# Oil Price Shocks and Monetary Policy in Azerbaijan: Challenges and Opportunities

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## Abstract
This article examines the transition from a fixed to a managed floating exchange regime in Azerbaijan and discusses the potentially stabilizing effects of monetary policy instruments on the Azerbaijani economy following oil price shocks. It argues that a proactive and credible fiscal policy and monetary expansion (albeit temporary) are indispensable measures to defend the domestic economy against external supply shocks. However, monetary expansion as a traditional approach to crisis management during recession has proven ineffective in the Azerbaijani case due to public panic over the possibility of further devaluation of the Azerbaijani currency (manat) and unofficial dollarization incentives. Faced with new challenges, the Central Bank of Azerbaijan adopted a tightening monetary policy to curb further devaluation of the manat, unofficial dollarization and inflation. However, establishing an effective monetary policy requires substantially enhancing credibility by creating a safer and sounder financial sector. In this regard, financial liberalization and greater ease of entry for foreign banks can lead to benefits connected with the development of the domestic financial system. The article also suggests that national currency devaluation has potential implications for the increase in exports and the inflow of import substituting foreign direct investment. However, a degree of uncertainty and turbulence surrounding the financial situation and weak institutional quality are barriers to external funding and can exacerbate the contraction of domestic credit for the time being.


## Economic Conditions and Monetary Policy

As uncertainties and volatility in the global economy and financial markets increased in recent years, global risks have arisen and economic growth in transitioning and developing countries has slowed down considerably since 2015. In particular, the decline in oil prices since 2014 led to a sharp drop in the foreign currency income of oil- and gas-exporting states. This hurt the balance of payments and caused devaluation of the exporting states' national currencies against foreign currencies, especially the US dollar. Meanwhile, as imported goods and services became more costly, inflation, public panic and surging incentives for dollarization by private agents followed. In considering these issues, monetary policy makers in Azerbaijan have faced a number of challenges amid financial turmoil. The turmoil was mainly caused by the improper forecasting of the event and associated risks by the Central Bank of the Republic of Azerbaijan (CBA) and by the choice of an inefficient combination of monetary policy tools to respond to these events.

The first challenge facing the Central Bank of Azerbaijan was related to the economy's reaction to export price shocks starting in the 3rd quarter of 2014, followed by the devaluation of the Azerbaijani manat (AZN) by 34% against the US dollar in February 2015. The CBA set the manat at 1.05 against the US dollar (compared to 0.78 in previous years) until it announced a transition from the so-called fixed to a managed floating exchange rate regime in December 2015 and adopted a dollar-euro basket to manage the exchange rate.

The transition was officially linked to an attempt to stimulate the diversification of the national economy, improve the international competitiveness of the domestic non-oil sector, and ease tensions on fiscal and external balances. However, though decisive, it was a long-delayed decision. The Azerbaijani manat should have been devalued to some extent much earlier, i.e., before the negative oil price shocks hit the economy. Similarly, the exchange rate should have been fixed or managed around that depreciated level to promote international trade and investment, mitigate current speculative activities associated with exchange rate uncertainties and ensure international economic stabilization.

Notably, the fixed exchange rate regime does not imply that the rate will remain frozen forever, and it does not necessarily impede export diversification unless the national currency is overvalued. The exchange rate in a small nation with a fragile financial system like Azerbaijan's cannot be left completely floating; it must be managed (i.e., the central bank influences the exchange rates by buying and selling currencies). Therefore, the economy might also be intensely diversified under the so-called fixed exchange rate regime, although to a lesser extent. In the past decade prior to devaluation, the overvalued level of the manat, whereby 1 US dollar equaled 0.78 manat, was an obstacle to export diversification. As a more powerful tool in a fixed exchange rate regime, efficient government investment spending in non-oil production sector not only could have contributed to the progress of economic diversification but also could have alleviated social costs associated with the sudden devaluation of the manat in 2015. However, the turbulence in the financial and economic situation after the oil price shock demonstrated that "something went wrong" with appropriate spending during implementation of the economic diversification strategy aimed at improving the structure of the economy through "the development of the non-oil industry, the expansion of opportunities to use alternative and renewable energy sources, the development of the agrarian sector, the strengthening of food security, expansion and development of trade and types of services and the improvement of the foreign trade and investment structure".[1]

Resorting to economic theory, I would mention that because general government spending decreases national saving, thereby causing increases in interest rates or revaluation of national currency, the role of monetary policy is to maintain the fixed exchange rate by increasing money supply to prevent the crowding out effects of government expenditures on investment and export. Therefore, in designing an anti-crisis management strategy, proactive and credible fiscal policy and temporary monetary expansion are indispensable measures for filling the output gap in a recession period. However, the traditional approach was not effective in the given situation due to institutional problems and improper prediction of external monetary shocks and negative externalities.

## Ineffectiveness of Loose (Expansionary) Monetary Policy

Taking a traditional approach to crisis management after the oil price shock, the Central Bank (CBA) confronted the challenge of increasing financial contributions and stimulating domestic investment by dropping the refinancing rate from 3.5% in 2014 to 3% in the 3rd quarter of 2015 (compared to 5% since 2011). Meanwhile, to enhance the availability of money and credit, the Central Bank dropped the reserve requirements from 2% to 0.5%, keeping the other parameters of the interest rate corridor unchanged: 0.1 % floor and 5% ceiling (see Table 2 on p. 10). Under these conditions, further devaluation of the manat and inflation were forecast in the 4th quarter of 2015.

If this policy were successful, it was expected that an increase in the quantity of domestic investment could decrease the supply of the manat to be exchanged into foreign currency (and into the US dollar, in particular) over the long term and that this fall in supply would appreciate the real exchange rate (by increasing the value of the manat).[2] However, private agents' incentives for unofficial dollarization seemed not to be considered, and this resulted in the ineffectiveness of expansionary monetary policy in further stimulating domestic investment.

Unofficial dollarization exerted a contractionary effect, i.e., it led to a reduction in official foreign exchange reserves and the money base in manat. Expectations of continuous devaluation and inflation frightened the population into converting their deposits from the manat into US dollars, which increased demand for US dollars and created the conditions for further devaluation of the manat.[3] This also led to a mismatch between deposits and bank loans. Consequently, in contrast to our hypothesis, a reduction in the money multiplier was observed (see Table 2 on p. 10). Over time, triggered by a fall in foreign exchange reserves, the broad money supply M3 (money in the hands of people, demand and time deposits in the manat and foreign currency) also decreased (see Table 2 on p. 10).

## Adopting the Managed Floating Exchange Rate Regime

Meanwhile, the Central Bank attempted to preserve the value of the manat and defended it against the effect of falling oil prices by spending its foreign exchange reserves. Nevertheless, continuous declines in oil prices and foreign exchange reserves brought about the second major devaluation of national currency against the US dollar in the 4th quarter of 2015 (approximately 47%) and challenged the adoption of the managed floating exchange rate regime in Azerbaijan. Based on the fundamental factors determining supply and demand ratio in the currency market, the advantage of the floating exchange rate regime is that it allows the economy to neutralize the negative consequences of global shocks and stimulates the development of the local financial market.

1 For further information on the strategic view and government's main priorities, see the development concept "Azerbaijan 2020: Look into the future", http://www.president.az/files/future_en.pdf

2 As long as the ownership and internationalization advantages of domestic firms are not sufficient to invest abroad, it is irrelevant to consider the serious detrimental effect of exchange rate appreciation on exports.

3 In contrast to unofficial dollarization, "The main attraction of full dollarization is the elimination of the risk of a sudden, sharp devaluation of the country's exchange rate. This may allow the country to reduce the risk premium attached to its international borrowing. Dollarized economies could enjoy a higher level of confidence among international investors, lower interest rate spreads on their international borrowing, reduced fiscal costs, and more investment and growth." Berg A., and Borenzstein E., IMF Working Paper No. 00/50, 2000, <https://www.imf.org/external/pubs/cat/longres.aspx?sk=3486.0>

## Tightening Monetary Policy and Addressing Novelty

As a fourth challenge, to prevent further devaluation of the manat and to keep inflation under control, the Central Bank cut its currency loose and began to pursue a tightening monetary policy. In this regard, increasing the refinancing rate from 3% to 5% and then to 7% in March 2016 is understandable (see Table 3 on p. 11). It was also one of the steps taken toward decreasing the dollarization incentives in the economy and increasing the population's confidence in the national currency because high refinancing rates can lead to increases in deposits. A high interest rate initially might discourage domestic investment, given that the turmoil in the financial sector has already decreased the confidence of the population and domestic investors (declining growth rates of loans in 2014 and 2015). On the other hand, it leads to increases in the opportunity costs of holding national currency and can also decrease the incentive for the population to convert the manat to the US dollar and stimulate them to increase their manat deposits. This activity can result in growing bank credits in the manat and push down the interest rate in the long term.

## Financial Liberalization and Globalization

Due to the financial turmoil, unofficial dollarization, and reduction in the money base, the growth rate of loans contracted substantially in 2014 and 2015. The growth rate of loans by private banks contracted from 24% in 2013 to 22% in 2014 and 16 % in 2015. In the meantime, the growth rate of loans by private banks with foreign capital was 35% in 2013 followed by 21% and 15 % in 2014 and 2015, respectively. Although the growth rate of loans by state-owned banks contracted from 28% in 2013 to 16% in 2014, it showed 19% growth in 2015 due to government intervention (see Table 3 on p. 11). Furthermore, since early 2016, the CBA has revoked the licenses of 7 banks (out of 42 total banks) and aimed to consolidate the banking sector. According to the CBA, these banks could not fulfill their obligations to creditors or manage their activities prudentially.

The fifth challenge facing the CBA should be liberalizing the financial sector and creating favorable conditions for the entry of foreign banks. The share of foreign banks (with 100% foreign ownership) in total loans is approximately 7%. The share of private banks with foreign capital was approximately 29% in 2015 and 26% in 2016 (where private banks' share was approximately 60%). (See Table 3 on p. 11). This is a clear indication of the weak role of foreign-owned banks in Azerbaijan. To promote economic growth through external funding to local firms, there is an urgent need for financial liberalization, for creating favorable conditions for foreign bank entry, and for improving domestic banks' competitiveness.

The effects of a tightening monetary policy and the credit response of private banks depend on the ownership of individual banks. The role of foreign banks can be of crucial importance in monetary policy transmission, as they are less responsive to domestic monetary policy and also more reactive to changes in foreign financial conditions. In comparison to the refinancing rate of 7% in Azerbaijan, the rate in the Eurozone is approximately 0.05% (in 2015), which clearly indicates that the price of international funds is much cheaper abroad than in Azerbaijan. With the abundant presence of foreign-owned banks, the interest rate in Azerbaijan would not be expected to be so high. Therefore, an increased presence of foreign-owned banks in the banking system and the possibility of access to cheaper international funds can decrease the credit response of private banks to changes in domestic monetary policy. According to recent research conducted by the IMF (on the case of East Asian economies), state-owned banks responded more negatively to an increasing rate than private banks, and as expected, loans by foreign-owned banks increased.

## Conclusion: Macroeconomic Prospects, Opportunities and Risks

The CBA has spent more than half of its foreign exchange reserves to maintain the level of the manat. Supported by the State Oil Fund of Azerbaijan (SOFAZ), the CBA continues holding foreign exchange auctions to help banks by selling dollars in exchange for manat (while simultaneously pursuing a tightening monetary policy). This is a short-term measure that offers little hope in the face of prevailing international and domestic economic pressures.

On the other hand, from an economic theory perspective on long-term sustainability, the devaluation of the national currency has created better economic prospects and opportunities, accompanied by exogenous and endogenous risk factors.

When the manat was devalued, its value declined relative to the value of other currencies such as the US Dollar and Euro. This exchange rate movement has potential implications for foreign direct investment (FDI). It reduces production costs in Azerbaijan relative to those in foreign investor countries, thereby enhancing Azerbaijan's location advantage for foreign investors contemplating investment projects in Azerbaijan. A depreciated exchange rate can attract FDI concentrated on import substitution (producing goods previously imported) and export promotion (seeking new sources of inputs). In turn, higher foreign capital inflow can compensate for weak domestic investment and eventually push down interest rates.

However, the deteriorating financial situation, the degree of uncertainty surrounding this situation and exchange rates, an expected tightening of monetary policy in the United States,[4] and weak institutional quality and government effectiveness[5] are not only barriers to foreign capital inflows to the non-oil sector but also obstacles that can aggravate the contraction of domestic credit and external funding and increase foreign investment repatriation.

In particular, creditworthiness has decreased and investor risks have increased since the negative oil shocks. The "Euromoney" country risk assessment survey highlights elevated investment risks since the 3rd quarter of 2014 (the risk score fell from 52.5 out of 100 in 2012 to 47 in the 4th quarter of 2015; a lower score indicates higher risk.)

Therefore, in an attempt to reduce fluctuations in the balance of payments under the floating exchange rate regime, the Azerbaijani government should accelerate the implementation of its adopted strategic economic development plan, reinforce financial stability to create a safer and sounder financial sector (to enhance credibility and monetary policy effectiveness), implement credible fiscal reform, stimulate domestic investment, and offer location advantages to foreign investors.

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*Further Readings*

- Ananchotikul N., Seneviratne D. "Monetary Policy Transmission in Emerging Asia: The Role of Banks and the Effects of Financial Globalization", IMF Working Paper, WP/15/207, 2015, <https://www.imf.org/external/pubs/ft/wp/2015/wp15207.pdf>
- Monetary Policy Review, January–September 2015, the Central Bank of the Republic of Azerbaijan, <http://en.CBA.az/assets/3970/MPR_2015_-_3Q_-_Final.pdf>
- Euromoney Country Risk Assessment, February 11, 2016, <http://www.euromoney.com/Article/3528900/Country-risk-Azerbaijan-loses-investment-grade-Kazakhstan-could-be-next.html>
- Berg A., and Borenzstein E. "The Pros and Cons of Full Dollarization", IMF Working Paper No. 00/50, 2000, <https://www.imf.org/external/pubs/cat/longres.aspx?sk=3486.0>

4 Expected tight monetary policy in the US may increase the cost of external financing and also lead to capital outflow from emerging and transitioning countries. This can cause further devaluation of these countries' currencies against the US dollar. Additionally, considering that the exchange rate of the manat depends on the dollar–euro basket, the impact of tight monetary policy in the US is inevitable.

5 For more information on the institutional quality in Azerbaijan, see Ahmadov I., Mammadov J., and Aslanli K., "Assessment of Institutional Quality in Resource Rich Caspian Basin Countries", 2013.

## Table 1: Selected Economic Indicators for Azerbaijan (mln. USD)

| | Q1 2013 | Q2 013 | Q3 2013 | Q4 2013 | Q1 2014 | Q2 2014 | Q3 2014 | Q4 2014 | Q1 2015 | Q2 2015 | Q3 2015 | Q4 2015 | Q1 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SOFAZ revenue % GDP** | | | | 22.5 | | | | 20.9 | | | | 13.6 | |
| **Current account** | 428 | 2,320 | 2809 | 3,276 | 3,333 | 3,166 | 2,793 | 1,139 | 108 | -45 | 177 | na | na |
| **Foreign trade balance** | 5,906 | 4,578 | 4,924 | 5,428 | 5,544 | 5584 | 5,080 | 2,720 | 1,758 | 2000 | 1,544 | na | na |
| Export | 8,289 | 7,571 | 7,950 | 7,947 | 7,504 | 8,090 | 7,338 | 5,328 | 4,250 | 4427 | 3,646 | na | na |
| - Oil-gas sector | 7,842 | 7,116 | 7,588 | 7,458 | 7,139 | 7,661 | 6,952 | 4,875 | 3,797 | 4,053 | 3,357 | na | na |
| - Other sectors | 447 | 455 | 362 | 489 | 365 | 429 | 386 | 453 | 453 | 374 | 289 | na | na |
| Import | 2,383 | 2993 | 3,026 | 2,520 | 1,960 | 2,506 | 2,258 | 2608 | 2,492 | 2,427 | 2102 | na | na |
| - Oil-gas sector | 281 | 237 | 292 | 356 | 272 | 409 | 326 | 431 | 344 | 590 | 571 | na | na |
| - Other sectors | 2,102 | 2,756 | 2,734 | 2,164 | 1,688 | 2,097 | 1,932 | 2,177 | 2,148 | 837 | 531 | na | na |
| FDI | 1,420 | 1,547 | 1,678 | 1,646 | 1,911 | 1,956 | 1,951 | 2,231 | 1,845 | 1,956 | 1,936 | na | na |
| Repatriation of investments | -841 | -871 | -952 | -998 | -970 | -826 | -858 | -982 | -829 | -830 | -856 | na | na |
| **Official average exchange rates of the manat** | | | | | | | | | | | | | |
| US dollar | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 1.05 | 1.05 | 1.05 | 1.23 | 1.58 |
| EURO | 1.02 | 1.04 | 1.05 | 1.07 | 1.09 | 1.07 | 1.01 | 0.97 | 1.14 | 1.18 | 1.18 | 1.34 | 1.72 |
| **Inflation (CPI)** | 1.2 | 2.0 | 2.3 | 2.4 | 2.0 | 1.6 | 1.5 | 1.4 | 2.8 | 3.5 | 3.7 | 4 | 13.6 |

*Sources: The Central Bank of Azerbaijan (CBA), the State Statistical Committee and State Oil Fund of Azerbaijan (SOFAZ).*

## Table 2: Key Monetary Indicators: Money Aggregates, Monetary Base (mln. AZN)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016/01 |
|---|---|---|---|---|---|---|---|
| **Money aggregates** | | | | | | | |
| **M0** | 5,456 | 7,158 | 9,257 | 10,459 | 10,153 | 4,776 | 4,485 |
| **M1** | 6,839 | 8,796 | 11,122 | 12,737 | 12,830 | 6,897 | 6,273 |
| **M2** | 8,298 | 10,997 | 13,807 | 16,435 | 17,435 | 8,613 | 7,937 |
| **M3** | 10,528 | 13,903 | 16,775 | 19,290 | 21,566 | 21,319 | 19,965 |
| - Net foreign assets | 4,638 | 7,850 | 8,283 | 9,903 | 10,492 | 11,056 | 10,571 |
| - Net domestic assets | 5,889 | 6,054 | 8,492 | 9,387 | 11,076 | 10,263 | 9,393 |
| **Official FX reserves (mln. USD)** | 6,408 | 10,482 | 11,695 | 14,152 | 13,758 | 5,017 | 4,026 |
| **Money base (mln. Manat)** | 6,397 | 8,275 | 10,515 | 11,642 | 11,542 | 6,902 | 5,787 |
| **Money multiplier, M2/MB** | 1.30 | 1.33 | 1.31 | 1.41 | 1.51 | 1.25 | 1.37 |
| **Interest rates %** | | | | | | | |
| - Corridor floor | 1 | 1 | na | na | 0.5 (July)<br>0.1 (May) | 0.1 | 2 |
| - Corridor ceiling | 7 | 7 | na | na | 5 (July)<br>6 (May) | 5 | 17 (March)<br>10 (Feb) |
| - Refinancing rate | 3 | 5.25 (May)<br>5 (Feb.) | 5 | 4.75 | 3.5 (July)<br>4.25 (May) | 3 | 7 (March)<br>5 (Feb.) |

*Source: The Central Bank of the Republic of Azerbaijan.*

Table 3: The Structure of Loans to the Economy by Type of Credit Institution (mln. AZN)

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016/01 |
|---|---|---|---|---|---|---|---|
| Total loans | 9,163 | 9,850 | 12,244 | 15,423 | 18,543 | 21,718 | 21,186 |
| State-owned banks | 3,902 | 3,300 | 4,137 | 5,300 | 6,144 | 7,289 | 7,707 |
| Private banks | 5,070 | 6,299 | 7,786 | 9,689 | 11,874 | 13,863 | 12,884 |
| - with foreign capital | 2,306 | 3,002 | 3,394 | 4,613 | 5,580 | 6,394 | 55,944 |
| as % of total loans | 25 | 30 | 28 | 30 | 30 | 29 | 26 |
| - with 100% foreign capital | 464 | 586 | 759 | 1,035 | 1,389 | 1,565 | 1,546 |
| as % of total loans | 5 | 6 | 6 | 7 | 8 | 7 | 7 |
| Non-credit bank institutions | 192 | 251 | 321 | 433 | 525 | 566 | 596 |

*Source: The Central Bank of the Republic of Azerbaijan*

# Lower Oil Revenues, Higher Public Debt: The Fiscal Policy Implications of Low Oil Prices in Azerbaijan

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## Abstract

This article examines fiscal policy and the main parameters of Azerbaijan's fiscal position in the context of the severe constraints (namely, reduced budget revenues and cuts in government spending) posed by the decline in crude oil prices. Azerbaijan's fiscal balances have deteriorated considerably as crude oil prices have tumbled. A worsening of Azerbaijan's fiscal balance could gradually contribute to an increase in the public debt burden and threaten fiscal sustainability in the long term. The sovereign wealth fund of Azerbaijan, SOFAZ, now has very limited profits from the sale of oil, and will contribute less to the fiscal revenues of the state as a consequence. The national state-owned oil-gas company, SOCAR, temporarily cancelled its plans for a new oil-gas refining and petrochemical complex because of the rapid fall in crude oil prices. However, at the same time, the new low oil price environment also offers an opportunity to boost a new wave of fiscal and public administration reforms in Azerbaijan.


## Summary of the Fiscal Implications of Lower Crude Oil Prices

The drop in oil prices and resultant waves of devaluation hit Azerbaijan's economy and fiscal balance especially hard by diminishing oil revenue inflows to the fiscal system and decreasing budget incomes. Oil, gas and mineral revenues accounted for more than 77% of Azerbaijani budget revenue in 2014,[1] and low oil prices affected almost every aspect of the country's fiscal policy. Fiscal policy adjustments made in response to the new reality include changes in governmental budget revenues; changes in the structure of governmental budget spending, including cuts to capital and recurrent expenditures; new sources of financing for the budget deficit; changes in the State Oil Fund's (SOFAZ) assets; and changes in the State Oil Company's (SOCAR) operations. Both revenue and spending aspects of fiscal policy have encountered severe constraints due to low oil prices, namely the shortfall in budget revenues and cuts in government spending. Current fiscal balances have deteriorated amid plunging oil prices.

Decreased crude oil and natural gas production coupled with lower crude oil prices led to a contraction of

1 Azerbaijan EITI Report for 2014, <https://eiti.org/files/azerbaijan_eiti_report_2014.pdf>