

American University of Armenia

The Role of Natural Gas in The Post-Soviet
Russian Foreign Policy

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Introduction

Russia is the owner of the largest natural gas reserves in the world. The capstone will show that Russia uses its natural gas reserves to improve its dominant position in the international system and that natural gas has a big role in the Post-Soviet Russian foreign policy. For many years Russian company, called Gazprom, had a monopolistic position for the export of natural gas to other countries and mainly to the EU. Gazprom also was the only gas supplier to its domestic market. But in the recent years, the dominant position of Gazprom and the demand for Russian natural gas is now decreased because of several factors. One of the major factors is the emergence of several gas producing companies in Russia, such as Rosneft, Novatek, Lukoil. Another factor is that Russia uses its monopolistic position and increases the price for the gas and for that reason the demand is decreasing. The EU countries are very concerned that they are largely dependent on Russian natural gas. That is the reason why they are searching alternatives to Russian gas, although many countries, such as Hungary, Poland, etc. are largely if not completely dependent on Russian natural gas. The liquefied natural gas (LNG), imported from the US, is maybe the best alternative for the EU, as it has less political risks and shorter transportations distances. Other factors are Western sanctions, the recent economic recession.

The export of natural gas is very important for Russia, as its economy is mainly relied on the export of gas. Russia failed to diversify its economy also in other fields, which could be very useful for the Russian economy, because the gas and oil are interconnected and the uncertain prices of oil may bring loses to the economy. So Russia needs to diversify its economy in order to be ready and not vulnerable when the prices of oil would decline.

Literature Review

The topic of my capstone is about the importance of natural gas in post-Soviet Russian foreign policy. This part of the thesis will introduce the studies of many scholars that are related to this topic.

The monopolistic position of Russian natural gas is decreasing because of several factors that many scholars referred in their studies. One of the factors is the competition in the Russian market of natural gas, as now several firms also provide natural gas and oil, besides from Gazprom (Locatelli 2014). Gazprom, which 50% of shares belong to Russia, is the major gas supplier to the EU and many other countries. The percentage of the European market in Russia's overall natural gas exports is 70% (Boguslavska et al. 2015). In Russian gas supply market, Gazprom has several competitors, such as Rosneft and Novatek. Although Rosneft and Novatek, in 2014, increased their gas production respectively by 35% and 1.5%, Gazprom is still the leading player in the domestic market (Boguslavska et al. 2015). More than 50% of its gas Gazprom sells to the Russian market. But since 2010 Gazprom is experiencing financial losses, because of the decreased gas extraction and competition. From 2013 to 2014 the gas production of Gazprom fell by 9%, or by 443.9 billion m³ (Boguslavska et al. 2015).

Western sanctions imposed against Russia contributed to the reduction of Gazprom's gas production and which caused a decrease in demand for Russian natural gas (Emerson 2014; Boguslavska et al. 2015). Because of Russia's actions in Ukraine that were destabilizing the situation, the EU imposed sanctions against Russia. These sanctions were mainly economic (import or export of goods), individual (asset freezes and visa bans for some people in Russia) and diplomatic (e.g. EU-Russia summit, scheduled in Sochi was cancelled). Russia in its turn also imposed sanctions against Europe and Ukraine. And since 2014, Russia stopped to supply natural gas to Ukraine (Emerson 2014).

Another factor, which also encouraged the decrease in Russian natural gas demand was the increasing price (Gelb 2007). Russia is now the most major exporting country of natural gas to the world gas market (Holz et al. 2014). The monopolistic position of Russia could be described as “either you accept our prices, or you freeze” (Petrillo 2013). And also, there is an unofficial slogan about Gazprom “What is good for Gazprom is good for Russia” (Trenin 2007). According to Simes (2007), Gazprom threatens to penalize the countries that resist, e.g. Ukraine and Georgia, and offers below-market prices for countries that enter into specific economic and political arrangements with Russia. As many countries were largely dependent on Russian gas, Russia used its monopolistic power and set high prices for the gas. And Gazprom stopped the supply of gas to Ukraine and Moldova, as they didn’t agree to pay the price that Gazprom set (Gelb 2007). After the increase of gas price in 2009, Ukraine decreased its gas imports from Russia. In 2014, when Russia supported the separatists in Lugansk and Donetsk, and the Crimea’s annexation led Ukraine to access gas supply from Poland, Slovakia and Hungary. And these natural gas flows substantially reverse the Russian gas streams. The reverse flow of Russian natural gas in Europe can compete with the Gazprom on gas price, which shows the inflation of Russian gas price (Boguslavska et al. 2015). Ukraine consumed 50-60% of gas, sold by Gazprom, and when Russia cut off the gas supply to Ukraine, the demand for Russian gas decreased. The position of Gazprom in post-soviet countries reduced drastically because of Ukraine’s decreased demand (Boguslavska et al. 2015).

Monopolistic position of Russia as one of the largest gas suppliers to the world gas market is now declined. The EU, which is one of the important gas markets for Russia, was importing 50% of Russia’s gas exports, but now it has decreased the import of gas from Russia, as their relations are now tensed (Belkin, Nichol, and Woehrel 2013; Monaghan 2006). One of the problems in the EU-Russia relations, to which the EU is concerned, is their

energy dependence on Russia, which undermines EU's ability to negotiate or criticize Russia. Another reason their relations started to tense is when Russia interfered in the Ukrainian civil war and stopped the gas supply to Ukraine (Monaghan 2006). Over the years, many European officials became concerned about possible cutoffs of Russian natural gas supply to Europe and for that problem many European states started to search alternatives for a natural gas import to their country. North Africa and Central Asia have a high possibility for more natural gas production, and these regions can be alternatives for Europe to import natural gas rather than from Russia (Belkin, Nichol, and Woehrel 2013).

According to some scholars (Goncalves and Melling 2014; Belkin, Nichol, and Woehrel 2013) for Europe LNG (Liquefied Natural Gas) is an alternative to Russian natural gas. In 2011, 20% of Europe's imported natural gas was LNG (Belkin, Nichol, and Woehrel 2013). The US also has LNG reserves, which may help the US to become a bigger player in world gas market. In the gas market of US, the price of natural gas is not set against oil, which gives an advantage to EU countries. Also, most of the proposed projects of LNG exports are situated on the East Coast or Gulf Coast of US, which make shipping to Europe more efficient (Belkin, Nichol, and Woehrel 2013).

The recent economic recession also had its negative impact on Russian natural gas supply. During and after the crisis the position of Gazprom in three major markets was changed. These markets are Europe, Russia and post-Soviet countries (Boguslavska et al. 2015). The demand for Russian natural gas is so decreased, that the supply is exceeding demand. From 2010 to 2014 gas supply to former Soviet countries declined from 70.2 bcm to 48.1 bcm. Although there is a decrease in gas supply to the post-soviet countries, still there are several countries to which the delivery of Russian natural gas is relatively stable in recent years. Among these countries are Belarus (now the largest customer of Gazprom in the post-Soviet region), Armenia, Georgia, Moldova and the Baltic countries, that are entirely

dependent on natural gas imports from Russia (Boguslavska et al. 2015). The fact that many post-soviet countries are largely dependent on Russian natural gas and mainly on Gazprom shows that Gazprom has a power and business advantage in these countries. Gazprom established its authority in many post-soviet states, by taking shares of gas networks against the country's debt to the Gazprom. For instance, initially from 1997, Gazprom's share in the Armenian gas network Armrosgazprom was 45%. But from 2006-2013 Gazprom started also to control the rest of shares of Armrosgazprom, as Armenian government gradually sold the shares for delayed execution of Gazprom's common price hikes and short-term price freezes. Now the biggest problem for the Gazprom is not the competition in Russian gas market, but the decrease in natural gas demand in the post-soviet region. And also their search for alternative gas supply sources through Europe, which may cost them even cheaper than the natural gas import from Russia (Boguslavska et al. 2015).

Issues

Some important issues have an effect on the Russia's foreign policy based on natural gas transportation. These issues are the monopoly of Gazprom, Russia-Turkey relations and the sanctions against Russia.

The first issue is about the monopolistic position of Gazprom in the Russian oil and gas market. Gazprom is a state-controlled company, which was founded in 1992 and is considered to be Russia's natural gas monopoly. Gazprom also has a strong domination in the export of gas to the European market. In 2013, taxes that Gazprom paid, ensured 7.5% of government revenues (Ahrend and Tompson 2010; Orlov 2015; AAslund 2010). Gazprom exports gas to more than 30 countries and is the sole producer and exporter of LNG in Russia. The company's share in the gas reserves of Russia is 72% and 17% in the world gas reserves (Gazprom 2016). The monopolistic position of Gazprom started from 1992 when Viktor Chernomyrdin (founder of Gazprom) was elected as Russia's prime minister and gave Gazprom special privileges (including tax privileges) and many monopolies. Gazprom has monopolies over trunk-line transportation, gas exports and as Russia owes world's largest gas reserves, Gazprom controls the 25% of the global gas (AAslund 2010).

Besides from Gazprom, which in 2013 produced 71.3% of total Russian gas production, there are also other companies that produce natural gas. And the share of independent gas producing companies in total Russian gas production increased in recent years: 28.7% in 2013, while in 2003, it was 12% (Orlov 2015). The main non-Gazprom companies producing gas are Lukoil, Rosneft, and Novatek. Although Gazprom has domination in domestic and export market, the increased prices in the domestic market made the competition between these companies more intense (Orlov 2015).

The price of natural gas is lower than the export price due to price regulation. Price regulation of gas aims to prevent monopolistic behavior of Gazprom in Russia and other

consequences that high prices can result. And is it efficient to for Russia to have Gazprom as a monopolistic company or to increase domestic prices to promote independent companies? On the one hand, the growth of domestic gas prices would foster investments in the gas sector. On the other hand, high prices would be beneficial for non-Gazprom companies and which will strengthen the competition between them and Gazprom. As Gazprom is a state-controlled company and is a significant political and economical source of power for Russia, the increasing competition would decrease the monopolistic position of Gazprom in domestic and hence in export markets (Orlov 2015).

The second issue is about strained relations between Russia and Turkey. Bilateral relations between Russia and Turkey are very complicated. These countries have been rivals for many years, but there are also economic ties and mostly in the field of energy, which binds these two states (Bechev 2015). Turkey is the second largest gas market for Russia, behind Germany (Gazprom 2015). Turkey wanted to become a major gas transit country for exporting Russian natural gas to Europe (Winrow 2013). Gazprom created the South Stream project, which aimed to transport gas to Europe through Bulgaria, Ukraine to Hungary and Austria. But as a result of Russia-Ukraine conflict Russian gas was planned to export to Europe through Turkey, which was a longer route (Öniş and Yılmaz 2015).

But since 24 November of last year, when Turkey shoot down Russian warplane, their bilateral relations became extremely intense (Al Jazeera 2016; Shadrina 2016). After this event Russia banned charter flights from Russia to Turkey, hence causing enormous economic damage to Turkey, as in Russia Turkey is the top destination. Also, President Putin restricted the import of vegetables and fruits (BBC 2015). And until now their bilateral relations are still strained.

The third issue concerning Russian natural gas is the sanctions by European states against Russia. According to Emerson (2014) political and economic sanctions usually were

considered to be ineffective. But the primary purpose of putting sanctions is to stay away from actions that might in some way hurt more the population of the country than its leadership. For this reason, EU and the US put sanctions against Russia, which included individual asset freezes and visa bans. Apart from individual sanctions, there were also diplomatic and economic sanctions imposed on Russia, including sanctions against “Sberbank”, “Gazprombank”, etc (Dobrokhotov 2015; Emerson 2014). As a response, Russia also in its turn imposed sanctions against EU, Ukraine and Moldova. Food imports were banned from the US, EU, Australia and Norway, but for a one year period. The European Commission stated that 40% of Russia’s agro-food imports from the EU were sanctioned. Russia also stopped gas supply to Ukraine since June 2014 and restricted several agro-food imports from Moldova (Emerson 2014).

Although several sanctions Russia could sustain its position due to its oil and gas reserves, that ensure 50% of the state budget (Dobrokhotov 2015). The decline of world oil prices coincided with the imposed Western sanctions against Russia and thus depending mainly on gas and oil reserves could result a recession in Russia (Holland 2015; Ashford 2016). As a result of imposed sanctions Russian ruble devaluated which brought low wages for employees, hence an increase of unemployment and migrations (Dobrokhotov 2015; Ashford 2016).

Overall, the abundance of oil and gas reserves in Russia ensure high profit and sustainability in international politics, but the imposed sanctions which are mainly economic, also bring side effects for Russia, such as devaluation of the ruble, the decrease in oil price, unemployment and migration. Although Russia in its turn imposed sanctions against EU and the US, but still the financial influence of Western sanctions is visible.

Theory

In this part the study will try to show that Russia uses its natural gas reserves as a tool of its “power”, using which Russia dictates its will to other countries. And as many states are dependent on the import of Russian natural gas, Russia keeps its influential status in the international system. So, the “power” of Russia, besides the military, is its commodities, such as oil and natural gas. The theory of the study will be based on realism, as the core concept of realism is the “power” and the relations between countries based on power.

In the theory of realism there are several core assumptions: 1) existing strict distinction between international and domestic politics, 2) Nation-states are major actors in the international system, and 3) the relations between nations are struggle for peace and power (Vasquez 1997). “Power politics”, “anarchy”, “balance of power”, “the national interest” and “security dilemma” are main concepts of realism. According to the theory of realism, power is seen as an interest; all statesmen and states seek to power (Ashley 1981). Morgenthau, one of the outstanding scholars of realism, claimed that generally politics is a power politics, which means power struggle. But the power of the state does not necessarily mean abundance of military weapons. Power of the state could be economic resources, people’s morale, etc. (Herz 1981; Williams 2004). Morgenthau also differed political and military powers. According to him, the term power usually means when a person controls the actions and the mind of the other person. While the political power is the reciprocal relations of control between the population and the public authority holders and among public authorities holders (Williams 2004). Morgenthau defined interest as power and also stated that the national interest should be reached with the help of influence and power (Herz 1981; Williams 2004).

So, the theory of realism concentrates on the “power” of states and the use of it in order to reach national interests. Realism assumes that a state may have economic conditions as a type of power, which may be case of Russia, i.e. its oil and gas reserves.

Following the study will elaborate more on the Russian natural gas as a powerful tool in its foreign policy and the level of dependence of gas importing countries on Russian gas. Firstly the study will cover the dependence of European, particularly Baltic States, on Russian natural gas; secondly the role of US liquefied natural gas (LNG) for the reduction of the dependence on Russian gas. Finally the study will elaborate on China-Kazakhstan gas transit, which may also affect the exports of Russian natural gas, as China is a major gas importing country.

According to IEA (International Energy Agency), in 2012, 25% of EU’s imported natural gas came from Russia (112 billion cm out of 472 bcm). Hence, Russia is the greatest natural gas supplier to Europe. Germany is the largest importer of gas from Russia (69.6 bcm in 2012), and it covers nearly 38% of its energy consumption with Russian natural gas. The Eastern EU states are largely dependent on Russian gas imports. Among these countries are Bulgaria, Slovakia, the Czech Republic and the Baltic States (Engerer et al. 2014). Russia exports its natural gas via four major routes: direct gas pipelines to the Baltic countries and Finland, a pipeline to Germany, which goes under the Baltic Sea (the Nord Stream), and pipelines through Ukraine and Belarus (Sharples and Judge 2014). In the Baltic countries, which are entirely dependent on Russian gas imports, Gazprom and its branches obviously abused their dominant position in the market and violated EU’s antitrust rules. While in Bulgaria, Gazprom’s branch by the use of EU legislation questioned the deficiency of access to pipelines and the legitimacy of tenders (Shaffer 2015; Engerer et al. 2014).

At the beginning of 2009, because of the Russia-Ukrainian crisis, several European countries (Bosnia and Herzegovina, Bosnia, Greece, Croatia, Montenegro, Romania, Kosovo,

Serbia and Former Yugoslav Republic of Macedonia) had disruptions of Russian natural gas in the middle of the cold winter. These countries import Russian gas via pipelines, which goes through Ukraine. The stoppage of gas supply mainly largely affected those countries that are almost entirely dependent on Russian gas, e.g. Serbia, FYR of Macedonia, Montenegro, and Moldova. This situation fostered these countries to search alternatives to the Russian natural gas, such as LNG (Kovacevic 2009). Pipeline gas imports from other regions and limited consumption of natural gas can also compensate natural gas disruptions (Richter and Holz 2015). Thus, the disruption of natural gas supplies can also contribute the customer countries to search alternatives to the Russian gas.

EU expects that its consumption of natural gas will increase, while the production of its own natural gas is decreasing (Belkin, Nichol, and Woehrel 2013). If these expectations will come into reality, EU's dependence on Russian gas supply will increase and therefore search for alternatives to Russian natural gas will be in EU's interest. But Russia tries to protect its dominant position in the European gas market. Russia (including Gazprom), in order to protect itself from possible alternatives to its pipelines, proposed competing projects and attempted to offer European companies shares in those projects and in other projects as well. Russia also tried to discourage potential natural gas suppliers from joining in European-supported projects (Belkin, Nichol, and Woehrel 2013). United States views EU energy security as its national interest. The Administration of George W. Bush considered that Russian energy reserves are political tools that Russia uses to have an influence on other countries (Belkin, Nichol, and Woehrel 2013).

If the Baltic countries will build two-three LNG infrastructures, this would largely reduce their dependence on Russian natural gas by early 2020s. These infrastructures require huge investments, which these states may not afford (Dickel et al. 2014). But in May 2014, the President of Lithuania Dalia Grybauskaite condemned Russia's aggressive behavior in

Ukraine and stated that Russia uses methods in Ukraine that were used in 1930s and she didn't doubt that Russia provided sophisticated and expensive weapons to the pro-Russian forces in Ukraine. Then she announced that Lithuania is planning to eliminate its dependence on Russian natural gas, as in December of that year a ship with LNG was scheduled to arrive Lithuania. The president urged US to approve LNG gas exports to her country, which would have political benefits. This move will help Lithuania to be independent from Russian influence in the region and to remove dependency on importing Russian natural gas (Dickel et al. 2014; VOA 2014). So, the import of liquefied natural gas will help the Baltic countries to reduce or even cut their dependency on Russian natural gas imports, but this may not be realistic in recent years.

LNG or the liquefied natural gas is the natural gas transformed to a form of liquid for its transportation purposes (Halvorsen-Weare and Fagerholt 2013). Nowadays natural gas is transported to the customers mainly by pipelines, but many countries are very far from the gas supplier country, so the gas transit to that countries is expensive. An alternative to the pipelines is the LNG. In order to transform natural gas into a liquid, it should be cooled down to -163°C under an atmospheric pressure. And when the LNG is transported, it is again transformed back to a natural gas form (Halvorsen-Weare and Fagerholt 2013). LNG is an alternative to Russian natural gas. In 2011, 25 states imported LNG and 18 states exported, and 20% of Europe's imported natural gas was in the form of LNG (Belkin, Nichol, and Woehrel 2013; Hufbauer et al. 2013). The process of liquefaction of natural gas is very costly: each liquefaction plant costs \$10 billion; each transportation tanker costs \$300 million dollar and the each plant for regasification process costs \$1-2 billion. Because of these huge costs, few countries are producing and exporting LNG. LNG production also causes environmental problems. In contrast to the natural gas, LNG production causes increasing

emissions of greenhouse gas. But as the demand for LNG is now growing, the international energy market will change (Hufbauer et al. 2013).

Several years ago, US had a shortfall of natural gas supply as in contrast to increasing demand; reserves and the conventional production were falling. Federal government encouraged private companies to build LNG import terminals as a solution from the situation. A decade ago, the situation reversed, as production and exploration technologies were developed and also the increased prices for natural gas in 2008 promoted improvement in the US energy sector (Ebinger, Massy, and Avasarala 2012). LNG imports from US is very attractive to the EU because of offered clear hub pricing, comparably less political risks, and shorter LNG transportation distances (Goncalves and Melling 2014). According to the Navigant Consulting estimations, in the near future US will become a major LNG exporter in the international natural gas market (Hufbauer et al. 2013). US also have an access to shale gas (natural gas extracted from shale rock). Shale gas fosters economic growth, as for instance in 2010, shale gas production provided employment for 600.000 people. Other countries also have shale gas, e.g. China (the largest shale gas owner), Poland, India, UK, Ukraine, Australia and South Africa, but they have not developed the production as much as US did. Shale gas also raises environmental problems, such as pollution of water, emission of more greenhouse gas, and even causing more earthquakes to happen (Wang et al. 2014). But now as the shale gas production is not so much developed, countries produce and export or import natural gas or LNG.

Currently, Japan is the largest LNG importing country, which has no pipelines, and the second is Korea. 11% of imported LNG to Japan, comes from Qatar, which is accounts one-third of international LNG market (Ebinger, Massy, and Avasarala 2012; Hufbauer et al. 2013). Japan also imported LNG from Asian and European suppliers, but as the US offers discounts compared to other countries, it is preferable for Japan to import from

LNG US (Hufbauer et al. 2013). Japan started to import LNG because of Fukushima nuclear power disaster and also the absence of natural gas reserves in its territory. Another natural gas importing country is China, but China does not want to pay the price that Russia offers the EU countries. So, for the US Japan and China are significant opportunities for LNG export (Hufbauer et al. 2013; Belkin, Nichol, and Woehrel 2013).

Russia in its turn also tried enter to the LNG market, particularly, Gazprom and its domestic competitors: Rosneft and Novatek, planed to start LNG projects. Since 2009, Gazprom is selling LNG from the Sakhalin 2 project and is planning three more projects: two projects in Asia, which is the development of Sakhalin 2 and the Baltic LNG project in the west (with a capacity of 7.5 million tonne). Novatek also has a project: Yamal LNG, which is supported by the government by infrastructure construction and tax breaks. This project is planned to start in 2017/18 (Dickel et al. 2014). Gazprom's plant in Vladivostok will supply Asian market and will reach Indian market while the other project (Baltic LNG) will target European and the South American markets, and will cause an increase of sales portfolio (Dickel et al. 2014). But Russia has pipelines, and maybe that is one of the reasons why the production of LNG is not much developed in Russia.

In 2013, the government of Russia passed a law and allowed Novatek and Rosneft to develop LNG projects. But will the production of LNG by other two competitors result the end of Gazprom's monopolistic position in the export of natural gas? If we take into consideration that President Vladimir Putin is inclined to control the energy sector of his country by state-owned companies, the answer to the question would be no, at least in the near future (Dickel et al. 2014). Currently, as Europe is importing gas mainly from Russia, it is less likely that Gazprom's position would change in the near future, but as the US-Russia relations are tensed and there are imposed sanctions against Russia, the end of Gazprom's monopoly is not unrealistic (Dickel et al. 2014). The liberalization of Russian gas market is

the main priority of Russia's State Energy Strategy 2030, which means that the monopoly of Gazprom should be eliminated, and independent companies also can enter the gas market. In 2015, Rosneft asked the government to have permission for the natural gas exports through pipelines to other countries, which would also put an end to the Gazprom's monopoly on natural gas exports (Boguslavskaya et al. 2015). Hence, Gazprom's monopoly may end in the near future.

In the Asian region Kazakhstan and Turkmenistan also want to lessen Russia's dominant position in the region, in energy sector (Fazilov and Chen 2013; Hancock 2006). Turkmenistan's natural gas reserves are equal to 1.2% of the global reserves, which is 2.1 trillion cm. Until 2006, Russia owned all the pipelines, by which Turkmenistan exported its gas. Gazprom-owned the gas pipelines, which exported Turkmenistan's natural gas to Ukraine and Russia. In 2006, China and Turkmenistan agreed to build a gas pipeline, which would help Turkmenistan to decrease Russian influence in its energy sector (Hancock 2006). The agreement was signed in 2007, according to which during the next 30 years, each year Turkmenistan would deliver 30bcm of natural gas to China through pipelines. The gas supply started in December 2009 (Fazilov and Chen 2013).

Kazakhstan also is a major owner of natural gas reserves (8.6 tcm). Kazakhstan-China cooperation in natural gas sector will help Kazakhstan to balance against Russian dominant position in its region. China and Kazakhstan are planning to build a new gas pipeline in the near future, which will connect Alashankou and Ishim and the pipeline going through Karaganda and Astana (Fazilov and Chen 2013). One of the factors that proves Russia's influence in Asian natural gas market is that Russia reexports gas from Central Asia to low paying countries of CIS, e.g. Ukraine, and keeps the EU market, which is more profitable, for itself. As Central Asian countries were largely dependent on Russian gas transit routes, Central Asian natural gas had less value, and before 2004, for each million cm, Turkmenistan

was receiving only \$36 million, while average EU gas price was \$136 mcm (Cobanli 2014). All these factors contributed that Kazakhstan and Turkmenistan started to search for new customers in order to decrease their dependence on sale of Russian natural gas.

From the covered sources, it is evident that Russia uses its natural gas reserves to improve its dominant position both in Europe and in the Asian market. But as customers of Russian natural gas, i.e. the EU and Central Asian countries are searching and developing alternative projects to Russian gas. The EU wants to import more LNG as an alternative and Central Asian countries, i.e. Turkmenistan and Kazakhstan are cooperating with China to lessen Russian dominant position in their energy sector.

The theory of the capstone derived from the literature is that natural gas has a direct impact on Russian foreign policy and Russia is largely dependent on its natural gas exports, and it should diversify its economy also in other fields. Russia made several states to be much dependent, if not completely dependent, on its natural gas imports, and as Russia uses natural gas in its foreign policy, it should be careful not to disrupt the gas supply to other countries. The theory of the thesis is based on realism, as Russia uses natural gas to prove its power over other states. As “power” is the core concepts of realism, the theory is based on that theory.

Methodology

The research question of the capstone is: *What is the importance of natural gas in post-soviet Russian foreign policy?* The hypothesis is that *Russia uses its natural gas reserves to improve its dominant position in the international system.* The theory of the capstone, as was mentioned above, is based on realism. The theory of the capstone derived from the literature is that Post-Soviet Russia uses natural gas in its foreign policy and Russia is largely dependent on its natural gas exports, and it failed to diversify its economy in other fields. Also, Russia made several states to be much dependent, if not completely dependent, on its natural gas imports, and as Russia uses natural gas in its foreign policy, it should be careful not to disrupt the gas supply to other countries. The methodology of the thesis is deductive, as from the covered theory it is obvious that Russia uses natural gas in its foreign policy and that Europe is dependent on Russian gas. After the methodology, the capstone will cover the evidence and analysis of findings and then the conclusion.

Evidence

The dominant position of Russia and particularly the Gazprom has been declining in recent years. There are several reasons and one of them, as it has been already mentioned, is the competition in the Russia's gas market. Although Gazprom is the major gas exporter to the EU, but there are also other companies in the Russian gas market, such as Novatek and Rosneft (Locatelli 2014; Boguslavska et al. 2015). Since 2010, Gazprom's position is declining because of less gas extraction, increased competition and financial losses (Boguslavska et al. 2015).

Another factor that also contributed to the decrease of Gazprom's position in the world gas market is the dependence of Europe on Russian natural gas. The EU, which is one of the important gas markets for Russia, was importing 50% of Russia's gas exports, but now it has decreased the import of gas from Russia, as their relations are now tensed (Belkin, Nichol, and Woehrel 2013; Monaghan 2006). The Western sanctions, imposed against Russia, largely hindered the gas imports from Russia to Europe, as they were the results of EU-Russia tensed relations (Emerson 2014; Boguslavska et al. 2015).

Although the demand for Russian natural gas is decreased, there are several EU member countries, which are still mainly or even entirely dependent on Russian natural gas imports. One of those countries is Hungary, which imports natural gas mainly from Russia, but also from other countries such as Turkmenistan, which also transits Russia, Germany, and France, that comes through Austria (Shaffer 2015). Among other EU countries, Hungary has one of the highest shares of gas consumption, which is 35%. As of 2014 Hungary had 95 bcm of natural gas reserves, which could be used nearly 40 years under the current 2.4 bcm rate of annual gas production (Shaffer 2015). Hungary is an important gas transit country for Russian gas supply to other EU member states. Hungary's gas is interconnected with its neighbor countries: Serbia, Austria, Croatia, Romania and Slovakia (Shaffer 2015). Besides

from Hungary, there are also other countries that are highly or completely dependent on Russian natural gas, such as Romania, Czech Republic, Latvia, Estonia, Finland, Lithuania, Bulgaria, Slovakia, etc. (Yafimava 2015). Hence, despite the decreasing demand for Russian natural gas in Europe, there are still countries that are highly dependent on Russian gas.

As the EU wants to decrease its dependence on Russian gas, it started to search alternatives to it. One of the alternatives is the liquefied natural gas or LNG. In 2011, 25 states imported LNG and 18 states exported, and 20% of Europe's imported natural gas was in the form of LNG (Belkin, Nichol, and Woehrel 2013; Hufbauer et al. 2013). LNG imports from the US are very attractive to the EU because of offered shorter LNG transportation distances, clear hub pricing and comparably less political risks (Goncalves and Melling 2014). The production of liquefied natural gas is very expensive, and that is why few countries are now producing and exporting LNG (Hufbauer et al. 2013). Japan is the largest LNG importing country and the second is Korea. 11% of imported LNG to Japan, comes from Qatar, which accounts one-third of international LNG market (Ebinger, Massy, and Avasarala 2012; Hufbauer et al. 2013). According to the Navigant Consulting estimations, in the near future US will become a major LNG exporter in the international natural gas market (Hufbauer et al. 2013). The US also has access to shale gas (natural gas extracted from shale rock). Besides from the US, other countries such as China (the largest shale gas owner), Poland, India, UK, Ukraine, Australia and South Africa also have shale gas, but they have not developed the production as much as US did (Wang et al. 2014).

Iran is the second largest gas reserves owner after Russia. It has 33 trillion cm of gas reserves, but the imposed sanctions by the US are a major obstacle for Iran to enter into the world gas market (Dickel et al. 2014; Cohen 2014). Even when the sanctions will be taken off, it would take several years for Iran to establish its status in the international gas market (Dickel et al. 2014). For many years Iran wanted to export gas to Europe and there were

many projects for the gas export. In 2008, the TAP (Trans-Atlantic-Pipeline) project was proposed for the first time, according to which Iran should export 5.5 bcm per year to Switzerland. Because of the US pressure, the project failed and the EU banned the import of gas from Iran. Apart from the sanctions imposed against Iran, there is also another issue, which makes difficulties for Iran to export its gas. The problem is that the domestic gas consumption is growing in Iran (due to market expansion, increasing population, etc.). Even if there would be investments and necessary technologies, the reserves of gas would be enough mainly for domestic consumption (up to 200-220 bcm per year before 2020). Iran can also export its gas to some states (e.g. Turkey and Iraq – 10 bcm per year each, etc.) and the rest of the available gas would be marginal for the EU export (Dickel et al. 2014). But as a gas exporting country Iran is unreliable for Turkey as from 2006 till 2008, Iran stopped the gas supply to Turkey in order to compensate its domestic consumption. If Iran would export gas to the EU, this may happen also with the EU member countries (Cohen 2014; Jalilvand 2013). In order for Iran to be able to enter the international gas market it should increase the gas production faster than the domestic consumption demand. This could be achieved as from 2000 till 2010 Iran's gas production was additionally increased by 130% (Jalilvand 2013).

Another country in the region that also has large natural gas reserves is Iraq. But like Iran, Iraq also has difficulties in exporting its gas. There are some security and political problems, such as sectarian violence, terrorist activity, and also the scarcity of electricity make obstacles for the export of gas (Dickel et al. 2014). Russia cannot impose pressure on Iraq to enter the European gas market. Russia can have an influence mostly on post-Soviet countries but not on Iraq (Cohen 2014). Thus, the barriers that do not let Iraq to export its gas reserves are the above-mentioned security and political problems. So, the current large reserves of Iran and Iraq cannot be an alternative to Russia for Europe yet, because of their internal and external political and other problems.

Although there is a decrease in demand, the dependence of Europe on the Russian natural gas is ongoing. Russia is the greatest natural gas supplier to Europe, Germany is the largest importer of gas from Russia (69.6 bcm in 2012), and it covers nearly 38% of its energy consumption with Russian natural gas (Engerer et al. 2014). And as long as Europe did not find a large alternative source of natural gas supply to lessen its dependence, it would rely on Russian gas and its prices.

All in all, the dominant position of Russian natural gas and particularly Gazprom is decreasing in the international and domestic gas market. In the world market, the customers of Russian gas do not want to depend on it and its huge prices. So this is mainly the reason why the EU wants to find other sources of natural gas supply. In the domestic market there are other gas producing companies, which increases the competition and decreases the monopolistic position of Gazprom.

Analysis

From the used literature in the capstone it is obvious that Gazprom is an important company for Russia. Gazprom, which was founded in 1992, is a state-controlled company. In 2013, the taxes of Gazprom composed 7.5% of Russia's revenues. It has a dominant position in Europe for the gas supply (Ahrend and Tompson 2010; Orlov 2015; AAslund 2010). The percentage of the European market in Russia's overall natural gas exports is 70% (Boguslavska et al. 2015).

During the recent years the demand for Russian natural gas in Europe has decreased and for that, there are several factors. Those factors largely contributed to the decline of Gazprom's dominant position as a major natural gas supply source. The factors are: firstly, the competition with other gas producing companies, which decreased the monopolistic position of Gazprom in Russian domestic natural gas market (Boguslavska et al. 2015; Orlov 2015). The second factor is the sanctions, imposed by the West and the EU, because of which Russia stopped the gas transit to Ukraine, through which gas was exported to the EU (Emerson 2014; Boguslavska et al. 2015). The third is the increasing price of the natural gas, as a result of Gazprom's monopolistic position. Gazprom used its monopoly and set high prices for instance in the case of Ukraine in 2009, after which Ukraine decreased the import of Russian natural gas (Gelb 2007; Boguslavska et al. 2015). The next factor is the increasing dependence of the EU on Russian gas because of which Europe started to search alternative sources for gas supply. The best alternative is the liquefied natural gas imported from the US (Monaghan 2006; Goncalves and Melling 2014; Belkin, Nichol, and Woehrel 2013). The last major factor is the recent economic recession, which brought huge financial loss not only to Russia but also to Europe (Boguslavska et al. 2015).

The theory of the capstone derived from the literature is that natural gas has a direct impact on Russian foreign policy and Russia is largely dependent on its natural gas exports,

and it should diversify its economy also in other fields. Russia made several states to be much dependent, if not completely dependent, on its natural gas imports, and as Russia uses natural gas in its foreign policy, it should be careful not to disrupt the gas supply to other countries. Based on the literature used, the hypothesis of the capstone is approved. Thus, Russia uses its natural gas reserves to establish and maintain its dominant position in the international system. But the leading position of Russia as a major gas supplier to the EU is decreased, and Europe wants to find other sources of natural gas supply because there is a significant dependence on Russian natural gas in the Europe. The monopoly of Gazprom and the increasing dependence made the EU start the import of LNG as an alternative to the Russian natural gas. Although the demand for Russian natural gas is decreased, Russia continues to be the largest gas exporting country.

Several sources (Cooper 2014; González, Lacovone, and Subhash 2013) mentioned that Russia should diversify its economy as the trade of natural gas is the main source of country's income. The reliance of Russia on natural gas exports is very high. In 2000, the share of natural gas in the total exports was more than 50%, in 2005 it raised up to 62%, in 2010 it increased to 65% and only from January till September of 2014, the share of gas exports rose over 66% (Cooper 2014). González, Lacovone, and Subhash (2013) also in their study mentioned about the increasing reliance of Russia on natural gas exports. Moreover, they also stated that Russia needs diversification in its economy, which means to do new thing in new markets or new sectors. Cooper (2014) indicates that for the oil exporting countries diversification of the economy is very crucial in order to be ready and not vulnerable when the prices of oil would decline.

All in all, the demand for Russian natural gas has decreased in recent years for which there are several factors. The EU wants to drop its dependence on Russian gas and search alternative gas supply sources. The monopolistic position of Russia and particularly Gazprom

as a gas supply source is decreased. Until the recent years, Russia mainly relied on the profits earned from the exports of natural gas and did not diversify its economy in other fields. The diversification of the economy is very crucial for Russia, so that even when the prices of oil would decrease, Russia will be less affected. The analysis of the capstone proved the hypothesis that *Russia uses its natural gas reserves to improve its dominant position in the international system*. It also showed that Russia mainly relies on the exports of its natural gas reserves and failed to diversify its economy in other fields.

Conclusion

The dominant position of Gazprom and the demand for Russian natural gas is decreased because of some factors that were mentioned in the study. Russia's reliance on the natural gas is very significant and it failed to diversify its economy in other fields. The study showed that the natural gas has a very important role in Post-Soviet Russia's foreign policy.

The analysis of the capstone accepted the hypothesis that Russia uses its natural gas reserves to improve its dominant position in the international system. The dominance of Russia as a major natural gas supplier to Europe shows that many European states are largely and even entirely dependent on Russian natural gas. On the other hand, many countries want to search alternatives to Russian gas and to lessen their dependence on Russia. As an alternative to the Russian natural gas is the LNG imported from the US, for which the transportation is shorter and it has less political risks.

All in all, natural gas plays a significant role in the Post-Soviet Russian foreign policy. Although Russia uses its dominant position as a major natural gas supplier and sets high prices, many states continue to be entirely or mostly dependent on Russian natural gas. But as the demand for gas is decreased Russia should start to diversify its economy in order not to be mainly relied on the natural gas exports.

References

- AAslund, Anders. 2010. "Gazprom: Challenged Giant in Need of Reform." I: Russia after the Global Economic Crisis, Red. Anders \AAslund, Sergei Guriev & Andrew Kuchins. Washington: Peterson Institute for International Economics, 151–68.
- Ahrend, Rudiger, and William Tompson. 2010. "Unnatural Monopoly: The Endless Wait for Gas Sector Reform in Russia." *Europe-Asia Studies*. <http://www.tandfonline.com/doi/full/10.1080/1080/09668130500199376>.
- Al Jazeera. 2016. "Analysis: How Russia Keeps Piling Pressure on Turkey." Al Jazeera. February 7. <http://www.aljazeera.com/news/2016/02/analysis-russia-piling-pressure-turkey-160207065649214.html>.
- Ashford, Emma. 2016. "Not-So-Smart Sanctions." *Foreign Affairs* 95 (1): 114.
- Ashley, Richard K. 1981. "Political Realism and Human Interests." *International Studies Quarterly* 25 (2): 204–36.
- BBC. 2015. "Turkey's Downing of Russian Warplane - What We Know." BBC. BBC News. December 1. <http://www.bbc.com/news/world-middle-east-34912581>.
- Bechev, Dimitar. 2015. "Russia and Turkey-What Does Their Partnership Mean for the EU? EPC Policy Brief, 13 February 2015." <http://aei.pitt.edu/61624/>.
- Belkin, Paul, Jim Nichol, and Steven Woehrel. 2013. "Europe's Energy Security: Options and Challenges to Natural Gas Supply Diversification." Congressional Research Service, 7–5700.
- Boguslavskaya, Kateryna, Ingerid Opdahl, Elena Kropatcheva, and Andrei Belyi. 2015. "Gazprom - Challenges at Home and Abroad." Center for Security Studies (CSS), ETH Zurich; Research Centre for East European Studies, University of Bremen; Institute for European, Russian and Eurasian Studies, George Washington University, *Russian Analytical Digest*, no. 174. http://www.css.ethz.ch/publications/DetailansichtPubDB_EN?rec_id=3416.
- Cobanli, Onur. 2014. "Central Asian Gas in Eurasian Power Game." *Energy Policy* 68: 348–70.
- Cohen, Ariel. 2014. "Caspian Gas, TANAP and TAP in Europe's Energy Security." Istituto affari internazionali. http://mercury.ethz.ch/serviceengine/Files/EINIRAS/179557/ipublication_document_singledocument/e337036b-8c5d-46a3-b145-21da88206559/en/iaiw1406.pdf.
- Cooper, Julian. 2014. "The Russian Economy: The Impact of Sanctions and Falling Oil Prices, and the Prospects for Future Growth." *Russian Analytical Digest* 22 (160). <http://www.css.ethz.ch/publications/pdfs/RAD-160.pdf>.

- Dickel, Ralf, Elham Hassanzadeh, James Henderson, Anouk Honoré, Laura El-Katiri, Simon Pirani, Howard Rogers, Jonathan Stern, and Katja Yafimava. 2014. "Reducing European Dependence on Russian Gas." OIES Paper NG92.
<https://xa.yimg.com/kq/groups/21990276/224180172/name/3c.pdf>.
- Dobrokhotoy, Roman. 2015. "Sanctions Against Russia: Economic And Political Consequences." *The War in Ukraine: Lessons for Europe*, 67.
- Ebinger, Charles, Kevin Massy, and Govinda Avasarala. 2012. "Liquid Markets: Assessing the Case for US Exports of Liquefied Natural Gas." Washington: Brookings Institution.
http://www.brookings.edu/~media/research/files/papers/2012/1/natural-gas-ebinger/natural_gas_ebinger.pdf.
- Emerson, Michael. 2014. "The EU-Ukraine-Russia Sanctions Triangle." CEPS Commentary, Brussels 13. <http://www.ceps.be/publications/eu-ukraine-russia-sanctions-triangle>.
- Engerer, Hella, Franziska Holz, Philipp M. Richter, Christian von Hirschhausen, and Claudia Kemfert. 2014. "European Natural Gas Supply Secure despite Political Crises." *DIW Economic Bulletin* 4 (8): 3–15.
- Fazilov, Fakhmiddin, and Xiangming Chen. 2013. "China and Central Asia: A Significant New Energy Nexus." <http://digitalrepository.trincoll.edu/facpub/85/>.
- Gazprom. 2016. "About Gazprom." <http://www.gazprom.com/about/>.
- Gazprom. 2015. "New Russia – Turkey Gas Pipeline Route Approved at Meeting in Ankara." Gazprom. January 27.
<http://www.gazprom.com/press/news/2015/january/article213570/>.
- Gelb, Bernard A. 2007. "Russian Natural Gas: Regional Dependence." In . DTIC Document.
<http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA460847>.
- Goncalves, Christopher, and Anthony Melling. 2014. "Perfect Match? European Natural Gas Markets and North American LNG Exports." *Natural Gas & Electricity* 30 (8): 1–9.
- González, Alvaro S., Leonardo Lacovone, and Hari Subhash. 2013. "Russian Volatility: Obstacle to Firm Survival and Diversification." *World Bank Policy Research Working Paper*, no. 6605.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2327361.
- Halvorsen-Weare, Elin E., and Kjetil Fagerholt. 2013. "Routing and Scheduling in a Liquefied Natural Gas Shipping Problem with Inventory and Berth Constraints." *Annals of Operations Research* 203 (1): 167–86.
- Hancock, Kathleen J. 2006. "Escaping Russia, Looking to China: Turkmenistan Pins Hopes on China's Thirst for Natural Gas." In *China and Eurasia Forum Quarterly*, 4:67–87.

- http://kms2.isn.ethz.ch/serviceengine/Files/RESSpecNet/31693/ichapters_lection_singledocument/F5FF9269-E941-4E0C-856D-27349798D068/en/7_Escaping_Russia_Looking_China.pdf.
- Herz, John H. 1981. "Political Realism Revisited." *International Studies Quarterly* 25 (2): 182–97. doi:10.2307/2600350.
- Holland, Sharon R. 2015. "Economic Powers That Be: US-Russo Political Actions and Their Affect on the Russian Economy." <http://digitalcommons.liberty.edu/honors/509/>.
- Holz, Franziska, Hella Engerer, Claudia Kemfert, Philipp M. Richter, and Christian von Hirschhausen. 2014. "European Natural Gas Infrastructure: The Role of Gazprom in European Natural Gas Supplies." Deutsches Institut für Wirtschaftsforschung. http://193.174.141.131/documents/publikationen/73/diw_01.c.465334.de/diwkompakt_2014-081.pdf.
- Hufbauer, Gary Clyde, Allie E. Bagnall, Julia Muir, and others. 2013. "Liquefied Natural Gas Exports: An Opportunity for America." PIIE Policy Brief. <http://rxlofql.iiie.com/publications/pb/pb13-6.pdf>.
- Jalilvand, David Ramin. 2013. "Iran's Gas Exports: Can Past Failure Become Future Success?" Oxford Institute for Energy Studies. <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2013/06/NG-78.pdf>.
- Kovacevic, Aleksandar. 2009. "The Impact of the Russia-Ukraine Gas Crisis in South Eastern Europe." Oxford Institute for Energy Studies. <http://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/NG29-TheImpactoftheRussiaUkrainianCrisisinSouthEasternEurope-AleksandarKovacevic-2009.pdf>.
- Locatelli, Catherine. 2014. "The Russian Gas Industry: Challenges to the 'Gazprom Model'?" *Post-Communist Economies* 26 (1): 53–66.
- Monaghan, Andrew. 2006. "Russia-EU Relations: An Emerging Energy Security Dilemma." *Pro et Contra* 10 (2-3): 8.
- Öniş, Ziya, and Şuhnaz Yılmaz. 2015. "Turkey and Russia in a Shifting Global Order: Cooperation, Conflict and Asymmetric Interdependence in a Turbulent Region." *Third World Quarterly*, 1–25.
- Orlov, Anton. 2015. "An Assessment of Optimal Gas Pricing in Russia: A CGE Approach." *Energy Economics* 49: 492–506.
- Petrillo, Enza. 2013. "Russian Foreign Policy towards the Balkans: Which Perspective?" *ISPI Analysis*, no. 169. http://193.205.23.8/sites/default/files/pubblicazioni/analysis_169_2013.pdf.
- Richter, Philipp M., and Franziska Holz. 2015. "All Quiet on the Eastern Front? Disruption Scenarios of Russian Natural Gas Supply to Europe." *Energy Policy* 80: 177–89.

- Shadrina, Dr Elena. 2016. "Can Russia Succeed in Energy Pivoting to Asia?" http://www.eppen.org/en/resim/haber_resim/EPPEN16.Elena.Shadrina.pdf.
- Shaffer, Brenda. 2015. "Europe's Natural Gas Security Of Supply: Policy Tools For Single-Supplied States." *Energy LJ* 36: 179–409.
- Sharples, Jack, and Andrew Judge. 2014. "Russian Gas Supplies to Europe: The Likelihood, and Potential Impact, of an Interruption in Gas Transit via Ukraine." In *The European Geopolitical Forum*. http://www.gpf-europe.com/upload/iblock/c52/egf_energy_special_contribution_pdf.pdf.
- Simes, Dimitri K. 2007. "Losing Russia." *Foreign Affairs-New York*- 86 (6): 36.
- Trenin, Dmitri. 2007. "Russia Redefines Itself and Its Relations with the West." *Washington Quarterly* 30 (2): 95–105.
- Vasquez, John A. 1997. "The Realist Paradigm and Degenerative versus Progressive Research Programs: An Appraisal of Neotraditional Research on Waltz's Balancing Proposition." *American Political Science Review* 91 (04): 899–912.
- VOA. 2014. "Lithuania President Warns of Growing 'Russian Chauvinism.'" VOA. July 4. <http://www.voanews.com/content/lithuania-president-warns-of-growing-russian-chauvinism/1952900.html>.
- Wang, Qiang, Xi Chen, Awadhesh N. Jha, and Howard Rogers. 2014. "Natural Gas from Shale Formation—the Evolution, Evidences and Challenges of Shale Gas Revolution in United States." *Renewable and Sustainable Energy Reviews* 30: 1–28.
- Williams, Michael C. 2004. "Why Ideas Matter in International Relations: Hans Morgenthau, Classical Realism, and the Moral Construction of Power Politics." *International Organization* 58 (04): 633–65.
- Winrow, Gareth M. 2013. "The Southern Gas Corridor and Turkey's Role as an Energy Transit State and Energy Hub." *Insight Turkey* 15 (1): 145.
- Yafimava, Katja. 2015. "European Energy Security and the Role of Russian Gas: Assessing the Feasibility and the Rationale of Reducing Dependence." <http://www.iai.it/sites/default/files/iaiw1554.pdf>.