The Impact of the Petroleum Price Reductions on the Economies of the Central Asian Turkish Communities

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Abstract
The prices of Petroleum as the inevitable natural source of energy for all economies all over the World for years have been highly effecting those economies being in a serious fluctuation within the last 15 years. While its price was about per barell USD.20.- as of 2002, it had a pick at the level of USD.147.- during July 2008 by a rapid rise but it fell down again to level of 2009 at USD.35.- following the global crisis of 2008. However, between the years of 2011-2014 the prices, by gathering, had fluctuated in between the corridor of USD. 80-126. At the end of 2015, the price of WTI (Teksas Petroleum) seriously decreased at the level of February 2009, down to USD.35.47 per barell. In parallel to WTI price, The Brent Oil price decreased down to USD.38.15 as well. Thereupon, as per these price fluctuations, most of the countries of which income sources mostly bound to these energy products have been facing vital economic problems. One of these countries is CIS (Russia). As CIS had been negatively effected by these oil price fluctuations, its sister countries which have historical and strict political and business relations were dragged to economic impasse. Not only, the position of CIS economy, but also the dramatic and ongoing price decreases related with the main income sources of the Central-Asian Turkish Communities forwarded their economies in problems by direct effects. Finally, the said economies have still been suffering from this problematic situation and have been trying to recover and to get rid of it. Through out this study, based on the OECD datas, it was found out that the Central-Asian Turkish Countries are urgently in need of new income sources other than the recent ones. If they couldn’t manage to find a way or the oil and natural gas prices couldn’t recover and reach to 2011-2014 period levels permanently, the collapses in those economies will be the inevitable fate in accordance with the general projections.

Keywords: Petroleum Prices, Energy, Middle -Asian Turkish Countries, Economic Impact, OECD Datas


Introduction

The prices of Petroleum as the inevitable natural source of energy for all economies all over the World for years have been highly effecting those economies as being in a serious fluctuation within the last 15 years. While its price was about per barell USD.20.- as of 2002, it had a pick at the level of USD.147.- during July 2008 by a rapid rise but it fell down again to level of 2009 at USD.35.- following the global crisis of 2008. However, between the years of 2011-2014 the prices, by gathering, had fluctuated in between the corridor of USD. 80-126. At the end of 2015, the price of WTI (Tekes Petroleum) seriously decreased at the level of February 2009, down to USD.35.47 per barell. In parallel to WTI price, The Brent Oil price decreased down to USD.38.15 as well.143 Thereupon, as per these price fluctuations, most of the countries of which income sources mostly bound to these energy products have been facing vital economic problems. One of these countries is CIS (Russia). As CIS had been negatively effected by these oil price fluctuations, its sister countries which have historical and strict political and business relations were dragged to economic impasse. Not only the position of CIS economy but also the dramatic and ongoing price decreases related with the main income sources of the Central-Asian Turkish Communities forwarded their economies in problems by direct effects.

The Importance Of Petroleum

As it is well known, the energy is one of the most significant inputs of industry and transportation. Especially, the industrialization process directly depends on energy consumption and the close relation between demand for energy and standard of living is considered to need appropriate planning and requires close attention of countries. Petroleum, also named as ‘black gold’, is one of the main sources needed to acquire energy and has been used as the most preferred one of them for 150 years in the world.

Petroleum can easily be stored and is somehow cleaner energy source and produces much more energy with the cost advantage in comparison with its’ alternatives. Besides, it is one of the cheapest energy sources today and it has less problems related with pollution and political conflicts. Thus, it has become a strategic raw material in the twentieth century.144

For a long time, Petroleum products have been the most important sources of energy and highly preferred against their closer competitor one, namely, coal. Although the coal has been continuing to preserve its importance due to the spread of steam engines since the acceleration of industrial revolution, the extraction, the use, and the transportation of those

143 http://www.eia.gov/forecasts/ieo/world.cfm
144 Bağmsız Türk Cumhuriyetlerinin enerji potansiyelleri ve önemi, iportal oca26 2012 (http://www.uiportal.net/uiportal/makaleler/bolgeler/orta-asya/page/2)
products give some advantages to their consumers. Thereby, after first World War, the usage of the Petroleum products have continuously been increasing as being a mostly preferred energy source together with the Natural Gases.

Although, the coal is evenly distributed in the world, the Petroleum and Natural Gas production is restricted to certain regions and make this energy source more strategic.\(^{145}\) As of its this said strategic position, it has great impact on important fields such as economy, industry, daily life and national security.\(^{146}\)

What causes energy sources more strategic is its scarcity, its production that is restricted to certain geographical regions, its increasing economic value and its reserves that could have an effect on the world trade and prices in a large extent.

Today, Petroleum is used in manufacturing a wide variety of materials, and it is estimated that the world consumes about 95 million barrels each day.\(^{147}\) About 90 percent of vehicular fuel needs are met by oil. Petroleum also makes up 40 percent of total energy consumption in the United States, but is responsible for only 1 percent of electricity generation. Petroleum's worth as a portable, dense energy source powering the vast majority of vehicles and as the base of many industrial chemicals makes it one of the world's most important commodities.\(^{148}\) Viability of the oil commodity is controlled by several key parameters such as the number of vehicles in the world competing for fuel and the quantity of oil exported to the world market. Political stability of oil exporting nations and their ability to defend is so important.

**Natural Gas Versus Petroleum**

Due to its cheapness and easily and rapidly use, the consumption of natural gas has been rapidly increasing. When environmental matters taken into consideration, it is understood that advanced industrialized countries have been meeting their greater proportion of energy needs from natural gas.\(^{149}\) Since natural gas is the substitute for Petroleum, natural gas consumption is encouraged by government policies. It is only realized under certain conditions like high investment costs involving natural gas transportation system and special equipments. On the other hand, it has several advantages. Natural gas purchase agreements are generally accomplished not on the free market but through bilateral agreements


\(^{146}\) [Bağımsız Türk Cumhuriyetlerinin enerji potansiyelleri ve önemi, iportal oca26 2012](http://www.iportal.net/iportal/makaleler/bolgeler/orta-asya/page/2)

\(^{147}\) [https://en.wikipedia.org/wiki/Petroleum_industry](https://en.wikipedia.org/wiki/Petroleum_industry)


between countries.\footnote{http://bumanenergyjournal.com/petroleum-natural-gas-and-coal/} The characteristic of these agreements prevent the natural gas price from fluctuating. Since natural gas reserve has longer life compared to petroleum reserves, it can compete with Petroleum. In spite of this, Petroleum still maintains its value. By the year 2030, natural gas and Petroleum will share the first two places in total energy consumption.

**The Main Types Of Petroleum**

Petroleum is a naturally occuring, yellow-to-black liquid found in geological formations beneath the Earth's surface. It is commonly refined into various types of fuels. Components of petroleum are separated using a technique called fractional distillation.\footnote{https://en.wikipedia.org/wiki/Petroleum_industry} It is used into a large number of consumer products, from gasoline to asphalt and chemical reagents used to make plastics and pharmaceuticals.\footnote{https://en.wikipedia.org/wiki/Petroleum} The petroleum industry generally classifies crude oil by the geographic location it is produced in:

1. West Texas Intermediate,
2. Brent, or
3. Oman

Accordingly, its API gravity (an oil industry measure of density), and its sulfur content are also other criteria. Crude oil may be considered light if it has low density or heavy if it has high density; It may be referred to as sweet if it contains relatively little sulfur or sour if it contains substantial amounts of sulfur.\footnote{https://en.wikipedia.org/wiki/Petroleum_industry}

The geographic location is important because it affects transportation costs to the refinery. Light crude oil is more desirable than heavy oil since it produces a higher yield of gasoline. Sweet oil commands a higher price than sour oil because it has fewer environmental problems and requires less refining to meet sulfur standards imposed on fuels in consuming countries.

Barrels from an area in which the crude oil's molecular characteristics have been determined and the oil has been classified are used as pricing references throughout the world. Common crudes are:

1. West Texas Intermediate (WTI), a very high-quality, sweet, light oil delivered at Cushing, Oklahoma for North American oil
2. Brent Blend, consisting of 15 oils from fields in the Brent and Ninian systems in the East Shetland Basin of the North Sea. The oil is landed at Sullom Voe terminal in Shetland. Oil production from Europe, Africa and Middle Eastern oil flowing West tends to be priced off this oil, which forms a benchmark

151 https://en.wikipedia.org/wiki/Petroleum_industry
152 https://en.wikipedia.org/wiki/Petroleum
153 https://en.wikipedia.org/wiki/Petroleum_industry
3-Dubai-Oman, used as benchmark for Middle East sour crude oil flowing to the Asia-Pacific region
4-Tapis (from Malaysia, used as a reference for light Far East oil)
5-Minas (from Indonesia, used as a reference for heavy Far East oil)
6-The OPEC Reference Basket, a weighted average of oil blends from various OPEC (The Organization of the Petroleum Exporting Countries) countries
7-Midway Sunset Heavy, by which heavy oil in California is priced
8-Western Canadian Select the benchmark crude oil for emerging heavy, high TAN (acidic) crudes.154

There are declining amounts of these benchmark oils being produced each year, so other oils are more commonly what is actually delivered. While the reference price may be for West Texas Intermediate delivered at Cushing, the actual oil being traded may be a discounted Canadian heavy oil -Western Canadian Select- delivered at Hardisty, Alberta, and for a Brent Blend delivered at Shetland, it may be a discounted Russian Export Blend delivered at the port of Primorsk.

**IV-The Countries Which Have Power Relating The Fuel & Natural Gas Energy**

Petroleum and Natural Gas are not evenly distributed in the world regions as they are only produced in some certain regions. Middle East, America, Venezuela are the well known oil exporting regions. The Caspian Sea is no exception and it has gaining importance.

The countries around Caspian Sea, Azerbaijan, Kazakhstan and Turkmenistan have rich Petroleum and Natural Gas reserves that will affect the world economy deeply in the recent century. A potential reserve that is waiting to be discovered is considered to be great in addition to proved energy potential. According to International Energy Report, proved petroleum reserves of this region is 28 billion barrel whereas natural gas reserves is 8 trillion cubic meter.

The top three oil producing countries are Russia, Saudi Arabia and the United States. About 80 percent of the world's readily accessible reserves are located in the Middle East and, besides 62.5 percent of them is from the Arab 5: 155

1-Saudi Arabia,
2-UAE,
3-Iraq,
4-Qatar and

154 https://en.wikipedia.org/wiki/Petroleum
5-Kuwait.
A large portion of the world's total oil exists as unconventional sources such as bitumen in Canada and extra heavy oil in Venezuela. While significant volumes of oil are extracted from oil sands, particularly in Canada, logistical and technical hurdles remain, as oil extraction requires large amounts of heat and water by making its net energy content quite low relative to conventional crude oil. Thus, Canada's oil sands are not expected to provide more than a few million barrels per day in the foreseeable future.

In this respect The Importance Of Central Asia by means of Petroleum & Natural Gas:

Central Asia is at the center of a super-continent whose strategic importance is many fold: it is a continent that is home to three of the world’s most sophisticated and advanced economic regions. Seventy-five percent of the world’s population lives in Eurasia and, as Zbigniew Brzezinski notes, “three-fourths of the world’s energy resources” are there as well. Eurasia is also the world’s most dynamic continent, as it is the location of six of the largest economies as well as six big military spenders.

The location of Central Asia has made it a “strategic pivot.” The interconnectedness and high degree of economic interaction among great powers makes it unlikely that a strategic player (China or Russia) could use Central Asia as a staging ground for an invasion. However, it should be “America’s primary interest to help ensure that no single power comes to control this geopolitical space” [Zbigniew Brzezinski] because any strategic player dominating Eurasia would likely seek to control other parts of the world. Central Asian countries, especially Kazakhstan, can be a conduit of stability, as their natural resources can satisfy some of the energy demands of the People’s Republic of China. Central Asian countries are rich in oil, natural gas, and other resources, and therefore, it makes sense for the Chinese to extend their economic muscle to that part of the world.

The main 5 Central Asian Countries regarding Petroleum & Natural Gas:
1-Tajikistan,
2-Uzbekistan,
3-Turkmenistan,

156 Bağımız Türk Cumhuriyetlerinin enerji potansiyelleri ve önemi, iportal oca26 2012 (http://www.uiportal.net/uiportal/makaleler/bolgeler/orta-asya/page/2)
157 Korkmaz, S (1992); “Natural Resources of the new Turkish States”, Geological Engineering, n. 405 20-24, 1992
158 Robert V. Baryiski, “Russia the West and the Caspian Energy Hub”, Middle East Journal, Cilt 49, No:2, Spring 1995, s.224
4-Kyrgyzstan, and
5-Kazakhstan are endowed with an immense amount of natural resources and are located in the center of Eurasia.\textsuperscript{160}

The collapse of the Soviet Union made it possible for these Central Asian states to develop independent relations with the rest of the World and now they run their economies by themselves.\textsuperscript{161} The emerging economic and geopolitical significance of these five republics to China is currently defining the international relations of these republics. Kazakhstan in particular has attracted the interest of the Chinese government. With the steady growth of the Chinese economy and its energy demands, Kazakhstan together with other central Asian states— has become one of the key sources for China’s energy supply.\textsuperscript{162} In terms of absolute amounts, oil from Kazakhstan still only accounts for a small portion of China’s total oil imports: in 2004, China imported 1.19 million tons (8.3 million barrels) of crude oil from Kazakhstan, compared with the country’s total imports of 91 million tons (636.8 million barrels), about 1.31 percent.

Since The Caspian Sea is between the Middle east and Caucasus; when assessing the geopolitics importance of it, it could be analyzed by integrating with these two regions. In Caspian Region, there is a Casavian country; Azerbaijan and there exist two middle eastern countries (Kazakhstan and Turkmenistan).\textsuperscript{163} Having had significant portion of these resources of Caspian by Turkish countries from their economy point of view, these energy resources have a vital importance.\textsuperscript{164} Especially Land countries like Azerbaijan, Kazakhstan and Turkmenistan which have large oil and natural gas reserves have no access to the sea, it is difficult for them to carry their energy products to international markets. The remoteness of the region away from international markets, make transportation via one or more than one neighboring country costly. Azerbaijan, Kazakhstan, Turkmenistan endowed with rich energy sources have some advantages over Russia and

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\textsuperscript{160} Bağımız Türk Cumhuriyetlerinin enerji potansiyelleri ve önemi, iportal oca26 2012 (http://www.uiportal.net/iportal/makaleler/bolgeler/orta-asya/page/2)
\textsuperscript{162} http://oilprice.com/Latest-Energy-News/World-News/Turkmenistan-Diversifies-Its-Gas-Exports-To-Reduce-Reliance-On-China.htmlTurkmenistan Diversifies Its Gas Exports To Reduce Reliance On China
\textsuperscript{163} Nesibli, N (2000); “Azerbaycan Jeopolitiği ve Petrol”, Bakü, Hazar Universitesi Yayımları, 2000, s 29-30
\end{flushleft}
Iran. Although Russia and Iran have rich resources, their oil and natural gas resources in Hazar region as compared to Turkish countries is negligible.\textsuperscript{165}

V-The Diminishing Petroleum Prices’ Influence On Economic Bottleneck In The Turkish Originated Middle (Central) Asian Countries

The prices of Petroleum as the inevitable natural source of energy for all economies all over the World for years have been highly effecting those economies as being in a serious fluctuation within the last 15 years. While its price was about per barell USD.20.- as of 2002, it had a pick at the level of USD.147.- during July 2008 by a rapid rise but it fell down again to level of 2009 at USD.35.- following the global crisis of 2008. However, between the years of 2011-2014 the prices, by gathering, had fluctuated in between the corridor of USD. 80-126. At the end of 2015, the price of WTI ( Teksas Petrolium) seriously decreased at the level of February 2009, down to USD.35,47 per barell.\textsuperscript{166} In parallel to WTI price, The Brent Oil price decreased down to USD.38,15 as well as the three-fourths of the world’s energy resources” are there in Central Asia, all price issues directly effect the economies of those Turkish originated countries located there.\textsuperscript{167}

Therefore,
1-Azerbaijan,
2-Kazakhstan,
3-Turkmenistan and
4-Uzbekistan are the main countries and their economies influenced by the price fluctuations of energy all over the World.

As per the price fluctuations, most of the countries of which income sources mostly bound to these energy products have been facing vital economic problems. One of these countries is CIS (Russia). As CIS had been negatively effected by these oil price fluctuations, its sister countries which have historical and strict political and business relations were dragged to economic impasse. Not only the position of CIS economy, but also the dramatic and ongoing price decreases related with the main income sources of the Middle -Asian Turkish Communities forwarded their economies in problems by direct effects.\textsuperscript{168}

\textsuperscript{165} Hasgüler, M& Uludağ, M,B (2009); “ Russia and the Central Asia on the way to the Third World”, İ.U. Siyasal Bilgiler Fakültesi Dergisi No:41 (Ekim 2009)
The Global Political Influence On This Territory (CIS, USA, EU, OECD Factors)

Geographically, Kazakhstan shares a border with China’s western province, Xinjiang. China, unlike the United States and European powers, and registers no objections to the Kazakh government’s human rights abuses. This makes China’s political and economic transactions with the Kazakh government much easier. Nevertheless, a bilateral strategic partnership underpinned by energy cooperation is believed to fit the fundamental interest of both nations. China’s thirst for oil and natural gas has stimulated the Chinese to invest heavily in the markets of Central Asia. Thus, Kazakhstan will continue to be a particular target for that investment. Janet Liao describes Chinese economic interest in Kazakhstan: Of course, China is not the only country eyeing the natural resources of Central Asia. Western Europe, Russia, India, and the United States are interested as well. Thus, it is no surprise that Central Asia in recent years has become the center of world attention.\(^{169}\)

It is claimed with great certainty that known resources will increase as it was in the past and the same thing necessarily will happen in the future both with the use of new extraction technologies and increasing energy prices. When it is evaluated with newly discovered reserves, Caspian Region has some great economic potential.\(^{170}\) Increase in energy price would influence the future of high cost hazar petroleum for the producers and consumers, on the other hand, decrease in prices will lower the speed of big projects that aim to develop high search and production cost for Caspian resources and their transportation to the international market.\(^{171}\) Price fluctuations does not only affect Caspian region but also affects the whole world. For example, several explanations can be made to account for price decrease in petroleum in international markets.\(^{172}\) It can be result of stone gas revolution and investment after that natural gas and petroleum started to be produced. In OECD countries stagnation and low growth rate might be

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possible explanations for decrease in price.\textsuperscript{173} Chinese economy that have had high growth rates recently could not sustain this trend and growth rate dropped as it is before. Thus, there has been continuous increase in energy demand slightly. In this case, the occurrence of slow growth in advanced countries and their inadequacy to reach expected level of growth energy demand stayed constant and at most indicated moderate increase. In situations like being unable to function the joint decision making in OPEC, the prominent role of Saudi Arabia as the biggest producer on decision making strengthens. This is the indication that weakens the role of OPEC on prices. The oil supply is higher than the oil demand in the market. Especially, Saudi Arabia hasn’t supported restrictions on production. Oil producing countries other than OPEC countries have supplied petroleum to the market and they continue to supply in spite of the decreasing prices. Decreasing prices brings oil exporting countries to worst economic conditions. Their foreign reserves and asset funds melt down.

The decrease in raw petroleum prices naturally has a negative impact on search facilities of oil and natural gas. When data corresponding price fluctuations is analyzed, we reach these following conclusions. Between the years 1996-1998 oil consumption decreased due to the warm weather in winter and Southeast Asia crisis with the accumulation of OPEC stocks, oil price decreased by more than half. According to Kohl factors that place oil demand below oil supply is because of Southeast Asia crisis in which devaluations in these countries make dollar based borrowing difficult.

In order to support its financial needs, Russia increased its oil export by 600-800 thousand barrel in the last three months in 1998 and to stabilize its currency China restricted its oil imports lately in 1998. According to Marse and Richard, the reaction against Venezuela that does not obey OPEC rules and oil price wars to dominate the market are the basic reasons for this price decrease. After oil producing countries had restricted on oil prices, demand increased with economic recovery and this caused prices to increase again.\textsuperscript{174}

What causes oil price decrease is the reduction in oil demand as a result of economic stagnation Although especially Asian countries have had high growth rates in recent years, when confronted with high prices, they

\textsuperscript{173} Özkaya, Ş. “Petrol Fiyatlarının Ekonomilere Etkisi”, (http://www.mfa.gov.tr/petrol-fiyatlarinin-ekonomilere-ektisi.tr.mfa

could not save their positions. Until the beginning of 2002, this reduction continued and OPEC member countries jointly decided on restrictions of their oil production except Iraq. In 2003, although these countries increased their production, oil prices went on increasing. One reason for this is the continuing decrease in oil reserves in OECD countries. In 2003 since the tension in Iraq war is below the expected level, the increasing trend of oil prices decreased; OPEC and especially Saudi Arabia increased their production in great proportions against supply crisis in return and this precaution reduced this increase in price. In 2010 demand for raw oil increased by 2.84 million barrel and this resulted in increase in oil prices. In 2011, the political and social tension in Middle east resulted in causing rapid increase in oil prices, ended with %1 value loss.

The economic development of Turkish countries depend on operation of these resources rationally and transportation of them to western markets. For these reasons, Turkish authorities make an investment deal with international energy companies and world countries and try to attract foreign direct investment. But they need legal arrangements to do this. After their independence, they want to use their reserves immediately to provide necessary resources directed to make changes in their economies, and smoothen their problems. For these three countries, these resources are inevitable. In Public revenue, income obtained from energy sector out of total income, the greatest proportion belongs to energy resources. Energy sources is important to attract foreign direct investment. The difficulties in the use of energy sources is explained as the problem of transporting energy resources to the market, the statue of Caspian Sea, the monopoly of Russian federation in the region and the lack of national capital with insufficient technology.

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What Will Be The Economic Fate Of The Central Asian Turkish Originated Countries

Especially, the economies of Azerbaijan, Turkmenistan and Uzbekistan that are the Central Asian Turkish originated countries are directly dependent on the natural energy revenues. All their industrial investments, the credits achieved from abroad are all motivated by this potential income sources. Besides, it is inevitable that they have to gain much more for their future by these energy resources. The energy pipeline facilities are to be wisely managed on the basis of reel international politics by them and they have to easily reach the world markets by being the price maker acting together with the help of CIS. Otherwise, their recent situation would be problematic in the future as of the diminishing price levels and the economies of these countries of which income sources mostly bound to the said energy products. Moreover, they will have been facing vital economic problems.

Conclusion & recommendations

As during the last two years, the diminishing prices of oil and natural gas had negative effects on the economies of Turkish originated countries where they are the main source of income. This means less investment, less income, lower standart of living, and less employment for these countries. Thus, the effects of the decreased prices have occured by causing their balance of payment and foreign trade accounts with a high deterioration although the prices are expected to rise again. Finally, the said economies have still been suffering from this problematic situation and have been trying to recover and to get rid of it. Throughout this study, based on the OECD datas, it was found out that the Central-Asian Turkish Countries are urgently in need of new income sources other than the recent ones. If they couldn’t manage to find a way or the oil and natural gas prices couldn’t recover and reach to 2011-2014 period levels permanently, the collapses in those economies will be the inevitable fate in accordance with the general projections. One of these countries is CIS (Russia). As CIS had been negatively effected by these oil price fluctuations, its sister countries which have historical and strict political and business relations were dragged to economic impasse.

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