

# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft  
*ZBW – Leibniz Information Centre for Economics*

Suleymanov, Elchin; Rahmanov, Farhad; Bulut, Cihan et al.

## Article

# The impact of the oil price fluctuations on the economic policy in oil-exporting former soviet union countries

Academic journal of economic studies

## Provided in Cooperation with:

Dimitrie Cantemir Christian University, Bucharest

*Reference:* Suleymanov, Elchin/Rahmanov, Farhad et. al. (2018). The impact of the oil price fluctuations on the economic policy in oil-exporting former soviet union countries. In: Academic journal of economic studies 4 (1), S. 111 - 122.

This Version is available at:

<http://hdl.handle.net/11159/1872>

## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/econis-archiv/>

## Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.

<https://zbw.eu/econis-archiv/termsfuse>

## Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*

# The Impact of the Oil Price Fluctuations on the Economic Policy in Oil-Exporting Former Soviet Union Countries

Elchin Suleymanov<sup>1</sup>, Farhad Rahmanov<sup>2</sup>, Cihan Bulut<sup>3</sup>, Fakhri Hasanov<sup>4</sup>

<sup>1</sup>Baku Engineering University, Azerbaijan, <sup>1</sup>E-mail: [elsuleymanov@beu.edu.az](mailto:elsuleymanov@beu.edu.az)

<sup>2</sup>Vistula University, Poland

<sup>3</sup>Azerbaijan State Economy University, Azerbaijan

<sup>4</sup>King Abdullah Petroleum Studies and Research Center, Riyadh, Saudi Arabia

**Abstract** For Azerbaijan, Russia and Kazakhstan as Post-Soviet countries, oil exports are main revenues sources. These three resource rich countries implemented notable oil projects since independence and as a result acquired significant oil revenues. Due to major part of export goes to oil and relevant sectors; especially after 2000 these gained huge revenues are directed to solve main social and economic problems. Azerbaijan, Russia and Kazakhstan accelerated transition period through using oil revenues in their economies. But besides such positive effects of oil revenues, the phenomenon called "natural resource curse" in the literature has not skipped these three countries. Because of the similar structure of the economies and the fact that the petroleum revenues are locomotives of the country's economies, the steep decline in oil prices since 2015 has led to similar economic outcomes for all three countries, and has started to become a major threat. In this negative environment, real sector activities have suffered significant losses. Many financial institutions either have lived difficulties in maintaining their activities or have closed. The economy of the three countries began to narrow with the negativities in all sectors, especially in the service sectors such as finance and construction. In this study, the negative aspects and their effects of negativities were addressed and some proposals were given for economic activity of all three countries.

**Key words** Azerbaijan economy, Kazakhstan economy, Russian economy, oil revenues, budget expenditure, economic policy

**JEL Codes:** F31, C31, Q43

© 2018 Published by Dimitrie Cantemir Christian University/Universitara Publishing House.

(This is an open access article under the CC BY-NC license <http://creativecommons.org/licenses/by-nc-nd/4.0/>)

## 1. Introduction

Oil is an important wealth of post-Soviet countries as Azerbaijan, Russia and Kazakhstan. From the start of production over the last 150 years oil is playing an important role in economy and it is considered to be the country's main source of income. Medium and long-term prospects of the country's development are directly dependent on the oil sector strengths. Proceedings from the sale of oil play a key role in addressing some of the social and economic problems. Oil export revenues are an important source of income for post-Soviet countries such as Azerbaijan, Russia and Kazakhstan. All those countries with rich natural resources have achieved significant petroleum projects, especially after gaining independence, and those projects have generated huge oil revenues. As a significant part of exports of the three countries were oil and oil refinery products, they got huge income in the post-2000 period, especially due to oil price increases. With that income as a source of economic activities, many vital social and economic problems that had been waiting for many years have begun to be solved. This process has been important in solving the difficulties of the economic system change which is the common feature of these countries and has accelerated the transformation called transitional process. Undoubtedly, while the use of natural resource revenues facilitated the solution of some basic problems and the process of change in the socio-economic structure accelerated, undesirable results rose as well. This phenomenon that entered to the literature as "natural resource curse" has also manifested itself in three countries. While the countries have gone beyond structural anticipation and reached significant levels of relief in the economies, the easy acquisition of resources and expectation that ease will continue could prevented the effective using and cautious approaching. In terms of the contracts signed by the discovery and development of Azerbaijan energy resources, a historic opportunity both politically and in terms of economic independence, has had an excellent opportunity. The signed oil contracts speed up the entry of foreign capital into the country, in parallel, increased foreign aid and loans from international financial organizations.

Thus, it is an inevitable necessity for the government, which directs the country's economy, to pay attention to the division with a mechanism of resources division that will be able to continue oil revenues in a way to form a growth (between oil & non-oil trade sectors and the sectors that are not included in foreign trade). Diverting the revenues and benefits coming from oil to productive areas is one of the major problems in an economy where financial institutions and markets are not formed fully. The solution to this problem reveals the need for the planning role of the state in the economy.

### 1.1. Reasons for the Decline in Oil Prices in Global Markets after 2014 and Their Impact on the Country's Economies

Natural resources and other sectors that are fed from these sources generally have high efficiency. It includes capital-intensive, economic activities that are effective in the balance of foreign trade and important to the state. The energy sources that form the locomotive of economic growth, the volume of investments related to these resources and the length of the economic recovery period of these activities increase the sensitivity to the continuation of these activities and their related price changes. Since the late 19th century, oil has started to take an important role in the production process. After the invention of the diesel engine by the German inventor Rudolf Diesel, the oil has gained its essential value. Petroleum is one of the major energy sources and has a wider use than other energy sources. Different raw materials can also be obtained. Moreover, it is more suitable to be obtained and transported than other energy sources. The basic factors in the cost of oil and petroleum products are the expenditure for the extraction, transport and distribution of petroleum (Aras, 2007). The share of oil in world energy consumption was 20.7% in 1938, 27.7% in 1950, 34.7% in 1960, 44.1% in 1970, 44.9% in 1980, and 40.5% in 1990. It is estimated that this ratio which was around 40% in 2000 will be over 55% as of 2020.

Table 1. Countries with the Largest Proven Oil Reserves in 2016

Rank	Country	Barrels (bbl)
1	Venezuela	298,400,000,000
2	Saudi Arabia	268,300,000,000
3	Canada	171,000,000,000
4	Iran	157,800,000,000
5	Iraq	144,200,000,000
6	Kuwait	104,000,000,000
7	Russia	103,200,000,000
8	United Arab Emirates	97,800,000,000
9	Libya	48,360,000,000
10	Nigeria	37,070,000,000
11	United States	36,520,000,000
12	Kazakhstan	30,000,000,000
13	Qatar	25,240,000,000
14	China	24,650,000,000
15	Brazil	15,310,000,000
16	Algeria	12,200,000,000
17	Mexico	9,812,000,000
18	Angola	9,011,000,000
19	Ecuador	8,832,000,000
20	Azerbaijan	7,000,000,000

Source: <http://www.worldatlas.com/articles/the-world-s-largest-oil-reserves-by-country.html>

According to the Energy Information Administration's 2015 data, while daily petroleum demand in OECD countries has been in a trend of declining between 2011 and 2015, the demand in non-OECD countries has increased in 10 percent. However, despite the demand of around 4 million barrels per day in this period, supply has increased more rapidly and passed the total demand.

According to the BP World Energy Statistics Report, in 2016, global oil production has increased more than doubled of global consumption. Production outside the Organization of Petroleum Exporting Countries (OPEC) increased by 2.1 million barrels per day, it has recorded the highest increase in the data set. The long-term effects of OPEC countries, which have two-thirds of crude oil reserves and one-third of natural gas reserves, have started to decline in the world oil market since 2015. Increasing the oil production of the US, Canada and Brazil has affected the decreasing in the effects of OPEC countries.

Table 2. Global Oil Demand and Supply

Daily (Million barrels)	2012	2013	2014	2015	2016
Total Demand	90,5	91,8	92,4	93,3	97,0
Total Supply	90,8	91,4	96,5	95,8	96,5

Source: <https://www.iea.org/statistics/monthlystatistics/monthlyoilstatistics/>

Oil prices in global markets have started to fall from late 2014, and this process has continued throughout the first months of 2016. In June 2014, the price of oil, which is about \$ 115 US a barrel, fell by about four times in the first six months of 2016 and its price was \$ 30. When oil supply-demand situation and future-market prices are assessed, expectations are high that oil prices will stay close to the current low levels. Indeed, many international organizations are revising down their oil price forecasts.

Table 3. The largest oil producer countries as of 2016

Rank	Country	Oil – production (bbl/day)
1	<a href="#">Saudi Arabia</a>	11,730,000
2	<a href="#">United States</a>	11,110,000
3	<a href="#">Russia</a>	10,440,000
4	<a href="#">China</a>	4,197,000
5	<a href="#">Canada</a>	3,856,000
6	<a href="#">Iran</a>	3,594,000
7	<a href="#">United Arab Emirates</a>	3,213,000
8	<a href="#">Iraq</a>	2,979,000
9	<a href="#">Mexico</a>	2,936,000
10	<a href="#">Kuwait</a>	2,797,000

Source: Energy Information Administration, USA 2017

Countries that are highly sensitive to oil revenues are negatively affected by this process at different levels. On the other hand, it is predicted that the price decline will contribute positively to the foreign balances of the energy importer countries and support their economic growth. On the supply side of oil price changes: Except for the increase in production of non-OPEC countries, OPEC's decision not to reduce production quota and the expected rapid increase in rock oil production with newly developed technologies have been effective. When the demand-driven developments are examined; the weakness of the economic situation in Japan and the slowdown in the Chinese economy, the second largest oil consumer in the world, caused the slowdown in the increase in global demand for oil. Along with these developments in the petroleum market, the value of the US dollar by the influence of the FED's monetary policy in the US also played a role in the decline in oil prices.

Table 4. Breakeven point of oil price for oil producer countries' budget balance

	Break-even point (USD/barrel)	Net energy exports (%GDP)	GDP(2013) (Billion USD)	GDP estimate effect of 50% reduction in oil price	
				(Billion USD)	(%GDP)
<a href="#">Libya</a>	184	58.4	66	-19.3	-29.2
<a href="#">Iranian</a>	131	13.3	367	-24.4	-6.6
<a href="#">Algeria</a>	130	28.5	212	-30.2	-14.2
<a href="#">Nigeria</a>	123	16.3	522	-42.5	-8.1
<a href="#">Saudi Arabia</a>	106	42.7	748	-159.7	-21.4
<a href="#">Iraq</a>	101	38.6	229	-44.2	-19.3
<a href="#">Russia</a>	98	17.6	2,097	-184.5	-8.8
<a href="#">UAE</a>	77	33.4	402	-67.1	-16.7
<a href="#">Train</a>	60	59.2	202	-59.8	-29.6
<a href="#">Kuwait</a>	54	56.5	176	-49.7	-28.2
<a href="#">Norway</a>	40	19.1	513	-49.0	-9.6

Source: Trademap, IMF

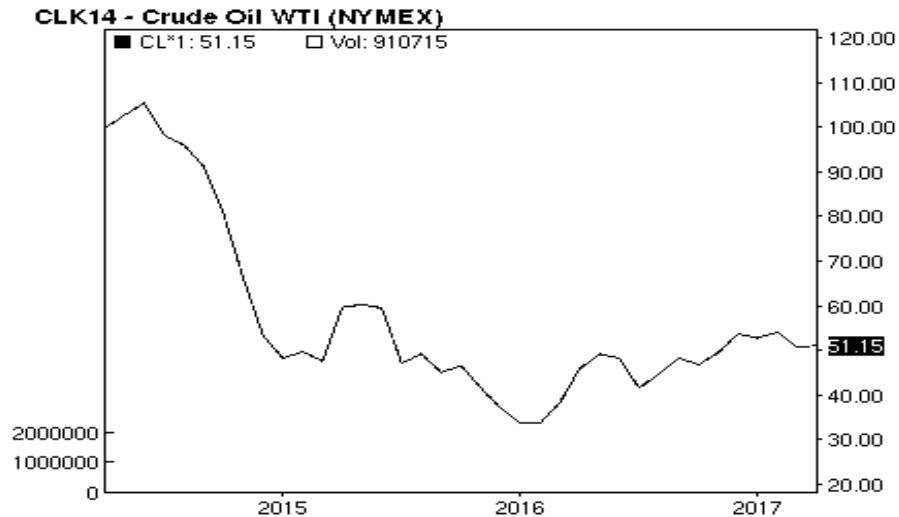


Figure 1. Crude oil prices (USD per barrel)

Source: <http://www.nasdaq.com/markets/crude-oil.aspx?timeframe=3y>

## 2. The Economic Structure of Oil-Exporting Post-Soviet Countries

After a period of 70 years, the USSR has begun a new period as 15 independent states. The countries that gained their independence established liberal-based economic systems. Russia, Kazakhstan and Azerbaijan, which have significant energy resources in the new economic system, started to follow their own energy policies and in the end achieved great profits. Although some of these gains are invested again in the energy sector, a significant portion has been directed at projects aimed at increasing the quality of life of the population. Of course the socio-economic development of the population is related to the way in which the revenues from these sources are spent. As the export of energy resources increases the country's GNP, it increases income per person and people's spending opportunities. In addition, a significant portion of the budget revenues of countries exporting energy resources are based on these resource revenues (Aras, 2016). Although the production of petroleum has increased by 16% in recent years (2004-2014), about 25% of it has been consumed by the United States. The share of OECD countries in consumption is over 60%. According to World Energy Council estimates, world oil reserves will be exhausted between 2040 and 2060. Thus, in the near future, the danger of not meeting the demand for oil increases competition in the oil market. It has been tried to balance with the declining in world oil reserves, the better management of existing areas and the discovery of new reserve areas (Hasanov *et al.*, 2017). In this context, competition in the petroleum market has continued partly through Caspian oil.

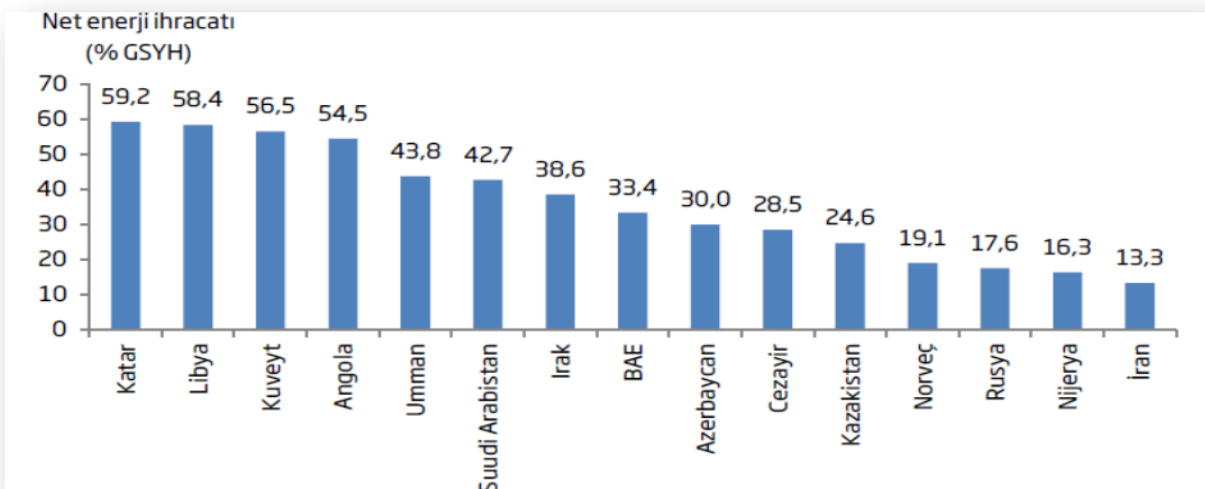


Figure 2. Major energy exporter countries by share in GDP 2015

Source: Trademap, IMF

## 2.1. The economic structure of the Russian Federation

Russia's economy is the sixth largest economy in terms of purchasing power, while it is the ninth largest country in the world according to GDP. He is also the world's largest natural gas and oil producer.

Table 5. Basis indicators of the Russian Economy for years 2009-2016

	2009	2010	2011	2012	2013	2014	2015	2016
Population and Employment								
Population (million)	142,7	142,9	142,9	143,0	143,7	143,8	146,5	146,3
Unemployment rate (%)	8,1	6,9	6,6	5,5	5,5	5,5	5,6	6,2
GDP								
Growth (%)	-7,8	4,5	4,3	3,4	1,3	0,2	-3,5	-1,4
Private consumption expenditures (%)	-5,1	5,5	6,8	8,0	4,7	0,5	-6,0	-1,0
Total investment expenditures (%)	-14,4	5,9	9,1	6,4	-0,3	-10,0	-15,0	-8,0
Nominal GDP (USD billion)	1.223	1.530	1.903	2.007	2.096	1.833	1.366	1.375
External Balance								
USD/RUB (end of the year)	29,9	30,9	31,6	30,7	32,9	58,0	58,2	61,8
Real effective exchange rate (%)	-5,8	10,6	4,9	1,5	2,2	-8,6	-25,6	1,7
Balance of Foreign Trade (billion USD)	113,2	147,0	196,9	192,3	180,9	169,9	153,2	183,8
Current Balance (USD bn)	55,5	71,0	101,0	66,6	33,2	53,7	63,6	82,1
Current Balance (% GDP)	4,5	4,7	5,3	3,3	1,6	2,9	4,7	6,0
External Debt (% GDP)	38,2	32,1	28,7	31,8	34,5	34,9	41,2	40,7
Public Finance								
Budget Balance (% GDP)	-5,4	-3,9	0,4	-0,1	-0,3	-1,1	-1,2	-1,6
Public Debt (% GDP)	8,1	9,0	9,2	8,9	8,2	7,3	8,3	9,8
Inflation								
CPI (% , year-end)	8,8	8,8	6,1	6,5	6,5	9,8	11,2	8,1
	2009	2010	2011	2012	2013	2014	2015	2016*
Population and Employment								
Population (million)	142,7	142,9	142,9	143,0	143,7	143,8	146,5	146,3
Unemployment rate (%)	8,1	6,9	6,6	5,5	5,5	5,5	5,6	6,2
GDP								
Growth (%)	-7,8	4,5	4,3	3,4	1,3	0,2	-3,5	-1,4
Private consumption expenditures (%)	-5,1	5,5	6,8	8,0	4,7	0,5	-6,0	-1,0
Total investment expenditures (%)	-14,4	5,9	9,1	6,4	-0,3	-10,0	-15,0	-8,0
Nominal GDP (USD billion)	1.223	1.530	1.903	2.007	2.096	1.833	1.366	1.375
External Balance								
USD/RUB (end of the year)	29,9	30,9	31,6	30,7	32,9	58,0	58,2	61,8
Real effective exchange rate (%)	-5,8	10,6	4,9	1,5	2,2	-8,6	-25,6	1,7
Balance of Foreign Trade (billion USD)	113,2	147,0	196,9	192,3	180,9	169,9	153,2	183,8
Current Balance (USD bn)	55,5	71,0	101,0	66,6	33,2	53,7	63,6	82,1
Current Balance (% GDP)	4,5	4,7	5,3	3,3	1,6	2,9	4,7	6,0
External Debt (% GDP)	38,2	32,1	28,7	31,8	34,5	34,9	41,2	40,7
Public Finance								
Budget Balance (% GDP)	-5,4	-3,9	0,4	-0,1	-0,3	-1,1	-1,2	-1,6
Public Debt (% GDP)	8,1	9,0	9,2	8,9	8,2	7,3	8,3	9,8
Inflation								
CPI (% , year-end)	8,8	8,8	6,1	6,5	6,5	9,8	11,2	8,1

**Source:** International Monetary Fund, World Economic Outlook Report, 2016

More than 80% of Russia's exports are made up of oil, natural gas, metals and timber. After 2003, the economic importance of natural resource exports has decreased, as the domestic market has grown significantly (Suleymanov *et al.*, 2014).

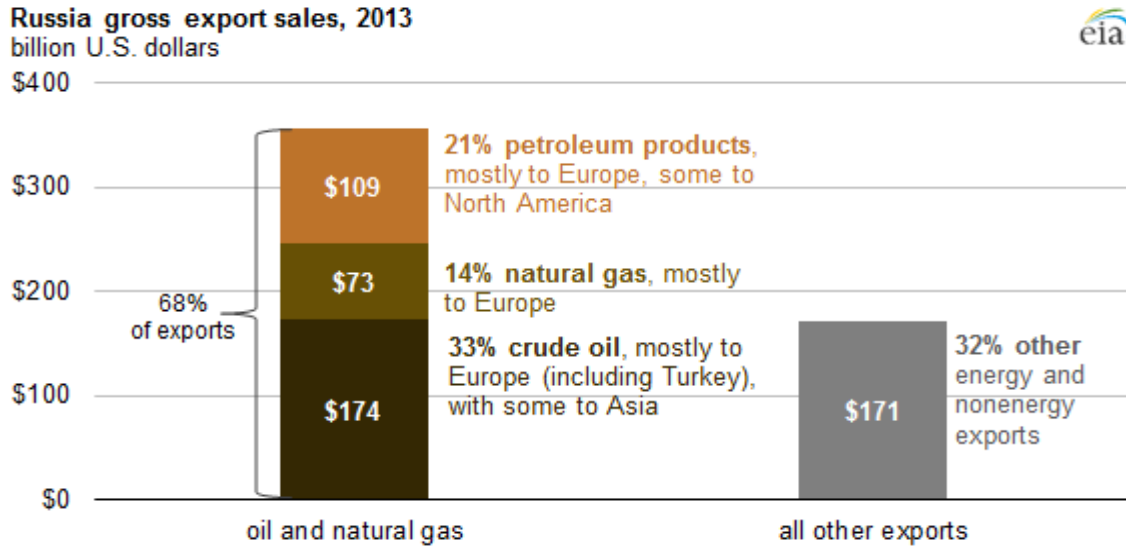


Figure 3. Russia gross export sales

**Source:** Energy Information Administration

In Russia, a market economy with tremendous natural resources, especially oil and natural gas, significant gains have been achieved in economic growth since the beginning of the 21st century, thanks to high domestic consumption and long-term political stability (Petrol, 2015).

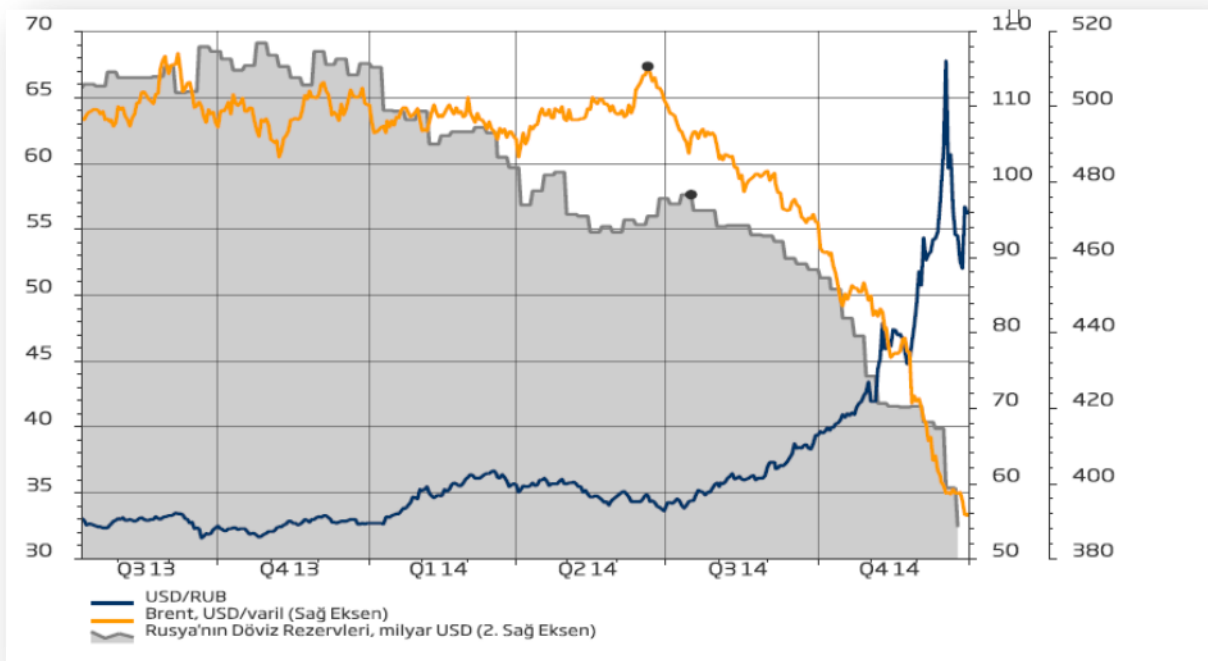


Figure 4. Foreign exchange reserves of the Central Bank of Russia, ruble/dollar exchange rate and oil prices

**Source:** Datastream

In the country where the gain from oil exports was \$ 12 billion in 1999, this figure increased day by day, foreign reserve amounted to 697.3 billion on 1 December 2013, made Russia the world's third largest foreign exchange reserves. But then the drop in oil prices in world markets led to a 40 percent depreciation of this reserve (Petrol, 2015).



Figure 5. Russian foreign exchange reserve and asset fund total

## 2.2. Kazakhstan's economic structure

Kazakhstan has an important place in Central Asia, according to its natural resources and economic power. 26% of chromium in the world, 20% of gold, 17% of uranium are in Kazakhstan. The first in the world in terms of zinc and tungsten sources, the second in terms of silver, uranium, lead and chromium mines, third in terms of copper reserves is in place. There are about 500 mineral deposits in the country that contain more than 1200 mineral resource types. According to oil and natural gas reserves, Kazakhstan is among the top fifteen countries in the world. According to BP's June 2014 World Energy Summaries, Kazakhstan has 1.8% of global oil reserves, and therefore it has 30 billion barrels of oil (Suleymanov *et al.*, 2014).

Kazakhstan, whose oil resources are expected to reach 92 million tons by 2020, has quite benefited from the advantages of this resource richness in the first decade of the new century. In the country, where more than half of the state revenues were received from these sources, has been reached a significant economic structure with an annual growth rate of over 8.4%. The vast majority of the country's exports were consist of oil and basic metals. With the high oil prices in the world, Kazakhstan has lived a period of foreign trade surplus.

The changes in the prices of these products in global markets have affected the country's economy to a great extent. While the vast majority of production was in the oil and gas sectors, production in capital and consumer goods was not yet at a level that meets domestic consumption. The main objective of the country's economic policies was to develop the non-energy sectors and to reduce the rate of impact from changes in oil prices. For this purpose, by the help of the Innovative Industrial Development Strategy covering the period 2003-2015, the country intended to keep the growth rate in GDP at 8% and the economy diversified. Within this program, priority was given to tourism, petroleum, natural gas, food, textile, transportation, logistics sectors and it was aimed to use new technologies and to develop investment projects in these sectors.

However, the country has two major disadvantages as an important obstacle to achieving these goals. The distances of the country to international markets and the small size of domestic markets. The fact that the country is not open to any sea and it has a geographical location surrounded by lands is important factors limiting trade development. The high transportation costs and the shortage of domestic markets reduce the investments made in the non-oil sectors and hamper the development of the sector.

The recent decline in the prices of oil and natural gas has caused significant economic difficulties in this country as far as in the other natural resource rich countries. Real growth rate was about 6% in 2013, 4.3 in 2014. Along with the events that are happening in the global economy, Kazakhstan Central Bank reduced the value of its money in February 2014. It reduced the value of Tenge by 18%. The devaluation made has had many effects on the domestic economy. While the purchasing power has weakened, domestic savings have decreased and companies operating on a large scale foreign borrowing have suffered serious losses. The share of non-refundable loans in the banking sector also has increased

rapidly. Despite the negative effects of the devaluation on the financial markets, the positive effects on foreign trade have resulted in an increase in exports and an improvement in foreign trade balance (Şimşek, 2014).

In the concerned period, the foreign exchange reserves of the Central Bank of Kazakhstan have decreased considerably. With the negative consequences of the Russian and Chinese markets further increasing the current negative situation in Kazakhstan's financial markets, the Central Bank of Kazakhstan has changed its monetary policy. After August 20, 2015, the free floating exchange rate policy has begun to be implemented (Şimşek, 2014).

Applications such as the harsh monetary policy to protect the value of the Kazakh currency Tenge and the increase in the base interest rate caused recession, mainly industrial production, in 2015. The lived stagnation reflected on economic growth figures and expectations about growth rates. While Kazakhstan's economic growth was at 1% in 2015, the World Bank's expectations have been for 2016 1.1%, 3.3% for 2017 and 3.4% for 2018 (Kosolapova, 2018). Kazakhstan's budget revenues has constituted 15% of GDP. On average, 74% of budget revenues in 2005-2014 have been financed by taxes. Although its rate has been reduced, taxes continue to be the main financial source of the state in budget revenues. While taxes accounted for 95% of the budget in 2005, but by 2014 this figure dropped to 62%, so reached its lowest level.

Due to the decrease in tax incomes, National Oil Fund transfers have increased in recent years. The share of the Oil Fund was 33% of the national budget in 2014. However, first transfer from the National Fund, based on the "Norwegian Model" and established in 2000, to the state budget was only 7% of the budget. The increment in the revenues of the oil and gas sectors also has an important role in the increase in these transfers. In recent years, the share of the oil and gas sector in GDP has increased, reaching over 20% (Kosolapova, 2018).



Figure 6. Kazakhstan GDP (2005-2016), billion USD

Source: <http://www.tradingeconomics.com/>

### 2.3. Economic structure of Azerbaijan

Azerbaijan is the most developed country in the South Caucasus according to its economic power. The oil and gas reserves owned by Azerbaijan have an indispensable role in gaining this economic power. In 2014, the GDP of Azerbaijan constituted 59 billion manats, of which 39% was from the oil and gas sector. In the last 10 years, the size of the country's economy has increased more than 7 times. During this period, per capita GDP increased by about 6.7 times. In Kazakhstan, which was seen as the second strong economy of the CIS, this indicator was close to 6 times. As it can see, the Azerbaijan economy has surpassed other Caucasus countries twice according to the growth tempos; it ranked first in the CIS. In addition, there were variations in the factors that economic growth was based on during that period (Aras *et al.*, 2013).

In 2005, the opening of the Baku-Tbilisi-Ceyhan oil pipeline has significantly increased oil production and exports, which meant that it was a large stream of revenue to the economy. This event caused radical changes in the structure of the country's economy. The increase in oil revenues over the years has shown itself more sharply in the state budget in 2008. In 2008, transfers from the Azerbaijani Oil Fund to the budget increased by more than fourfold, it was led to a visible jump in government revenues.

According to the results of the year 2015, the GDP of Azerbaijan estimated to be seventy billion dollars. 38.5% of these were from general exports, 93.5% from budget revenues, 66% from total investment expenditures and 33.9% from the oil sector. Increasing oil and natural gas production and exports, rising oil prices on the world market has led to large oil incomes included in the country. In 2004, while oil production was 15.6 million tons, it reached 50.8 million tons at the highest point in 2010. Oil production continued with the rising trend. But the world financial crisis in 2008 has affected many areas and has also affected the oil sector. Since 2011, oil production has begun to decline and nearly reached the 2007 level. This decline has also manifested itself in the following years.



Figure 7. GDP of Azerbaijan (2005-2016), bil. USD

Source: <http://www.tradingeconomics.com/>

The rise in GDP has been driven by the increase in oil and natural gas production in the country and the inclusion of large financing[12]. For example, while the average annual growth rate of GDP in 2004 was equivalent to 9-10%, but in following 26.4% in 2005, 34.5% in 2006, 10.8% and 5.0% in 2008 and 2010 in respectively. The main reason behind the rapid decline in the GDP growth rate in 2008 was the global financial crisis. As a matter of fact, the oil prices have remained low for a while due to the crisis. Considering that, in 2008, the share of the oil sector in the GDP was equal 55%, the increase have been of 10.8%. This rate, with production of 50.8 mln tons, was the highest limit of oil production (%56) in Azerbaijan in 2010. Decrease in oil output and a double dip in oil prices since the end of 2014 have also been observed in GDP. Decrease in production of oil and natural gas, diminish in GDP growth rate also affected the share of oil sector in GDP. The share of the oil sector in GDP in 2012 was 53%. This rate increased again in 2014 to 62% (Aras, 2016).

The increase in oil revenues led to an increase in budget expenditures. While 2005 budget expenditures were 2.1 billion manats, in 2015 were approved as 21 billion manats. So it has increased 10 times. In 2015, this figure was around 19 billion manats.

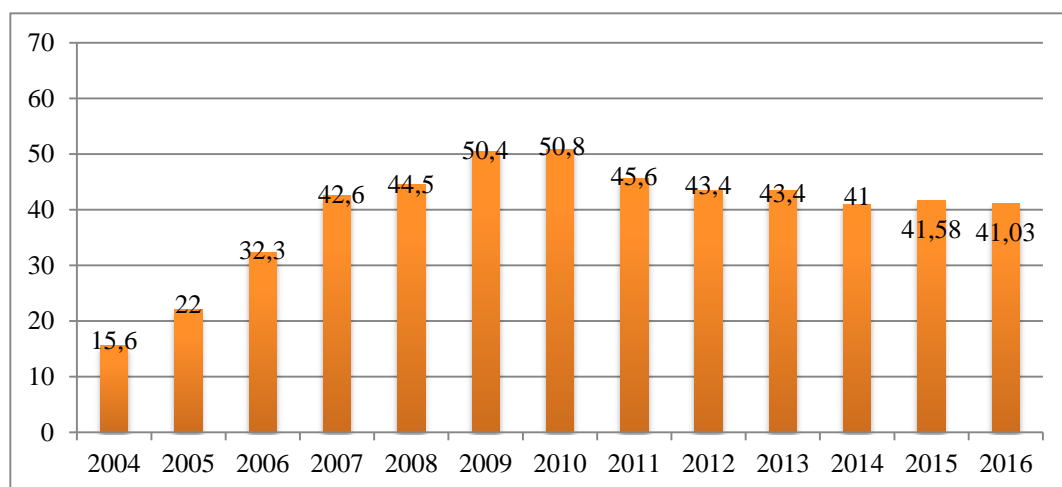


Figure 8. Volume of oil production in Azerbaijan in 2004-2016 (million tons)

Source: [www.socar.az](http://www.socar.az)

As mentioned earlier, oil production started to decline in 2011 and descended to the level of about 2007. This decline has also manifested itself in the following years.

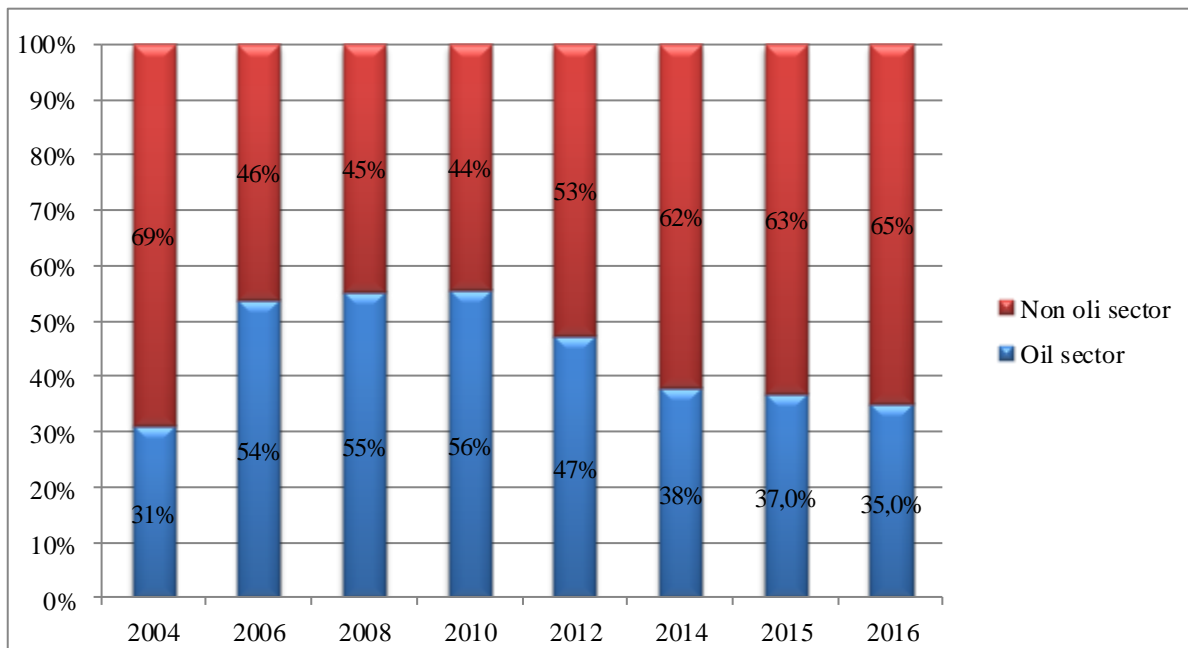


Figure 9. Oil and non-oil sector share in GDP (%)

Source: <http://www.maliyye.gov.az/sites/default/files/2017-1.pdf>

### 3. Influence of Oil Prices Fluctuations on the Economic Policies of Post-Soviet Oil Exporting Countries

The economies of Russia, Kazakhstan and Azerbaijan are very different each other in terms of volume. Russia's budget revenues are quite different from the other two countries due to the size of the economy and the size of the area. In 2014, while Russia's budget revenues were 532 billion dollars, Kazakhstan and Azerbaijan budget revenues were 31 and 17 billion dollars respectively. But the fact that there are quantity differences does not prevent comparative analysis. It is possible to compare the rates of increase over the years.

As seen in Table 3, until 2009 the highest growth rate of budget revenues belonged to Azerbaijan. This growth rate is directly related to the increase in oil revenues. While the increase in the budget revenues of Azerbaijan was 79% in 2008, this increase was 20% and 40% respectively in the Russian Federation and Kazakhstan. Among the three mentioned countries, Azerbaijan was the least affected by the 2008 global financial crisis in terms of budget revenues. This is due to the fact that the Azerbaijani economy has not been globalized to a great extent and that the same year there is a 29% increase in transfers from the Oil Fund. This increase rate was 3% in Kazakhstan in the same year. After the financial crisis, the rate of increase in the budget revenues of all three countries decreased, while in Azerbaijan budget revenues increased by 13%, Kazakh budget revenues decreased by 11%, and Russian budget revenues increased by only 3% in 2013. In 2014, while Azerbaijani budget revenues decreased by 6% the Russian Federation and Kazakhstan increased.

As can be seen from the above mentioned points, the growth rate of the budget revenues is more similar in the Russian Federation and Kazakhstan, while Azerbaijan shows a certain difference. This can be explained by the fact that Kazakhstan and Russian economies are more intensely connected with each other.

When it is taken into consideration that oil and natural gas exports account for 68% of Russia's total export revenues by 2013-2015, it was predicted that the country's economy would adversely affected if the current low level of oil prices was maintained. In addition to the oil dependence of Russia's total export revenues; taxes on petroleum and natural gas constitute 50% of total revenues in budget revenues. Therefore, although Russia's current public finance data shows a positive outlook, a decline in oil-based incomes may negatively impact budget performance.

It was assumed by Russian authorities that in 2014 the oil price should be on average 114 USD/barrel for the equivalent budget. Although the oil price estimated for the year 2015 around 70-75 USD/barrel, the Russian budget balance not achieved, because oil price was below the annual price of 50 USD/barrel. Since investors took into account the current

conditions at the time of the pricing, Ruble's depreciation against the US dollar accelerated and the USD/RUB rate rose by almost two times between 2014-2016. Although the Central Bank of Russia tried to protect the value of the Ruble by using USD 60 billion of foreign exchange reserves starting from August, the target was not reached. The Bank increased its policy interest rate by 650 basis points and raised from 10.5% to 17%. In addition to the increase in interest rates, Gazprom's foreign exchange sales could not prevent the rise in USD/RUB exchange rate.

International credit rating agency Standard & Poor's explained that Russia received a negative credit rating in December 2014, despite the fact that Russia's available foreign exchange reserves are around \$ 200 billion. S&P indicated as causes of decision that, the rapid deterioration in the flexibility of monetary policy in Russia and the weakening of economic activity has had a negative impact on the financial system. In addition to the negative trend of oil prices, relations with Ukraine have increased uncertainties about the performance of the Russian economy in 2015 and 2016. Despite Russian Central Bank increased interest rates and the expected contraction in domestic demand, since the depreciation of the ruble increased the prices of imported goods, inflation rose to 9.2% at the end of 2014 and to 11.2% at the end of 2015 (Petrol, 2015).

The Russian economy, which grew 0.2% in 2014, is projected to fall by 3.5% in 2015 and 1.4% in 2016 under current expectations. Private consumption expenditures are projected to decline by 10% in real terms in 2016 due to depreciation in Ruble and the tightening of the monetary policy of the Russian Central Bank. As financial conditions tighten and real sector confidence declines, total investment spending is projected to shrink by 20% in real terms in 2016.

Kazakhstan's economy, exposed to various difficulties such as the regional turbulence caused by the Ukrainian crisis in 2014, sanctions imposed on Russia and the decline in oil prices, and has closed the year with a growth rate of 4.2 percent. The joint statement of Kazakhstan Government and the Central Bank declared that Kazakhstan's foreign trade account decreased by 8.3 percent in January-October 2014 compared to the same period of 2013, and the export volume of mining items such as coal, aluminium, iron, copper decreased. This reduction was evaluated along with the decline in world prices.

In 2016, measures to prevent reserves have been increased and the economy has been narrowed. In 2015, changes were made to the foreign exchange market laws, citing the importance to be taken against external shocks threatening economic security and financial system stability. It has been given importance the Policy that will ensure Kazakhstan's national gold and foreign exchange reserves (at the level of \$ 105 billion in the present condition) remain adequate. Accordingly, the fiscal policy of 2016 has been emphasized to ensure that the budget is balanced and no tax policy has been envisaged to reduce investment attractiveness. The 2016 economic policy aimed at alleviating negative externalities and strengthening the socio-economic stability of the country.

Manat's revaluation process in Azerbaijan continued until 2015 when oil prices sharply declined in world markets. The first devaluation of the Manat rate in February was from \$ 0.79 to \$ 1.05 Manat, with the second devaluation at the end of December to \$ 1.55 Manat. Thus, for the first time in the recent history of the country, the Central Bank has devalued twice a year. The Central Bank while carried out the first devaluation related to the two-currency basket, the second devaluation was carried out for the floating exchange rate regime.

According to this decision, Manat's exchange rate is mainly based on the influence of the main factors determining the supply and demand ratio in the foreign exchange market. The Central Bank has started to make transactions in the foreign exchange market in accordance with this regime. Budget forecasts for the years 2016-2019 have been prepared with anticipation the crude oil sales price on world market will fall to 30-50 dollars. According to this, optimistic (\$ 60), base (\$ 50), and pessimistic (\$ 40) scenarios are prepared for budget basic items and priorities. The total amount of transfers from the Oil Fund to the state budget in 2003-2016 was more than eighty billion manats. Generally, the volume of this transfer has been more than half of the budget until 2016. Due to the decline in oil prices; the volume of this transfer in the 2016 budget has decreased by 50% from previous years to seven billion manats, or approximately 5 billion dollars.

#### 4. Conclusions

Investments in these countries, in oil sector mostly and the major role of the oil revenues in GDP's formation are dangerous. Directing all the attention to energy resources simply means a risk for the economy. This creates a possibility that the economy may be exposed to some financial fluctuations. Price changes in the world market due to the one-sided development of the oil sector bring about fluctuations in GDP, the budget and foreign trade. The fact that their national currency lost significant value against the dollar affected the economic policies of 2016 in all three countries. Azerbaijan and Kazakhstan lost important portions of foreign exchange reserves. At the same time, it was necessary for all three countries to prepare and practice some urgent measures packages for the post-petroleum period. The economical losses of the three countries due to oil price declines in recent years and the economic policies they applied to reduce these losses were investigated. It has also been pointed out that the adherence to a single sector, called the "Dutch syndrome", is a

threat to the country's economy in the event of price reductions or the depletion of resources. The prevention of similar situations for these countries has been emphasized, and incentive schemes have been sought to create different groups of goods in exports.

Azerbaijan and Kazakhstan many important reforms have been undertaken for the transition to the free market economy, restructuring in the free market environment, development and integration into the world economy. However, despite significant distances to the integration of the world economy, the impact of oil price fluctuations has created the necessity of some regulation for more efficient operation of the free market economy.

In ideal conditions, the oil fund reserves should be directed to investments rather than current expenditures in order for the income attained from the investment to be used in case of oil prices fall. Foreign factors also make it important to manage the rapid advance of the oil sector. Considering the effect on the state budget, some portion of oil fund can be directed to unexpected costs that are likely to appear as a result of the rapid increase of oil production. The primary targets for 2016 involve stimulating non-oil sector further, fulfilling complete and timely tax obligations for increasing revenues more, as a whole reinforcing tax and customs discipline.

## Acknowledgment

The views expressed in this study are those of the authors and do not necessarily represent the views of their affiliated institutions. The authors are responsible for all errors and omissions.

## References

- Aras, O. N. (2007). *Azerbaycan'ın hazar ekonomisi ve stratejisi*, Der Yayınları.
- Aras, O. N., Süleymanov, E. (2016). *Azerbaycan İqtisadiyyatı*, Şark-Garb Matbaası, Bakü.
- Aras, O.N, Suleymanov, E., Huseynov, R. (2013). *The Importance of Azerbaijan's Energy Revenues in its Exports Volume and the Effects on the National Economy*, International Journal of Business and Social Science 4 (No 6 June 2013), 79-87.
- Şimşek, A. (2014). *Devalüasyonu Sonrası Kazakistan Ekonomisi Üzerine Gözlemler -1*" Ekonomi, Finans ve Enerji Araştırma Grubu Şubat. <http://eurasian-research.org/tr/research/comments/economy/%C5%9Fubat-2014-deval%C3%BCasyonu-sonras%C4%B1-kazakistan-ekonomisi-%C3%BCzerine-g%C3%B6zlemler-1>
- British Petroleum (2015). *Statistical Review of World Energy*.
- Bulut, C., Suleymanov, E. (2012). *Azerbaycanın Hollanda Hastalığı Problemini Önleme Stratejilerinde Türkiye ile Yapılan Ekonomik İlişkilerin Önemi*, International Symposium on Regional Cooperation and Development on October 17-20, (Erzurum, Turkey) <http://dx.doi.org/10.2139/ssrn.2172960>
- Kosolapova, E.W.B. (2018). *Lowest Kazakhstan's GDP Growth Forecast*, <http://en.trend.az/business/economy/2477647.html>
- International Energy Agency (2016). *Oil Market Report*.
- International Energy Agency (2016). *World Energy Outlook 2016*.
- IFE (2015). *After the Fall – Consequences of Lower Oil Prices*, 2016
- Suleymanov, E., Bulut, C. and Hasanov, F. (2014). *Post-Sovyet Petrol İhraç Eden Ülkelerde Petrol Gelirlerinin Yaşam Standartlarına Etkisi* International Conference on Eurasian Economies, July 2014. Available <http://dx.doi.org/10.2139/ssrn.2463409>
- Petrol (2015). *Fiyatlarındaki Düşüşün Nedenleri ve Etkileri* İktisadi Araştırmalar Bölümü Ocak 2015 [https://ekonomi.isbank.com.tr/UserFiles/pdf/ar\\_01\\_2015.pdf](https://ekonomi.isbank.com.tr/UserFiles/pdf/ar_01_2015.pdf)
- Hasanov, F., Mikayilov, J., Bulut, C., Suleymanov, E., Aliyev, F. (2017). *The Role of Oil Prices in Exchange Rate Movements: The CIS Oil Exporters*. *Economies*, 5, 13.
- Gurbanov, S., Nugent, J.B., Mikayilov, J. (2017). *Management of Oil Revenues: Has That of Azerbaijan Been Prudent?* *Economies*, 5, 19.
- Thomson Reuters Datastream
- Trademap
- U.S. Energy Information Administration

## Web sources:

<http://www.eia.gov/petroleum/data.cfm>