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**The role of Azerbaijan in the
context of EU energy security**

Master thesis

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Abstract

The thesis deals with the issue of energy security in the European Union, and the role played by Azerbaijan in the provision of the EU's energy independence and long-term stability. The author investigates the current issues of the European Union's energy policy, and the main threats impairing the EU's energy independence. Countries of the Caspian Basin, and particularly Azerbaijan, are investigated as the main alternative suppliers of energy resources for the European Union to increase its energy security. The author justifies and forecasts the future development of the EU-Azerbaijani relations in the energy sector taking into account the current policies implemented by the European Union in the field of energy security.

Abstrakt

Diplomová práce se zabývá problematikou energetické bezpečnosti v Evropské unii, a roli, kterou hraje Ázerbájdžán v oblasti poskytování a zajištění energetické nezávislosti a dlouhodobé stability v Evropské unii. Autor zkoumá aktuální otázky energetické politiky Evropské unie, a hlavní hrozby poškozující energetické nezávislosti Evropské unie. Země Kaspického moře, zejména Ázerbájdžán, jsou zkoumány jako hlavní alternativní dodavatele energetických zdrojů pro Evropskou unii, aby zvýšila svou energetickou bezpečnosti. Autor ospravedlňuje a předpovídá budoucí vývoj vztahů mezi Ázerbájdžánem a Evropskou unii v oblasti energetiky s přihlédnutím k současné politice prováděné Evropskou unií v oblasti energetické bezpečnosti.

Keywords

European Union, Azerbaijan, Caspian Basin, energy security, energy policy, energy resources.

Klíčová slova

Evropská unie, Ázerbájdžán, Caspian Basin, energetické bezpečnosti, energetické politiky, energetické zdroje

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Declaration of Authorship

1. The author hereby declares that he compiled this thesis independently, using only the listed resources and literature.
2. The author hereby declares that all the sources and literature used have been properly cited.
3. The author hereby declares that the thesis has not been used to obtain a different or the same degree.

Prague 15.05.2015

Abdul Aliyev

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Institute International Economic and Political Studies

Master thesis proposal The role of Azerbaijan in the context of EU energy security

Master Thesis Proposal

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TOPIC CHARACTERISTICS

The (in)security of energy supply to Europe has come to the focus of public and academic attention in recent years. Russia is the largest supplier to the European energy market, especially in terms of natural gas – as both a producer and an exporter – which means that Russia and the EU are interdependent. To offset this mutual dependency, the EU works with alternative energy suppliers, such as Azerbaijan, Kazakhstan, and Turkmenistan, in order to diversify suppliers and pipelines. Using a common energy policy, in contrast to the EU, Russia has a major geopolitical role in controlling energy resources in the post-Soviet region, especially in Caspian Basin countries. To provide necessary energy from outside particularly from Russia is not safe enough, as it was proven several times. As stability in the region of Middle East is very fragile, the Caspian basin gains priority for providing alternative energy resources and transportation routes.

My Master thesis will aim to analyze the importance of energy resources of Azerbaijan in security of the energy supply of the European Union. That is why, I want to

emphasize why I find it obligatory for Europe (especially for Eastern Europe) to decrease its energy and political dependence on Russia in terms of hydrocarbons' exports.

Hypothesis

1. Lack of alternatives may lead to unfair pricing on energy.
2. The usage of the Russian “energy weapon” induces Europe to re-think and diversify its energy suppliers.
3. Monopoly of Russian energy supply to the European Union can be reduced by Azerbaijani energy provision.

Methodology

The thesis is going to be based mainly on qualitative methods and is going to use an interpretative approach. I would like to analyze my research topic through the exploration for the paper to have a more comprehensive approach. I also aim to explore bilateral and multilateral agreements, documents as well as scientific articles and literature on this issue, drawing on secondary sources such as scholarly books and articles, publications, energy firm websites, as well as primary sources and European Union decisions and strategies. In order to present the realities of the topic from today's perspective and aim also to observe the future perspective, some statistical data will be analyzed in the thesis as well.

Outline:

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2. General framework of EU energy security policy
 - 2.1. Historical development of the Energy Policy of the EU
 - 2.2. The role of the governments in European energy policy
 - 2.3. The importance of Russian hydrocarbon exports for Europe
3. Azerbaijan's role in ensuring the EU's energy security
 - 3.1. Azerbaijani policies towards energy security
 - 3.2. Energy Geopolitics of Azerbaijan
 - 3.3 Importance of Caspian basin for the energy security of EU
4. Main challenges for European energy security and role of Azerbaijan as a partner
 - 4.1. The evolution of EU energy security concept
 - 4.2. Options for diversification of energy sources and suppliers: role of Azerbaijan
5. Conclusions
6. References / Bibliography

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Introduction and Methodology

The issue of security of energy supply to Europe has come to the focus of public and academic attention in recent years. Russia is the largest supplier to the European energy market, especially in terms of natural gas supplies – both as a producer and exporter – which means that Russia and the EU are much interdependent. To offset this mutual dependency, the EU works with alternative energy suppliers, such as Azerbaijan, Kazakhstan, and Turkmenistan, in order to diversify the suppliers and ways of supplies. Using a common energy policy, in contrast to the EU, Russia has a major geopolitical role in controlling energy resources in the post-Soviet region, especially in the Caspian Basin countries. The supplies of energy resources only from impose significant threats of loss of stability on the European Union, as it has already been proven several times. As stability in the Middle East is very fragile, the Caspian Basin gains top priority for providing alternative energy resources and transportation routes.

The recent geopolitical trends in Europe have shown that the relations between the Russian Federation, one of the world's major superpowers, and the European Union become more and more strained. Those tendencies became particularly obvious with Russia's annexation of the Crimean peninsula from Ukraine, and the country's involvement in the war in the Eastern regions of Ukraine. The mutual sanctions implemented by the European and Russian authorities have shown that the cooperation between Russia and the EU may face significant complications in the near future. Moreover, taking into account the European Union's utter dependence on Russia in terms of the supplies of energy resources, it becomes obvious that the Russian Federation may use the supplies of hydrocarbons as a significant lever of tension in its relations with the European Union already in the near future. Such tension may consist in changes in the pricing policy, or in the complete stoppage of all energy supplies.

Taking into account the above facts, it becomes obvious that the issue of energy security is the European Union's top priority as of today, and the supranational formation should seek all possible ways to improve the situation. Therefore, the countries of the

Caspian Basin seem to be a perfect option for the European Union to optimize the structure of energy imports in all respects. Among those countries, a prominent role could be played by Azerbaijan. This is due not only to the fact that the country is a major exporter of hydrocarbons in the Eurasian region, but also due to the fact that its authorities maintain close relations with the European Union, and the country has lately been gradually following its path of European integration. Therefore, there are prospects for the tightening cooperation between Azerbaijan and the European Union in all fields in the near future, and it is worth investigating more in detail the possible development of mutual cooperation between them in the field of energy supplies.

This Master's thesis will aim to analyze the importance of Azerbaijan's energy resources for the security of energy supplies to the European Union. The thesis will emphasize the author's opinion why Europe (especially Eastern European countries) should decrease its energy and political dependence on Russia in terms of the imports of hydrocarbons.

The main research question is whether Azerbaijan may become a key partner of the European Union within framework of the EU's policy aimed at diversifying energy supplies.

The aim of the thesis is to investigate the key aspects of the European Energy Policy, the possible role which Azerbaijan may play in its implementation, and the prospects for the successful development of Azerbaijan-EU relations in the field of energy supplies taking into account the current trends on the European energy market.

Hypotheses

For the purpose of fulfilling the aim of the research and maximizing the added value of the thesis, several hypotheses will be tested.

1. Lack of alternatives in energy supplies may lead to unfair pricing.

2. Usage of the Russian “energy weapon” induces Europe to re-think and diversify its energy suppliers.
3. Supplies of energy from Azerbaijan may help significantly diversify the EU’s imports of energy resources.

Methodology

The thesis will be based mainly on qualitative methods, and will use an interpretative approach. The author will analyze the research topic through the exploration of different scenarios, for the paper to have a more comprehensive approach. The author also aims to explore bilateral and multilateral agreements, documents and scientific articles and literature on this topic, drawing on secondary sources such as scholarly books and articles, publications, energy firm websites, as well as primary sources and European Union’s resolutions and strategies. In order to present the realities of the topic from the today’s perspective and to observe the future prospects, some statistical data will be analyzed in the thesis as well.

For the purpose of increasing the added value of the research, bibliographic sources available in open access, both in print and electronic forms, will be used.

1 Investigation of the European Union's energy policy and energy security

1.1 General framework of EU energy security policy

Historically, the European Union developed from the European Coal and Steel Community and the European Atomic Energy Community. The two communities were international organizations uniting European countries, which were mostly aimed at ensuring the member states' energy security, and at governing a large number of issues in the energy sector for the purpose of ensuring the long-term sustainable development of European states (Orbie 2008, pp. 63-64). This testifies that the development of European integration has historically been tightly interconnected with the issues of the European states' energy security, and the energy sector has long remained of a key importance to European countries.

The importance of uninterrupted energy supplies to the European Union remains topical as of today. This is due to the fact that the EU member states are unable to fulfill their domestic needs in energy in full due to the lack of the required resources. Therefore, countries making part of the Union are forced to import energy resources from abroad, and therefore are affected by a great number of threats, as they remain dependent on third-party energy suppliers (Welfens and Addison 2009, pp. 105-106). As of today, the main suppliers of energy resource, namely natural gas and oil, to the European Union are Russia, Norway, Canada, Niger, and Kazakhstan. In this context, the European Union has long been trying to implement effective policies in the energy sector destined to diversify the sources of energy supplies, to develop renewable energy, and to increase the level of energy efficiency. Such measures are aimed to decrease the EU's dependence on energy supplies from Russia, and at the same time to increase the own production of energy in the conditions of scarce energy resources (Talus 2013, pp. 72-76).

However, despite the objective preconditions existing in the European Union's energy sector and the EU's long struggle for the diversification of energy supplies and the improvement of its energy industry, the first direct measures to adopt a common Union-

wide energy policy were only undertaken for the first time in 2005 by the European Council. In 2007, the Treaty of Lisbon stipulated common policies of the EU member states in the field of energy, but still left much of the powers in the energy sector on the level of the EU member states' national governments. Thus, according to Article 194 of the Treaty of Lisbon, the European Union's energy policy "*shall aim, in a spirit of solidarity between Member States, to ensure the functioning of the energy market; ensure security of energy supply in the Union; promote energy efficiency and energy saving and the development of new and renewable forms of energy; and promote the interconnection of energy networks.*" (Treaty of Lisbon 2007, Art. 194). The Treaty of Lisbon played an important role for the development of the EU member states' common energy policy, as it in fact established the first legal foundations for the effective elaboration of such policy within the Union (Müller-Kraenner 2008, pp. 21-24).

Later the same year, the European Commission published its proposals for the improvement of the European Union's energy sector, namely Proposal 2012/0288 (COD) for a Directive of the European Parliament and of the Council amending Directive 98/70/EC relating to the quality of petrol and diesel fuels and amending Directive 2009/28/EC on the promotion of the use of energy from renewable sources, and the European council adopted those key proposals which should form the backbone of the EU member states' common energy policies. Among other things, the European Commission's proposals for the energy sector include the following: creation of a carbon-free economy through a decrease of carbon emissions by 95% by 2050, decrease in the level of greenhouse gas emissions by 20% by 2020, increase in the share of biofuels in the EU's energy sector up to 10% by 2020, increase in the share of renewable energy in the structure of the European Union's energy consumption up to 20% by 2020, elaboration of the European Strategic Energy Technology Plan aimed at developing the most up-to-date technologies in the fields of energy production and conservation, renewable energy, capture of emissions, etc. Also, it is particularly worth noting that those proposals stipulate that the European Union sees Africa as its key partner in the energy sector, and aims to develop mutually beneficial relations with the continent's countries in this field in the future (Tosun, Biesenbender and Schulze 2015, pp. 133-135).

Within the framework of the common European energy policy, the EU member states are currently governed by the so-called SET Plan (Strategic Energy Technologies Plan) which is destined to increase the research and engineering activities across all member states for promoting the development of the European energy sector. The SET Plan includes a number of initiatives aimed at promoting particular branches of the European energy sector. Thus, the Solar Europe Initiative focuses on the development of solar power plants, particularly in Southern European countries, the European Wind Initiative is aimed at developing applications for the wind energy systems and at creating new wind power plants in EU member states, the Bioenergy Europe Initiative is destined to increase the share of biofuels in the European energy sector, the European Electricity Grid System is aimed at developing a smart electricity system common for all EU member states which would significantly spare the funds spent by the Union's authorities on electricity, and so on (Jacobs 2012, pp. 66-70).

The Directive on Electricity Production from Renewable Energy Sources makes another important part of the European Union's energy policy. Under this Directive, target indicators are established for member states in terms of the share of renewable energy in their aggregate energy production. As of today, the target share of renewable energy to be reached by 2020 is established at a level of 20%. This should help significantly diversify the sources of energy production in the Union, and should also substantially decrease the EU's dependence on energy supplies from other countries, particularly from Russia (Aalto 2008, pp. 91-93).

The European Union Emissions Trading System (EU ETS) adopted in 2005 is another regulation making the backbone of the European Union's energy policy. Under EU ETS, caps are set for greenhouse gas emissions for plants, factories, installations, and other objects which are pollutants of the ecosphere. Such caps may differ on the national level. A system of allowances exists for the greenhouse gas emissions, similarly to the allowances provided under the Kyoto Protocol. Such allowances can be traded on the open market. This system allows significantly sparing the national governments' funds, and also promotes the industrial manufacturers' interest in reducing their emissions. The planned

caps for 2020 currently amount to a 21% reduction in the aggregate greenhouse gas emissions (Proedrou 2011, pp. 106-108).

Directive 2009/72/EC adopted by the European Union in 2009 governs the field of liberalization of the European Union's energy market. The Directive is mainly aimed at de-integrating the European energy market by decreasing the role played by governments, and at the same time by allowing major corporations running their operations in the energy sector without any major government interventions. This is believed to be a prerequisite for the effective development of competition on the European energy market, and thus for the increased effectiveness of energy production on the EU's territory (Pedersen, Behrens and Egenhofer 2008, pp. 40-41).

The Directive on the energy performance of buildings was adopted by the European Union within the framework of its Intelligent Energy – Europe Programme for 2003-2006, and is still valid as of today. The main aim of the Directive is to ensure the high energy performance of residential and non-residential housings with an ultimate aim of reducing the consumption of energy by such buildings. For this purpose, inspections of boilers and air conditioning systems are stipulated in the Directive, as well as the provision of Energy Performance Certificates by the EU member states' national governments (Morata and Solorio Sandoval 2012, pp. 45-47).

A particularly important role in the implementation of the European Union's energy policy is played by the International Partnership for Energy Efficiency Cooperation (IPEEC), an international forum in the field of energy efficiency with the participation of countries from around the globe. The forum is mainly destined to promote the development of up-to-date technologies combining the more effective use of energy resources with the smaller levels of emissions (Proedrou 2011, pp. 114-115). Within the framework of IPEEC, several initiatives play an essential role for the EU in terms of the development and implementation of its common energy policy. Thus, MEER (Making Energy Efficiency Real) is an initiative aimed at promoting bilateral energy efficiency programmes; sectorial initiatives are destined to promote energy efficiency in particular industries and economic

branches, etc. Common global policies are elaborated within the framework of IPEEC as well (Kuzemko 2012, pp. 290-291).

The ACEA Agreement between the European Automobile Manufacturers Association and the European Commission governs the field of emissions in automobile transport. Namely, the Agreement assumes gradual decrease in the maximum allowable values of carbon dioxide emissions by the car transports. This is particularly important taking into account the fact that the automobile transport is the largest air pollutant in Europe. However, the ACEA Agreement is voluntary, and isn't mandatory to comply with for the EU member states' national governments (Pedersen, Behrens and Egenhofer 2008, pp. 47-48).

A particularly important field of the European Union's energy policy is the research and development activities aimed at increasing the energy efficiency of the Union's member states, and at promoting the development of the EU's energy sector by means of innovations. Within this framework, the EU participates in a number of projects the most prominent of which are the following: ALTENER (development of new and alternative energy sources for reducing the consumption of traditional resources such as natural gas and oil), CEPHEUS (implementation of highly energy-effective technologies in the construction of housings), STEER (promotion of the use of biofuels and alternative energy resources in the field of transport), etc. (Morata and Solorio Sandoval 2012, pp. 82-85).

Finally, an important part of the European Union's measures within the framework of the European Union's energy policy is played by the measures aimed at diversifying the sources of energy supplies. For instance, the European Union participates in the Energy Community of South East Europe (ECSEE) which involves countries beyond the EU, and is aimed to develop a common system of energy supplies for the entire European continent. The Baku Initiative promoted by the European Union involves the participation of the EU and countries with access to the Black and Caspian Seas. The Baku Initiative is aimed at promoting the supplies of energy resources from Asian countries to the European Union, with the involvement of littoral Caspian and Black Sea states as transit points. The

Initiative is aimed at limiting the level of dependence on Russian energy supplies (Kuzemko 2012, pp. 274-277).

The Union for the Mediterranean includes the European Union member states and countries of North Africa, and is aimed at building up close partnership ties between the European Union and African countries in the field of energy production and supplies. Currently, the European Union plans to further develop this vector of cooperation in the energy sector, as African countries are seen as the EU's potential major partners in the light of the EU's energy policy aimed at the diversification of supply sources (Jacobs 2012, pp. 101-102).

The development of relations in the energy sector with Russia is run within the framework of bilateral and multilateral agreements. Such agreements mostly ensure continuous and uninterrupted supplies of natural gas and oil from Russia to the EU member states (Aalto 2008, pp. 79-80). As the relations between the European Union and Russia in the energy sector are crucial for the EU in terms of ensuring the Union's energy security, they will be analyzed more deeply in the next chapters of this thesis.

In the next chapter of the thesis, the role of the EU member states' national governments in the implementation of the European Union's common energy policy will be investigated more in detail.

1.2 The role of governments in the European Energy Policy

A particularly important issue in the field of implementation of the European Union's common energy policy is the coordination of activities in the energy sector between the national governments of the EU member states. As it has already been stated in the previous chapter of this thesis, the legislative framework for the implementation of the European Union's energy policy is currently implemented throughout all member states. Thus, the EU directives related to the field of energy are transposed to the national legislation of all EU member states, and the internal energy market rules are to be complied with by all EU member states. However, there are problems with the implementation of

common regulations, norms and standards, as there are significant differences in the legislation in force in different EU member states. Particularly, it is worth noting here that the formation of the energy mix, i.e. the structure of consumption of different types of energy in different EU member states belongs to the competences of such countries' national authorities. This scheme is implemented for the purpose of optimizing the structure of energy consumption in all EU member states, and thus improving the overall level of energy security in the European Union (Pedersen, Behrens and Egenhofer 2008, pp. 54-55).

First of all, it should be noted that the agreements for energy supplies are entered into by each member state with foreign energy suppliers individually. Therefore, the terms and conditions of the supplies of natural gas, oil and other resources to different EU member states may significantly differ. As a result, the level of economic effectiveness of use of such resources differs as well for different EU member states, and their national governments may have different levels of interest in the compliance with the energy-efficiency norms offered within the framework of the European Union's energy policy (Welfens and Addison 2009, pp. 97-99).

Next, it is worth noting that there is opposition within the European Union in terms of the different approaches to the cooperation with Russia in the energy sector. Lately, the issue of the construction of the so-called South Stream, a gas pipeline joining Russia and the European Union directly under the Black Sea and across the Balkans has been put into focus in the European Union (though it was cancelled in 2014 due to the Crimea Crisis and the tensions in the political relations between Russia and the European Union). While most EU member states oppose the implementation of the project in the light of Russia's annexation of Crimea from Ukraine and the aggression in the Eastern regions of Ukraine, and promote the construction of TANAP pipelines for the supplies of natural gas from Azerbaijan across the territory of Turkey, some EU countries still stress the importance of the cooperation with Russia. For instance, this is the case of Greece. Such an opposition between the European Union member states prevents the EU's authorities from effectively implementing their strategy in the energy field in terms of the diversification of energy

supplies, and only further stresses the issues existing in the EU's energy sector (Tosun, Biesenbender and Schulze 2015, pp. 227-230).

Next, it should be understood that different EU member states have different standards and regulations in the field of energy and energy security. Due to such differences, companies of different European countries tend to adopt different approaches to energy security and energy effectiveness. Although the policies implemented by the European Union in the field of maximum allowable emissions are among the most developed around the globe, subjects from less developed states have smaller financial resources, and therefore fail to comply with the norms recommended by the European Union (Kuzemko 2012, pp. 164-166). Moreover, there are different approaches in different EU member states to the development of alternative energy sources. This depends not only on the legislative base, but also on the climate conditions and availability of resources in different countries. For instance, Sweden largely focuses on the development of alternative energy, and its standards in this field significantly differ from the ones implemented within the framework of the European Union's common energy policy. Thus, Swedish companies are subject to much stricter requirements in terms of energy efficiency and the use of alternative energy, and therefore the conditions of their work significantly differ from the rest of the EU member states (Jacobs 2012, pp. 202-205).

However, despite the existing differences, member states of the European Union tend to closely cooperate in the energy sector for the purpose of developing mutual standards and achieving mutual goals with an ultimate aim of improving energy efficiency. For instance, all EU member states' national governments tightly cooperate in the partnership programmes for research and development in the energy sector. Common budgets are formed for the development of projects in this field, and the results of such activities are implemented across all member states, thus contributing to the effective implementation of common energy policy norms in the European Union (Orbie 2008, pp. 122-124).

Also, all national governments tightly cooperate with foreign partners within initiatives such as the Baku Initiative or the Union for the Mediterranean. Thanks to those

mutual activities, the EU member states promote the implementation of the European Union's common energy policy in the field of diversification of energy supplies and increase in the EU's energy security (Talus 2013, pp. 174-175).

Taking into account the importance of hydrocarbon imports from Russia, in the next chapter, the Russian Federation's role for the European Union's energy sector will be analyzed more in detail.

1.3 The importance of Russian hydrocarbon exports for Europe

When investigating the European Union member states' dependence of the imports of energy resources from Russia, it is first of all worth understanding that the Russian Federation is one of the global leaders in terms of the volumes of proven oil and natural gas resources, their production and exports. Russia is abundant in energy resources, and has made this sphere its key factor of success in both economic relations and spreading of its geopolitical impact in the international level (Perović, Orttung and Wenger 2009, pp. 22-23).

As of today, Russia ranks 8th worldwide in terms of proven oil reserves, 1st in terms of oil production, and 2nd in terms of oil exports. At the same time, the country holds the 1st place on the global level by proven natural gas reserves, 2nd place by natural gas production, and 1st place by natural gas exports. Those figures testify that Russia is not only the region's main producer of energy resources, but also a major supplier of such resources on the global scale (Aalto 2012, pp. 60-61).

In recent years, the share of Russian imports of energy resources in the European Union has steadily remained at an average level of over 27%. At the same time, the share of Russian natural gas in the European Union's aggregate natural gas imports has constantly remained at an average level of nearly 40% in recent years. The high values of hydrocarbon imports from the Russian Federation testify that the country's supplies of energy resources play an utterly important role in the provision of the EU's corporate sector and population with energy resources. However, at the same time, the great concentration of energy

supplies testifies high risks borne by the EU member states in terms of the possible stoppage of supplies from the Russian Federation. This is one of the main factors preconditioning the EU member states' desire to diversify their sources of energy supplies, which has been described earlier in this thesis. Moreover, in this context, it is worth noting that the level of different EU member states' dependence on the Russian Federation in terms of natural gas supplies differs, and some of those states are completely dependent on such supplies. This poses the energy security of the entire European Union under a major threat, and therefore the EU member states are forced to seek diversifying their sources of energy imports (Dellecker and Gomart 2011, pp. 113-115).

The energy sector in the Russian Federation is monopolized by public enterprises. Thus, all gas supplies are fully controlled by the Russian state-owned gas corporation Gazprom, while all oil supplies are controlled by the state-owned giant Rosneft. As a result, when according the supplies of energy resources from the Russian Federation, the European Union member states have to agree upon all such terms and conditions with the Russian government, and not with private structures. On the one hand, this deprives the European Union of any possibility to seek better conditions of supply, prices, and so on. On the other hand, this also preconditions the utterly high dependence on Russia in geopolitical terms, as the Russian government may use energy supplies as a lever of tension in case of any political conflicts, being the sole beneficiary of all hydrocarbon supplies. At the same time, it should be noted on the other hand that the European Union is currently the major buyer of Russia's energy resources, and the Russian Federation doesn't have any effective switching alternatives at the moment, thus being dependent on the EU in terms of sales of natural gas (Kuzemko 2012, pp. 77-81).

An important aspect to be noted here is that all Russian supplies of natural gas to the European Union are made using the Urengoy-Pomary-Uzhgorod pipeline, the Nord Stream pipeline (offshore pipeline used for transporting natural gas), the Blue Stream pipeline (natural gas pipeline laid through the Black Sea and connecting the territory of the Russian Federation with Turkey), and the Yamal-Europe pipeline (connecting Russia with Germany through the territories of Belarus and Poland), and all oil supplies are made via

the Druzhba oil pipeline. There are no other gas and oil transportation pipelines connecting Russia and Western Europe. The projects planned for the construction of new pipelines are currently in progress, and there are significant political obstacles to their effective termination. The existing pipelines joining Russia and Western Europe all pass through the territory of Ukraine which lies between the Russian Federation and the EU. As a result, the EU is vulnerable to significant threats of interruption in the supplies of energy resources due to possible conflicts between Russia and Ukraine. This further deteriorates the European energy security, and makes the Union's dependence on Russia's energy supplies even greater.

In addition to the abovementioned threat, it should be noted here that the Urengoy-Pomary-Uzhgorod natural gas pipeline and the Druzhba oil pipeline are in fact the only pipelines existing between the European Union and countries of the Asian continent. Therefore, this means that there is no direct connection between the EU and those countries for transporting oil and natural gas. Countries of the Caspian Basin and other potential suppliers of energy resources to the European Union are thus forced to transport the energy resources produced on their territory via the Russian Federation. This implies the payment of fees for the use of pipelines laid through Russia's territories, and preconditions the necessity to enter into agreements with the Russian Federation on the terms dictated by the country's authorities (Tosun, Biesenbender and Schulze 2015, pp. 197-199).

Obviously, the information above definitely shows how much the European Union is currently dependent on Russia in terms of the imports of energy resources. The Russian Federation largely controls the supplies of natural gas and oil to the European Union, and has levers which may be used for interrupting those supplies, or for making them utterly ineffective in terms of the required financial expenses. This advantage provides Russia with an opportunity to use energy resources not only as an economic factor, but also as a major lever of geopolitical tension on the European Union (Orbie 2008, pp. 180-181).

Taking into account the above information, it should be understood that the risks borne by the European Union in the context of its high dependence on energy supplies from the Russian Federation are very high. First of all, it is worth noting that as of today, the

EU's major drawback in terms of the imports of energy resources is the lack of effective interconnections between different EU member states which would allow freely transporting natural gas within the Union. Another major drawback is connected with the circumstances described above: there are currently no pipelines for the transportation of energy resources laid beyond the territory of Russia. Therefore, the European Union's alternatives are very scarce, and their ultimate effective implementation would require much time and substantial financial expenditures (Talus 2013, pp. 72-73). Taking into account the current situation in the relations between the European Union and Russia against the background of the Russian Federation's annexation of Crimea and intervention in the Eastern regions of Ukraine after which the EU imposed significant sanctions against Russia and the Russian Federation struck back with similar measures, the risks inherent of the European Union's high dependence on energy imports from Russia are only further growing, and their potential consequences are becoming more and more important. This is particularly true taking into consideration the fact that some of the European Union member states' energy imports come from Russia in full, and therefore, in case of any interruption or stoppage of supplies, the entire economy of the EU would fall under a substantial threat (Tosun, Biesenbender and Schulze 2015, pp. 204-206).

As of today, the cooperation between Russia and the European Union in the energy sector is beneficial for both parties. For Russia, the European Union is a major sales market, where the largest portion of its natural gas and oil is supplied. For the European Union, the vast amounts of imports of natural gas and oil from the Russian Federation allow avoiding the need to enter into many agreements on different terms with different countries, as the volumes supplied by Russia couldn't be effectively covered by any single exporter of energy resources (Pedersen, Behrens and Egenhofer 2008, p. 55). Moreover, the quality of energy resources supplied by Russia is high, and therefore the authorities of the European Union know well what product they purchase, and what opportunities it will bring. The use of other suppliers would mean additional adaptation to their standards, and probably additional processing of their products for satisfying the domestic needs of the EU member states (Proedrou 2011, pp. 90-92).

However, as it has already been said earlier, despite the current effectiveness of such cooperation with Russia in the energy field, the EU is subject to the effects of significant risks in terms of economic stability and energy security in terms of Russia's high share in the European Union's total imports of hydrocarbon. All such risks borne by the European can be conditionally divided into short-term and long-terms (Welfens and Addison 2009, pp. 36-37).

The short-term risks incurred by the European Union in terms of its high dependence of energy imports from the Russian Federation include shortfalls of energy supplies which may be due to a great number of reasons. For instance, such shortfalls may be caused by the following issues:

- technical issues with the pipelines, as both the Urengoy-Pomary-Uzhgood and Druzhba pipelines are old, and their particular sections beyond the territory of Russia require effective continuous maintenance, repairs and replacement. Moreover, the systems are technologically imperfect, and, for instance, in case of lack of the required pressure inside the pipelines, all supplies may be interrupted for some periods of time. In Western countries, those issues are eliminated thanks to the higher technological reliability of the energy supply networks (Kuzemko 2012, pp. 65-66);

- theft of energy resources in the course of transportation. There have already many times been accusations on the part of Russia's authorities of unauthorized use of gas transported via the territory of Ukraine. As the share of Russia's exports is very high in the EU energy sector, all such thefts can lead to significant shortcomings of the volumes of energy resources required for the EU to fulfill the needs of its economy (Aalto 2008, pp. 107-108);

- terrorist attacks and other force-majeure events. Although those risks can't be avoided with any supplies from any other countries, they are particularly high in the case of supplies from Russia. This is due to Russia's very high share in the EU's aggregate imports of energy resources, and the lack of other transportation routes (Müller-Kraenner 2008, p. 135).

The long-term risks incurred by the European Union in terms of its high dependence on Russia's energy exports can be conditionally divided into economic and geopolitical.

Economic risks are as follows:

- problems with the national economy. If the Russian Federation interrupts or stops its supplies of natural gas and oil to the European Union for any reason whatsoever, the EU will be likely to face significant difficulties with the provision of its economic sector with the required volume of energy resources. This is particularly important when speaking of developed EU member states, where the industrial sector requires continuous supplies of energy and electricity. As a result, this may lead to the overall recession in the European Union, growth in the actual rate of unemployment, and other negative cyclical conditions (Jacobs 2012, pp. 157-158);

- problems with the social sector. Russia's energy supplies are used by the European Union not only for ensuring the working capacity of its industrial sector, but also for satisfying the needs of the population. In case of any interruption or stoppage of supplies from the Russian Federation, the EU' authorities will be likely to focus their attention on the steady operation of the industrial sector, and thus to divert part of the resources from the social sector. This would mean deterioration in the energy services provided to the population, and would probably mean rise in negative sentiment among the population. In its turn, such situation in the social sphere would lead to a substantial deterioration of the real economic sector as well (Morata and Solorio Sandoval 2012, pp. 139-142);

- excessive expenditures for diversification. Taking into account the current lack of effective alternatives in terms of their practical applicability, in case of any deterioration of the relations with the Russian Federation in terms of energy imports from the country, the European Union will have to quickly seek alternatives for avoiding the deep recession of its economy. In that case, the EU will be forced to incur additional expenditures, as the delays for all works and conclusion of agreements will be very limited (Proedrou 2011, pp. 68-69).

Political risks incurred by the European Union in those terms are as follows:

- political confrontation with Russia. The current opposition between the EU and the Russian Federation on the diplomatic level obviously leads to a substantial deterioration in the mutual relations between them. Therefore, there are significant threats that Russia would diminish or stop at all its energy supplies to the European Union. For the EU, this would mean the lack of opportunity to effectively satisfy the needs of the economic and social sectors (Welfens and Addison 2009, pp. 174-175);

- confrontation between Russia and Ukraine. A major part of gas and oil transits from the Russian Federation to the European Union are run through the territory of Ukraine, there are significant risks that Ukraine would use its position as a transit country for putting tension on the EU against the background of its current conflict with Russia. In fact, if Ukraine stops transit of energy resources due to political considerations, there will be no other alternatives for supplying Russian gas and oil to the EU (Perović, Ortung and Wenger 2009, pp. 240-241);

- Russia's possible actions against diversification. Russia may use its geopolitical levers of tension for preventing other post-Soviet states which are potential major suppliers of energy resources to the European Union from running such supplies. Therefore, this may lead to an even further growth in the EU's high dependence on Russia's energy supplies (Morata and Solorio Sandoval 2012, pp. 104-105).

Having investigated the main aspects of the European Union's energy policy, and the Russian Federation role's in the supplies of energy resources to the EU, in the next chapter of this thesis, I would like to focus on Azerbaijan' role for ensuring the effective functioning of the EU's economy as a potential major supplier of energy resources to the European Union.

2 Azerbaijan's role in ensuring the EU's energy security

As the European Union's dependence on energy imports from Russia is very high and the energy security policy of the EU clearly stipulates the need to seek diversification of energy supplies for avoiding excessive economic and political risks, the European Union has to seek effective alternatives in energy supplies which would allow increasing the overall level of its energy security, and thus would allow maintaining the political and economic stability of the European Union. One of the main alternatives considered by the EU's authorities is the countries of the Caspian Basin, namely Azerbaijan. Therefore, they should be investigated more in detail as potential supplies of energy resources to the European Union.

2.1 Azerbaijani energy security policies

Azerbaijan's traditions in the energy sector originated during the start of the country's industrial development back in the late XIX century, and those traditions predefine the country's current focus on the field of energy (Cornell 2011, pp. 59-60).

Azerbaijan was economically important for both the Russian Empire and the Soviet Union. In times of the Russian Empire, Azerbaijan maintained the functioning of the entire Russian economy by providing it with oil. Furthermore, Azerbaijan's leading position in global oil production made it possible for the Russian Empire to rapidly develop its foreign economic relations. In the Soviet epoch, Azerbaijan's economy functioned for the sake of the USSR, without any focus on foreign relations (Nichol 2008, pp. 18-19).

In 1991, the Soviet Union collapsed, and Azerbaijan proclaimed its independence. The economy of Azerbaijan was not ready to face the new market conditions, just as the country's legislation didn't comply with the actual requirements of domestic development and foreign economic cooperation. As Azerbaijan didn't have any major full-cycle industrial production, the country was unable to rapidly access foreign markets which had previously been restricted for the USSR. To the contrary, taking into consideration the circumstances objectively existing during that time, Azerbaijan remained to the largest

extent dependent on Russia (Ismailzade 2006, pp. 10-12). As the old connections between the ex-Soviet republics were ruptured, all countries faced the new geopolitical circumstances, being forced to change their domestic policies and vectors of foreign relations. Disputes arose between some of them for territories and geopolitical influence, due to which regional security became of utter importance on the entire post-Soviet space (Alieva, Lyutskanov and Seragimova 2013, pp. 50-51).

The largest share of Azerbaijan's exports and imports belonged to the trade with Russia. In addition to the economic dependence, with the collapse of the Soviet Union and the proclamation of Azerbaijan's independence, the country became a key point of Russia's geopolitical interests in the South Caucasian region. Despite the end of the USSR's existence, Russia continued positioning itself as a global superpower, and therefore preserving its influence on the post-Soviet space was one of Russia's main geopolitical aspirations. At the same time, the region of South Caucasus was particularly important for Russia in geopolitical terms, as it linked Europe and Asia (Crandall 2006, pp. 175-177).

As Azerbaijan was still economically and geopolitically much dependent on the Russian Federation, after the collapse of the Soviet Union, the most active economic cooperation was carried out with Russia. Here, the interests of Russia and Azerbaijan coincided. Azerbaijan wished to rapidly modernize its oil-and-gas sector, while Russia, as the world's major producer and exporter of oil and gas, was interested in entering the Azerbaijani energy market for several main purposes. On the one hand, Russia was interested in investing in the oil and gas production sector for the purpose of establishing control over it, and thus raising its energy companies' share in global energy production (Gencer and Gerni 2012, pp. 127-128). On the other hand, Russia was interested in gaining access to the Azerbaijani oil and gas pipelines, namely the Baku-Tbilisi-Erzurum crude oil pipeline joining Azerbaijan, Georgia and Turkey, and thus providing access to oil supplies to Asia (this pipeline is directly linked with the Azerbaijani-Russian Baku-Novorossiysk pipeline), and the South Caucasus gas pipeline giving access to gas pipelines to Asia. In its turn, Azerbaijan was interested in getting additional investment in its energy sector from the Russian Federation, and in ensuring access to the European Union's market of oil and

gas supplies through the mediation of Russia. Since that time, the field of oil and gas production has remained the core of Russia's and Azerbaijan's mutual cooperation (Cohen 2014, pp. 293-296).

However, a particularly important role in Azerbaijan's development of its security policy was played by the 1994 Nagorno-Karabakh War against the self-proclaimed "Nagorno-Karabakh Republic" supported by Armenia. During the period of 1992 and 1993, Armenia has occupied 20 percent of the Azerbaijani territory. In the result of the Armenian aggression, the following seven regions have fallen under the occupation. Nearly million of people have become refugees and internally displaced persons. The area of the conflict was near Azerbaijan's deposits of energy resources and gas and oil pipelines joining the country with Russia. Since the end of the war, Nagorno-Karabakh territory dominated by the separatist regime has remained the zone of frozen conflict, and the Russian Federation has been using its geopolitical levers for affecting both Azerbaijan's and Armenia's vectors of geopolitical development (Luft and Korin 2009, pp. 115-117).

Russia's geopolitical policy in the South Caucasian region has gradually shifted toward the support of Armenia, and Azerbaijan started evaluating possible other alternatives for maintaining a high level of its national security. Yet again, the country's energy sector was put into the core of those processes, as Azerbaijan started its deeper cooperation with Western countries through supplies of energy resources to them, and through the liberalization of the domestic energy market (Øverland, Kjærnet and Kendall-Taylor 2010, pp. 110-111).

As a result of complex political processes and negotiations with foreign partners, in 2010, Azerbaijan officially proclaimed its course toward European integration, and rejected any scenarios of integration with the Customs Union of Russia, Belarus and Kazakhstan. This was a turning point in the South Caucasian geopolitics, as Russia understood that it could completely lose its geopolitical influence over Azerbaijan (Diuk 2012, pp. 136-137).

Azerbaijan hasn't yet completed its European integration, as, according to the country's officials, Azerbaijan's economy is still too weak to open the country's domestic market to powerful Western transnational corporations. Moreover, the European Union's

requirements in both political and economic terms are not fully convenient for Azerbaijan, and therefore the country would like to suspend the negotiations on the association agreement with the EU, until all such issues are effectively resolved. Despite the fact that Azerbaijan only postponed negotiations on further European integration, without rejecting this idea as such, (De Jong, Auping and Govers 2014, pp. 288-292).

As of today, Azerbaijan is playing a key role in the development of all processes in South Caucasus, and thus any Azerbaijan's actions in the international arena to the largest extent affect not only regional security, but also the entire complex of relations between European and Asian countries. Due to this, Azerbaijan represents an essential geopolitical interest for both Western countries, namely the EU member states and the US, on the one hand, and the Russian Federation, on the other hand. The two global superpowers and their allies are trying to expand their spheres of influence, and the region of South Caucasus plays an utterly important role for each of them. Taking into consideration the aforementioned circumstances and Azerbaijan's current non-aligned status, both Western and Russia-led structures are undertaking efforts in order to incline Azerbaijan to develop its security policy within the framework of their respective organizations. As of today, the possible scenarios of Azerbaijan's security policy development can be conditionally divided into two main options: the European and Asian (Russian) ways (Aydın 2011, pp. 170-172).

Taking into account the high level of tensions made on Azerbaijan by the world's major superpowers, the country has to pay significant attention to its national security. Here, the energy sector plays a predominant role for the country, as it makes the backbone of Azerbaijan's economic development, and provides the country with the required resources for ensuring its growth. Thus, energy security is a key factor for maintaining not only Azerbaijan's economic development, but also political stability (Aydın 2011, pp. 74-75).

In the field of energy security, the authorities of Azerbaijan tend to preserve the full control over the sector, as they believe it to be Azerbaijan's strategic industry. Thus, the country's energy sector is monopolized, and all operations related to the exploration,

production and sales of natural gas and oil are run by the government of Azerbaijan through its agencies. However, the country provides concessions to foreign companies for the participation in such operations. This is done for the purpose of giving a greater impetus to the Azerbaijani oil-and-gas sector, and to promote the imports of up-to-date energy sector technologies in the country. All foreign corporations' activities are closely supervised and strictly controlled by the government of Azerbaijan in order not to let the deterioration of the energy sector, loss of control over it, and thus in order to prevent the emergence of major threats to the entire country's political and economic stability (Luft and Korin 2009, pp. 263-266).

In the next chapter of the thesis, I would like to investigate more in detail the energy geopolitics of Azerbaijan, namely the country's vectors of foreign relations aimed at developing its energy sector.

2.2 Energy geopolitics of Azerbaijan

When investigating the role of Azerbaijan's energy sector in the country's geopolitics, it is first of all worth noting that, from the very beginning of its independence period, the country started paying particular attention to the development of effective partnership ties with both Russia and the European Union based on energy supplies and the production of energy resources. Azerbaijan's authorities understood that the energy sector provided the country with the largest inflows of monetary funds, and focused on its development. However, this was preconditioned not only by purely economic dividends, but also by geopolitical interests (Alieva, Lyutskanov and Seragimova 2013, pp. 73-74).

For the Azerbaijani authorities, the development of the energy sector became a great opportunity to influence both the decisions of Russia and Western countries on the international diplomatic level for a peaceful solution, namely in the context of Azerbaijan's protracted conflict with Armenia over the territory of Nagorno-Karabakh. Thus, in the context of its relations with Russia, Azerbaijan's energy sector represents a major factor of interest to both countries. Thus, on the one hand, Russia is interested in Azerbaijan as a

country linking it with the Central Asian states. The pipelines laid through Azerbaijan's territory are used by the Russian Federation for supplying its natural gas and oil to Asia, and therefore the development of relations with Azerbaijan in the energy sector is of a strategic importance to Russia. On the other hand, Russia isn't interested in Azerbaijan's close cooperation with Western countries in terms of the supplies of energy resources due to the fact that this may bring significant financial damages to the Russian Federation, as Azerbaijan could potentially substitute part of the EU's imports of energy resources from the Russian Federation (Crandall 2006, pp. 127-128).

For the European Union, the close cooperation with Azerbaijan in the energy sector provides an opportunity to effectively diversify the sources of energy supplies, and thus to avoid the excessive dependence on the Russian Federation in those terms. Therefore, the EU member states tend not only to cooperate with Azerbaijan in the energy sector, but also to provide the country with investments required to boost its economic development with this aim (Diuk 2012, pp. 167-168).

Therefore, thanks to its energy sector, Azerbaijan represents a major object of interest to both Russia and Western countries. This allows the country using its energy sector as a key competitive advantage in its geopolitics. Azerbaijan's authorities may effectively use the country's energy sector for imposing their economic and political conditions on the Russian Federation and the European Union for maximizing the benefits obtained through cooperation with them. In this context, it is particularly worth noting that Azerbaijan currently refrains from entering any integration formations, and tries to develop its cooperation with all partners with a particular emphasis on the energy sector (Aydın 2011, pp. 130-133).

The relations between Azerbaijan and the European Union in the energy sector started back in 1994, i.e. on the initial stage of Azerbaijan's economic formation after the collapse of the Soviet Union. In 1994, Azerbaijan and its Western partners entered into Azeri, Chirag and deep-water Gunashli (ACG)-International Contract No. 1 commonly referred to as the Contract of the Century due to its large scale and the benefits brought to the Azerbaijani national economy. Under the Contract of the Century, the authorities of

Azerbaijan ran a vast liberalization of the country's domestic oil-and-gas market, and provided foreign corporations with concessions for exploring and producing oil and natural gas on the country's territory (Øverland, Kjærnet and Kendall-Taylor 2010, pp. 43-44). The agreement was signed with major Western corporations involved in the energy sector. Those corporations and the Azerbaijani state-owned oil-and-gas monopolist established an energy consortium aimed to effectively develop the country's energy sector (Nichol 2008, pp. 49-50).

Thanks to the conclusion of the Contract of the century, Azerbaijan created a completely new vector of its foreign relations representing an effective alternative to the cooperation with Russia within the framework of international organizations established under its auspices. At the same time, it is worth noting here that, despite allowing foreign corporations entering its energy market, the Azerbaijani authorities preserved the full control over it for the purpose of not losing the country's geopolitical sovereignty and economic stability. This was a key prerequisite for the subsequent effective geopolitical development of Azerbaijan (Diuk 2012, pp. 180-181).

After entering into the Contract of the Century, Azerbaijan significantly boosted the development of its cooperation with Western countries in the energy sector. Thereafter, Azerbaijan officially joined the European Union's INOGATE programme destined to promote the improvement of the EU's energy security. Within the framework of this programme, Azerbaijan obtained significant financial investments on the part of the European Union, and was able to improve the technological development of its energy sector thanks to the close cooperation with the EU member states. By entering this programme, Azerbaijan further used the energy sector as its key factor of geopolitical development, as the country significantly raised the level of cooperation with the European countries through the oil-and-gas sector (Ismailzade 2006, pp. 53-54).

In 2003, Azerbaijan started implementing the construction of the Trans Adriatic Pipeline (TAP) for the transportation of natural gas to the European Union via the territory of the Balkans, avoiding the transit via the territory of the Russian Federation. The project was launched in close cooperation with the European Union member states. Later, in 2013,

another new project was launched in this field. Azerbaijan started the construction of the Trans-Anatolian gas pipeline (TANAP) which was another major pipeline for the transportation of natural gas from the country to the European Union. Similarly to TAP, TANAP aims to supply natural gas to the EU beyond the territory of Russia, this time via Turkey. The financial and engineering support for the construction of both pipelines was provided by the European Union, and this again showed the importance of the Azerbaijani oil-and-gas sector for the development of its foreign relations, and thus for the maintenance and further improvement of its regional geopolitical status (De Jong, Auping and Govers 2014, pp. 124-126).

Thus, it can obviously be stated that the development of Azerbaijan as a major manufacturer and supplier of energy resources largely predefines the country's geopolitical growth vectors, and the energy sector is a key factor of the country's geopolitical stability. In the next section of the thesis, I would like to investigate more in detail the strategic importance of the Caspian Basin countries for the European Union's energy security.

2.3 Importance of the Caspian Basin for the EU's energy security

When investigating the importance of the Caspian Basin countries for the European Union's energy security, it is first of all worth understanding that, according to recent estimates, countries of that region are among the world's states most abundant in oil and gas deposits. Although they lag behind the Middle Eastern states in terms of the estimated reserves of energy resources and particularly in terms of the current level of their production, the Caspian Basin states have great prospects for the development of the energy sector in the future, and their existing opportunities aren't used in full as of today. Taking into consideration the abundance of the Caspian Basin states, namely of Azerbaijan, Kazakhstan, Iran, and Turkmenistan, in energy resources, they are prospective major suppliers of oil and natural gas to the European Union, which is particularly important in the light of the EU's policies aimed for the diversification of oil and natural gas supplies (Stulberg 2003, pp. 16-17).

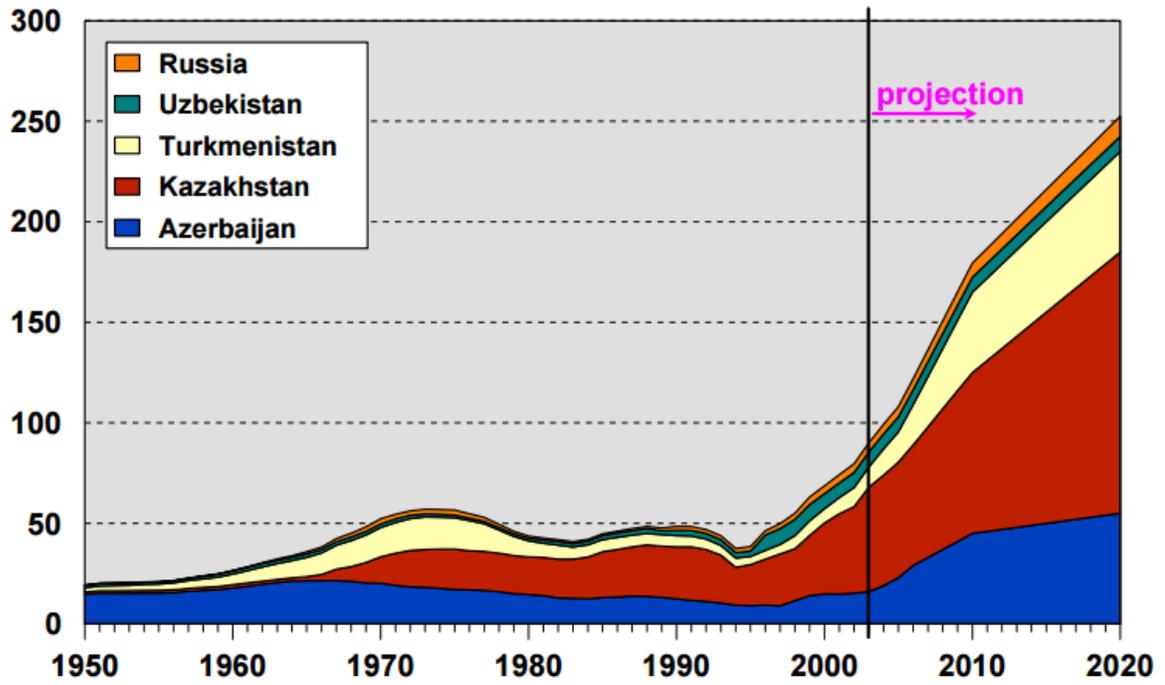


Figure 1. Projected production of oil in the Caspian Basin countries, in Mt (Mez 2010, p. 12)

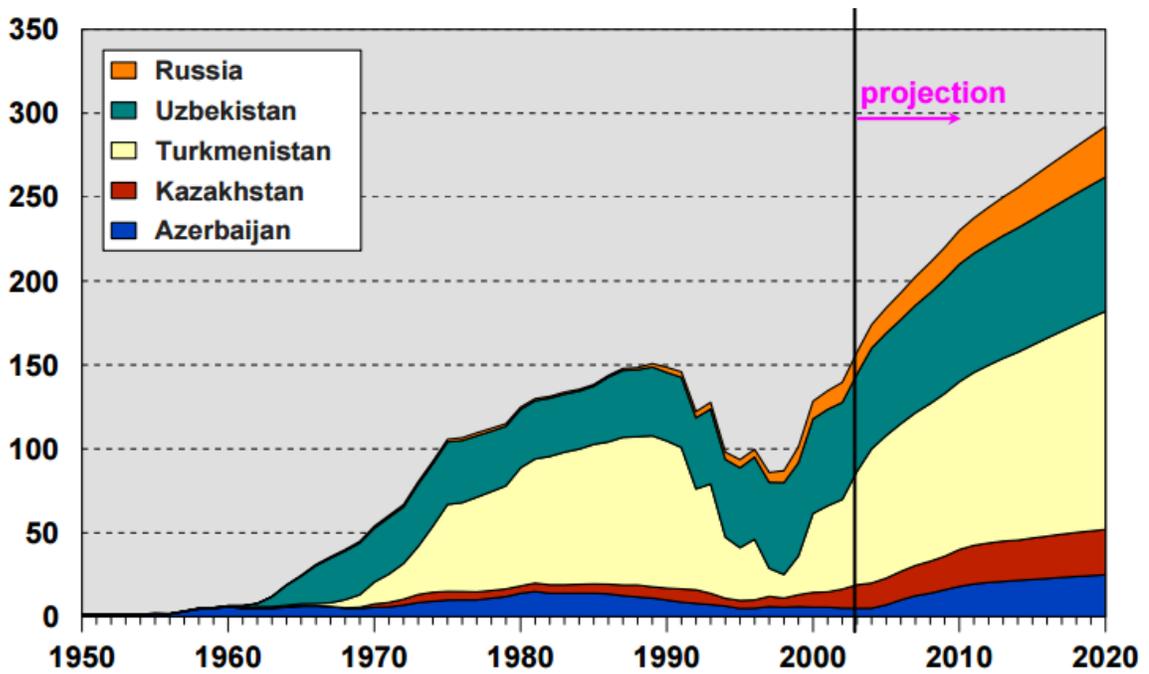


Figure 2. Projected production of natural gas in the Caspian Basin countries, in billion m³ (Mez 2010, p. 12)

As Figures 1 and 2 above illustrate, the projected growth of oil and natural gas production in the Caspian Basin countries is expected to constantly grow until 2020, with the most rapid growth pace in countries which are currently less powerful in terms of the production of energy resources as compared with Russia. The charts above testify that the overall production of energy resources in the Caspian Basin will tend to grow in the future, and this means that the export potential of those states will continue growing as well. This largely predefines the European Union's interest in developing cooperation with the Caspian Basin countries in the field of energy, as they will be able to provide greater volumes of energy supplies to the EU, and thus to satisfy the European Union's greater needs in oil and natural gas.

Historically, the cooperation between the European Union and the Caspian Basin countries in the field of energy security started back in 1991, right after the collapse of the Soviet Union. In the conditions of the rapid liberalization of the post-Soviet countries' domestic markets, the authorities of the European countries wanted to establish strong partnership ties with the newly formed countries on the territory of the ex-USSR, namely with an aim of ensuring higher energy security. The first program which touched upon those issues was TACIS (Technical Assistance to the Commonwealth of Independent States). Within the framework of TACIS, the EU in particular aimed to deepen its cooperation with the Azerbaijan, Turkmenistan and Kazakhstan in the field of energy supplies. This program also gave an impetus for the development and implementation of TRACECA (Transport Corridor Europe-Caucasus-Asia) aimed at linking European countries with Central Asian states through the Black Sea and the Caspian Basin region (Pedersen, Behrens and Egenhofer 2008, pp. 43-44).

Another important program which was implemented by the European Union in the early 1990's with an aim to develop its cooperation with the Caspian Basin countries was INOGATE. Under INOGATE, the EU aimed to deepen its cooperation with the countries of the Black Sea and the Caspian Basin in the energy sector. Namely, within the framework of INOGATE, the European Union undertook to provide large-scale investment to the Caspian Basin countries in exchange for the future supplies of energy resources from them

produced with the use of the funds granted by the EU. This program promoted the rapid development of the European Union's relations with the Caspian Basin countries, and established strong grounds for their subsequent development. INOGATE is still valid as of today, and makes an integral part of the European Union's policies in the field of energy security (Tosun, Biesenbender and Schulze 2015, pp. 144-145).

Another important point in the development of relations in the energy sector between the European Union and the Caspian Basin countries is the European Neighborhood Policies used as the framework for the development of the EU's partnership ties with other countries beyond the Union. An integral part of the ENPs is constituted by the development of ties aimed at increasing the level of energy security (Proedrou 2011, pp. 127-128).

However, although the legislative frameworks and programs described above play an important role in the development of the European Union's cooperation with the Caspian Basin states in the field of energy security, as of today, the legislative basis available is insufficient for the effective promotion of such partnership ties, and this is one of the key issues in the development of the European Union's common energy policy, as has already been described earlier in this thesis (Dellecker and Gomart 2011, p. 160).

In recent years, the development of cooperation between the European Union and the Caspian Basin countries in the energy sector has been greatly boosted by the implementation of projects related to the construction of oil and gas pipelines connecting the European Union's countries with the states of Central Asia. Such projects make part of the European Union's policies implemented in the energy sector, and are expected to play an essential role in the EU member states' search for alternative sources of energy supplies (Talus 2013, pp. 186-187).

Taking into account the abovementioned information, it can be stated that the Caspian Basin countries represent a major interest for the EU member states against the background of the European Union's policies aimed at diversifying the sources of supply of energy resources, and thus at decreasing the share of the Russian Federation in the imports of oil and natural gas. In the next chapter of the thesis, particular attention will be paid to

the implementation of projects in the energy sector involving the European Union and Azerbaijan, and to the role which may be played by those projects in the future deepening of economic cooperation between them.

3 Projects implemented by the European Union and Azerbaijan in the energy sector, and their role in the provision of the EU's energy security

3.1 Baku-Tbilisi-Ceyhan oil pipeline

Baku-Tbilisi-Ceyhan oil pipeline is the second longest oil pipeline running through the territory of the post-Soviet countries, after the Druzhba pipeline. The BTC pipeline lies between the city of Baku and the Turkish port town Ceyhan, and all supplies of oil run through it are delivered via the territory of Georgia, namely its capital city Tbilisi. The resource supplied via the Baku-Tbilisi-Ceyhan oil pipeline is the crude oil produced in the Azeri-Chirag-Guneshli oil field in the Caspian Sea shelf. This pipeline plays an essential role in the development of Azerbaijan's relations with the European Union in the energy, and it is worth looking more in detail at the history of the implementation of this project in order to understand its importance (Pedersen, Behrens and Egenhofer 2008, p. 43).

After the collapse of the Soviet Union, the countries of the Caspian Basin were deprived of their own pipelines for transporting energy resources to European states, as all such pipelines went through the territory of the Russian Federation, and therefore countries of the Caspian Basin were forced to pay transit fees to Russia, and moreover were vulnerable to Russia's own geopolitical interests and ambitions which overlapped with the country's activities run in the energy sector. Therefore, in those conditions, a key step in the energy field for countries of the Caspian Basin, and namely for Azerbaijan, was the construction of a separate pipeline connecting the Caspian Basin with European states. The Baku-Tbilisi-Ceyhan was such project developed by the Azerbaijani authorities (Aalto 2008, pp. 134-136).

The options for the construction of the pipeline initially included the transitional laying through either Armenia or Georgia. However, the variant with Armenia was in the long run rejected due to the protracted and unresolved conflict between Azerbaijan and Armenia over the territory of Nagorno-Karabakh. In the long-run, after negotiations on the highest level between the governments of Turkey and Azerbaijan, the two states agreed to

run the pipeline via the territory of Georgia. In 1993, a preliminary agreement was entered into by the governments of Azerbaijan, Turkey and Georgia. However, the construction of the pipeline started only in 2002 (Morata and Solorio Sandoval 2012, pp, 77-79).

The effective implementation of the Baku-Tbilisi-Ceyhan oil pipeline project became possible thanks to the experience obtained by Azerbaijan through the cooperation with Western countries in the energy sector within the framework of the so-called Contract of the Century described earlier in this thesis. Thus, the pipeline was constructed with the involvement of major transnational corporations from around the globe with extensive experience in the energy field. Azerbaijan again participated in the agreement being represented by SOCAR, the Azerbaijani energy market monopolist. The pipeline was put into operation only in 2005, and has since then remained an important means of oil transportation in the region (Welfens and Addison 2009, p. 73).

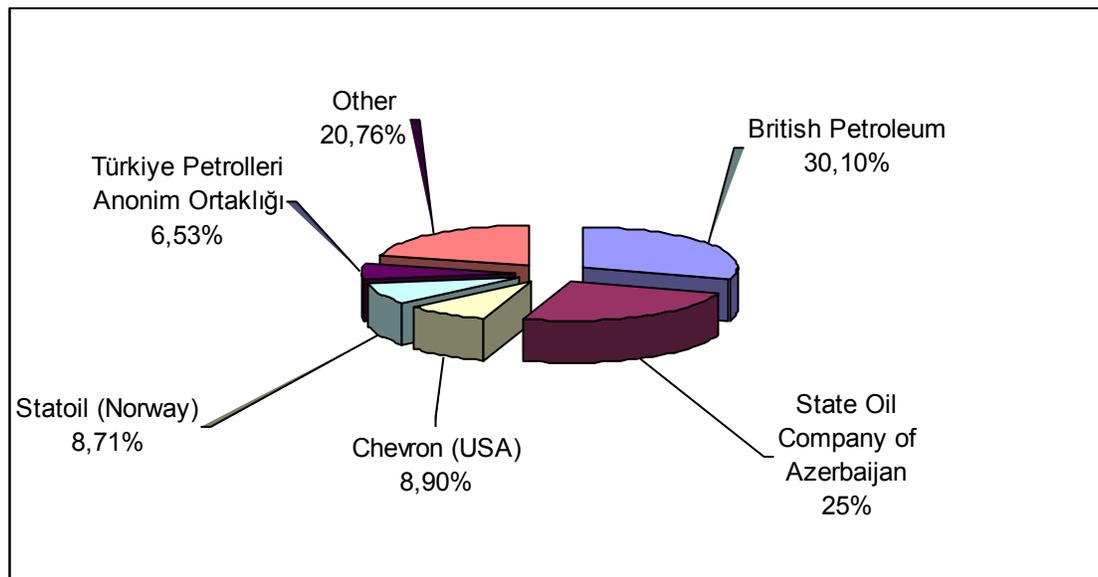


Figure 3. Structure of ownership in the Baku-Tbilisi-Ceyhan oil pipeline, as of 2014 (Tosun, Biesenbender and Schulze 2015, p. 186)

As can be seen from Figure 3 above, as of today, the Baku-Tbilisi-Ceyhan oil pipeline is partially owned by major oil-and-gas companies such as British Petroleum (30.1%), Chevron (8.9%), Statoil (8.71%), etc. At the same time, SOCAR holds the title of ownership for 25%, one of the major shares. This testifies that the Azerbaijani government was able to raise significant investment in the construction project, but still has a high level of control over the pipeline, and thus has overall great levers for the control over the domestic energy market. At the same time, the interest of Western European, America and Asian companies in the development of the Azerbaijani oil-and-gas sector further proves the country's importance as a supplier of energy resources, particularly for the European Union.

The operation of the pipeline is important for Azerbaijan in economic terms, as it currently allows transporting nearly 30 million tons of oil produced in Azerbaijan. Turkey and Georgia get significant benefits in the form of transit fees. In the near future, there are plans to further expand the pipeline for the purpose of linking it directly with the countries of Southern Europe, and thus for further increasing the level of benefits obtained by the Azerbaijani government. For the European Union, the Baku-Tbilisi-Ceyhan oil pipeline is much important in terms of the diversification of its oil imports, and the projects for the subsequent expansion of the pipeline are discussed on the highest level within the EU. For proving the above statement, it should be noted that as of 2013, the EU imported approximately 13 million barrels of crude oil every day, while the daily volume of oil discharged from the Baku-Tbilisi-Ceyhan oil pipeline makes up slightly less than 1 billion barrels of crude oil daily, which corresponds to approximately 7.7% of the European Union's total crude oil imports (Alieva, Lyutskanov and Seragimova 2013, pp. 76-77).

In the next chapter, another important oil pipeline of Azerbaijan, namely the Baku-Supsa pipeline, will be analyzed more in detail.

3.2 Baku-Supsa oil pipeline

The Baku-Supsa oil pipeline links two countries of the South Caucasian region, namely Azerbaijan and Georgia. The pipeline is laid from the Sangachal terminal to the city of Supsa in Georgia. This pipeline lies to the north of the Baku-Tbilisi-Ceyhan oil pipeline, and doesn't have any intermediary transit points. The partners operating the pipeline include the UK-based major transnational energy corporation British Petroleum and the Azerbaijan State oil company SOCAR. The Baku-Supsa Oil Pipeline is also commonly referred to as the Western Route Export Pipeline (Kuzemko 2012, pp. 223-224).

The preliminary agreement for the construction of the pipeline was entered into by the governments of Azerbaijan and Georgia in 1994, and the construction and assembly works started in 1996. Already in 1999, the pipeline was put into operation. The greatest part of investments required for the implementation of the project were provided by the British investors, and this helped significantly accelerate the construction process. As of today, the Baku-Supsa oil pipeline is able to transport nearly 150,000 barrels of oil per day, and there are plans for the subsequent improvement of its capacities in the future (Diuk 2012, pp. 170-171).

The importance of the pipeline for Azerbaijan lies in the fact that it provides the country with an opportunity to deliver oil resources directly to Georgia, and thus to have a direct access to the Black Sea from where oil can be delivered to Bulgaria and Romania via water transport. Thus, it can obviously be stated that the Baku-Supsa oil pipeline provides Azerbaijan with two strategic alternatives. On the one hand, thanks to the pipeline, Azerbaijan is able to maintain its leading positions in the region's energy sector, and thus is able to get significant financial benefits. On the other hand, the operation of the pipeline provides the Azerbaijani authorities with an opportunity to supply oil to member states of the European Union without any transit via the territory of Russia (Crandall 2006, pp. 212-213).

When speaking of the Baku-Supsa oil pipeline's importance for the European Union, as of today, it can be stated that the volumes of oil transported by sea transport are

low, as this is not cost-effective. However, in the near future, the Baku-Supsa oil pipeline may be used for developing the pipeline infrastructure to link Azerbaijan and the European Union member states. For instance, in the future, the Baku-Supsa oil pipeline may be extended and coupled with an underwater pipeline connecting Azerbaijan and the EU member states via the territory of Georgia. This would allow the EU diversifying its energy supplies, and also significantly reducing the expenses for the Azerbaijani oil (Talus 2013, pp. 198-200).

In the next chapter, the AGRI project for the supplies of natural gas from Azerbaijan to Romania will be investigated.

3.3 AGRI

Taking into account the information mentioned above, it should be noted that Azerbaijan and the European Union largely cooperate not only in the field of oil transportations, but also in gas transportations. The problems faced here are the same as in the oil sector. After the collapse of the Soviet Union, Azerbaijan lost its effective infrastructural communications with the other countries of the ex-Soviet Union, and as of today, all gas supplies are run via the territory of the Russian Federation. This significantly impairs the economic benefits gained by Azerbaijan, and at the same time deprives the country of the opportunity to effectively satisfy the needs of the European Union in natural gas. Therefore, a key issue relevant as of today in the field of Azerbaijan's gas supplies to the European Union is the construction of a pipeline which would link it directly with the EU (De Jong, Auping and Govers 2014, pp. 122-124).

One of the major currently discusses between Azerbaijan and the European Union in the field of gas supplies is the Azerbaijan–Georgia–Romania Interconnector (AGRI). AGRI is a projected gas pipeline for the transportation of natural gas from Sangachal Terminal in Azerbaijan to the Black Sea border in Georgia, and thereafter to Romania, from where such natural gas supplied would be redistributed to other Central European states making part of the European Union. The project assumes that a liquefied natural gas terminal

would be built in Georgia, where the natural gas supplied from Azerbaijan would be liquefied and loaded to sea vessels which would transport it to Romania. This method of natural gas transportation is cost-effective, and it would allow Azerbaijan avoiding the transit through Russia (Proedrou 2011, pp. 139-140).

The expected capacity of the Azerbaijan–Georgia–Romania Interconnector amounts to 7 billion m³ of natural gas per year, of which approximately 30% would be supplied directly to Romania. Therefore, the construction of the Azerbaijan–Georgia–Romania Interconnector would allow the European Union diversifying part of its natural gas imports through the natural gas produced in the deposits of Azerbaijan (Cornell 2011, p. 86).

The preliminary agreement between the governments of Azerbaijan, Georgia and Romania for the construction of the Azerbaijan–Georgia–Romania Interconnector was signed in 2010, and it is currently expected that the project will be delivered by the public oil-and-gas corporations of the three countries. However, taking into account the fact that the expected amount of investment in the project makes up approximately EUR 6 billion, it is possible that investors would be attracted for effectively financing the project. Also, Bulgaria currently investigates the opportunities of joining the project, as the country could effectively host a degasification terminal similar to the one planned for construction in Romania. However, as of today, the participation of Bulgaria is yet to be discussed (Talus 2013, p. 307).

In the next chapter, the Trans Adriatic Pipeline for the supplies of natural gas from Azerbaijan to the European Union will be investigated.

3.4 TAP

The project of the Trans Adriatic Pipeline is one of the major projects in the energy sector currently implemented by Azerbaijan and the European Union. The Trans Adriatic Pipeline is a gas pipeline for the transportation of natural gas from Azerbaijan via Greece and Albania to Italy, and then to other Western European countries. The implementation

of the project started in 2015, and it is expected to be put into operation in 2018. The pipeline's planned capacity amounts to up to 20 billion m³ of natural gas per year.

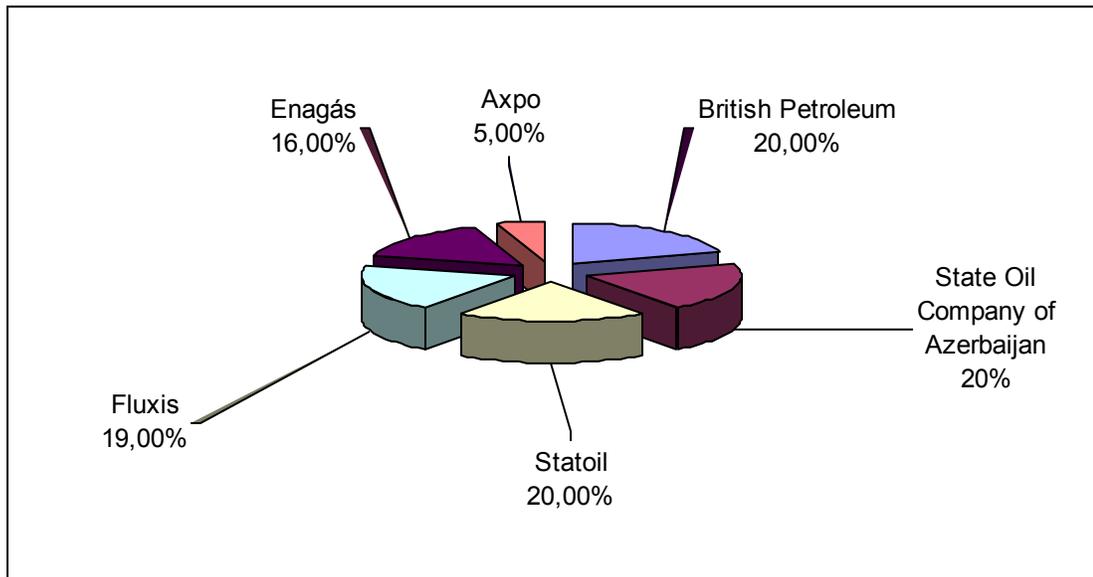


Figure 4. Structure of ownership in the Trans Adriatic Pipeline project (Karagiannis 2013, p. 151)

As can be seen from Figure 4 above, the structure of investment and ownership in the Trans Adriatic Pipeline project is similar to the structure of ownership in other mutual projects in the energy sector between Azerbaijan and the European Union. Thus, the project is mostly financed through the investments of major Western European corporations, namely the British giant British Petroleum, and the Norwegian energy corporation Statoil, but with the Azerbaijani State Oil company SOCAR holding the largest share on equal conditions with the two aforementioned corporations. The participation of the major global oil-and-gas companies testifies the importance of the TAP project for the European Union.

Initially, the TAP project was launched back in 2003, and it assumed two different routes which could be used for laying the pipeline, namely the one used as of today, and the second one via Bulgaria and Macedonia. However, the second route was rejected due

to its lower cost-effectiveness. In 2008, a joint venture was established between the companies given in Figure 4 above, and works were launched for the detailed investigation of the feasibility of the project. In 2009, the governments of Italy, Albania and Greece officially joined the agreement for the construction of the Trans Adriatic Pipeline with Azerbaijan, and declared that the project fitted best the energy security goals pursued by the European Union. The construction works started in 2015, and the commissioning is expected to take place in 2018 (Tosun, Biesenbender and Schulze 2015, pp. 83-84).

The Trans Adriatic Pipeline project is much important for both Azerbaijan and the European Union, as it would allow the country transporting its natural gas to the European Union directly, without anyhow depending on the transit routes laid via the territory of the Russian Federation. The particular importance of the pipeline consists in the fact that it is expected to transport the natural gas extracted from the Shah Deniz gas deposit, Azerbaijan's largest source of natural gas production. The planned capacity of 20 billion cubic meters of natural gas per year would allow significantly diversifying the European Union's energy imports, and thus reducing the EU's dependence on the Russian natural gas (Kuzemko 2012, pp. 260-262).

Another important feature of the Trans Adriatic Pipeline is the fact that this project is closely interlinked with the TANAP project for the construction of the Trans-Anatolian Natural Gas Pipeline, another major international project aimed at linking the Shah Deniz field in Azerbaijan with the consumers of natural gas in the European Union. The implementation of the two projects would allow creating a developed natural gas transportation infrastructure between Azerbaijan and the European Union, and this would allow significantly reducing the European Union's dependence on the supplies of natural gas from the Russian Federation (Perović, Orttung and Wenger 2009, pp. 148-149).

The Trans-Anatolian Natural Gas Pipeline project and its importance for the effective development of relations between Azerbaijan and the European Union in the energy field will be analyzed more in detail in the next chapter.

3.5 TANAP

The Trans-Anatolian Natural Gas Pipeline (TANAP) project assumes the construction of a natural gas pipeline which would link the Shah Deniz gas field in Azerbaijan with Georgia and Turkey. From Turkey, the pipeline is expected to go further to the territory of Greece and Albania, where it would be connected with the Trans Adriatic pipeline. Thus, as can be seen, the scope of the project is very large, and its implementation should provide Azerbaijan with key strategic opportunities in terms of not only supplies of energy resources to the member states of the European Union, but also in terms of the country's share in the energy market of Central Asia. The construction works started in 2015, and the pipeline is expected to be put into operation by 2018, just as in the case with the Trans Adriatic Pipeline (Tosun, Biesenbender and Schulze 2015, pp. 147-148).

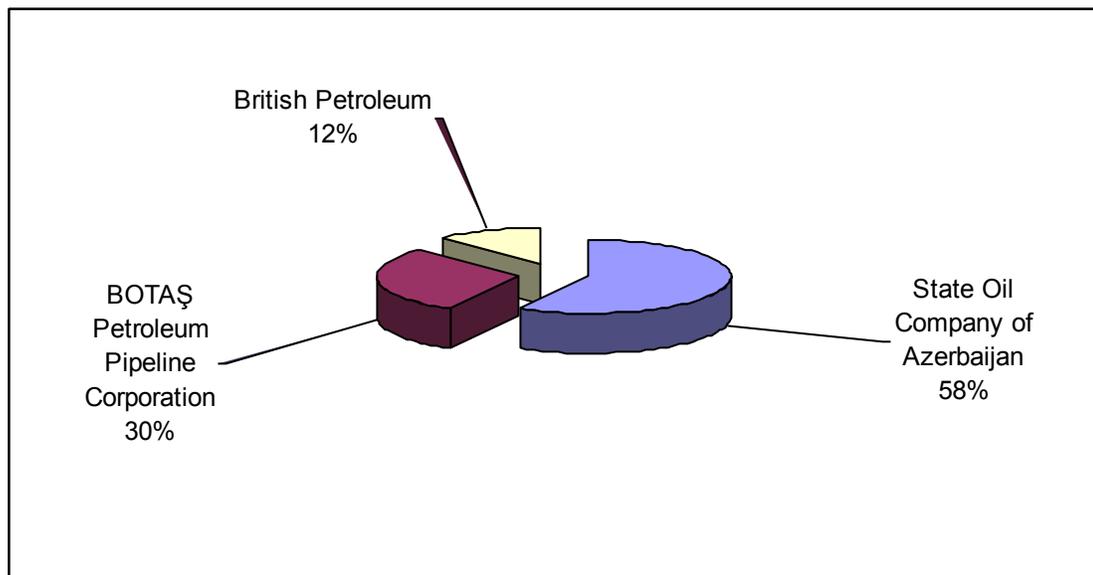


Figure 5. Structure of ownership in the Trans-Anatolian Natural Gas Pipeline project (Karagiannis 2013, p. 151)

As can be seen from Figure 5 above, the Trans-Anatolian Natural Gas Pipeline only has three owners, and the State Oil Company of Azerbaijan holds the controlling interest in the project, having the title for 58% of the shares. The two other companies are the British giant British Petroleum and the Turkish state monopolist BOTUS Petroleum Pipeline Corporation.

The project was initially proposed in 2011, and the governments of Azerbaijan and Turkey entered into a preliminary agreement for the construction and operation of the gas pipeline, and the aforementioned consortium of companies was established. In 2012, the development of the project was finished, and the final agreement was signed between the countries involved. The construction works started in 2015, and are performed by major Western European construction corporations. The project is planned to be commissioned in 2018 (Tosun, Biesenbender and Schulze 2015, p. 238).

The estimated total cost of the construction of the Trans-Anatolian Natural Gas Pipeline amounts to nearly EUR 9 billion, and the planned capacity of the pipeline makes up 16 billion cubic meters of natural gas per year. Thus, together with the Trans Adriatic Pipeline, TANAP is expected to provide Azerbaijan with the ability to transport approximately 36 billion cubic meters of natural gas from the Shah Deniz gas field directly to the European countries. Moreover, further expansion of capacities is possible, up to 26 billion cubic meters for TANAP, and up to 30 billion cubic meters for TAP (Diuk 2012, pp. 105-106). The current capacity of the Shah Deniz gas field which is the source for natural gas supplies via TAP and TANAP is estimated to make up approximately 1,200 billion cubic meters of natural gas. At the expected amounts of gas transportations via the above pipelines, the total lifespan of the Shah Deniz field would make up to 30 years (Upstream Online Website 2013, Socar tallies up giant Umid field).

Thus, the project of the Trans-Anatolian Natural Gas Pipeline is much attractive for both Azerbaijan and the European Union. For Azerbaijan, it would allow effectively operating the giant Shah Deniz natural gas field, and transporting the gas extracted from the deposit directly to both the European Union and Central Asian countries, namely Turkey. This would significantly increase the benefits generated by Azerbaijan. At the

same time, for the European Union, this would allow drastically reducing the energy dependence on Russia, and would provide the EU member states with an opportunity to significantly diversify the sources of their natural gas imports (Morata and Solorio Sandoval 2012, p. 165).

Also, there is a project aimed to construct an underwater natural gas transportation pipeline between Azerbaijan and Turkmenistan (Trans-Caspian Gas Pipeline), and to link into to the Trans-Anatolian Natural Gas Pipeline. This project would provide the European Union with even greater opportunities to raise its energy security, as the Trans-Caspian Gas Pipeline would allow importing natural gas not only from Azerbaijan, but also from Turkmenistan, using the already existing infrastructural capacities. However, this project hasn't yet been put into operation due to the unresolved dispute over the establishment of territorial boundaries in the Caspian Sea, and due to the ensuing conflicts between the countries involved in it (Jacobs 2012, pp. 239-240).

In the next chapter, the Nabucco natural gas pipeline construction project will be investigated more in detail.

3.6 Nabucco

The Nabucco natural gas pipeline construction project is a projected pipeline for the supplies of natural gas to link Turkey and Austria. Although the Nabucco pipeline isn't expected to be laid directly through the territory of the Caspian Basin countries, under the project proposed, it would be linked with the Trans-Anatolian Gas Pipeline, and therefore the main source of gas supplies through the Nabucco pipeline would be the Shah Deniz gas field in Azerbaijan. There are also alternative supply routes which are currently planned within the framework of the Nabucco project. For instance, in addition to the Azerbaijani natural gas, the governments involved in the project see Turkmenistan and Iraq as prospective major gas exporters to the European Union (Cohen 2014, pp. 363-364).

The consortium responsible for the development of the project includes the following oil-and-gas sector corporations: BOTAŞ (Turkey), BEH (Bulgaria), FGSZ (Hungary), OMV (Austria), and Transgaz (Romania). It was established in 2002, when negotiations between the governments of the countries involved took off. In 2003, the European Union financed half of the costs associated with the investigation of the real opportunities for the implementation of the Nabucco project. Azerbaijan was officially involved in the project in 2008, when the participating partners decided that the Azerbaijani natural gas would be the most beneficial source of natural gas supplies to the European Union via the Nabucco pipeline. In 2010, all countries participating in the project ratified an intergovernmental agreement for the construction and the subsequent operation of the Nabucco pipeline, which testified the importance of the project for all stakeholders involved, particularly for the European Union member states. In 2012, an agreement with the Shah Deniz consortium was signed for the funding and operation of the Nabucco project. However, in 2013, the Shah Deniz Consortium opted toward the Trans Adriatic Pipeline construction project, and therefore, as of today, the future of the Nabucco pipeline construction project remains rather unclear. The projected start of construction works is the year 2018, but further prospects of the project will largely depend on the discovery of new deposits and growth in the production capacities in Azerbaijan, and on the implementation of other natural gas pipeline construction projects in the region (Tosun, Biesenbender and Schulze 2015, pp. 159-162).

The expected initial capacity of the Nabucco natural gas transportation pipeline would amount to 10 billion cubic meters of gas, with the possibility of expanding this volume up to 23 billion cubic meters from the Shah Deniz field. Moreover, additional 10 billion cubic meters of natural gas per year could be transported from Turkmenistan, namely through the planned Trans-Caspian Natural Gas Pipeline to be coupled with the Nabucco pipeline. Finally, up to 5.5 billion cubic meters of natural gas per year could be transported from Egypt, via the Arab Gas Pipeline to be interlinked with the Nabucco natural gas pipeline. Therefore, the expected capacities of the project are very large, and they could prospectively help significantly diversify the European Union's sources of

natural gas imports, and decrease the Russian Federation's share in the supplies of natural gas (Talus 2013, pp. 267-268).

For Azerbaijan, the Nabucco pipeline construction project is potentially much beneficial in economic terms, as it would allow the country generating additional profits through the supplies of natural gas to the European Union without the transit through the territory of Russia. For the EU, in addition to diversifying the supplies of natural gas, the Nabucco project would represent another key advantage. In contrast to all other similar projects, the Nabucco pipeline is expected to link the Caspian Sea basin and Western Europe directly, without the transit via Southern Europe. Therefore, the implementation of this project would allow significantly improving the structure of supplies, and reducing the costs of re-distribution of natural gas from the supplies performed to Southern Europe. In its turn, this would help significantly increase the energy security of the European Union.

In the next chapter, the SOCAR-DESPA project will be investigated.

3.7 SOCAR-DESFA

A major project currently planned by the State Oil Corporation of Azerbaijan is the purchase of controlling interest in the Greek monopolist of the electricity distribution networks DESFA. DESFA is a subsidiary of the Greek gas distribution company DEPA which is currently put on sale. The tender for the privatization of DESFA organized by the Greek authorities currently involves three main competitors: SOCAR, the Greek company GEK Terna, and the Russian state giant Gazprom. The latter competes at once for purchasing not only DESPA, but also DEPA. Gazprom has better opportunities for acquiring the company taking into account the company's financial resources, but SOCAR sees this deal as a key step for the development of the Azerbaijani energy sector, and therefore intensively offers development projects to the Greek government, in order to win the tender (Talus 2013, pp. 236-237).

The acquisition of DESFA is prospectively very beneficial for the State Oil Company of Azerbaijan due to a number of reasons. Thus, it should be understood that the production of power and electricity in Greece relies on the natural gas, as most power plants in the country function either on natural gas or on hydropower. Taking into account the projects currently implemented by Azerbaijan and the European Union for constructing natural gas pipelines linking Azerbaijan and Greece (namely the Trans Adriatic Pipeline, and the Trans-Anatolian Natural Gas Pipeline), Azerbaijan could become the major supplier of natural gas to Greece already in the near future. Therefore, for the Azerbaijani authorities, operating the Greek monopolist of the electricity distribution networks functioning almost entirely on the Azerbaijani natural gas would allow obtaining significant economic benefits taking into consideration the economies of scale achieved within the framework of those projects. For Greece, SOCAR's winning bid would mean higher effectiveness in the operation of the power distribution networks, and probably lower prices for electricity for the population. In contrast to the Russian natural gas currently being the main source of supplies of natural gas to Greece, the Azerbaijani gas would be supplied to Greece directly, which would allow avoiding superfluous costs. Furthermore, the operation of the Greek electricity distribution networks by the same corporation would mean higher management effectiveness, as the professionals of SOCAR are fully aware of the parameters of the natural gas supplied, its refinement and use in the electricity generation processes, etc. (Tosun, Biesenbender and Schulze 2015, pp. 153-154).

For the European Union, Azerbaijan's acquisition of the Greek electricity distribution monopolist DESFA together with the implementation of the TAP and TANAP natural gas pipeline construction projects would bring two key advantages. On the one hand, the EU would thus be able to significantly diversify its sources of energy imports, thus reducing its dependence on Russia and increasing the overall level of energy security. On the other hand, the effective operation of the Greek electricity distribution networks by the State Oil Corporation of Azerbaijan would prospectively allow resolving the energy issues in Greece, and at the same time exporting part of the energy generated to other

Southern European states, which would contribute to the overall resolution of the energy crisis in the European Union.

Having analyzed the main projects and aspects of cooperation between Azerbaijan and the European Union in the energy sector, in the next chapter, conclusions will be drawn in line with the findings of the research.

4 Analysis of the research findings

The findings of the research prove that as of today, countries of the Caspian Basin, and namely Azerbaijan, play a key role for the European Union in terms of the common energy policy implemented by the EU member states. This is preconditioned by many factors, in particular by the lack of effective diversification of natural gas and crude oil supply sources existing in the European Union as of today. The utterly high level of the EU's dependence on the Russian Federation is a major factor predefining the opportunities for the effective cooperation between the European Union and Azerbaijan in the energy sector.

The European Union's and Azerbaijan's mutual interests in the development of cooperation in the energy sector are proven by the great number of mutual projects currently implemented or planned by the two states. As can be seen from the previous chapter of the research, only the capacities of the Shah Deniz gas field in Azerbaijan and the TAP and TANAP pipeline construction projects can help significantly diversify the sources of natural gas imports in the European Union, with their capacity in aggregate constituting approximately 8% of the current total gas imports required by the EU. Other major projects in the energy sector such as Nabucco or the Azerbaijan–Georgia–Romania Interconnector further prove that Azerbaijan is a prospective major partner of the European Union in terms of energy supplies, as most major projects implemented by the EU in the energy sector are directed to the countries of the Caspian Basin, and namely to Azerbaijan.

In the course of the research, several hypotheses have been tested.

H1: Lack of alternatives in energy supplies may lead to unfair pricing.

Hypothesis 1 has been confirmed. Indeed, as the practice shows, namely in terms of the European Union's relations with the Russian Federation in the energy sector, the lack of alternative supply sources may lead to an ever-growing dependence on a particular supplier, and as a result to its unfair practices in the establishment of prices for the

products supplied. This is preconditioned by the general market laws, and this conclusion is relevant for all industries. The monopolization of the market most often leads to the fact that a single manufacturer or supplier has the full control over all market mechanisms. Therefore, the lack of substitute products and competitors allows the monopolist fixing high prices for its products, as the buyers do not have any opportunities to switch to other suppliers' products. As a result, buyers are forced to pay more for purchasing the same products, and don't have any mechanisms to affect the activities of the supplier, or to make it change the pricing strategy adopted. In the case of international relations, namely in the energy sector, the lack of energy supply alternatives brings even worse consequences, and the energy resources are strategic goods which ensure any country's effective operation in all respects, and the level of energy security of an individual state largely predefines its overall level of its national security in the long-term perspective. Therefore, for the purpose of avoiding the excessive risks associated with the lack of effective energy supply alternatives, countries need to develop their effective energy security policies aiming in particular to ensure sufficient alternatives in terms of energy supplies, namely in order to avoid the excessive use of financial resources.

H2: Usage of the Russian “energy weapon” induces Europe to re-think and diversify its energy suppliers.

Hypothesis 2 has been confirmed. As the Russian Federation is the major supplier of oil and natural gas to the European Union, the EU doesn't have effective alternative sources of supplies for diversifying its energy imports. Therefore, as the findings of the research prove, the Russian Federation uses this situation in its own interests, and therefore the energy resources supplied by the country are not only natural resources, but also important geopolitical tools which Russia uses for putting tension on the European Union. For the EU, this situation is much negative, and has particularly aggravated with the recent aggression of the Russian Federation against Ukraine. In addition to the lack of supply alternatives, there are currently no alternative pipeline routes for the transportation of energy resources from Russia, and as a result, the dependence of the EU on both

Russia's geopolitical ambitions and the overall geopolitical conjuncture on the continent becomes excessively high, which substantially impairs the level of the European Union's energy security. Taking into consideration those negative effects, the European Union's energy policies currently implemented are first of all aimed at diversifying the sources of energy supplies, and namely at reducing the Russian Federation's share in the EU's imports of natural gas and oil. This is a key prerequisite for ensuring the European Union's energy security, and thus geopolitical stability in the future.

H3: Supplies of energy from Azerbaijan may help significantly diversify the EU's imports of energy resources.

Hypothesis 3 has been confirmed. Indeed, Azerbaijan represent a strategic opportunity for the European Union as an alternative supplier of energy resources within the framework of the European Union's energy policies aimed at reducing the EU's dependence on energy supplies from the Russian Federation. As the findings of the research run within the framework of this thesis testify, Azerbaijan is prospectively a key partner of the European Union in the energy sector. On the one hand, this is predefined by the fact that Azerbaijan is among the global leaders in terms of the proven oil and natural gas reserves, and the country's production capacities are constantly growing. On the other hand, the partnership ties between the European Union and Azerbaijan which have been actively developing since the early 1990's have allowed establishing cooperation in the energy sector, which can be seen particularly well in the mutual projects currently implemented by Azerbaijan and the EU member states. Namely, the numerous pipeline construction projects such as the Trans Adriatic Pipeline, the Trans-Anatolian Natural Gas Pipeline, the Nabucco pipeline, etc. prove that the European Union indeed see Azerbaijan as a key strategic partner in the field of energy supplies, and Azerbaijan may become a major partner contributing to the diversification of natural gas and oil supplies to the European Union already in the near future.

Thus, the findings of the research allow stating Azerbaijan's essential role for the improvement of the European Union's energy security through diversification of energy

supplies. Therefore, further enhancement of cooperation between the EU and Azerbaijan in this field should be expected in the near future. For Azerbaijan, it would represent great economic growth prospects, and the implementation of the mutual projects described above would help reduce the country's economic and geopolitical dependence on the Russian Federation.

Conclusions

Energy resources are strategic natural resources which to the largest extent predefine any country's effective economic activities. As a result, the level of provision with energy resources and the level of an individual state's energy security greatly precondition its geopolitical sovereignty, and the ability to run independent policies in all fields of international cooperation. Taking into account the essential role of energy resources in any state's successful activities, the supplies of energy resources are one of the most important factors for ensuring a high level of national security, and the suppliers of such resources have competitive advantages in terms of both the economic benefits they gain and the geopolitical impact they are able to use thanks to their abundance in energy resources.

For the European Union, the world's largest and most successful regional integration formation, the provision of a high level of energy security has become of key importance. The supranational formation doesn't have sufficient internal resources for satisfying the needs of its industrial sector and the population in natural gas and oil, and therefore is forced to import those energy resources from abroad. As of today, most hydrocarbon imports in the European Union come from the Russian Federation, which imposes significant threats on the European Union member states which do not have any effective alternative sources of energy supplies, and therefore remain much dependent on Russia in both economic and geopolitical terms. This understanding has promoted the European Union's desire to diversify the sources of energy supplies, and to use more intensively other sources of energy, namely non-traditional ones. As of today, the two vectors make an integral part of the European Union member states' policies implemented in the field of energy security.

In terms of the geographic diversification of the energy supply sources, a particularly important alternative for the European Union is represented by the countries of the Caspian Basin, namely by Azerbaijan. Those states are abundant in oil and natural gas, and their close geographic location allows developing plans for their subsequent inclusion in the energy supply infrastructure of the European Union.

Azerbaijan has remained a major producer of oil and natural gas throughout its recent history. After the collapse of the Soviet Union, the country undertook significant efforts to effectively re-boost its energy sector, which became possible in particular thanks to the investments on the part of the European Union, and the involvement of major Western European corporations in the programs for the development of the Azerbaijani oil-and-gas industry. This laid a strong basis for the subsequent development of the EU-Azerbaijani relations in the energy sector, which as of today represent a particular interest for both Azerbaijan and the European Union. This is testified by the growing turnover of energy supplies from Azerbaijan, and by the large-scale mutual projects implemented by the EU and Azerbaijan in the field of oil and natural gas supplies. The benefits brought by such cooperation allow stating that both Azerbaijan and the EU will aim to strengthen it in the near future.

Taking into account the current level of cooperation between Azerbaijan and the European Union in the energy sector, and the aims followed by the European Union in terms of the diversification of energy supplies and the reduction of the Russian Federation's share in the EU's aggregate oil and natural gas imports, further growth in the turnover and deepening of cooperation between Azerbaijan and the European Union should be expected in the near future. Both the EU and Azerbaijan are much interested in developing such effective cooperation for the purpose of not only obtaining economic benefits, but also in order to reduce their geopolitical dependence on Russia, and thus in order to raise their level of geopolitical sovereignty through improved energy security. The completion of the projects currently implemented or planned for implementation between Azerbaijan and the European Union would provide both the South Caucasian state and the European Union with far greater prospects for increasing their cooperation and ensuring their high level of energy security, which is one of the ultimate goals of their policies in the energy sector.

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