for the independent gas producers like Novatek and others.

2.4.2. European long-term contracts under pressure

The 2011 was a year of financial and export records for Gazprom. In its unaudited financial information for the first 9 months of 2011, Gazprom compares its results with the same period from last year. From January 1 till September 30 the company's overall sales were amounted for RUB 3,296,656 million, when in the same period in 2010 were calculated for RUB 2,495,557 million. Net sales of gas to Europe and Turkey increased to 114,8 bcm compared to 106,6 bcm of gas sold in the first 9 months of 2010.⁷⁵ According to an unofficial data, overall net sales to Europe and Turkey in 2011 achieved

⁷⁴ Куликов, С. 2012. Газ в России стал дороже, чем в США [Gas in Russia has become more expensive than in the U.S.]. *Независимая*, 16.01.

⁷⁵ Gazprom. 2012. *Gazprom reports its financial results under IFRS for nine months ended September 30, 2011*. Press release, 01.02. Available at: <http://gazprom.com/press/news/2012/february/article128793/>, accessed February 23, 2012.

a level of 155-158 bcm of gas, compared to 148,1 bcm in 2010.⁷⁶ High market gas prices resulted in overall record revenues forecasted at the level of USD 150 billion, it is a 27% increase over the previous year.⁷⁷ Such increase in financial and export results are dictated by the European customers. The summarized income from the sales to Post-Soviet countries and Russian customers was smaller than to the EU, however not significantly. The major customers of Gazprom in Europe were in 2011 Germany (34,02 bcm), Turkey (25,99 bcm), and Italy (17,08 bcm).⁷⁸

The final result of annual export sales to Europe depends on several factors. In 2011 the number of new factors increased, what caused a stir on the European market and gave additional profits for Gazprom. The gas price was rising all year. In the beginning of the year, Russia was exporting gas to Europe in price USD 300-350 per 1000 cubic meters of gas, in the third quarter prices rose up to USD 440-450, and in the end of the year were on the average level of USD 450-500.⁷⁹ It gives an average of USD 400 per 1000 cubic meters of gas. Since gas price has been regulated under the equation adjusted for petroleum products pricing, rising oil prices work upon gas prices.

The 2011 was for Gazprom profitable in terms of increase in gas sales on account of external factors. First one was tie-up of Libyan gas exports to Italy and other countries, because of the Civil War. Second one, resignation from nuclear energy in Germany and need of alternative energy source. Third one, the Fukushima Daiichi nuclear disaster in Japan and increased demand for LNG in the region. After reopening of supplies via Greenstream pipeline,⁸⁰ the importance of Libyan factor decreased but it showed how

⁷⁶ РИА Новости. 2012. Газпром в 2011 году ожидает роста выручки от продаж на 27% [Gazprom in 2011, expects growth in sales revenue by 27%]. *РИА Новости*, 01.02. Available at: <http://ria.ru/company/20120201/553776727.html>, accessed February 23, 2012.

⁷⁷ Ibid.

⁷⁸ Gazprom Export. Available at: <http://www.gazpromexport.com/statistics/>, accessed February 23, 2012.

⁷⁹ Яновский, А.. 2011. Speech presented at the The Sixth International Energy Week "Moscow Energy Dialogue", World Trade Center, 24-25.10.

⁸⁰ Eni. 2011. *NOC and Eni restart Greenstream pipeline*. Press release, 11.10. Available at: http://www.eni.com/en_IT/media/press-releases/2011/10/2011-10-13-greenstream-noc-eni-eng.shtml, accessed February 24, 2012.

fast Gazprom can react for the temporary gas shortages. Worth noting is a fact that Qatar completed its LNG infrastructure expansion and is not planning to build any more LNG facilities in the near future.⁸¹ It means for Gazprom a possibility of further expansion of its LNG projects trying to reach extraction capabilities of Qatar. The factor that will affect Gazprom sales in 2012 can be prolonged high price of oil, which will push European clients to further renegotiations of long-term contracts.

First group of renegotiations were held in 2009-2010 after crisis in gas demand in 2008 which brought price drop on the spot markets. The difference in prices between those on the spot market and those in Gazprom's long-term contracts was double. In two following years after the crisis in demand, Gazprom changed rules of gas supply for the main customers. Since then, E.ON Ruhrgas could buy 15% of its contracted gas volumes in a spot market price, however the company was forced to buy full volumes from contract on time.⁸² The price of remaining volumes was still linked to the exchange value of oil and included "take or pay" clause. Similar concessions received German WIEH, Romanian WIEE, Italian Eni and French GDF Suez. Despite those few concessions, Gazprom prolonged all long-term contracts in Europe.

In the last years Gazprom lost only two long-term contracts. First with Croatia, which resigned from a gas contract with Gazprom and has chosen supplies from Eni. However, the gas that Croatians are buying now is still Russian.⁸³ Second loss is a contract with Turkish Botas, which did not prolong its contract for 6 bcm of gas per year in the end of 2011.⁸⁴ Nevertheless, Turkey has still valid other agreements with Gazprom with overall imports volumes of minimum 18 bcm to maximum 24 bcm of gas annually. The countries which have not received any discounts and are not able to resign from gas

⁸¹ QATARGAS 4. Available at: <http://www.qatargas.com/Projects.aspx?id=78>, accessed February 24, 2012.

⁸² Fomichev, M.. 2010. E.On Ruhrgas presses Gazprom for discounts again. *PIA Новосту*, 20.08.

⁸³ Гриб, Н., Джоджуа, Т., Егикян, С. 2010. Хорватия отказалась от "Газпрома" [Croatia has refused to "Gazprom"]. *Коммерсантъ*, №234 (4534), 17.12.

⁸⁴ Притчин, С. А. 2011. Баку обошелся без "Газпрома" [Baku pass without "Gazprom"]. *Независимая*, 28.11.

imports from Russia have decided to settle their price disputes with Gazprom at arbitration in Stockholm. To those countries belongs Poland.

A Polish state-controlled oil and natural gas company Polish Petroleum and Gas Mining (PGNiG) has started negotiations with Gazprom in 2011 to renegotiate the pricing formula for Russian gas imported by Poland.⁸⁵ PGNiG insists on the restoration of measurement bases prior to November 2006, when the price of gas was calculated on the basis of spot market prices. The Russian side has agreed to reduce the price by increasing the volume of imports, but Poland unlikely would increase its imports. The talks did not succeed and PGNiG appeal to the International Arbitration at Stockholm. On February 20, 2012, was filed a lawsuit against Gazprom and Gazprom Export.⁸⁶ PGNiG's main argument is the fact that Russian gas can purchases with 15% discount from the German operators under contract with Gaz-System, which allows to use virtual reverse, reverse of fuel flow in the Yamal-Europe gas pipeline. In connection with the EU regulations, the Polish company is required to buy gas at the lowest price.⁸⁷ While Poland is seeking help in Arbitration, other countries are getting discounts.

At the beginning of 2012 Gazprom reviewed next agreements and 5 European partners got lowered gas prices: German Wingas, French GdF Suez, Austrian Ecomgas, Italian Singerie Italiana and Slovak SPP. They buy together about 35 bcm of Russian gas annually (quarter of Gazprom's exports to the region). Unofficially, the scale of the reduction is about 10-15%.⁸⁸ The list of the companies that demand reviewing their

⁸⁵ Булавкина, М. 2011. Польша обещает обратиться в арбитраж, если не получит скидку на российский газ [Poland promises to apply to the arbitration, if does not receive a discount on Russian gas]. *РБК daily*, 05.10.

⁸⁶ PGNiG. 2012. *PGNiG SA złożyło pozew przed Trybunałem Arbitrażowym* [PGNiG SA files suit with Arbitration Tribunal]. Press release, 21.02. Available at: <http://www.pgnig.pl/pgnig/com/8387?r%2Cnews%2CpageNumber=0&r%2Cnews%2CdateTo=&r%2Cnews%2CdateFrom=&r%2Cnews%2CnewsId=34175>, accessed February 26, 2012.

⁸⁷ Булавкина, М. 2011. Польша подает в суд на «Газпром» [Poland sends "Gazprom" to the court]. *РБК daily*, 07.11.

⁸⁸ Беликов, Д. 2012. "Газпром" провел новогоднюю распродажу ["Gazprom" made the New Year sale]. *Коммерсантъ*, №7 (4792), 18.01.

long-term contracts is growing, among others Czech Transgaz RWE, German E.ON Ruhrgas and Europe Shell from Netherlands.

On one side this flexibility in pricing policy has been forced by the situation on the EU gas market, but on other side Gazprom counts for additional benefits namely possibility of entering into national electricity power industry. Initial talks with German E.ON on cooperation in the electricity industry were not successful, but Gazprom found another partner ready to work on electricity generation in Europe - RWE.⁸⁹ The talks on the establishment of joint venture focussing on the electricity business in England, Germany and the Benelux countries were in progress from the middle of 2011. However, parties could not agree on a framework for cooperation and talks were ceased.⁹⁰

Table 3. Main long-term contracts of Gazprom

Company (Country)	Volumes of supply (bcm)	End of the contract
EconGas (Austria)	5	2027
GWH (Austria)	1,6	2027
PanRusgas (Hungary)	7	2015
E.ON Ruhrgas (Germany)	23,8*	2035
WIEH/Wingas (Germany)	31,3*	2031
DEPA (Greece)	3	2016
Eni (Italy)	19	2035
GDF Suez (France)	13*	2031
GasTerra (Netherlands)	4,3	2020
Wingas (Great Britain)	5	2028

⁸⁹ Исполатов, С. 2011. «Газпром энергохолдинг» собрался на зарубежные рынки [”Gazprom energy” going into foreign markets]. *РБК daily*, 10.10.

⁹⁰ Сафонова, Е. 2011. «Газпром» остался без энергоактивов [”Gazprom” was left without energy assets]. *РБК daily*, 23.12.

Company (Country)	Volumes of supply (bcm)	End of the contract
PGNiG (Poland)	11	2022
RWE (Czech Republic)	9	2035
SPP (Slovakia)	6,5	2028
Gasum (Finland)	6	2026
WIEE (Romania)	5	2030
Conef (Romania)	23,8*	2030
Overgas (Bulgaria)	2,5	2011
Botas (Turkey)	20	2022
Enerco (Turkey)	2,5	2022
Avrasya (Turkey)	1	2022
Bosphorus Gas (Turkey)	0,75	2022
Shell (Turkey)	0,25	2022
DONG (Denmark)	2*	2029

* Including newly contracted supplies from the Nord Stream pipeline.

Source: Compiled by the author on the basis of official data from Gazprom, Gazprom Export and national importers.

New approach to the European gas market and long-term contracts shows that Gazprom is aware that it must bear new costs to keep benefiting from the member states' demand on gas. Bigger flexibility in the agreements and discounts for Russian fuel could be a reasonable step before true diversification of energy sources become real in the EU. For Gazprom it is important to be ahead of coming changes and prepare its offer. However, the discounts only for chosen countries shows that the company is not ready to review whole system of the contracts.

It will not happen soon because the long-term contracts are a warranty for continues gas sales and are financially securing major infrastructure projects such as the Nord Stream and the South Stream. In the future, costs to be incurred by Gazprom to retain contracts in Europe are related to the changes of general operating principles that is the price of gas determined on the basis of 6 or 9 month average price of crude oil or petroleum products, “take or pay” clause requiring clients to receive the annually set volume of gas with a certain flexibility and penalties for unclaimed gas volumes. Under the EU pressure first rule that Gazprom had to dismissed was a destination clause, forbidding reexporting of Russian gas. Next one in a half way are renegotiated contracts. Other clauses have a high importance in Gazprom warranties so the company will unlikely resign from them in the nearest future.

The concessions made by Gazprom are largely forced by the reduced price competitiveness of Russian gas and associated significant decline in exports due to changes on the market. By deciding on modification of contracts, Gazprom is trying to control its share in the European gas market and guarantee sales of certain gas volumes each year. However, its action could influence other gas exporters and may contribute to increased competition in the EU gas sector. It should be emphasized that the changes made by Gazprom are not only dictated by the EU policy but also by market factors. Gazprom has been motivated also by the competitors who are faster and more flexibly responding to current changes in the gas market.⁹¹

Indirectly, the company's actions can be calculated also for increasing the profitability of Russia's priority infrastructure projects. In exchange for favorable terms of supply, Gazprom will probably seek to gain from its European partners the commitment to greater use of its Nord Stream gas pipeline, and possibly also in the longer term, the South Stream and cooperation in the electricity sector.

⁹¹ Hromadko, J.. 2012. E.ON, Statoil Agree To Adjust Gas Deal Terms. *The Wall Street Journal*, 03.14.

Russian company's activities are likely to affect the operation of other gas suppliers, including greater flexibility in the gas trade. It is difficult to determine whether it will contribute to the changes in long-term contracts, including the permanent disconnection of gas prices from oil prices and gradual resignation from the “take or pay” clause. However, it is likely that Gazprom's aim is to prevent the abandonment of long-term contracts and stop significant increase in the role of short-term gas market, which is contrary to the plans of the EU. Gazprom will bear another costs to maintain its position in Europe by gradually changing its contracts but the benefits coming from the European markets are worth it, especially when the company is not ready to resign from the most profitable customers such as the member states.

The alternative for the EU have not been worked out by Gazprom yet. Until then the company does not have any alternatives. It should make the further concessions requested by the member states. When Gazprom finds new markets for its gas will have more room for maneuver and alternatives for the actions in the EU. Then Gazprom can adjust to the European expectations, lose benefits but keep significant part of the market and increase revenues from supply to the new customers outside the EU. On other hand being eager, despite having new markets, can not agree with the European demands. This brings profits in the short-term, but in the long-term, after expiration of the contracts, will loose significant share in the European gas imports. The important role here are going to have Asian customers.

2.4.3. Maintaining position in Europe via Nord Stream

On November 8, 2011 president of Russia Dimitri Medvedev and prime ministers of Germany, France and Netherlands - Angela Merkel, François Fillon and Mark Rutte has opened first line of the Nord Stream gas pipeline, which is going to transport Russian gas to the Western Europe avoiding transit countries. The Russian authorities have

called the project a "Russian contribution to European energy security."⁹² The ceremony of opening was held in time of rising conflict in Russian - European talks about the EU's Third Energy Package and not granting the South Stream status of EU Priority Energy Project (Trans-European Network, TEN), which would have facilitated its financing and forbid access to the pipeline for other gas suppliers.⁹³

The idea of the pipeline under the Baltic Sea was initiated already in 90's, when the Soviet Union collapsed and together with this event Russians lost control (for a while) over the gas systems in the Post-Soviet countries, the most important in sovereign now Ukraine. Just after the collapse of the Soviet Union, Gazprom began new projects to diminish the independence of gas export thru Ukraine and find new markets. First projects initiated in the post soviet Russia were Yamal - Europe gas pipeline thru Belarus and Poland, delivering 30 bcm of Russian gas to Germany annually⁹⁴ and Blue Stream gas pipeline to Turkey with capacity of 16 bcm of gas per annum.⁹⁵ However, those projects where designed for the new contracts and a real diversification of the exports routes did not have place.

The first project that really diversifies Gazprom's export routes to Europe is the Nord Stream. Currently, contracted volumes of Russian gas delivered by Nord Stream are small and do not cover whole throughput power of the system. Agreements were sign

⁹² Соловьев, В., Лубмин, Д. 2011. После них хоть поток [After them at least stream]. *Коммерсантъ*, №209 (4750), 09.11.

⁹³ Гудков, А. 2011. Евросоюз отправил «священных коров» «Газпрома» в Китай [The EU sent a "holly cows" of "Gazprom" to China]. *Коммерсантъ*, 24.10.

⁹⁴ Yamal - Europe. Available at: <http://www.gazprom.ru/production/projects/pipelines/yamal-evropa/>, accessed February 17, 2012.

⁹⁵ Blue Stream. Available at: <http://www.gazprom.ru/production/projects/pipelines/blue-stream/>, accessed February 17, 2012.

with Wingas for 9 bcm,⁹⁶ E.ON Ruhrgas 4 bcm,⁹⁷ GDF Suez 2,5 bcm,⁹⁸ DONG 2 bcm of gas annually⁹⁹ and some not precise amount 100% owned UK subsidiary of Gazprom - Gazprom Marketing and Trading. Rest of the combined capacity is still free to use. When Gazprom will find potential buyers, transit over Ukraine can be cut by more than half of nowadays volumes making the Nord Stream a significant project in Gazprom's exports to Europe.

At first sight, transit prices are much lower by using the Nord Stream instead of Brotherhood pipeline. Boris Medvedev, Chief Adviser at the Economy Department of Ministry of Foreign Affairs of Russian Federation says that cost of transporting 1000 cubic meters of gas for 100 kilometers via new pipeline is estimated for EUR 1,6-1,7, or EUR 20 for 1000 cubic meters for whole route (personal communication, October 26, 2011). Russia pays a transit fee of USD 2,6-2,8 for sending 1000 cubic meters of gas for 100 kilometers through Ukrainian territory.¹⁰⁰ Nonetheless, the Nord Stream needs a connection to the existing pipeline grid in the Middle and Western Europe what will definitely increase the transporting prices. The Nord Stream pipeline will be connected to the European grid by OPAL and NEL pipelines projects which construction costs will influence final price of gas transportation by new routes. There are more hidden costs. Gazprom have not published costs of the 917 kilometer Gryazovets – Vyborg gas

⁹⁶ Wingas. 2005. *Gazexport and WINGAS agree upon first deliveries of natural gas through the Northern European Gas Pipeline*. Press release, 13.10. Available at: <http://www.wingas.de/160.html?&L=1>, accessed February 17, 2012

⁹⁷ Gazprom. 2006. *Gazprom and E. ON prolong the existing contracts and sign contract for gas supply via the NEGP*. Press release, 29.08. Available at: <http://www.gazprom.com/press/news/2006/august/article63576/>, accessed February 17, 2012.

⁹⁸ Gazprom. 2006. *Gazprom and Gaz de France extend contracts for russian natural gas supply to France up to 2030*. Press release, 19.12. Available at: <http://www.gazprom.com/press/news/2006/december/article63695/>, accessed February 17, 2012

⁹⁹ Nord Stream. 2009. *Nord Stream Gas Contracted by DONG Energy*. Press release, 13.09. Available at: <http://www.nord-stream.com/press-info/emagazine/nord-stream-gas-contracted-by-dong-energy-62/>, accessed February 17, 2012.

¹⁰⁰ РИА Новости. 2011. Ukraine to seek higher gas transit fees at Moscow talks. *PIA Новости*. 06.06. Available at: <http://en.rian.ru/russia/20110606/164467844.html>, accessed February 17, 2012.

pipeline¹⁰¹ which is responsible for securing gas deliveries to the Nord Stream. All costs which have been brought out are considering only spendings on constructing and maintaining of the two 1224 kilometer offshore pipelines under the Baltic Sea.

After opening the first line of the Nord Stream, export capacities of Russian gas grow by 15%, and with full operating Nord Stream, Gazprom is able to deliver more than 200 bcm of gas annually to Europe. Including new contracts, spare transmission capacity will be around 50-60 bcm of gas. Spare transmission capacity can be used for the benefit of the new type of spot market that the EU is lobbying in the Third Energy Package. Gazprom thru the Nord Stream, using free throughput power is able to deliver daily flexible volumes of gas. This possibility of adjusting daily supply, besides contracted volumes, falls within the scope of the European project of daily price flexibility on the spot market in the frames of contracts.

Positive prospects for the not contracted volumes of Russian gas result mainly from Germany's decision to give up the use of nuclear energy until 2022.¹⁰² In the near future more countries are likely to end generating atomic power, even these who rely on it more than Germany do, where nuclear power plants, produce 23% of its electricity.¹⁰³ An example of such country could be France, where nuclear energy is responsible for around 75,2% of energy mix.¹⁰⁴ Already now, French government is revising its energy strategy and in case of success of social party in 2012 elections, France will reduce number of its nuclear power plants giving a chance for new market for Russian gas.

¹⁰¹ Gryazovets - Vyborg. Available at: <http://www.gazprom.ru/production/projects/pipelines/gvg/>, accessed February 17, 2012.

¹⁰² Kwiatkowska-Drożdż, A. 2011. *Niemcy – prekursorzy czy panikarze? Jak RNF rezygnuje z energetyki jądrowej* [Forerunners or scaremongers? Germany to abandon nuclear power]. Ośrodek Studiów Wschodnich. Available at: <http://www.osw.waw.pl/pl/publikacje/komentarze-osw/2011-07-21/niemcy-prekursorzy-czy-panikarze-jak-rfn-rezygnuje-z-energetyki>, accessed March 30, 2012.

¹⁰³ Ibid.

¹⁰⁴ Energy handbook. French Alternative Energies and Atomic Energy Commission. 2010, 32. Available at: http://www.cea.fr/english_portal/library/other_publications, accessed March 30, 2012.

The balance between costs and benefits during the realization of the Nord Stream pipeline was questionable from the beginning of the project in 1999 when the technical capability and economical effectiveness of the pipe was confirmed by Gazprom.¹⁰⁵ From the Russian point of view the Nord Stream is a project which brings not only benefits for Gazprom but also for European customers. Originally, Gazprom should benefit from the additional transit capabilities which will help to satisfy extra demand for imported gas, reduce gas transmission costs and increase reliability of gas deliveries. Those profits will be achieved but not in full and by covering big costs.

The starting point is the reason of building the pipeline, which is more political than economical. The construction was motivated by bypassing transit countries and eliminate possible political risks like it was during the Ukrainian gas dispute. The alternatives for offshore pipeline were cheaper but by all means Gazprom wanted to avoid transit countries. The possibilities were two: second line of the Yamal–Europe pipeline through Belarus and Poland or the Amber pipeline through the Baltic states and Poland. None of two of them was better in the Gazprom view.¹⁰⁶

Claimed by Gazprom extra capabilities are a true benefit, which could be not profitable. Firstly, ongoing dispute with Ukraine, makes one think to move transited gas volumes thru Ukraine to the Nord Stream pipeline (and the rest to the planned South Stream).¹⁰⁷ It makes no extra earnings for Gazprom, since it is the same gas but send to Europe by other route. Secondly, Gazprom aim is to secure growing demand for natural gas in Europe. It requires still a transit thru Ukraine to make the transit capabilities really more powerful and European readiness to continue gas import from Russia. Additionally, how I wrote earlier in the chapter, after finishing the first linepipe, Gazprom still have not

¹⁰⁵ Nord Stream. Available at: <http://www.gazprom.ru/about/production/projects/pipelines/nord-stream/>, accessed March 21, 2012.

¹⁰⁶ Flak, A. 2008. *Nord Stream says overland route not an option*. Reuters, 04.14. Available at: <http://uk.reuters.com/article/2008/04/14/nordstream-idUKL1455560620080414>, accessed March 21, 2012.

¹⁰⁷ Ивженко, Т. 2011. "Северный поток" ударит по украинскому транзиту ["Nord Stream" will hit the Ukrainian transit]. *Независимая*, 10.11.

contracted whole annual supplies via the Nord Stream, what shows that Europe could not be ready for more gas from Russia.

Initial plan of reduction gas transmission costs each month becomes less and less valid. Gazprom in its own data presents price including only the offshore part of the project. It is not including pipeline necessary to connect the Nord Stream to the Russian gas fields and network costs of connecting the pipeline to the European gas system. It is true that transit offshore costs are lower by dismissing the midway compressor stations but the overall submarine maintenance costs have not been published yet. Moreover, the NEL pipeline which will be transmitting gas from the second linepipe of the Nord Stream became more expensive due to the possible rerouting and the final costs are still unknown.¹⁰⁸ Additional costs of the onshore pipelines for the Nord Stream need to be covered by the price of gas for the final customers, thus the argument of reduction gas transmission costs is half true and can not be proved before ending whole offshore and onshore parts of the project. Rising costs will cover the European suppliers or clients.

The Nord Stream brings definitely a political benefit for Gazprom, but the financial profits are questionable. The nearest future will show, how useful the pipeline will be and if it brings extra benefits. Everything depends on the decision of abandoning transit thru Ukraine or not? How fast the Nord Stream will be connected to the European network? If Gazprom is still sending gas thru Ukraine, will it find new customers for its oversupply in Europe?

2.4.4. Conflict in the Caspian Sea Region and the Southern Gas Corridor

The import of natural gas in Europe will grow in next years. In the situation when domestic production is constant, forecasts for the shale gas extraction are mixed and rising concerns about nuclear power plants are influencing governments to change the

¹⁰⁸ Шестернина, Е. 2012. *Европейцы потратят лишние миллионы на транспортировку российского газа* [Europeans will spend extra millions on Russian gas transportation]. РБК daily, 15.03.

structure of energy mix, the choice for alternative energy sources is currently strictly limited. Despite of fast growth in the usage of green energy, renewables accounted only for 9% of the EU-27 total gross inland energy consumption in 2009.¹⁰⁹ Significant role in the EU energy mix plays natural gas (24,5%).¹¹⁰ Usage of natural gas is going to grow, and as a cleanest fossil fuel it will be an inherent part of electricity production based on renewables.

Mostly because of the differences in infrastructure, each European country has particular possibilities of gas import diversification and covering its gas deficits. While the Western EU members can increase imports from Russia, Norway, Algeria and buy additional volumes of LNG, the Central and Eastern Europe members do not have for today such a choice. To change this unfavorable structure of gas imports, the EU wants to join the Southern Gas Corridor in the Caspian Sea Region. The choice of connecting to the new energy grid is not only motivated by political and economic conditions for new pipeline projects in this region but also by critical opposition to the another Gazprom's project, the South Stream gas pipeline. What is more important, compare to the Nord Stream, the European Commission towards the South Stream has chosen strategy of open confrontation with Gazprom.

The South Stream together with the Nord Stream has an aim of replacing gas transit thru Ukraine. The aim is contradictory to the idea, mentioned before in this paper, about spare transit volumes of Gazprom to Europe. On one side Gazprom's new pipelines are taking over gas volumes transited via Ukraine. On other side we pointed out Gazprom willingness to use spare capacity of the pipelines for spot market transactions. In the light of recent problems with filling the pipelines with Russian gas,¹¹¹ scenario of abandoning in whole transit thru Ukraine seems to be possible. But only when the South

¹⁰⁹ Eurostat Press Office. 2011. Share of renewables in the EU27 energy supply almost doubled between 1999 and 2009. Available at: <http://europa.eu/rapid/pressReleasesAction.do?reference=STAT/11/53>, accessed February 12, 2012.

¹¹⁰ Ibid.

¹¹¹ Мазнева, Е. 2011. «Газпром» не может заполнить все экспортные газопроводы [“Gazprom” can not fill all export pipelines]. *Ведомости*, 20.12.

Stream project will be realized, what is going to be problematic. The biggest problems that Gazprom needs to face are negative opinion of the EU, lack of Turkish interest in laying down pipeline in their part of Black Sea, Bulgarian disagreement about taking an active part in the project and rising costs of the project.

The route of the South Stream is planned mainly through the EU member states territory, what classifies the project under new rules of the Third Energy Package.¹¹² According to it, the network would be no longer controlled or majority-owned by Gazprom and third-party suppliers would receive an access to the gas transmission infrastructure. The exemption from those principles can be achieved by granting South Stream TEN status by the European Commission, but for now the EU refused to do so.¹¹³

Gazprom is seeking a support in achieving status TEN among its European allies. In the end of November 2011, during the visit of Prime Minister Vladimir Putin to France, Russia asked for help.¹¹⁴ France is willing to support the efforts to grant the South Stream status TEN because French energy group EDF is holding 15% stake in the project and it is important for them also to maintain the profitability of the investment. It is not only dictated by the joint investment but also by the tightening of the French - Russian cooperation in other spheres like construction of nuclear power plant in Kaliningrad, modernization of the Russian Eastern Energy System with Alstom or the possibility of increasing the stake in Novatek by Total. Gazprom needs to find another allies but with France and better than ever relations with Germany, achieving status TEN for South Stream is not sure but possible.

After the analysis, the competition for Southern Gas Corridor seems to be a struggle for a small profit. The competition between pipelines projects in the region is big but the

¹¹² South Stream. Available at: <http://www.gazprom.ru/production/projects/pipelines/south-stream/>, accessed February 18, 2012.

¹¹³ Гудков, А. 2011. Евросоюз отправил «священных коров» «Газпрома» в Китай [The EU sent a "holly cows" of "Gazprom" to China]. *Коммерсантъ*, 24.10.

¹¹⁴ Беликов, Д. 2011. "Южный поток" развернут на Париж ["South Stream" is deployed in Paris]. *Коммерсантъ*, №217/П (4758), 21.11.

volumes of gas are insufficient to say that it is a major project in the import diversification plan for the EU. The first project is the Nabucco, with annual capacity estimated at 30 bcm. The second project is the Trans Adriatic Pipeline, with smaller designed transmission power, 10-20 bcm. The third competitor in this region is ITGI Poseidon, which has the advantage over other projects in connection with the use of existing gas infrastructure in Georgia, Turkey and Greece. According to plans the annual capacity of ITGI pipeline is estimated at 17 bcm. In the 2011, the race for the deposits in Azerbaijan joined British Petroleum proposing the construction of the South-East gas pipeline, which will be based partly on the existing Turkish infrastructure, the planned capacity is about 10 bcm.¹¹⁵ Compare to the design capacity of the South Stream at 63 bcm, importance of the other projects look insignificant but their construction is much more economically reasonable, especially while the gas infrastructure in Turkey does not allow to pump from Shah-Deniz field in Azerbaijan more than 10 bcm of gas per year.¹¹⁶

Despite uncertain future of the Southern Gas Corridor, the EU tries to influence the region for its advantage. In September 2011, the EU Foreign Affairs Council agreed to give a negotiating mandate to the European Commission for negotiations with Azerbaijan and Turkmenistan on the Trans-Caspian Gas Pipeline.¹¹⁷ The Ministry of Foreign Affairs of the Russian Federation strongly criticized the decision, arguing that the EU should not take a part in the long standing negotiations about demarcation of the Caspian Sea. The answer for Russian critique came in the end of September with unannounced inspections of Gazprom's subsidiaries and joint ventures in the Central Europe, as well as contractors for the Russian monopoly and the transmission operators.¹¹⁸ It was a first so assertive action undertaken by the EU towards Gazprom

¹¹⁵ Мамедов, С. 2011. Nabucco нашли альтернативу [They found an alternative for Nabucco]. *Независимая*, 03.10.

¹¹⁶ Беликов, Д., Джоджуа, Т 2011. Британия вступила в гонку газопроводов [Britain entered the race gas]. *Коммерсантъ*, №181 (4722), 28.09.

¹¹⁷ Chaffin, J. 2011. EU set to act on Caspian pipeline plan. *Financial Times*, 11.09.

¹¹⁸ Булавкина, М., Гельтищев, П. 2011. В Европе обыскали «дочки» «Газпрома» [Subsidiaries of "Gazprom" in Europe ransacked]. *РБК daily*, 29.09.

monopoly. These inspections did not undermine the firm Russian position in the Caspian Sea Region. Turkmenistan and Azerbaijan despite strong Russian influence stay calm and are considering the best solutions for themselves.

In October 2011 Austrian President Heinz Fischer visited Azerbaijan and Turkmenistan to talk on the Nabucco project cooperation.¹¹⁹ Azerbaijani President Ilham Aliyev did not give unequivocal support to the Nabucco, due to the need of considering other proposals relating to transport Azerbaijani gas to Europe. While the Turkmen side expressed its willingness to cooperate. It was emphasized that the Turkmen gas will be sold at the border of the country at market prices. Progress in talks on gas supplies for the Nabucco, increases probability of the realization of the project. Moreover, openness of Azerbaijan and Turkmenistan to talks shows that Russia is losing its influence in the region.

Including all tensions between Gazprom and the EU authorities considering the South Stream, Russian monopoly met on the way to realizing the project additional obstacles, which create a question of the rationality of the pipeline construction. The main motivation for building the South Stream gas pipeline is avoiding gas transit thru Ukraine. The similar aim has the Nord Stream pipeline. However, in comparison to the pipeline under the Baltic Sea, the South Stream is more complex project including up to 4 lines and 900 kilometers offshore pipeline section. The gas will flow from Russia under the Black Sea to Bulgaria and then further to Austria and Italy. The pipeline design capacity is estimated for 63 bcm per annum.¹²⁰

The official start of the project was in 2007 when Gazprom and Italian Eni signed the Memorandum of Understanding for the South Stream project implementation, half year

¹¹⁹ Панфилова, В. 2011. Туркменский газ идет в Европу [Turkmen gas is going to Europe]. *Независимая*, 14.10.

¹²⁰ South Stream. Available at: <http://www.gazprom.ru/production/projects/pipelines/south-stream/>, accessed February 28, 2012.

later South Stream AG was registered in Switzerland.¹²¹ Initially Gazprom was considering 3 different routes from Bulgaria. One line thru Serbia and Hungary to Austria. Second line thru Serbia, Hungary, Slovenia to the north of Italy. Third line thru Greece, under the Adriatic Sea to the south part of Italy. The expansion of the network to Croatia and Macedonia was taken into consideration. Changes on the European market validated Gazprom high expectations towards development of the South Stream. Gazprom revised possibility of connection to Austria and the idea of a pipeline through Greece. Additionally, Croatia resigned in whole from Gazprom imports, so it is not going to participate in the project. The route of the South Stream is still changing, in the same way like the Nabucco gas pipeline.¹²² Current situation shows that from signing intergovernmental agreements to realization of the final project the way is long and everything can change.

The problems has started in 2009 after the Bulgarian parliamentary election. Newly elected centre-right government is more keen on cooperation with the U.S. than with Russia like it was in former centre-left coalition (which signed an intergovernmental agreements for the South Stream construction on January 18, 2008). In such circumstances Russians did preliminary talks with Romania to begin the onshore part of the pipeline on the Romanian coast, but in the end the idea was abandoned.¹²³

The one of two major problems of the South Stream remain the same. To change the approach of the EU in 2011 Russian delegation visited Brussels. The meaning of the visit was increased by the presence of Vladimir Putin. The Ministry of Energy of the Russian Federation prepared a special agreement between Russia and the EU to grant the South Stream a special status excluding it from the Third Energy Package. In May Minister of Energy Sergei Shmatko met European Commissioner of Energy Günther

¹²¹ Project history. Available at: <http://www.south-stream.info/index.php?id=13>, accessed February 28, 2012.

¹²² Никольский, И. 2012. Nabucco станет короче [Nabucco will be shorter]. *Коммерсантъ*, 20.02.

¹²³ Причин, С. А. 2010. СПГ вместо "Южного потока" [LNG instead of the "South Stream"]. *Независимая*, 01.11.

Oettinger who guaranteed a revision of proposed agreement.¹²⁴ However, after the meeting the EU became strongly engaged in the Trans-Caspian gas pipeline and refused to assist Gazprom in its endeavors.

The second main issue of the South Stream is receiving a permission for lying down the pipeline on the Turkish or Ukrainian parts of the Black Sea. The idea of negotiation with Ukraine was from the beginning not considered, because the whole project aims at decreasing the transit role of Ukraine and is against Ukrainian interest. At this point it is important to realize that full throughput power the South Stream will achieve in 2019, exactly in the same year when 10 years-old contract with Ukraine for gas transit expires.¹²⁵ Negotiations with Turkey were complicated, because Ankara was not interested in realization of the South Stream since the project threatened Turkish ambitions to become a gas hub for Europe. Gazprom received in 2010 a permission to conduct research in the Turkish part of the Black Sea and the final decision for construction has been made in the end of 2011.¹²⁶ To force Turkey to make a decision, Gazprom is considering a LNG shipment infrastructure instead of the pipeline to avoid necessary permissions, but this idea seems unlikely to be realized.

The investment plan is still under construction and similar to the Nord Stream, new pipeline requires connection to the existing Russian gas network. It brings additional costs to already expensive project. Boris Medvedev says that the South Stream will be connected to the Russian gas network by two pipelines Pochinki - Anapa and Sudzha - Anapa with summarized cost of EUR 12-13 billion (personal communication, October

¹²⁴ Gazprom. 2011. *В Брюсселе состоялась презентация проекта «Южный поток»* [In Brussels was held a presentation of the South Stream]. Press release, 25.05. Available at: <http://gazprom.ru/press/news/2011/may/article112773/>, accessed February 28, 2012.

¹²⁵ Naftogaz. 2009. Пресс – конференция Первого заместителя председателя правления НАК «Нафтогаз Украины» Игоря Диденко [Press - Conference of the First Deputy Chairman of the Board "Naftogaz of Ukraine" Ihor Didenko]. Press release, 21.01. Available at: <http://www.naftogaz.com/www/2/nakwebu.nsf/0/755F276D21DFC8ADC22575470040853C?OpenDocument&year=2009&month=01&nt=События&>, accessed February 28, 2012.

¹²⁶ Розова, А. 2011. Турция впустила "Южный поток" [Turkey let in the "South Stream"]. *Коммерсантъ*, 28.12.

26, 2011). The South Stream like the Nord Stream will not bring significant additional profits for Gazprom, because is replacing existing transit routes.

Similar like in the case of the Nord Stream, disputed from the beginning are benefits of the South Stream construction and costs that by some analysts far outweigh the profits. The South Stream due to its complexity contains much bigger catalogue of possible benefits and costs than the pipeline thru the Baltic Sea. The main aim of the South Stream is to diversify the Russian natural gas supply routes and by this enable theoretically abandoning full transit thru Ukraine. Gazprom in the South Stream presentations repeats also the same argument like in the Nord Stream information, that new pipeline will cover Europe's additional demand for natural gas.¹²⁷

Those two benefits are in common with the profits coming from the construction of the Nord Stream. Particular gains from the South Stream for Gazprom are better control over gas transport in the EU and maintenance of the the EU market, through investment in interconnectors, hubs and warehouses. By strong lobbying of the new project Gazprom wants to stop the implementation of other pipeline projects which would enable the supply of gas to the EU from alternative sources, other than Russia. Having two pipelines in the north and south of Europe with overall annual capacity of 118 billion cubic meters, and still an access to the Yamal-Europe and Brotherhood pipeline, Gazprom have a network able to satisfy European demand for years.

The very process of promoting the new pipeline is an important instrument of influence on national policies and the policy of the EU as a whole. Thanks to the agreements with the countries that participate also in Nabucco (Bulgaria, Romania, Austria, Hungary),¹²⁸ Russia has managed to raise doubts among politicians and world public opinion about whether implementation of the EU project is profitable. Russia managed to disturb the

¹²⁷ Brussels South Stream Presentation. Available at: <http://www.gazprom.com/about/production/projects/pipelines/south-stream/>, accessed March 22, 2012.

¹²⁸ Cooperating countries. Available at: <http://south-stream.info/index.php?id=4&L=1>, accessed March 22, 2012.

political consensus in the EU for the Nabucco. After the Nord Stream, the South Stream is a project by which Gazprom manages to increase the inconsistency of the EU policy on gas. This can obstruct the setting of the EU energy strategy and developing a single stance on Europe's gas relations with Russia. What of course, would benefit Gazprom and keep its strong position on the European gas market.

However, those undisputed benefits have high costs. The question arises whether and to what degree the actual financial condition of Gazprom can cover implementing so complex infrastructure projects and other investment plans in Europe? But not only the financial matters are important.

Firstly, the realization of the South Stream is unlikely to provide increasing exports of Russian gas to Europe because of the barrier in demand for conventional gas. In 2010, LNG share in the world gas trade grew by 22,6%.¹²⁹ The sharp decline in U.S. imports of LNG caused the unexpected increase in fuel offers in Europe and the decline in gas prices in other markets. Therefore, the likely scenario is that on EU gas market, supply exceeds demand, and competition between suppliers become stronger. Even if Russian prices would fall this is an open question whether Russia would be able to export a corresponding amount of gas due to the problem of extraction of gas from the new deposits.

The South Stream gas could be supplied by gas from Central Asia. But the launch of the pipeline Turkmenistan-Uzbekistan-Kazakhstan-China and developing Turkmenistan's gas cooperation with Iran are reducing the possibility of Gazprom access to the existing gas disposal of the Central Asian republics. This force Gazprom to seek other sources and make further unforeseen investments.

In summing up, Gazprom determination in lobbying expensive projects like the South Stream and the Nord Stream verify a thesis that in the balance of benefits the most

¹²⁹ BP Statistical Review of World Energy June 2011, 29. Available at: <http://www.bp.com/sectionbodycopy.do?categoryId=7500&contentId=7068481>, accessed March 22, 2012.

important is to solve the problem of Gazprom's export dependence on transit countries (Ukraine, Belarus and Poland), increase gas exports to Europe and ensure a stable position in the EU market. In the long-term both projects can face problems with oversupply together with competition from rising role of the LNG. The South Stream and the Nord Stream gas pipelines are an evidence that Gazprom is able to pay a high costs only to save its benefits in Europe. However, much cheaper alternative for both expensive projects was a dialog with the EU and transit countries about using the existing network to increase gas imports.

2.4.5. Transition from European to Asian markets

Tense relationship between Russia and the EU, motivates Gazprom to look for alternative markets. Changing the export routes from the West to the East requires new investments. The infrastructure for the gas extraction and transmission from the Russian Far East is not developed yet. Gazprom itself is not extracting gas in the region. Supplies of natural gas from the Far East are based on Sakhalin and Sakhalin II fields where Gazprom is one of the share holders in the integrated gas production programme. The LNG extraction in Sakhalin II, being a cornerstone for Russia's first LNG plant, is also not fully operated by Gazprom, but the company is the program execution coordinator (50% plus one share).¹³⁰ Despite shortcomings in the gas infrastructure development in Eastern Russia, export from the region to the Asian countries is one of the priorities in Gazprom foreign policy.¹³¹

Gazprom was and is still seeing Asia as an alternative for the European market. The approach to the expansion on the Asian markets was firstly treated as an argument in the EU - Russian disputes after the first conflict with Ukraine, when Russia cut off supplies

¹³⁰ Sakhalin-2. Available at: <http://www.gazprom.ru/production/projects/deposits/sakhalin2/>, accessed February 19, 2012.

¹³¹ Yanovsky, A.. 2011. Speech presented at the The Sixth International Energy Week "Moscow Energy Dialogue", World Trade Center, 24-25.10.

and in the number of European countries supplies were diminished as well. In the 2006 when it had a place, the issue of the dependance on the Russian gas has risen significantly. In answer for those concerns, Gazprom restarted gas negotiations with People's Republic of China.¹³² From perspective of the time, it was only a move to show Europe that Gazprom has alternative export possibilities, because since then negotiations with PRC are not completed.¹³³ We could say that Russian move helped in prolonging all long-term contracts in Europe, but it is known that those countries did not have alternatives for gas imports. When Gazprom lost its interest in PRC, Chinese have chosen cheaper Turkmen gas.¹³⁴ With introduction of the Third Energy Package Gazprom turns again its focus on Chinese market.

To transfer Russian gas to China, Gazprom is planing to construct the Altai gas pipeline system within the existing transmission network from Western Siberia to Novosibirsk with new extension to the Russian-Chinese border. The design capacity is 30 bcm of gas per year from the currently existing and planned fields in Yamal-Nenets Autonomous Okrug. On September 27, 2010 Gazprom and China National Petroleum Corporation signed the Extended Major Terms and Conditions of Natural Gas Supplies from Russia to China.¹³⁵ The document sets the volumes and the timeframe for export startup, the “take or pay” level, the supplies buildup period, the guaranteed payment level but is not including the base price. The negotiations are now focused on the disagreement in base price. For Gazprom it is important to establish such a price which would bring the same revenues like it does in Europe.

¹³² Altai. Available at: <http://www.gazprom.ru/production/projects/pipelines/altai/>, accessed February 19, 2012.

¹³³ Булавкина, М. 2011. Китай «Газпрому» не светит [China is not shining for “Gazprom”]. *РБК daily*, 30.12.

¹³⁴ Назарова, Ю. 2009. Азиатское взаимопонимание [Asian mutual understanding]. *РБК daily*, 26.06.

¹³⁵ Gazprom. 2010. «Газпром» и КННК подписали Расширенные основные условия поставок газа из России в Китай [“Gazprom” and CNPC signed an Expanded Conditions of gas supplies from Russia to China]. Press release, 27.09. Available at: <http://www.gazprom.ru/press/news/2010/september/article103480/>, accessed February 19, 2012.

The problem of establishing satisfying base price is not a major issue in the Russian - Chinese talks. Since the first agreement on export Russian gas to China in October 2004¹³⁶ and lack of Gazprom continuous interest in the new market, CNPC found other supply route, from Turkmenistan. In the situation when CNPC secured the gas supply, the Altai pipeline is not anymore a priority project but is considered as a possibility of additional supplies when the demand will grow. China does not need Russian gas, and without contracts with Gazprom will be able to meet the growing demand for gas.¹³⁷ Position of CNPC towards the Altai pipeline is not satisfying Gazprom, because Russia in this situation is losing an argument in the talks with Europe and the idea of price equality between the European and Asian clients becomes unjustified.

Taking into account potential gas exports to China, Gazprom started designing the Sakhalin – Khabarovsk – Vladivostok¹³⁸ gas transmission system which will deliver gas for the Altai pipeline in the future. Despite that the system will supply gas in the Khabarovsk and Primorsky Krai, Jewish Autonomous Oblast and Sakhalin Oblast main aim is to connect it to pipeline going to China. In February 2011 a 1188 kilometer section of the linepipe was welded and further development of the project depends on the agreement with China including base price for Russian gas.

Gazprom is looking further for new Asian customers and negotiations with South Korea and Japan are in progress. South Korean gas company Kogas is interested in importing 10-12 bcm of gas per year from Russia.¹³⁹ The main principle in the agreement between Gazprom and Kogas is, that Russian side will guarantee security of gas transit thru

¹³⁶ Gazprom. 2004. «Газпром» и КННК подписали Соглашение о сотрудничестве [“Gazprom” and CNPC signed a Cooperation Agreement]. Press release, 14.10. Available at: <http://www.gazprom.ru/press/news/2004/october/article55055/>, accessed February 19, 2012.

¹³⁷ Куликов, С. 2011. Россия сторговалась с Китаем [Russia bargained China]. *Независимая*, 12.10.

¹³⁸ Sakhalin - Khabarovsk - Vladivostok. Available at: <http://www.gazprom.ru/production/projects/pipelines/shvg/>, accessed February 19, 2012.

¹³⁹ Габуев, А., Беликов, Д. 2011. Северокорейский поток [North Korean stream]. *Коммерсантъ*, №224 (4765), 11.30.

Democratic People's Republic of Korea.¹⁴⁰ According to the initial plans Russian gas will flow to South Korea at the earliest in 2017. The 700 km section of pipeline running through the territory of North Korea will be build by Gazprom. For the construction of the pipeline on the territory of South Korea will be responsible Kogas. It was also agreed that North Korea will play only the role of the transit country. The cost of the project is estimated for more than USD 7 billion. According to Russian analysts, the biggest problem is not only the high construction price, but also the risks associated with transit, despite the political guarantees provided by the authorities of North Korea.¹⁴¹

Gazprom simultaneously is negotiating with another potential Asian client - Japan. In case of Japan we are not talking about constructing new pipelines like it is in Europe, China or South Korea, but about increasing development of LNG production in Sakhalin. Japan in 2010 was a major consumer of Sakhalin energy Investment Company importing 61,27% of shipments, what gives around 6 million tones of LNG.¹⁴² To increase Russian LNG export capabilities in July 2010, during regular meeting of the Joint Coordinating Committee was initiated joint elaboration of the investment rationale for the project aimed at building LNG plant.¹⁴³ However, in comparison to the European customers Japan is one of the smallest clients, but the biggest in terms of buying Russian LNG. The key issue is that Japan has well diverse LNG supply imports, and Russia needs to be competitive in price to win with other suppliers like Malaysia, Indonesia, Australia, Qatar and others.

¹⁴⁰ Булавкина, М. 2011. Сеул требует от Москвы дополнительных гарантий [Seul needs extra guarantees from Moscow]. *РБК daily*, 27.09.

¹⁴¹ Габуев, А., Беликов, Д. 2011. Северокорейский поток [North Korean stream]. *Коммерсантъ*, №224 (4765), 11.30.

¹⁴² Sakhalin Energy. 2010 Annual Review. Available at: http://www.sakhalinenergy.com/en/aboutus.asp?p=annual_reports, accessed February 20, 2012.

¹⁴³ Gazprom. 2010. *Об итогах заседания совместного координационного комитета между ОАО «Газпром» и Агентством природных ресурсов и энергетики Министерства экономики, торговли и промышленности Японии* [On meeting of Joint Coordinating Committee between Gazprom and Agency for Natural Resources and Energy under Japan's Ministry of Economy, Trade and Industry]. Press release, 08.07. Available at: <http://www.gazprom.ru/press/news/2010/july/article101292/>, accessed February 20, 2012.

Benefits from gas exports to Asian countries are much smaller than to the European countries. Gazprom lacks a functioning infrastructure for the transmission of gas into the East. Prices which can offer Asian contractors are much lower than the prices offered by European consumers. This reduces the likelihood of possible diversion of gas exports from Europe to Asia, even if Russia will build an infrastructure in the Far East. In this context, it is reasonable to ask how Asia can become an energy alternative - for Russia's relations with the West?

The biggest profit Gazprom can gain from gas contract with China. However, there are various limitations and costs of this new cooperation. One of the major obstacles for Gazprom's exports is low Chinese demand for Russian gas, which results both from the structure of the energy balance of the country, the discovery of new gas deposits and advancing energy cooperation with Central Asian countries, primarily Kazakhstan and Turkmenistan. An additional problem is the reluctance of China to pay the price comparable with those on the European market. Preliminary agreements on gas pipeline to China seemed to be aimed in large part to pressure the European consumers to sign long-term contracts. Another difficulty, the most valid in case of exports to Japan, is the absence of Gazprom on LNG market, which has grown strongly in Asia.

To enter the Asian market, meaning mainly China, Gazprom has to dramatically reduce the price of gas which will cause a stir on the European market, be more flexible on terms of cooperation with potential customers, not to push the exchange of assets of companies from strategic sectors and co-investment. In Russia, Gazprom has to incur significant costs associated with the development of natural resources in Eastern Siberia, made difficult by the extreme geological conditions.

3. Possible scenarios for the future Gazprom's position

3.1. The internal market impact on the European benefits

The Russian internal energy market is changing. The prices for Russian customers are going to be equated to the European level, share of the independent gas suppliers is increasing, Novatek receives governmental support for its projects and in the meantime Gazprom has started to lose contracts for industrial customers. It could affect Gazprom's export policy towards the EU, but both in short and long term, this situation on the Russian energy market will not significantly influence export policy to the EU.

Despite announcements we could argue that as Russia continues to implement its policy of increasing domestic gas prices, this will stimulate more energy efficient behavior by end users, both industrial and eventually residential. This would have more of an impact internally, to reduce the pace of growth in gas demand over time as opposed to changing Russian export policy to the EU. Export policy will be driven by the demand and pace of demand growth in traditional and emerging export markets. Even as domestic prices increase, Gazprom will see benefit in exporting as much natural gas as it can and maintaining or growing its market share in traditional and new export markets. Jerzy Rutkowski an energy expert in the Oil and Gas Department of Ministry of Economy of the Republic of Poland and former Counselor of the Economic Section of Embassy of the Republic of Poland in Moscow underlines here that the export market was always a top priority at the expense of domestic clients. On the contrary, due to the additional competition within the internal market, a sufficient number of extracted and delivered gas to customers in Russia, Gazprom will be able to fully focus on exports (personal communication, April 26, 2012).

A strategic question for the Russian gas industry is the extent to which Russia will rely on Gazprom and its mega projects, such as Yamal and Shtokman, to meet these future production needs or seen from another perspective, whether a larger share of output could come from multiple smaller fields and from other Russian gas producers such as Novatek and the Russian oil companies, who own some significant and under exploited gas assets. Isabel Murray the Russia Programme Manager at International Energy Agency says that the structure of the Russian gas market will change slowly out to 2035, with Gazprom's super-dominance of gas production, transportation and sales somewhat reduced over the projection period, but not dismantled. Even with relatively marginal improvements in access to transportation capacity and exchange based gas trading and through joint gas marketing ventures with Gazprom, non-Gazprom producers are expected to play an expanded supporting role in the overall Russian gas balance, displacing to a large extent the previous reliance on gas from Central Asia (personal communication, April 2, 2012). Boris Medvedev an energy expert in the Economic Cooperation Department of Ministry of Foreign Affairs of Russian Federation agrees with this opinion by pointing out close relationship between Novatek and Russian Government. It will bring new player on the market, but it is not equivalent to bigger competition and any impact on the export policies (personal communication, April 4, 2012).

Isabel Murray continues that reliance on a larger number of smaller projects with shorter lead times, alongside a greater focus on the efficiency of domestic gas use, would be a coherent strategic response by Gazprom to the uncertainties over the pace of gas demand growth in Europe. To a degree, this is already reflected in Gazprom's own plans: after Bovanenkovo gas field (with envisaged peak production of 110 bcm per year) and Shtokman (70 bcm to 90 bcm per year), output from the next largest fields envisaged for development drops from 30 bcm to 40 bcm per year (personal communication, April 2, 2012). With infrastructure in place on the Yamal peninsula, Gazprom will have more flexibility to pace its investment in additional smaller fields in response to market developments in Europe and elsewhere.

But this does not mean that we have seen the last of such mega projects. Demand from faster growing markets outside Europe is a more likely foundation for such major upstream developments: Gazprom is already considering marketing Shtokman LNG to India¹⁴⁴ and Novatek is seeking markets for Yamal LNG in the Asia-Pacific region.¹⁴⁵ Another generation of Russian mega projects, albeit on a smaller scale to Yamal and Shtokman, is likely to emerge in East Siberia for export to Asia. However, Gazprom now relies on the export to the EU and internal market.

Over the 1990s and early 2000s the key driver at Gazprom to push for higher domestic gas prices in Russia was to turn the domestic market from a loss-making to a break even or profit-making market. It is essential for Gazprom. René Snijder a fellow at Energy Delta Institute and former Manager Public Affairs at Gasunie draws attention to the simple relation, as long as internal prices are not as high as the European, main business focus is on the exports. Rising prices for Russians will give Gazprom more flexibility in talks with the European customers (personal communication, April 4, 2012).

Nowadays, the company is no longer losing money on the domestic market, it continues to call for higher prices, and this is in line with the Russian Government's plans to have export parity pricing by 2015. Already for non-residential consumers, domestic Russian gas prices are on par or higher than European spot prices and higher than U.S. industrial prices.¹⁴⁶ Howard V. Rogers a Director of Natural Gas Research Programme at Oxford Institute for Energy Studies and former Head of Fundamental Analysis, Global Gas at British Petroleum notes here two challenging aspects. First the increase in Russian prices could be limited by rising non-Gazprom Russian production. Secondly investment in new gas fired generation in Russia will reduce gas consumption due to

¹⁴⁴ Soldatkin, V. 2011. Gazprom to boost gas to India from 2016. Reuters, 02.06. Available at: <http://in.reuters.com/article/2011/06/02/idINIndia-57451720110602>, accessed April 8, 2012.

¹⁴⁵ Novatek. 2011. Focus on Growth - Corporate Strategy Day Presentation. Available at: http://www.novatek.ru/en/investors/presentations/index.php?quarter_5=1, accessed April 8, 2012.

¹⁴⁶ Куликов, С. 2012. Газ в России стал дороже, чем в США [Gas in Russia has become more expensive than in the U.S.]. *Независимая*, 16.01.

higher efficiency factors (personal communication, March 26, 2012). Jerzy Rutkowski focuses on the second goal mentioned by Howard V. Rogers. Gazprom has not started investments in Russia's electricity generation market to gain a new source of income or to diversify its domestic portfolio. It has been done to modernize power generation, which consumes too much gas needed for export. The company aims to decrease dependence of Russia's electricity generation from natural gas, which at much higher prices can be exported and bring bigger profits (personal communication, April 26, 2012). The increasing gas demand for electricity generation threatens the export commitments, so entering the market for electricity generation has a defensive function for exports.

The key strategy for Russia to reduce its dependency on its revenues from gas exports to the EU is through diversifying its export markets. Isabel Murray by referring to the World Energy Outlook 2011 draws attention to the fact that IEA estimates that the domestic gas market produced around one-fifth of total Russian gas sales revenue in 2000 and that this share rose to 40% in 2010. In IEA's projections, this share will continue to increase, as domestic prices rise, to account for half of total gas sales revenue in 2020 before declining in the latter part of the projection period. The share of the EU in total Russian gas sales revenue has fallen from 60% in 2000 to under 40% in 2010 (personal communication, April 2, 2012). Although revenue from gas sales to the EU rises in real terms over the projection period, expressed as a percentage of total revenue it continues to fall, because of the value of domestic sales and then the increasing importance of Russian exports to China and other Asian economies.

Last important point makes Kevin Rosner a specialist in Russian oil and gas, former Co-Director for the NATO Forum on Energy Security and Project Director with the Program on Cooperation with the Russian Federation at the OECD. If other gas producers are able to produce more gas for internal market, it reduces pressure on Gazprom to restrict exports. It is important to say that Gazprom is going to respect whatever Russian Government will tell to people before Gazprom will fulfill export

contracts. If gas production increase in Russia thanks to other non-Gazprom producers, it will benefit all, Gazprom and countries that import Russian gas (personal communication, April 11, 2012).

All in all, control over the pipe and exports is crucial here. This winter independent producers have just been backing Gazprom up when it could not find production reserves to satisfy both national and European demand.¹⁴⁷ Novatek seems to be on the rise, as closely, though informally, connected to the government as Gazprom. Andrey Shadurskiy a Senior Lecturer and Chair of European Studies at School of International Relations at St. Petersburg State University says that even if gas sector is liberalized and the competition grows, exports are likely to be orchestrated by the government – no one is a fool to lose such a foreign policy instrument (personal communication, March 28, 2012). Losing market share in Russia and the prospect of higher Russian gas production from non-Gazprom producers is definitely a problem for Gazprom, but it is affecting internal not the external business. Until Gazprom's export monopoly is removed, changes on the Russian energy market will not change much the company's international policy.

3.2. Ways of maintaining profits in Europe

Recent negotiations with the European gas importers forced Gazprom to make concessions in the long-term contracts. In several cases, for restricted volume of imported gas, spot market price was adopted. However in the future Gazprom will not fully adopt spot prices in its contracts. In the best scenario for the European customers, the price for Russian gas will be calculated on the mixed scheme of oil-indexed and partial spot market prices. How it is highlighted by René Snijder and was mentioned in my previous chapters, long-term contracts are a guarantee for Gazprom's mega projects,

¹⁴⁷ Medetsky, A. 2012. Shmatko Stands Up for Independent Gas Producers. *The Moscow Times*, 26.03.

without stable income the company is not able to invest in such expensive projects like the South Stream (personal communication, April 4, 2012).

Kevin Rosner agrees with the problem of financial guarantees from long-term contracts. Gazprom as long it will not find alternative markets, it will be forced to be more flexible in terms of its pricing policy in Europe. When Gazprom adopts spot prices it will change whole European energy market. It is going to be extremely difficult for the company to adopt spot prices, because of the upstream projects which need a financial guarantees (personal communication, April 11, 2012).

Isabel Murray reminds that Gazprom's share of the EU gas imports have declined markedly to 34% in 2010, 16% below its import share in 2000. The most recent drop in this share, by 4% in 2010, was the result of a Gazprom strategy to make minimal changes to its oil-indexed pricing formulas for gas export even as they came under pressure from cheaper LNG in Europe. This may have optimized revenues as oil-indexed prices rebounded during the year, but it meant that Gazprom progressively lost market share to other suppliers with pricing formulas more sensitive to gas-to-gas competition (personal communication, April 2, 2012). Gas demand growth in Europe is becoming increasingly concentrated in the power sector, calling into question the viability of an export strategy based on indexation to a commodity (oil) that is no longer used wide for electricity generation in Europe.¹⁴⁸ A similar insistence on maximizing export prices holds risks also in relation to supply into China, where pricing remains the main stumbling block in negotiations over gas, even though it seems clearer than in the past that China may be ready to pay the prices necessary to ensure development of East Siberian gas resources.

Main factor driving Gazprom towards more flexible contracts will be definitely changing spot market thanks to the U.S. Jerzy Rutkowski reminds that gas mentioned to be shipped from Qatar to the U.S. has been redirected to Europe, due to the change in

¹⁴⁸ Tzimas, E., Georgakaki, A., Peteves, S.D. 2009. *Future Fossil Fuel Electricity Generation in Europe: Options and Consequences*. European Commission, Joint Research Centre, Institute for Energy, 44.

the American market. The U.S. from the gas importer has transformed into gas exporter that can supply the EU market. Showing that, spot market is a real factor in creating the pricing policy for the European market. He adds that Gazprom is chasing competition, it should tie larger volumes of gas with spot market prices and reduce dependence on “take or pay” clause and lower a limit of minimum gas reception. The difference between the prices of long-term contracts and spot market were in the peak accounted for 50-60%. Referring to the opinion of Russian analysts, it is a mistake to invest in new pipelines, because it makes Gazprom more dependent on long-term contracts. Probably market realities will force Gazprom to change the pricing policy (personal communication, April 26, 2012).

Over time Gazprom is going to have to diversify its service portfolio. Gazprom will try to secure its revenue chain, so while facing changes on global energy market, it is important for the company to look for other investments. They are looking for whole supplier chain in terms of being a pipeline operator, taking stake in the pipelines, gas storages and the more recent moves into the electricity sector are extensions of this strategy. First talks with German E.ON and RWE have been unsuccessful. Jonathan Stern the Chairman and a Senior Research Fellow at Oxford Institute for Energy Studies does not see any other industries where Gazprom could invest, other than power generation. He has doubts about the Gazprom’s plans. Nobody wants to allow Gazprom to invest in gas assets in Europe, the company is discriminated against everywhere, so there is not much space for Gazprom in other branches in the EU (personal communication, April 1, 2012).

Jerzy Rutkowski argues with this and points out why Gazprom is discriminated. He says that Gazprom could play a different role on the EU energy market but it is very difficult. It is possible if the opinion of a subject at the service of the Russian Government, as an instrument of Russian foreign policy will be outdated. If Gazprom ceased to be associated in this way, and the company will act like any other investor, it has a chance. Each country would invite Gazprom to build gas power plants, which meet all

environmental requirements of the EU. Currently, Gazprom has a very difficult task, especially if it takes part in the privatization of various European sectors being so far under the governmental control of individual states (personal communication, April 26, 2012).

Another problem on the way to enter power generation market in Europe is pointed out by Howard V. Rogers and it is a fact that gas is not competitive with coal at the moment at gas prices above USD 6.50/MMBtu, so oil-indexed prices and power generation just do not work at present. Also as traded hubs gain liquidity it gets harder to make a margin as a mid-stream player as companies found in the UK in the last decade (personal communication, March 26, 2012). Gazprom will be still very interested in power generation in Europe and will continue trying to enter this market. It seems to be natural for a major gas supplier but this strategy is going to be very challenging for the company. That's why Gazprom does not want to invest by its own, but is looking for a partners for a joint-venture. René Snijder agrees on this, and adds that even for such company like Gazprom, entering the energy power generation sector in the EU without a partner is way to risky (personal communication, April 4, 2012).

In the next 20 years, the vast majority of Europe's long-term contracts for the supply of Russian gas are going to expire. It does not mean that those are last 20 years of ruling Gazprom in its present form on the European market. Gazprom is not a monopoly on the European market, it is the sole supplier to a number of European countries which, over the past 20 years have failed to arrange other supplies, some may now be succeeding although whether this will bring them commercial benefits is, at least, questionable. The big question is whether the existing contracts are going to last for another 20 years or whether they may be terminated early. Price negotiations will be crucial.

In the opinion of Howard V. Rogers, most probably long term oil-indexed contracts will survive but we will see a transition to a mixture of long term hub-indexed contracts and

direct sales of Russian gas onto European hubs. However, this does not change the role of Russia being Europe's largest source of imported gas and so even under new arrangements Russia's market power and its ability to influence hub prices by managing supply will become a major feature of the European gas market (personal communication, March 26, 2012).

Isabel Murray would also not expect any drastic change in current agreements, although the length of the long-term contracts will tend to be shortened (personal communication, April 2, 2012). Kevin Rosner adds also a possibility of adjustments in the volumes of contracted gas (personal communication, April 11, 2012). There are so many uncertainties in the future, we should not expect an outright elimination of long-term contracts with Gazprom. Additionally, prices in Asia are also predominately set under long-term contracts that are indexed to crude oil. However, in a growing number of markets, gas prices are set freely in a competitive gas market, an approach known as gas-to-gas competition. Prices are set in this way in North America, the United Kingdom and Australia.

An important point makes Jerzy Rutkowski who says that the long-term contracts are not bad by themselves because they give a mutual guarantee for exporter and importer. Gazprom justifying its firm pricing stated that despite the difficult contract conditions will guarantee the gas supply. In the last winter 2011/2012 this guarantee turn out to be not completely true. Therefore, Gazprom's reputation has suffered considerably. The problem is not in the long-term scheme but the mechanism of regulating the price. The long-term contracts are going to be still in use after next 20 years but in the changed form with different regulation policy for price and volumes (personal communication, April 26, 2012).

In a summary, long-term will present more flexibility in terms of pricing and closures. Boris Medvedev confirms this scenario, adding that long-term contracts are now unfavorable because of the cheaper spot prices. But on other hand, he underlines that

spot prices can also rise in the future. Gazprom will not adopt spot market prices in whole, but can adjust to it some of the volumes of the sold gas, like it has been done with several contracts in the beginning of 2012 (personal communication, April 4, 2012).

3.3. The European Union's impact

The EU reinforces its approach to the activity of Gazprom on the European market. Starting from the introduction of Third Energy Package, hindering the construction of the South Stream pipeline through not granting status TEN and ending with last year's anti-monopoly inspections in the offices of companies cooperating with Gazprom. The EU is possibly fortunate that Gazprom seems determined to build new pipelines. A more logical Gazprom attitude might have been to tell the EU that it (not Russia) needed to sort out transit problems. It should be noted that Russia is dependent on the European market. This is the main feature of the pipeline, which makes the players on both ends depended on each other.

Opposite to the general opinion I would not see the EU actions as a means for the EU to turn away from Russia. Just the opposite. The Third Package is designed to create a stable, predictable environment for investors to have the confidence to invest and consumers to be satisfied of the security and affordability of their supply. And the recent anti-monopoly enquiry should be seen in the same light. Howard V. Rogers adds that it is unlikely that the momentum to introducing the Third Energy Package will slow, even if Gazprom may not like certain aspects of it. Nevertheless the EU will still rely on Russian gas for the foreseeable future, even if some policy makers see renewables reducing gas' share of energy consumption post 2020 (personal communication, March 26, 2012). The same opinion share Boris Medvedev, believing that for the next years the EU does not have an alternative for Russian gas (personal communication, April 4, 2012). On other hand, Russia also does not currently have a viable alternative to the

European market. Jerzy Rutkowski thinks that the EU policy is correct, and what is more, it is based on an arrogant attitude of Gazprom. As an example, the European Energy Charter, which Russia was a co-author, have been confirmed by Russian analysts as beneficial for Gazprom. The company would have an active role in shaping the European transmission network in the frames of the EU law. But Vladimir Putin's imperial approach to the case terminated the further cooperation, what has brought adverse policy for Gazprom in the Third Energy Package (personal communication, April 26, 2012).

It is worth nothing that not exactly the EU has an impact on Gazprom but the national energy companies. René Snijder says that the EU policy is only giving a bigger flexibility and access to new alternatives for the energy sources, but is not stopping directly Gazprom from prolonging long-term contracts in the EU. Final decision always belongs to the national gas importers (personal communication, April 4, 2012). Even if European network of pipelines is liberalized, there are still countries which will not benefit from given opportunities. Many countries of the Central and Eastern Europe are far away in the development of the green energy production or are in process of constructing alternative LNG shipment infrastructure or nuclear power plan network, which take time.

The EU actions are completely justified even if Europe does not have a ready alternative for Russian gas. On other side it is also justified for Gazprom to build new pipelines in Europe. Kevin Rosner says that in some ways only from commercial stand point and not even on financial basis the Nord Stream and the South Stream they can be justify simply on the basis of saving corporate creditability in terms of being able to deliver gas. It is enough to look what happened in February 2011, when Europeans needed more gas and they could not get it from Gazprom, because like Medvedev said, there was not enough gas to send (personal communication, April 11, 2012). So you can build pipelines which are not financial viable or commercial viable but they save the

credibility of the company in short-term. Of course one thing is to have pipelines and other to fill them with enough of gas.

3.4. Turn back from the EU in favor of Asia

Planned expansion of Gazprom to Asian markets is going to balance the company's revenue streams by reduced the strategic importance of exports to the EU. Hypothetical annual imports of Russian gas by potential Asian customers (China, South Korea and Japan) does not reach half of the exports volumes to the EU. The Asian customers are not going to replace European market. However, Asian markets will continue to grow much more quickly than European markets. So for the longer term it is important for Gazprom to open and grow its Eastern export markets as an additional source of revenues. Jonathan Stern clarifies, that Asia will not replace Europe, but will be a necessary supplement (personal communication, April 1, 2012).

Russia would like to export gas from west Siberia to China via the Altai pipeline, thus allowing for this gas to be monetized even if European demand for Russian gas does not grow quickly. China would prefer East Siberian gas, which is not connected to West Siberia. Gazprom does not see Asia as replacing the European market for Russia. Howard V. Rogers believes that Russia is well placed to supply Asia with LNG, providing it can develop the upstream gas for liquefaction (personal communication, March 26, 2012). However, current LNG production by Gazprom is not enough. Jerzy Rutkowski points out here that the entry into the Asian market would be much easier if Gazprom would focus more on LNG. Launch of new fields for gas exports exclusively to Asia requires extra time and huge investments. Reorientation of the gas transport from Yamal region and construction of new pipelines to do it is a prospect extremely hard to implement (personal communication, April 26, 2012). The problem here is the construction of additional pipelines and transit countries.

Andrey Shadurskiy says that costs are very high for entering the Asian market, but are justified to fortify a place in the most lucrative market, compare with stagnating Europe. Short-term losses may result in long-term gains (personal communication, March 28, 2012). Boris Medvedev agrees that Asian market is hard to access not only for Gazprom, talks are in progress and in a long-term Asian countries will balance Gazprom's export revenues (personal communication, April 4, 2012).

Negotiations regarding the gas deliveries to Asia are still not fully completed, but Gazprom is already planning to enter the Asian electricity generation markets, like in Europe. Isabel Murray thinks there is scope for electricity exports from Russia to China, and she have seen many presentations on these ideas and potential projects (personal communication, April 2, 2012). Electricity prices in the export markets will need to be cost reflective though before any project start up. The obstacles for Gazprom in Asian electricity generation market are pointed out by Howard V. Rogers. In many Asian countries the mid and downstream sectors are either state controlled or dominated by incumbents. Gazprom may have a hard time establishing a major market share. These countries may not need external investment capital and so it is not clear why they would welcome Gazprom (personal communication, March 26, 2012). To above mentioned problems Jerzy Rutkowski adds the opinion of Gazprom as a tool in the hands of the Russian Government which will not help in gaining trust as an investor in such an important sector as the generation of electricity. Energy is a sensitive and very important for each country, and therefore it is unlikely that Gazprom in its current form will be authorized for participation in this sector neither in Asia nor in Europe (personal communication, April 26, 2012).

In overall, Asia is and will be a new profitable market for Gazprom. The company like any other seeks to establish as much contracts as possible to guarantee stable income. René Snijder underlines once again, that Asia will not replace Europe, but it is a natural step for Gazprom to expand its export to the East, while still maintaing supplies to the

EU. He points out the necessity of signing long-term contracts before any new investments in the Asian direction will be made (personal communication, April 4, 2012). Kevin Rosner underlines in the end also that in this particular case, over the long-term, we are talking mainly only about one big customer, Chinese government. Gazprom even with Chinese contract will still prefer European market because of the transportation costs and allocation of gas fields (personal communication, April 11, 2012). How it was mentioned in my thesis, Gazprom has decided already to expand the Eastern network, aiming at future exports to China, before signing a long-term contract. It can only show how big hopes Gazprom has with new Chinese customers.

4. Conclusion

Gazprom has a theoretical access to the world's largest gas reserves and until 2008 was the biggest gas producer in the world. In the last 3 years the company has lost the first place in favor of the U.S. and their technological revolution in extracting unconventional gas, shale gas. Despite losing the lead, those factors make Gazprom and Russia natural economic partners for the EU. The EU and Gazprom have economic interests in working together but there are many conflicts which hinder a dynamic development of mutual partnership.

Is Gazprom's position on the European gas market weakening? It is not weakening like many say, but the company needs to be more competitive and face fast market changes. It is true that Gazprom needs to bear much more costs than 5-10 years ago to maintain its position in Europe as a sole supplier of gas, especially in Central and Eastern Europe. European resistance towards new Russian gas projects is growing. EU wants to be independent from Russian gas, it is getting stronger and new barriers for Gazprom's activity had been created. Nevertheless, in the short-term Gazprom is in better situation than the EU and its member states, what showed the interruption of gas supply in 2006 and 2009 during the dispute between Russia and Ukraine. Lack of Russian gas means almost immediate problems for the European industry and private customers. For Russia it leads to limited flow of foreign exchange.

Per contra, the scenario changes in the long-term forecast. The crisis in 2008-2009, when low oil rates entailed gas prices, highlighted that without significant income from the energy resources exports, Russian state may have problems with its functioning. Russian budget has become main tool in the state economy, so in the long-term missing revenues from gas export can bring social and economic problems in Russia. In the worst scenario, it can cause an economic collapse. Lack of alternative idea for the economic growth in Russia brings a motivation or rather force to adjust Gazprom export

policy to the EU. It does not mean losing the position, but benefits from overstated gas prices driven by the price formula based on the oil products.

Not so long time ago, when Gazprom was cooperating with the EU on the Energy Charter Treaty both sides were willing to create a reliable partnership. Rising oil prices and thus increasing power of Gazprom resulted in abandoning the talks by Russian side. The situation has changed with introduction of the Third Energy Package, liberalizing the European energy market, directly and indirectly limiting Gazprom's activities in Europe. The EU wants to break Gazprom's monopoly in Central and Eastern Europe and uses more straightforward ways of controlling it, like antimonopoly audits at the offices of the company's European partners or lobbying alternative projects for Russian pipelines.

Gazprom is aware that Europe is the main market for Russian gas and it counts on increase of demand in the future. This approach is highly justified when the EU is reducing CO² emissions and the fear from the nuclear power plants is spreading around the member states. However, there are alternatives for the gas supply and also alternatives for gas itself. This forced Gazprom to become more flexible in terms of long-term contracts. The cost of satisfying European importers was a decrease in gas prices by partially assigning spot prices. This will work only temporary, in the long-term Gazprom needs to make much further steps towards revalidating its pricing formula and contract closures like "take or pay" principle.

The most probable scenario is adopting spot market prices in the long-term contracts. Currently Gazprom has made first steps towards introducing new prices, but compare to gas volumes still assigned to the old price formula those decisions are not significantly changing the export and import rules. However, it is going to change, and probably more and more imported volumes of gas from Russia will be connected to the spot prices. It is important to say that from the long-term contracts profits not only Gazprom but also European countries, because it secures national energy markets. It is a

relationship that seems to be not underlined too often. Therefore, contracts will be still signed for the long-term periods, satisfying exporter and securing importer.

In the recent years Gazprom has started to use a new argument in the talks with the EU. It has redirected gas flows from Europe to Asia. New Asian customers will be a natural way to expand Gazprom portfolio, but not on the cost of Europe. Gazprom will maintain the EU supplies and will try to open new gas pipelines and LNG plants aiming at export to China, South Korea, Japan and in the further future other countries in the region. Gazprom's strategy of intimidating the EU by possibility of redirection gas export routes from the West to the East is unfounded, because the company will rely on the revenues from the European agreements.

Like any other company driven by the profits, expansion to new markets is natural. Developing Asian countries are looking for new energy sources to meet rising demand for energy. Gazprom is there, but mechanisms which work in Europe will not necessarily work in Asia. The Russian company is not used to make concessions in the gas agreements and face competition. This has changed and like in Europe, even more in Asia Gazprom need to become really competitive player with wide portfolio of services. It is not enough anymore that Russia has gas, because there are other suppliers and what is more, there are alternatives for the natural gas.

Additionally, Gazprom plans to enter energy generation branch in Asia are on starting point and it is an uncertain future. Asia will not replace Europe, it will be a supplement for European contracts and will add additional balance to the source of income for Gazprom.

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