

Impact of Oil Prices on Oil Exporting Countries in the Caucasus and Central Asia

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Summary:

After a period of relative stability in mid-2014, oil prices began to decrease, and this affected the economy of the oil exporting countries. The decrease in oil prices had an impact on the economy of oil exporting countries, exposing them to risk as a result of the reduced export revenues.

The effects of the decrease in oil prices on the economy of oil exporting and oil importing countries is different. The paper studies the effects of decreasing oil prices on economic growth, exchange rate sustainability and fiscal stability of the oil exporting countries in Caucasus and Central Asia. The forecasts anticipate recovery of the oil prices in 2016 but the uncertainty of oil revenues continues to be a challenge for the economy of oil exporting countries.

Key words: transmission mechanism, oil exporting countries, oil importing countries, competitiveness of non-oil sectors, oil price shock, exchange rate volatility, inflation rate.

JEL Classification: A10, B22, H30, E31

1. Introduction

In today's globalised economy and increasingly interconnected financial markets, oil price fluctuations have a considerable impact on the business activity and macroeconomic indicators in both oil

exporting and oil importing countries. The decline in oil prices has macroeconomic, financial and policy implications.

The purpose of this paper is to analyse the impact of oil price fluctuations on the economic performance in oil exporting countries and to show the effects of oil price shocks on economic performance. The transmission mechanism is different for oil importing countries and oil exporting countries. Specific examples of the effects of oil price shocks on economic growth will be provided by examining Kazakhstan, Azerbaijan, Turkmenistan and Uzbekistan,¹ oil exporting countries located in the Caucasus and Central Asia (CCA) and strongly dependent on export revenues from oil and gas. The CCA region boasts abundant oil and gas reserves and is one of the world's oldest production areas; the oil reserves are primarily located in Kazakhstan and Azerbaijan while the gas reserves are in Turkmenistan and Uzbekistan.

2. Overview of the research and empirical analysis of the relationship between oil prices and economic growth in oil exporting countries

There are a large number of studies on the macroeconomic effects of oil price fluctuations. These studies usually examine oil shock effects specifically on oil importing countries and exporting countries. While some researchers affirm that oil price shock has essential effect on

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¹ Turkmenistan and Uzbekistan are one of the world's most closed and most centralized countries.

the economy, other argue that the effect of oil prices depends on various factors including economic development, economic vulnerability, openness and economic structural characteristics. This shows that there are no common opinions for the oil price impact on macroeconomic variables. Nevertheless, most economists agree that oil price movements affect the economy through the supply and demand side. The changes of the demand and supply of oil lead to reallocation of the capital and human resources in the economy.

The following paragraphs briefly summarise the various views on the effects of oil price shocks on the economic growth of oil exporting countries which have been expressed.

The negative relationship between oil prices and macroeconomic activity has been widely studied by Hamilton (1988). The researcher argues that higher oil prices impact the macro-economy primarily through the supply side, not the demand side.² He explains that higher oil prices lead to lower output (capital and labour) in terms of the added value. In his opinion, elasticity of income (GDP) relative to oil prices has even decreased since the 1980s.³ The European Central Bank analysis provided empirical evidence for the arguments made by Hamilton that macroeconomic uncertainty changes the impact of oil price shocks on the oil production as well as the oil supply and demand elasticity.⁴

Jimenez-Rodriguez found that there was a significant relationship between oil

prices and macroeconomic variables in some of the Organisation for Economic Co-operation and Development (OECD) oil importing countries.⁵ The relationship between oil prices and inflation is easily achieved, namely considering the strong link between energy consumer prices and oil prices, while a negative correlation of oil prices with GDP was reported by Hamilton (1983, 2003), Mork (1994), Rotemberg and Woodford (1996), Raymond and Rich (1997), among others researchers

The most popular classic theory is the so-called 'Dutch disease theory', which aims to explain the effects of oil price increases on economic output growth in oil exporting countries.⁶

Some economists argue that the asymmetric effects of oil price shocks on the economic growth of oil exporting countries are a consequence of the change of revenues from the oil industry. Slumping revenues trigger budget deficit for the oil exporting countries.

Other findings show that the economy of oil exporting countries is highly sensitive to the oil price changes. Consequently, oil price increase leads to GDP growth and oil price decrease leads to GDP fall and fiscal deficit.

There have been many empirical studies to test the oil shock effects on the economies of the oil exporting countries, but most of the studies assume a linear relationship between the shocks and macroeconomic variables.

The role of oil price in macroeconomic fluctuations has also been subject to

² Hamilton, J.D. , (1988). A Neoclassical Model of Unemployment and the Business Cycle. *Journal of Political Economy*.

³ Hamilton, J.D. (2011). *Historical Oil Shocks*. NBER Working Paper Series, 16790.

⁴ Van Robays. I. (2012). *Macroeconomic Uncertainty and the Impact of Oil Shocks*. European Central Bank, Working Paper Series, 147.

⁵ Rebeca Jiménez-Rodríguez and Marcelo Sánchez. (2004) Oil price shock and Real CDP growth: empirical evidence for some OECD countries, Working Paper Series 362.

⁶ As its name suggests, the theory is based on the case of the Netherlands. According to it higher oil prices, generally, change the industrial structure of the oil exporting country making it more concentrated on oil industry and non-traded sectors. Moreover, it is argued that the higher oil revenues lead to the appreciation of local currency, which consequently causes the increase of imports of consumer goods and the competitiveness of the local producers will decrease in future.

studies. However, these studies tend to focus on individual countries. For example Eltony⁷ (2001) approved the causal relationship from oil revenues towards other macroeconomic variables in Kuwait. He also identified the government's fiscal stimuli as the main determinant of domestic prices.

Some economists examine that the total effect of oil price shocks on economic performance mostly depends on the size of the revenues from oil products. Husain, Tazhibayeva and Ter-Martirosyan (2008) argue that oil prices affect economic performance through fiscal policy.⁸

Other studies claim that high oil prices drive up real national income through higher export earnings, and create the terms-of-trade effect (Korhonen and Juurikkala, 2007).⁹ As a result, wealth will be transferred from oil importing countries to oil exporting countries, leading to greater purchasing power for economic agents of oil exporting countries. Thus, high oil price increase real national income because of the growth of export revenues. The higher revenues provide opportunity for investments and have a positive effect on the economic activity. The appreciation of national currency decreases the competitiveness of non-oil sectors.

Blanchard and Gali (2007) found that increased flexibility in labour markets improved monetary policy.¹⁰ The lack of adverse shocks also contributed to the decline of the impact of oil shocks on the economy. They presented evidence showing that the dynamic effect of oil shocks has

decreased considerably over time, due to a combination of improvements in monetary policy, more flexible labour markets, and a smaller share of oil in production.

According to the studies of the World Bank, GDP growth slows down as a result of the oil price decrease.¹¹ Oil exporting countries are generally more dependent on the price of oil than countries importing oil. A research conducted by the World Bank proved that the low oil price has a significant impact on both economic growth and inflation. According to the estimate, a decline of 45% in oil price contribute to 0.7-0.08 increase in global Gross domestic product in the mid-term and to a decline of global inflation by 1% in the short term. This positive effect can be explained by real income shifts from oil exporters to oil importers¹² and net beneficiaries from the low price which include, among others, EU countries, Japan, China, and Turkey.

Overall, these studies show that the oil price fluctuations have a different effect on the economy for oil importing countries and oil exporting countries. As a result, while a decline in oil prices benefits oil importing countries without natural resources, the revenue loss has negative impacts on oil exporting countries.

3. Transmission channels of oil price shocks on the economic growth of oil exporting countries in Caucasus and Central Asia

Oil price has been above USD100/barrel in the past four years. However, it fell dramatically in the second half of 2014 and

⁷ M. Nagy Eltony and Mohammad Al-Awadi. (2001). Oil Price fluctuations and their Impact on the Macroeconomic Variables of Kuwait: A Case Study Using VAR Model for Kuwait. Arab Planning Institute (API), Working Paper No. 9908.

⁸ Aasim M. Husain, Kamilya Tazhibayeva, and Anna Ter-Martirosyan (2008). Fiscal Policy and Economic Cycles in Oil-Exporting Countries. IMF working Paper, WP/08/253.

⁹ Iikka Korhonen and Tuuli Juurikkala. (2007). Equilibrium Exchange Rates in Oil-Dependent Countries. BOFIT Discussion Paper 8/2007, Bank of Finland, Institute of Economics in Transition.

¹⁰ Oliver Blanchard and Jordi Galí. 2007. The Macroeconomic Effects of Oil Shocks: Why Are the 2000s so Different from 1970s. NBER Working Paper No. 13368.

¹¹ Effects of the falling oil price on the global economy, Monetary Policy Report February 2015, World Bank.

¹² John Baffes, M. Ayhan Kose, Franziska Ohnsorge, and Marc Stocker. (2015). The Great Plunge in Oil Prices: Causes, Consequences, and Policy Responses. World Bank Policy Research Note.

continued declining until the end of 2015, reaching a new record low in January 2016. There are numerous factors that contributed to the fall of oil prices, which was the biggest since the 1980s. The global market situation of sharp decline occurred as a consequence of the downward trend of global oil demand, EU debt crisis and the slow recovery of the EU economy, the appreciation of the US dollar and oil price reaction to a variety of geopolitical and economic events.

Indirect effects from investor behaviour and expectations of oil companies' performance, open interest in crude oil futures and futures market contract positions also play a central role. For many CCA countries the Russian Federation remains an important trading partner and, as a result, the decline in Russia's economic growth rate and the devaluation of the ruble reinforced the impact of the oil price in these countries. Russia's influence is greater in Kazakhstan and Turkmenistan than in Azerbaijan because Kazakh oil exports run through Russian territory and Russia is a transit country for natural gas supplies from Uzbekistan and Turkmenistan.

The current situation of low oil price results from the supply side shock rather than demand side. The decline in oil prices generated a heavy macroeconomic shock on net oil exporters, especially those whose GDP and exports are dominated by oil and oil products. The relationship of oil and economic situation is determined mostly by the transmission channels of oil prices. According to some recent empirical studies, the effect of oil prices on the economy is through supply and demand shock, income transfer effect and exchange rate adjustment. The supply side and the demand side effects were considered as direct effects of oil price shocks, whereas the increase in oil prices affects the economy also indirectly from other transmission channels such as consumption, terms of trade and exchange rate volatility.

The change of the consumption is transmission channel through income effects. The increase in the oil price is due to the increase in the oil demand. The consequence of the high price is the increase in production costs and seemingly the decrease in the growth of production and productivity. Oil importing countries suffer the effects of lower productivity, a decrease in the total output and the rise of unemployment. Oil exporting economies in turn gain higher revenues as a result of the oil price shocks, which increase investment opportunities, and they in turn stimulate output growth and decrease the unemployment.

There is a difference in the income transfer effect on oil exporting and oil importing countries. The increase in oil price generates a transfer of income from the oil importing countries towards the oil exporting countries through the trade balance. The current account of net exporter countries becomes positive while the trade balance of oil importing countries becomes negative. This shift of wealth is a result of the current account adjustment to the exchange rate, production costs and consumption. Oil importing countries become net borrowers where gross domestic savings decline. For oil exporting countries the decline of the oil price determine the deterioration in the trade balance, the contraction in investments and the growth of the budget deficit.

Trade channel has a direct effect that speeds up exchange rate changes. This is critical for the transmission inflation and relative price effects. The exchange rate movements change economic activities through variation of some factors such as exports, interest rate, and domestic demand. Generally speaking, as oil prices move up or down, inflation follows in the same direction. Lower oil prices raise inflation directly when the price of oil-related products falls and indirectly when production costs for other goods fall. The effects are

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different for oil producing countries and oil importing countries.

Inflation prompts changes change in agent behaviour and increases the risk of uncertainty. In terms of inflation, oil prices directly affect the prices of goods made from petroleum products. As mentioned above, oil prices have an indirect effect on costs such as transportation, manufacturing, heating and commodities consumption.

The inflation in oil exporting countries results from the slump of the USD revenues, and the deterioration of the fiscal and external balance. The alteration in the trade balance of oil exporting countries results in the sharp devaluation of the national currency. This is generally attributed to the fact that oil products are predominantly traded in USD and, therefore, the fluctuations in the USD exchange rate influence the currency prices of major oil exporters. The action against exchange rates dynamics in oil exporting countries is aimed to curb rising inflation stemming from oil price

shocks. The interest rate range and money supply regulations are some of the monetary tools used in government policy.

The asymmetric effect of oil price shocks in oil importing and oil exporting countries is different. In oil importing countries the effect of falling oil prices on GDP growth is overwhelmingly positive while oil exporting countries suffer negative effects related to economic activity and governmental spending.

4. The effect of the oil shock on the dynamic economic growth of the oil exporting countries in the CCA

4.1 The effect of the oil price fluctuations on macroeconomic performance

Oil prices impact growth and inflation through various channels: trade, monetary and fiscal balances. The dynamics of supply and demand influence the real economic activities of the countries through oil price fluctuations. The effect of the oil

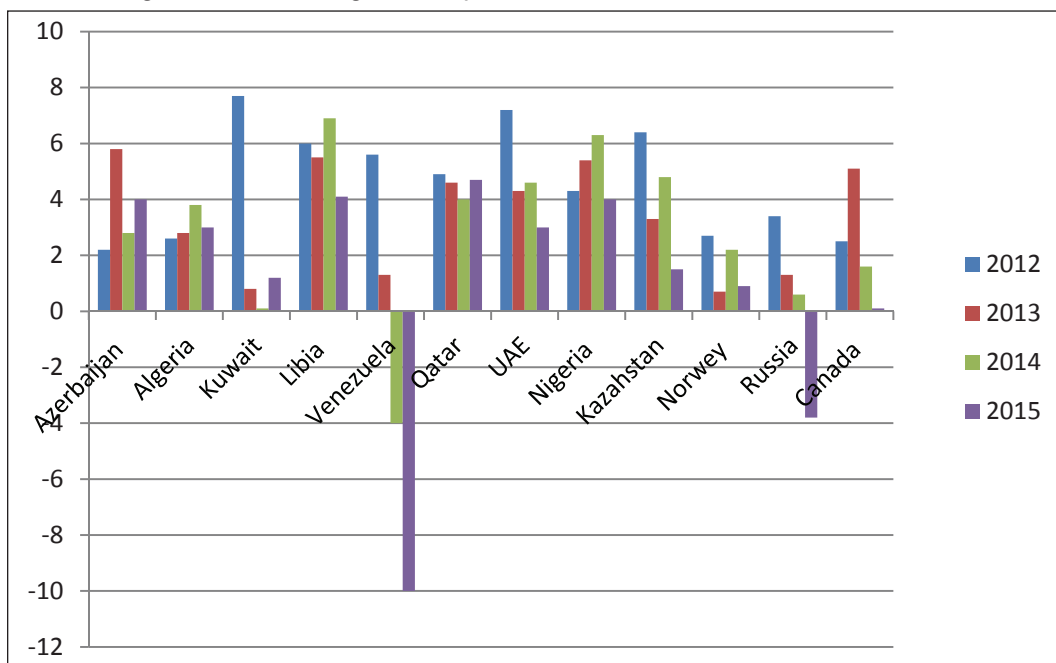


Fig. 1. Annual changes of the GDP of some oil export countries
Source: IMF Statistics.

price fluctuations depends on the structural characteristics of the economy, its level of diversification, fiscal and external balances and the size of monetary reserves.

Most oil exporters have not been seriously affected by the oil price fluctuations and their GDP growth is relatively stable due to industry diversification, and to countercyclical fiscal policies, as well as to policies in the area of exchange rate and monetary buffers. However, this does not hold for oil exporting countries in the CCA that are heavily dependent on oil revenues. When oil prices are low, their economies suffer from recession, and when oil prices are high, their economies boom.

More specifically, the Azerbaijani economy is very sensitive to oil prices, given that oil exports exceed 90% of the total exports. This is the reason why Azerbaijan feels a stronger effect compared to the rest of the oil exporters in the CCA region. The growth rate in Azerbaijan fell by 1.5% in 2015. Azerbaijan economy gears GDP growth at 3% in 2015 and projected at 2.8% in 2016. The growth was driven by internal demand, 42% of state expenditures were distributed to capital expenditures 37.8% and 4% on sovereign debt. The volume of investments in non-oil sector increased around 8%. The construction and services were the main sources for increasing the supply side of the economy in 2015.

Kazakhstan's¹³ fuel export is above 60% of the total exports. Economic conditions aggravated with a sharp decline in oil prices and decrease in trade with the Russian Federation. Kazakhstan economy development recovered gradually from the oil price external shock, GDP growth amounted to 1.9% in 2015, forecasted at 3.8% in

2016. The main directions of the country's economic policy in 2015 were: (1) to carry out countercyclical policies through the implementation of the State Infrastructure Development Program for 2015-2019, the increasing competitiveness of Kazakhstan's economy, and supporting small and medium enterprises; (2) to allocate public spending for the infrastructure projects; and (3) to ensure financial stability by strengthening the financial system and consolidating the banking sector. The investment supported by program resources rose by 4.0% in 2015 and is expected to rise by 4.8% in 2016. The Kazakhstan government succeeded to neutralize the GDP drop down by the increase of public investments and the transfer of assets of the National Fund to the state budget.

Uzbekistan's economy grew by 7% in 2015, but it is lower when compared to 8.1% in 2014. Even though Uzbekistan's economy is relatively closed, it has been growing steadily thanks to its vast natural resources of oil, natural gas¹⁴ and gold. The abundance of such resources prevented the country's dependence on energy supply from foreign sources.¹⁵ Similarly, the economy of Turkmenistan is also diversified. The high growth of Turkmenistan comes from public investment and gas export. Turkmenistan is one of the largest gas-producing countries in the Caspian Sea region. The hydrocarbon sector grew by 6.1% in 2014. On the demand side, strong investment was the main source of growth.¹⁶ The expansion of the services and agriculture compensated the contraction of the hydrocarbon industry and reduction of energy earnings. Yet, the GDP in Turkmenistan slowed to 6.7% in 2015 compared to 10.3% in 2014 due

¹³ Kazakhstan possesses plenty of oil and natural gas reserves as well as of other minerals and metals.

¹⁴ As of 2010 Uzbekistan had 171 discovered natural gas and oil fields. Gas condensate was produced by 17 of the country's natural gas and oil fields and oil was produced by 51 of Uzbekistan's natural gas and oil fields.

¹⁵ Almost 80% of the gas produced in Uzbekistan is utilized by the country's heating and electricity production sectors.

¹⁶ Asian Development Outlook 2015. Asian Development Bank.

to declining natural gas export and lower public investment.¹⁷ The slowdown reflected declines in energy prices, but growth found support from investments in social and industrial development, which picked up to 7.8% from 6.7% in 2014. Public investments for infrastructure under the National Program of Socio-Economic development of Turkmenistan for 2012-2016 lead to low GDP growth in 2015. The National Program of Socio-Economic Development of Turkmenistan for 2011-2030 aims to diversify the economy and increase the role of the private sector.

Turkmenistan and Uzbekistan keep high GDP growth rate when compared to Kazakhstan and Azerbaijan due to the fact that their economies are most diversified and less dependent on oil price. The slump down in the economic growth of Kazakhstan and Azerbaijan is mainly due to the fact that the oil industry shrank, net export fell and private and public consumption declined because of currency depreciation. To overcome these problems, both Azerbaijan and Kazakhstan are planning investments in infrastructure which are expected to offset declines in the oil sector, aiding non-oil sectors growth in 2016.

4.2. Relations between declining oil prices and exchange rates

The downward pressure on oil exporters' exchange rates is due to a weaker current account and fiscal positions as a consequence of the plummeting oil prices. Inflation effects vary from country to country depending on factors such as the share of oil products in the CPI basket, the freedom of monetary policy actions and the structure

of oil related taxes and subsidies.

A classic example of the interaction between exchange rate fluctuations and lower export prices is the depreciation of the national currency. In Turkmenistan, Uzbekistan and Kazakhstan the exchange rate movement was further influenced by devaluation of the Russian ruble since the Russian Federation is their main trading partner.¹⁸

Kazakhstan and Azerbaijan have allowed their currencies to depreciate against the USD. The countries confronted volatility in foreign exchange markets, dollarization and a sharp drop in their international reserves and rising inflationary pressures. The exchange rate uncertainty led the investors and individuals to shift their deposits and assets in USD.

In February 2014 the national currency Kazakhstan tenge (KZT) devaluated by almost 20% against the USD.¹⁹ Since then the National Bank of Kazakhstan has held the exchange rate fairly stable in a band of KZT 182-188 per USD, which was widened to a band of KZT 170-188 in September 2014. Decreasing overall business activity, decreasing consumer demand and disparity between the exchange rate of the tenge and the Russian ruble were conducive to the slowdown in inflation in Kazakhstan to the end of 2015. After moving to a floating exchange rate in band the depreciation of Kazakhstan tenge against USD gradually decreased to the end of 2015. The devaluation reached almost 60% at the end of 2015. The depreciation of the tenge against the dollar was the main reason to introduce a floating exchange rate and shift the country's monetary policy to an inflation-targeting regime, aimed at reducing

¹⁷ National Institute of State Statistics, Turkmenistan.

¹⁸ Uzbekistan as a producer of oil, natural gas, and gold and as the second largest exporter of cotton was affected by a decline of oil price and devaluation of Russian currency. Other exports include machines and equipment as well as food. Uzbekistan's main export partners are Russia, Turkey, China and Kazakhstan. Uzbekistan's main imports are machines and equipment, chemical products, food and metals. Uzbekistan's main import partners are Russia, South Korea, China, Germany and Kazakhstan.

¹⁹ KZT is targeting to USD in band of KZT170-188 (2014).

external imbalances and inflation pressure on the GDP growth.

Turkmenistan also conducted a rare devaluation of its currency in the first quarter of 2015, allowing the Turkmen manat to fall by 18.6% against the USD.²⁰ The government reduced spending and strengthened banking sector regulation and supervision, implied tighten monetary policy by slowing credit expansion. The Turkmenistan Central Bank Authority continues to control the exchange rate fluctuation and the government controls the price of the basic consumption goods and maintains a fixed exchange rate. Since January 2016 the Central Bank set limitations on currency exchange transactions.

In December 2015 the Central Bank authority in Azerbaijan switched the exchange rate regime from a currency peg to USD to a floating exchange rate. According to the Azerbaijan Central Bank, the average inflation at the end 2015 rose up to 4.5%, which was 2 times higher than the average level of inflation for the same period of 2014 (average inflation at 1.8%) and in 2013 (average inflation rate at 0.6%). The raised foreign currency demand led to dollarization. The share of foreign currency in total deposits and savings was approximately 70% at end 2015 in Azerbaijan. The devaluation of the Azerbaijan currency in 2015 was aimed at protecting the slump foreign exchange reserves and allowed adjustment to the external price shock.

After the last devaluation at the end 2015 the Central Bank adopted measures aimed at preventing the outflow of capital from the country, stabilising public finance, slowing down the inflation and restricting speculations on the domestic currency market. Since 2014 the efforts of the Central Bank were to keep the inflation rate low and to stabilize the exchange rate. However, these measures

lead to a dollarization increase. In response the Central Bank counteracted towards tight liquidity in local currency by increasing the interest rate on manat deposits and reducing the reserve requirements for local currency. Consequently, the banks were capitalized and the banks with bad performance were closed. The positive effect of the monetary measures was the introduction of a financial market supervisor to regulate banks, insurers and other financial institutions.

Simultaneously, the Azerbaijani government began to adapt its fiscal policy to the reduced oil revenues. Along with the application of new fiscal measures the government took additional measures to improve the business environment and declared a number of priority structural reforms. Economic policy priorities include the preparation of a multi-year plan to assist the transition to a flexible exchange rate regime, strengthening the financial sector and implementing the structural reforms for the further diversification of the economy.

The inflation expectations of the population increased at the end 2015, because of the depreciation of the national currency and increase of the consumer prices by 4%. The volume of net cash foreign currency sold by banks to the public increased around 70% in 2015, compared to 2014.

The increased demand for foreign currency was intensified additionally because of monetary expansion as a result of both private and public investments which increased in 2014. The inflation was driven by excessive consumer demand and an increase in wages and incomes in recent years. The nominal income growth of the households in 2015 rose by 5.8%.²¹ In January-September 2015 the greatest increase of salaries was registered up to 20.1% in the oil sector and 3% in non-oil sectors. The public

²⁰ A fixed exchange rate of the Turkmen manat was introduced in 2009 and has been maintained unchanged and pegged to USD until the second half of 2014 because of the slump external demand for Turkmen exports.

²¹ Monetary Review, September 2015, Central Bank of Azerbaijan.

expenditures were one of the key factors for internal demand in 2015.

The foreign reserve declined significantly by 9.1 billion USD and amounted to 6.8 billion USD at the end 2015 after the currency devaluations. The reason for foreign reserve decrease was the Central Bank's intervention aimed to maintain the new exchange rate after the February 2015 devaluation of the Azerbaijani manat. The change of the exchange rate regime was a measure to keep the foreign reserve and to limit the deterioration of the trade balance. The positive effect of the new currency regime was a decrease of Central Bank interventions and decreased inflation. The depreciation of the real effective exchange rate of the manat could improve the competitiveness of the non-oil sector and stimulated exports.

The inflation rate in Uzbekistan grew up to 10.1% in 2015. Uzbekistan resisted the downward pressure on the currency using tightened exchange-rate controls and tightened import control.²² The Central Bank prevented the local currency from depreciation through maintaining the crawling-peg exchange-rate regime. In response to slowing exports and currency depreciation on the curb market, the Central Bank accelerated its official depreciation of the domestic currency (sum) against the US dollar, decreased credit growth and tightened import controls.

What we can infer from the analysis above is that the major oil exporting countries in the CCA suffered similar effects as a result of the decrease in oil prices; namely, weakened national currency, increased dollarization of the economies, and decline of the household purchasing power. Nevertheless, these countries took various fiscal and monetary measures in order to mitigate the impact of external shocks. The depreciation of national

currencies was used to adjust to the impacts of low oil prices. Even though its effect was different on the economic performance in CCA countries, due to the degree of diversification, elasticity of the export and the degree of current balance deterioration, the depreciation of the national currencies is believed to restore the competitiveness of the exchange rate of their currencies in the mid-term.

4.3. Deterioration of the current account and fiscal balance

The growth of oil exporting countries has come from accumulated saving and government spending funded by hydrocarbon revenues during the period of high oil prices. However, the recent decline in oil prices and oil revenues has slowed the expansion of industry and reduced the current account surplus. The deterioration in the current account balance led to less supply of foreign currency and this certainly puts a downward pressure on domestic currency.

The governments of Azerbaijan and Kazakhstan undertook measures to neutralize the deterioration of the current account by extending private and government investments into infrastructure project and social programs.

The rapid slump of the oil price lead to the deterioration of the current account balance but it did not turn in negative.

The current account deficit recorded below 4% of GDP of Kazakhstan was a consequence of the influence of the term of trade with the trade partners: 60% of the commodity turnover is represented by the trade with the Russian Federation, China and the EU member states. The slowdown in the GDP growth rates has been impacted, mainly, by declining prices of Kazakhstan's export items such as oil, metals and wheat. Kazakhstan's exports of oil and

²² In Uzbekistan there are two exchange rates: the official and the parallel exchange market rate.

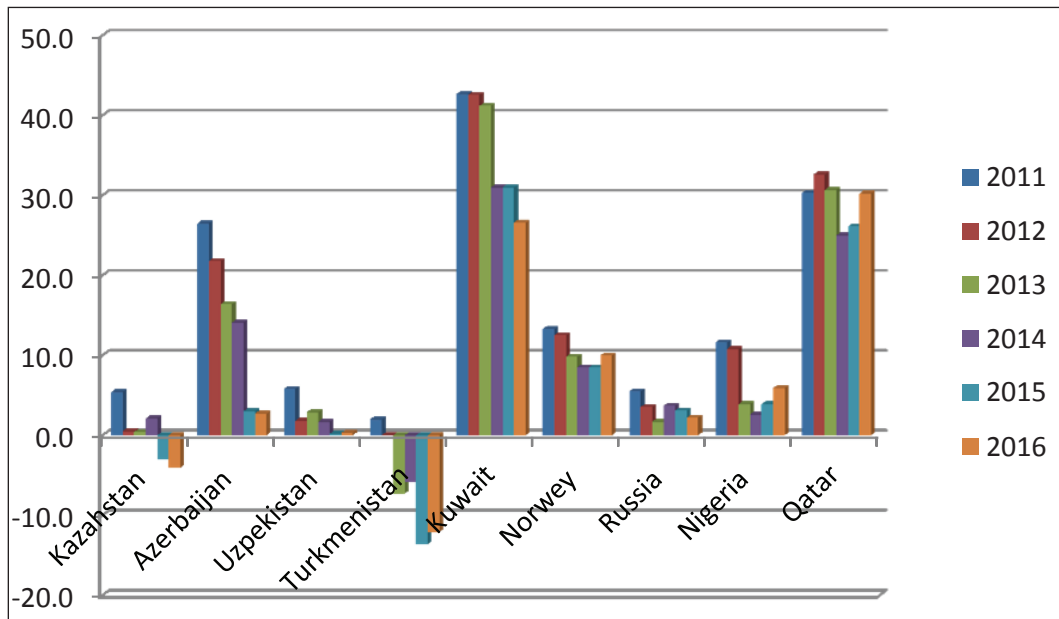


Fig. 2. Current Account Balance as a percent of the GDP

Source: IMF statistic.

natural gas are about 67% of the total exports. The decline of the prices of mineral ferrous commodities had a negative effect on trade balance.

The volume of production in mining was decreased by 13.4% in 2015. This is due to a decrease in the cost of oil and metals in the international markets, which are the main exports of Kazakhstan. Mineral products are 74% of Kazakhstan's exports, 64% of which is oil and oil products. The overall Kazakhstan exports fell by 42% and the country now is in a difficult position. Despite recent depreciations, export losses from lower oil prices have translated into significant fiscal revenue losses, with the current account balance expected to go from a surplus (3¼ % of GDP) in 2014 to a deficit (2¾ % of GDP) in 2015.

The low value of Kazakh oil exports and ruble depreciation explained dropping the from \$62.7 billion to \$36.4 billion;

export value fell by more than half in 2015. Kazakhstan's trade with the members of the Eurasia Union²³ fell by more than 25% in 2015 and it additionally contributed to deteriorating the current account balance and to increasing the inflation pressure.

Ultimately targeting a floating exchange rate of the tenge to USD, the Kazakh government spent \$28 billion to defend the tenge and thus allowed a sharp devaluation of more 40% devaluation in August 2015.

Oil-and-gas products account for 90.9% of Azerbaijan's exports. The unfavourable impact on the Azerbaijan external balance was strengthened by the decrease of export revenues in USD. The process of the adjustments of the national currency rate to the oil commodity prices conducted to the lower term of trade index. The current account surplus of Azerbaijan's balance of payments stood at \$240.5 million as of January-September 2015, or 37.8% less

²³ That is the Russian Federation, Belarus, Armenia and Kyrgyzstan.

than in the same period in 2014, according to the balance of payments published by the Central Bank of Azerbaijan. The share of petroleum products fell by 788.4 million USD in October 2015. Foreign investments recorded 5.7 billion USD, 83% of them in the oil sector.²⁴ Commodity export declined by 48%, crude oil exports dropped by 52%, oil products exports — by 45% and natural gas exports — by 34% in 2015. The deterioration of the current balance was neutralized to some extent by the size of foreign investments. In 2015 the growth of the foreign investment was 43.8%.²⁵

Heavy dependence on hydrocarbon revenues and a heavily dollarized foreign exchange market were key vulnerabilities for Azerbaijan economy. Despite the large dependence on oil and gas revenues, Azerbaijani economy has been quite successful in terms of achieving economic diversification. Since 2011 the share of non-oil sector in the country's GDP has been steadily increasing and in 2015 about 70% of the GDP has come from the non-oil sector. Also, in the past few years, the Azerbaijani government started to strengthen the agriculture sector by subsidized lending to farmers. As a result, the agriculture grew by 4.0% in 2015 and forecasts are that it will reach 5.0% in 2016. The government has also invested in large infrastructure projects, including road rehabilitation and the reconstruction of water supply, sanitation, and energy facilities.

Turkmenistan's current account deficit reached 4.40% of the country's GDP in 2014 because of the inflow of direct investment for large hydrocarbon projects. Petroleum and natural gas account for the largest share of exports proceeds, natural gas export is 53 % of the total export and oil export is 11% of the total export. The share of other goods

in Turkmenistan's exports remains relatively small (cotton, textile). Imports financed by exports were estimated to rise by 3.3% in 2014, while imports grew by 1.8%. Foreign direct investment rose above \$4 billion to equal 8.7% of GDP in 2015. The current account deficit is forecast to widen to 8.4% as a result of import investment goods for infrastructure projects.

The increasing imports of industrial and technological goods for investment projects and imports of hydrocarbons and construction services caused the imports to grow more quickly than exports which had a negative impact on the trade balance. The current account deficit of Turkmenistan is expected to improve in 2016 as a result of the measures taken for promoting non-oil economic sectors and capital inflow for oil and gas infrastructure pipelines.

Table 1. Gross Debt Percent of GDP

Countries	Gross Debt Percent of GDP				
	2012	2013	2014	2015	2016
Azerbaijan	11.6	13.8	15.9	20.6	22.7
Kazakhstan	12.4	12.9	14.9	18.3	18.8
Turkmenistan	18.1	21.1	16.8	18.7	18.8
Uzbekistan	8.6	8.3	8.5	11.6	16.0

Source: IMF World Country report.

The decline in oil prices limits the ability of the oil fund in oil exporting countries in terms of supporting the state budget. The increase of the budget deficit exerts upward pressure on interest rates and inflation.

During the period of oil price boost the oil exporting countries succeeded to keep the current account balance and foreign currency inflow and to increase the foreign reserves and the investments in stabilization oil funds. These stabilization funds can be used to cover the losses of

²⁴ Azerbaijan trades with Turkey, Italy, Great Britain, Germany, the Russian Federation, US, Japan, France, Israel and China.

²⁵ Monetary Review September 2015, Central Bank of Azerbaijan.

the revenue slump. For example, the capital of State Oil Fund of Azerbaijan (SOFAZ)²⁶ reached to 50.9 billion USD in 2014 and it could be used to cover fiscal deficit and for macroeconomic stabilization.

Oil exporting countries also used tax revenue from oil production to fund government spending. The oil producing countries in the CCA have not recorded serious deteriorations in their fiscal balances. In 2015 the fiscal balances of Kazakhstan and Azerbaijan got worse and the fiscal deficits recorded 14.5 % of GDP in Azerbaijan and 3.0 % of GDP in Kazakhstan. The forecast is a smaller deficit of 2.4% of GDP. The CCA oil exporting countries have low debt ratio. Monetary policy in Kazakhstan for the next years will aim to maintain macroeconomic and financial stability while ensuring economic growth and competitiveness.

The CCA countries applied countercyclical fiscal policy which helps them to limit the slowdown of economic activities. The fiscal adjustment of the oil exporting countries includes public expenditure cuts and tax increase. For example, fiscal expansion was driven by public investments and by cutting corporate tax in Kazakhstan and Uzbekistan. In Uzbekistan total government debt rose up to 11.5% of GDP in 2015 because of the increase of foreign lending for infrastructure. However, these investments increase demand and deteriorate current account balance. The energy revenues in trade balance declined.

The governments of Kazakhstan and Azerbaijan had already cut their 2016 budgets. The revision in spending was accompanied by re-pegging of the state budgets at 30 USD per barrel of oil, down from the initial 50 USD per barrel. Turkmenistan undertook similar

measures for revised budget revenues at a lower gas price.

Both Kazakhstan and Azerbaijan transferred finance resources to neutralize a decline in foreign reserves. They used their fiscal buffers to provide a fiscal stimulus, leading to some deterioration in their non-oil fiscal balances.

A decrease in oil prices badly impacts Azerbaijan and Kazakhstan economies, cutting revenues to state budgets. The authorities took measures for ensuring fiscal discipline and overcoming the deterioration in balance of payments. The 2016 budgets of CCA countries are tightened but the investments in infrastructure of oil and gas pipeline projects could partly compensate the restricted monetary policy.

In Uzbekistan public and private external debt increased to 13.4% of the GDP in 2014. Uzbekistan's government mitigates the vulnerability of the external shock demand by administrative intervention and implied restrictive measures towards trade and foreign-exchange regime. These administrative measures are facilitated by the various state-owned enterprises which monopolize certain sectors. Turkmenistan and Uzbekistan maintained spending plans because gas exports balance have not been affected by the decline in oil prices. In Turkmenistan the growing domestic demand and subsidizing public utilities, food, and fuel prices led to an increase of inflation to 6.7% in 2014 and to 6.2% in 2015 in spite of the tightened monetary policy and the inflation control.

The government of Turkmenistan adopted a policy of diversification of the economy to ease the impact of the lower oil and gas prices. The state budget for 2016 projects a deficit equal to 1.2% of the GDP in Turkmenistan. Fiscal measures set

²⁶ Azerbaijan established the SOFAZ in late 1999 to accumulate income from hydrocarbon exports. SOFAZ has gradually become a leading part of the country's public finance system. The Fund has three objectives: (1) to preserve macroeconomic stability by decreasing Azerbaijan's dependence on oil revenues and stimulate the development of the non-oil sector; (2) to accumulate and preserve revenues for future generations; and (3) to finance major national projects for socio-economic development. The same Funds are created in other oil and gas exporting countries in the CCA. For example, a National Fund for the Republic of Kazakhstan (NFRK) was established in 2000. NFRK transfers support the government's current anti-crisis program for 2015-2017.

external shocks using savings accumulated in the Stabilization Fund during the period of low energy prices. The government initiated a program for socio-economic development 2013-2030, aimed to diversify the economy through state industrialization and private sector expansion. Despite numerous activities targeting the development of other sectors, high priority is given to the oil and gas industry and the maximization of revenues from the export of hydrocarbons.

The economy of Azerbaijan expanded by 3% last year as a result of the growth in the non-oil sector and it is expected that the dependence of the economy on natural resources will be reduced in the years to come. The increase of the domestic demand could positively influence the annual average growth rate in 2016.

For oil exporting countries the main economic policy measures taken are fiscal adjustment and rebuilding buffers over the mid-term. Oil producing Kazakhstan and Azerbaijan could compensate the decreased oil prices by producing and exporting more non-oil sector products. The decisions of the Central Banks in the region for float rate would lead to a decrease of imports in the current account deficit and would help to stimulate local production and to preserve the reserves. The current account surplus could occur from the substituted effect of foreign and public investments and export of the non-oil commodities. The increase of public investment in the implementation of large industrial and infrastructure projects and social programs in both countries contribute to the dynamics of domestic demand. However, economic diversification in oil exporting countries will depend on a stronger promotion of the private sector and an economic policy conducive to industries that promise to drive future growth.

5. Conclusion

Kazakhstan, Turkmenistan, Azerbaijan and Uzbekistan have a high degree of export specialization in the energy sector. This represents the core of their economies

as it generates a significant part - around 80% - of all foreign currency revenues and consequently accounts for a high share of all budget revenues. In addition, Azerbaijan, Turkmenistan, and Kazakhstan exported 70% of the oil through Russian pipelines.

The rapid decline in oil prices observed in the second half of 2014 has changed the macroeconomic picture in these countries. The impact of the low price on the government finance is due to the heavy dependence on the oil sector. Hence government revenues tend to be highly volatile. The oil price shock for the oil exporting countries in the CCA region was unpredictable and fiscal management was considered as a viable approach to improving performance. Oil price volatility was transmitted to the economy through the decrease in government revenues. Low oil prices demonstrated that fluctuations in the balance of trade are directly correlated with the volume of oil exports. This decline created macroeconomic and financial problems which include, but are not limited to, increase in budget deficit, deterioration of the balance of payments, the depreciation of currency and increase in financial instability.

The negative impact of oil price prompted CCA countries to set new priorities for economic development aimed at restructuring their economic and financial systems and improving bank regulations in order to curb the effects of low oil prices and overcome external shocks. The CCA governments of the oil exporting countries developed diverse structural programs consisting of proactive monetary and fiscal adjustment measures aimed at economic recovery. These measures were intended to diversify the countries' economies, deal with the weakened fiscal and external positions, balance consumption and improve the financial situation. Stabilization funds were also used to cover budget deficit and to finance domestic public investments.

The future economic outlook of the oil exporting countries in the CCA region

Articles

depends on the advancement and effective implementation of these reforms and policies. One may argue that the general economic policy of these countries should be aimed at further strengthening their economic growth by increasing spending for non-oil industries and stimulating trading with EU countries and China. The economic diversification will ensure competitive, sustainable economic development and reduce the dependence on hydrocarbon revenues in the long term. The development of new transport networks and new supply routes as well as the diversification of trade partners will limit the dependence on Russia.

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