THE CENTRAL BANK OF THE REPUBLIC OF AZERBAIJAN

MONETARY POLICY REVIEW

January –June 2015

The key goal of the review is to present current macroeconomic state analyses and expectations of the Central Bank of the Republic of Azerbaijan (CBA). Another goal of the present publicly disclosed review is to regularly deliver to the public possible impacts of the policy pursued by the CBA on the economy. The review is quarterly disclosed to the public four times a year.

Baku – 2015

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ACRONYMS

CBA	The Central Bank of Azerbaijan
ADB	The Asian Development Bank
EBRD	The European Bank for Reconstruction and Development
ILO	The International Labor Organization
IMF	The International Monetary Fund
FDI	Foreign Direct Investments
FED	Federal Reserve System of the United States
SSC	The State Statistics Committee
DGCS	Developing countries
DDCS	Developed countries
OECD	The Organization for Economic Cooperation and Development
CPI	Consumer Price Index
APPI	Agricultural Producer Price Index
SME	Small and medium entrepreneurs
NEER	Nominal Effective Interest Rate
OG	Output Gap
OPEC	The Organization of the Petroleum Exporting Countries
QE	Quantitive Easing
REER	Real Effective Exchange Rate
RSM	Real Sector Monitoring
PPI	Producer Price Index
SKMF	The National Fund for Entrepreneural Support
UNCTAD	The United Nations Conference of Trade and Development
GDP	Gross Domestic Product
WTO	World Trade Organization

EXECUTIVE SUMMARY

The CBA operated on the backdrop of stronger impact of the negative processes in the global economy, world energy markets and trade partner countries on the Azerbaijani economy in the first half of 2015. International organizations revised global growth expectations down over the period again. Although global oil prices were prone to rise in the first half of the year, YoY it remained significantly low along with sharp devaluation of national currencies in a number of trade partner countries.

FX supply decreased, while demand increased in the market over the reporting period, particularly in the first quarter under the direct and indirect impact of the negative external environment. The situation in the FX market relatively stabilized starting from Quarter 2. Foreign exchange reserves of the country were maintained in a adequate level.

The CBA implemented its monetary and exchange rate policy, targeting maintenance of macroeconomic and financial stability, and elevation of international competitiveness of the non-oil sector amid complex global economic environment. The CBA took exchange rate policy decisions given new trends in the balance of payments to support the diversification of the economy.

The strategic targets of monetary policy were favorably achieved. Inlfation remained in low single digits in the first half of 2015.

Economic growth was primarily driven by the non-oil sector amid positive dynamics on the key components of aggregate demand. The multilateral exchange rate of manat depreciated, which added momentum to economic growth offsetting import and stimulating export.

I. GLOBAL ECONOMIC ENVIRONMENT AND EXTERNAL SECTOR

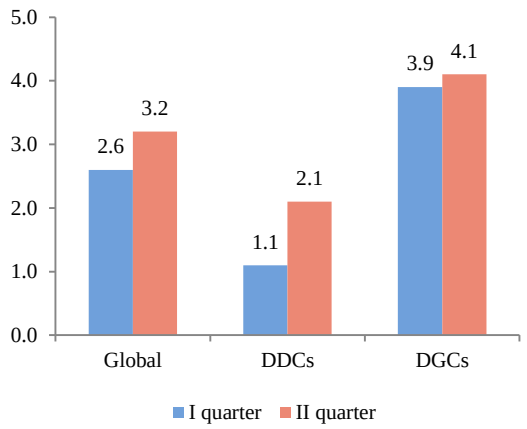
1.1 Global economic trends

The global economic growth rate rose in Quarter II compared to the first quarter of 2015. DDCs are making more contribution to global economic growth. However, weak economic activity in the USA enforced international organizations to reduce growth outlook for the current year.

Global economic growth. According to initial estimations, global economic growth was 3.2% in the second quarter of 2015, 0.6 p.p. higher than the previous quarter. Growth is estimated to be 1.9% on DDCs and 4.2% on DGCs (the Barclays Bank).

Economic indicators on DDCs are improving. Although brutal winter in the USA caused economic downturn in the first quarter, retail sales and industrial production started to revive from the following quarter.

Figure1. Global economic growth in 2015, %, over previous year



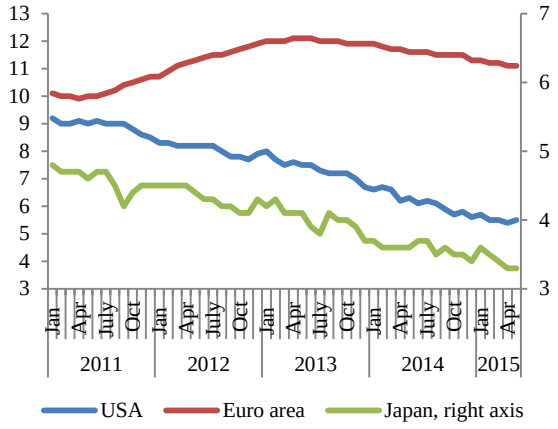
Source: Barclays

Economic growth for current second quarter is initially estimated to be 1.8% (Barclays). Low oil prices, favorable credit conditions, expansionary monetary policy and depreciated exchange rate accelerated recovery in the euro zone from mid-2014 onward. The World Bank estimations suggest that depreciation of the euro from previous June will increase economic growth in the euro zone by 0.5 p.p. in 2025. The expansionary monetary and fiscal policy, low oil prices and the decision to postpone the second time increase of the VAT until April, 2017 supported economic activity in Japan.

Economic growth in DGCs was lower than its sustainable level due to sharp drops in commodity prices, tougher external lending terms, structural problems, the rebalancing policy in China, and higher geopolitical tensions. Low investment activity in China related to structural reforms was partly neutralized by low commodity prices, high external demand, monetary and fiscal stimuli. China preferred conventional tools, including reserve requirements, and reduction of the refinancing rate, and financing of infrastructural projects while utilizing stimulative capacity of the macroeconomic policy. Economic donwturn in Russia continued amid low oil prices. Low consumer and investment demand had a considerable negative impact on import, while depreciation of the real exchange rate relatively incentivised export, which in its turn stipulated positive contribution of net export to economic growth.

Global unemployment. In the first half of 2015 lower unemployment supported positive trends in the global economy. However, unemployment still remains high in leading countries. As of end-May unemployment in the euro zone decreased 0.2 p.p. to 11.1%, and 0.1 p.p. in the USA and Japan to 5.5% and 3.3% respectively compared to the early-year.

Figure 2. Unemployment rate, %

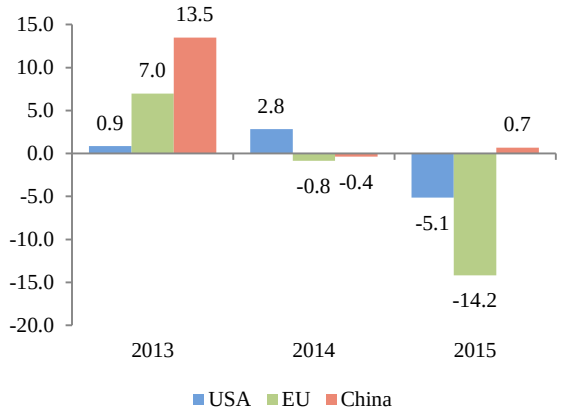


Source: OECD

Global trade. Global trade growth is still weak. In January – May, 2015 trade YoY increased 0.7% in China, and decreased 14.2% and 5.1% in the EU and USA respectively. Revived economic activity in the USA boosted export of

investment goods in DGCs, particularly in Mexico and China.

Figure 3. Global export, Jan.-May, %, over previous year



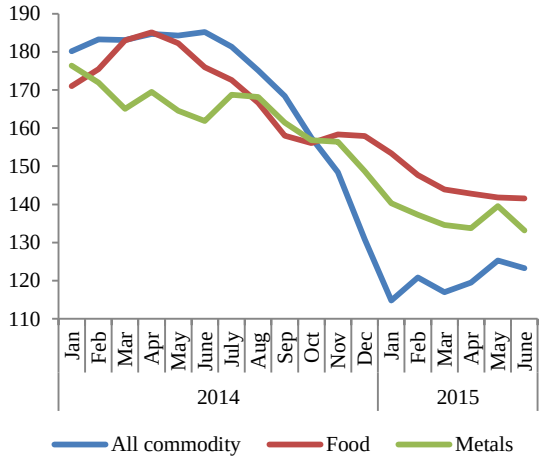
Source: WTO

According to the UNCTAD, low oil prices may partly revive global trade, since the share of fuel in freight transportation is 40 – 63%. 1% drop in transportation is estimated to increase global trade by 2%.

Global commodity prices. Over 6 months of 2015 global commodity prices decreased 5.8%, and food prices decreased 10.4%. Over the period stronger USD in commodity markets, high supply and weak global demand had a downward effect on prices.

Metal prices dropped 10.5% due to low demand and high supply in

Figure 4. Price indices, 2005=100



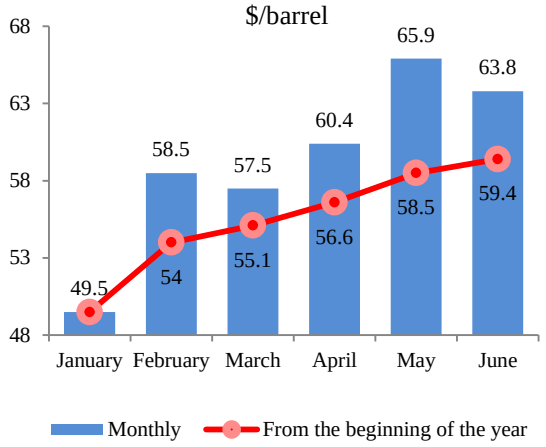
Source: IMF

China. Over the period gold prices decreased 0.9% to 1177.2$ (1 ounce). Gold prices were primarily affected by high supply related to uncertainties, lower than expected demand in India, China and the UAE, and depreciation of exchange rates in producer countries.

Oil prices stabilized over the past period of the current year after slump in the second half of 2014. The price for Brent oil increased 7.4% relative the early year to USD 61.9 as of the end-June. The average oil price over the period was USD 59.4, YoY 45.4% low.

According to the World Bank, relative drop in production of the shale oil and investments to the oil sector in the USA over 6 months had a rising effect on prices. However, high supply and low demand factor in low oil prices in the middle run.

Figure 5. Average oil price in 2015, $/barrel

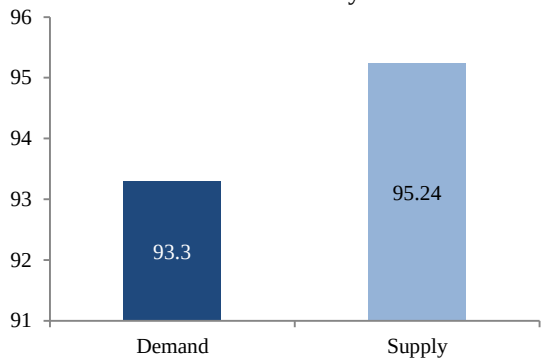


Source: Bloomberg

Moreover, appreciation of the exchange rate of the US dollar, high supply in oil exporters in the Middle East, removal of sanctions against Iran have a considerable influence on oil price drops.

According to the recent release by the IMF, the global oil price (average of Brent, WTI, Dubai Fateh) will be USD 58.9 in 2015 and USD 64.2 in 2016.

Figure 6. Oil demand-supply projection in the world market for 2015, M.barrel/day



Source: International Energy Agency

World Bank estimations suggest that 45% drop in oil prices is likely to decrease food prices by 10%. High productivity may reduce global food prices by additional 10% in the current year.

Global inflation. As of end-May inflation was 0% in the USA, 0.3% in the euro zone, 0.5% in Japan, 1.2% in China, and 15.8% in Russia. The euro zone witnessed inflation after 4 month deflation in a row. Weak demand, inflation expectations and a low growth rate of money supply in Russia caused partial drop in inflation.

According to World Bank estimations, 45% slump in oil prices is likely to decrease global inflation

by 0.7-1.2 p.p.. However, inflation rates are hiking in DDCs due to gradual rise in energy prices since current February and accommodative monetary policy. In DGCs fragile internal demand, low oil prices have a downward effect, while depreciated exchange rate and administrative prices have an upward effect on inflation.

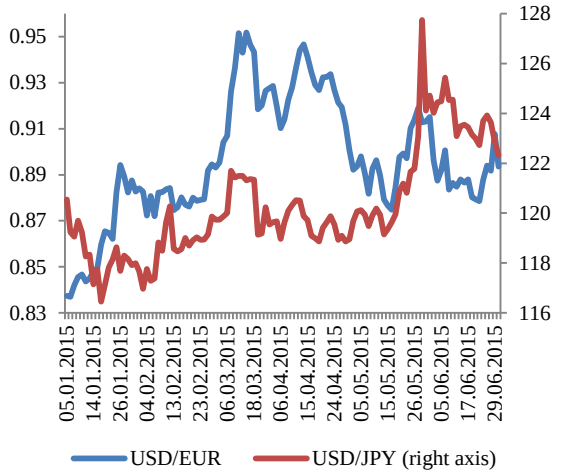
Monetary policy decisions are asynchronous amid diverse economic situations. Over the reporting period, interest rates were decreased in 9, increased in 2 and remained stable in 7 countries under monetary policy decisions of 18 leading countries. (Barclays). The ECB continued the 1.1 trillion worth of Quantitative Easing to be implemented until September, 2016. The US Federal Reserve System is expected to increase the refinancing rate on Half II, 2015, for the first time after 2008. However, drop in the Chinese Stock Market, the situation around Greece and not fully satisfactory economic activity indicators in the USA challenge interest rate related clear communication.

Global capital flows. Over the reporting period, capital flows to DGCs remained low. However, DGCs, particularly China and East Asian countries are keen on bond issuance on the backdrop of global liquidity and low interest rates. At the same time, the size of euro denominated bonds increased along with high exchange rate risks due to appreciation of the US dollar against the euro. High interest rates in the USA are expected to make bank lending more attractive for DGCs.

Exchange rates. The probability that the US Fed will tighten the monetary policy, and rising economic activity are accompanied with appreciation of the US dollar against currencies of a number of leading countries. Whereas the US dollar appreciated 8.5% against the euro and 1.6% against the

Japanese yen, it depreciated 0.3% against the Chinese yuan over current 6 months. Depreciation of the euro against the US dollar relates to QE in the euro zone and the Greece crisis.

Figure7. Exchange rate of USD



Source: Bloomberg

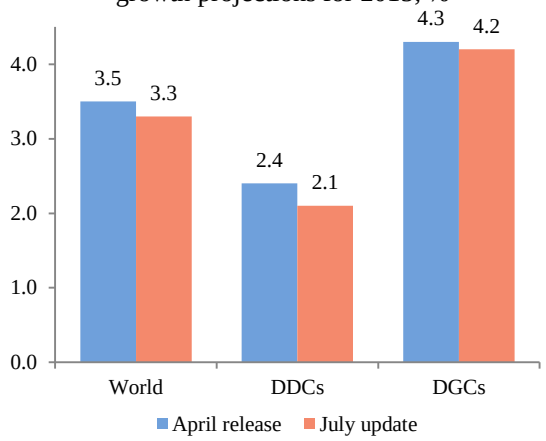
With the decrease in currency demand of households and the corporate sector in Russia and banking sector's debt liability in a foreign currency rouble gained 3.5% against the US dollar.

Global growth expectations and risks. The IMF in its recent (July) release revised global growth outlook down for 2015 compared to the previous one given unexpected economic downturn in the USA and its spillover to other North American economies.

Global growth is projected to be 3.3%, 2.1% in DGCs and 4.2% in DDCs, which displays that economic growth has been rising on DDCs and dropping in DGCs since 2013.

The key risks on DDCs include weak recovery of full employment, appreciation of the dollar (USA) and incomplete mitigaton of challenges triggered by the global crisis.

Figure 8. Corrections to the global growth projections for 2015, %



Source: IMF

10% appreciation of the REER is estimated to decrease economic growth in the USA by 0.75 p.p.. Meanwhile, appreciated dollar expose countries with dollar denominated liabilities to currency risks.

Box 1. First-time international bond issuance: opportunities and risks

IMF experts analyzed reasons for recent tendencies, its opportunities and risks given the rising number of countries, involved in first-time bond issuance. The country sample comprises 23 countries that issued minimum USD 200 M. worth of bonds in the international market for first time since 2004.

All of new issuances during this period were in U.S. dollar (with the exception of Euro-denominated bonds issued by Montenegro and Albania). Asian countries and resource-rich countries—Mongolia, Zambia and Gabon issued in larger amounts than European countries.

High bond issuance relates to demand and supply factors. Demand factors include high-income appetite of investors, and the diversification policy, excess liquidity of financial markets and high investment attractiveness of DGCs over recent 10 years. Some countries were planning to use at least a part of the proceeds for budgetary purposes, or cover arrears (Honduras). International bonds have also been issued as part of debt restructuring process, as for instance Seychelles (2010), and Gabon (2007) or to attract to attention of international investors to the country (Bolivia).

Issuing countries followed certain similar trends prior to issuance. Inflation rate and volatility lessened, economic activity booted, official reserves increased, and credit ratings of certain countries improved (particularly Latin America and Asian countries). However, fiscal and external sector follow diverse tendencies.

The new issue premia paid for debut issuers have averaged about 50 basis points over the secondary market yield of similarly rated countries (except for Mongolia and Honduras). Difference between secondary market interest rates and benchmark interest rates is due to fundamental factors (economic growth, financial depth, the CAB, debt burden, inflation etc.).

Risks emerging for issuing countries in international markets:

- **Exchange rate and fiscal sustainability risks.** Large amounts attracted in foreign currency increase exchange rate and fiscal sustainability risks. Depreciation of the national currency with external shocks increases the value of debt burden and debt servicing expenses, which may trigger debt crises. At the same time large amounts may undermine fiscal sustainability and reduce the room for maneuver when dealing with external shocks.
- **Refinancing risk.** If debts are not timely repaid, it may challenge attraction of funds by countries from financial markets for refinancing purposes.
- **Interest rate risk.** Although majority of debut issuances took a form of fixed rate instruments which reduces interest rate risk, a spike in global interest rates may icrease the cost of refinancing.

A group of strategic and tactical considerations need to be analyzed by countries that want to issue an international bond for the first time.

- **Strategic analyses** imply analyses of country's future payment capacity under different macroeconomic scenarios, measurement of refinancing and exchange rate risks, and cost-risk trade odd with other alternative financial tools.
- **Tactical analyses** include a solid preparation on the legal aspects involved in such issuance, securing the best possible credit rating and image of the country, as well as hiring of financial advisors. Since investors closely follow post-issuance economic situation in the country and economic policy decisions, these decisions and their communication need to be on focus. In parallel, the secondary market needs to be regularly monitored, with preventive steps to be taken against potential negative impact on the country economy.

Source: Anastasia Guscina, Guilherme Pedras, and Gabriel Presciuttini "First-Time International Bond Issuance—New Opportunities and Emerging Risks", IMF, 2014

The key risks on DGCs involve geopolitical tension, low commodity prices, volatile asset prices, expectations of monetary policy tightening in the USA, worsened credit ratings, harder than expected decline in China. These risks threaten financial stability as well.

Given dwelling risks international organizations recommend to continue with accommodative monetary policy, conduct structural reforms, finance infrastructural projects in countries with fiscal space [1], and endure economic growth friendly fiscal consolidation in countries with huge government debt in DDCs.

DGCs are recommended to conduct tax reforms, re-prioritize expenditures, maintain structural reforms to boost productivity and eliminate scarcity of resources to support aggregate demand. Oil exporters with no fiscal space are recommended to reduce budget expenditures, while oil importers are recommended to review energy subsidies and pursue a counter-cyclic fiscal policy.

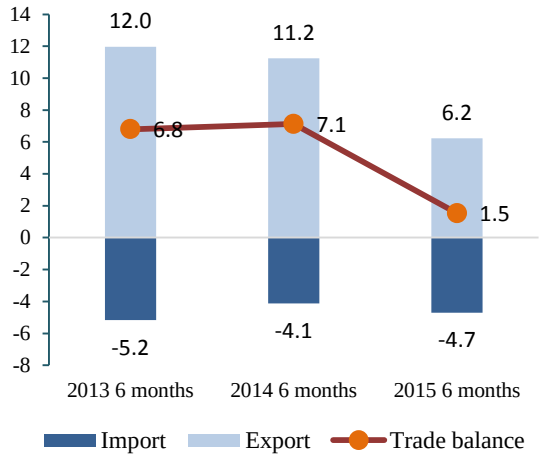
[1] *Fiscal space refers to the flexibility of a government in its spending choices and to the financial well-being of a government.*

1.2. Azerbaijan's external sector developments

Over the reporting period the external sector was affected by the conjuncture in the global commodity market and the economic stance in key trade partners.

According to the State Customs Committee (SCC), trade turnover constituted USD 10.9 B. in the first half of 2015, of which export accounts for USD 6.2 B. and import accounts for USD 4.7 B.

Figure 9. Trade balance, B.USD.



Source: SCC

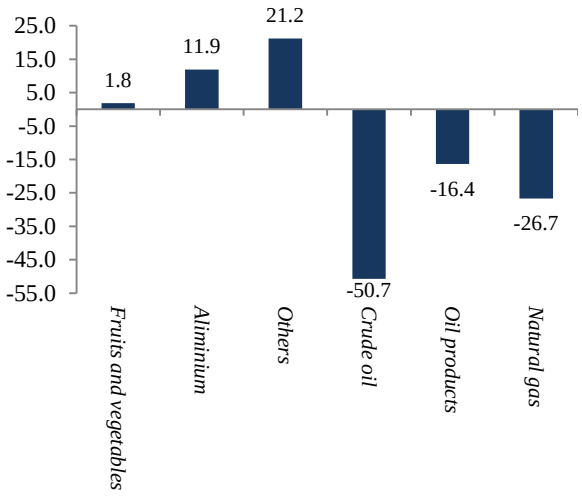
Over the period surplus of trade balance was USD 1.5 B. with export prevailing over import by 32.6%.

61% of export was supplied to EU and 3.9% to CIS countries. The EU accounts for 28.2%, the CIS – 22%, Turkey – 13% and the USA for 12% of import.

In the first half of the year YoY decrease in commodity export was 44.6%, which is primarily on the non-oil sector with a higher share in export. Export dropped 50.7% on crude oil, 16.4% on oil products and 26.7% on natural gas.

Products of the chemical industry, aluminum and materials posted a high growth rate. Export of chemicals went up 2.6 times and aluminum 11.9%. Export of fruits and vegetables also posted growth.

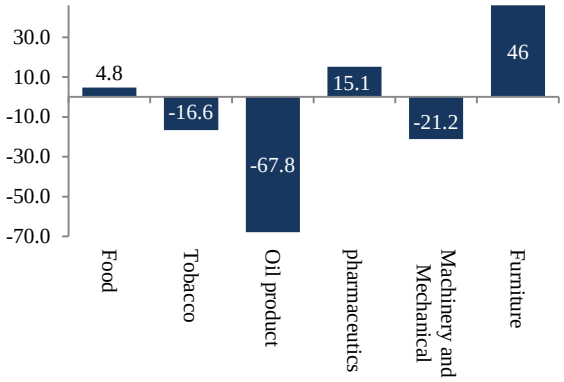
Figure10. Dynamics of main export products, %, over previous year



Source: SCC

Commodity import YoY rose 13.6% in the first half of the year. Import by the public sector went down by 12.6%. Import on a number of products declined due to expansion of domestic production.

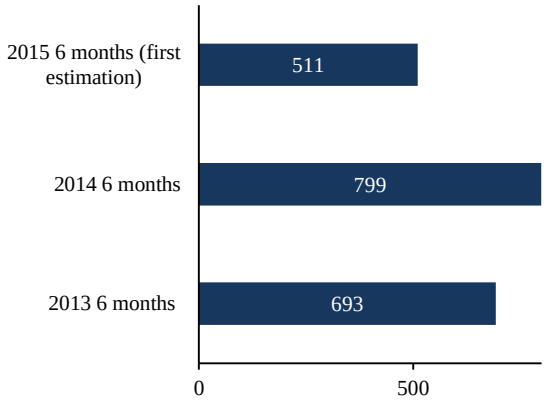
Figure 11. Change in import of products, %, over previous year



Source: SCC

The current situation in economic partner countries affected the dynamics of remittances. According to initial estimations, remittances to the country in 6 months constituted USD 511M.

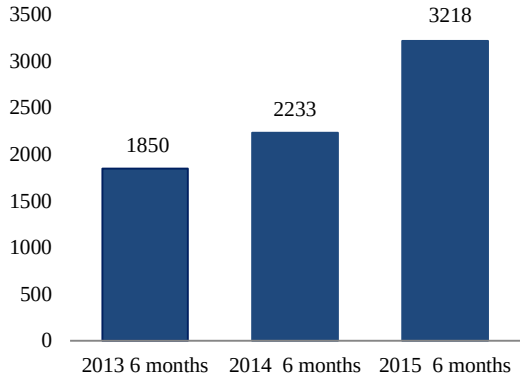
Figure 12. Inflow of remittances, M.$



Source: CBA

Over the reporting period FDIs continued to flow to the country. According to the SSC, the size of FDIs to the country economy equaled to AZN 3.2 B. over 6 months of 2015, which account for 40.6% of total investments. The YoY growth rate of FDIs made 44.1%.

Figure 13. Foreign investments, M.AZN



Source: SSC

Investments from Great Britain, Norway, Turkey, Russia, Iran, the USA and Japan account for most part of investments from foreign countries and organizations (88,5 %).

Over the reporting period country's strategic foreign exchange reserves were maintained on a critical amount. As of end-Half I strategic foreign exchange reserves sufficed for 28 month commodities and services import and surpassed the country's foreign debt by 6.2 times. At the same time, strategic reserves exceeded broad money supply in manat 4.2 times.

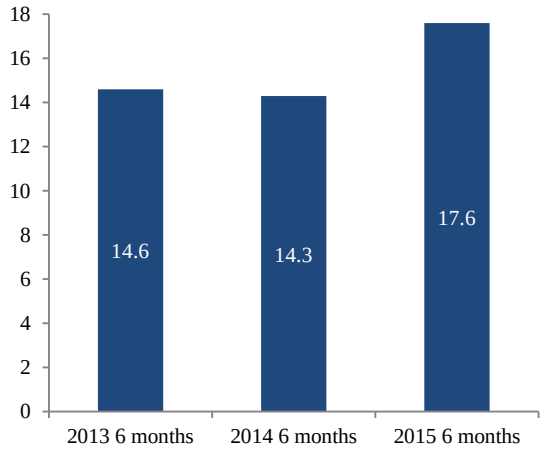
II. MACROECONOMIC PROCESSES IN AZERBAIJAN

2.1. Aggregate demand

The key components of aggregate demand positively affected economic growth over the reporting period.

Final consumption expenditures. In Half I, 2015 consumption expenditures of households YoY increased 17.6% to AZN 14.7 B., which account for 74.2% of household income. Over the reporting period every consumer purchased on average AZN 274.4 worth of commodities and chargeable services with YoY AZN 35.3 increase.

Figure 14. Change in final consumption, %, over previous year

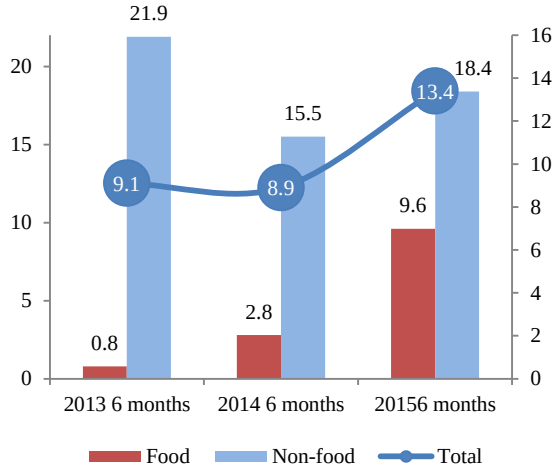


Source: SSC

High consumption expenditures conditioned growth of retail commodity turnover. Over the period the size of commodities and services sold in the consumer market to meet consumer demand increased 11.9% to AZN 15.6 B. Trade accounted for 84.6% and services accounted for 15.4% of real growth on the consumer market.

Retail trade turnover increased 13.4% to AZN 12 B.

Figure 15. Dynamics of retail trade turnover, %, over previous year



Source:SSC

Over the reporting period consumers spent 49.5% of their funds on food, beverage and tobacco in retail trade facilities.

Table 1. Share of spending items in trade facilities in the I Half , 2015 (in %)

Spending item	Share, %
Food, beverage and tobacco	49.5
Knitwear, clothing and shoes	17.8
Electric appliances and furniture	5.5
Computers, telecommunication equipment and other devices	0.8
Pharmaceuticals and medicals	1.2
Fuel	6.5
Other non-food stuff	18.7

Source: SSC

Overall, every consumer monthly purchased on average AZN 104 worth of food, beverage and tobacco and AZN 105.9 worth of non-food products in retail trade outlets for private consumption.

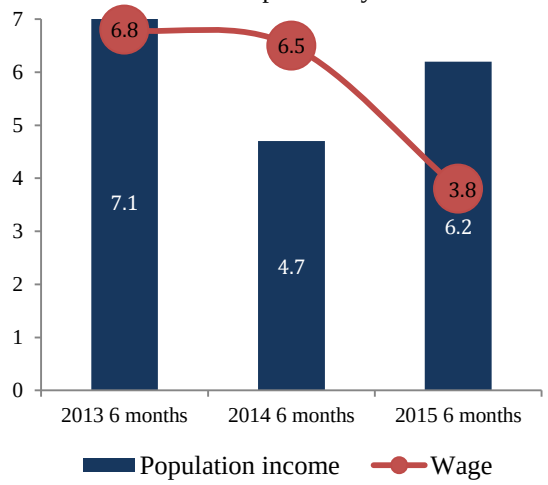
To note, a portion of non-food products was purchased via e-trade. YoY increase in consumer purchases via e-trade network was 1.9 times in January – June, 2015.

In January – June, 2015 YoY increase in catering turnover was 17.1% and paid services to the population 6%.

High consumer demand in the first instance stemmed from rise in income of the population. Over the period income of households rose 6.2% in nominal and 2.7% in real terms. Per capita income rose 4.9% in nominal and 1.4% in real terms. Disposable income of the population increased 6.2% to AZN 18 B.

Average monthly salary nominally increased 3.8% to AZN 454.8 in January - May.

Figure 16. Population income and wages, %, over previous year



Source: SSC

Over the period consumer demand was also affected by loans issued to households. Volume of the lending portfolio of households as of the end-period approximated AZN 7.9 B., with 2% rise relative the beginning of the year.

Government spending. Public expenditures were one of the key factors of internal demand in the first half of 2015. Government's consumption expenditures were primarily directed to expenses on goods and services from the state budget. According to the SSC, expenses of the state budget constituted 7.3 B. In January – May.

AZN 3.7 B. worth of budget expenditures (50.2%) were channeled to the development of the economy, AZN 817 M. (11.1%) to social protection and welfare of the population, AZN 524.8 M. (7.2%) to financing of education, AZN 228.2 M. (3.1%) to financing of healthcare.

Investment expenditures. In January – June, 2015 investments to the country economy YoY increased 3.7% to AZN 7.9 B. In January – June investments to the oil sector constituted AZN 3.4 B., while investments to the non-oil sector made AZN 4.5 B.

Box 2. Why investment in the euro area has been weak

Analyses suggest that recent financial crisis has hit the euro area economy harder than others. A number of European countries sharply reduced investments due to financial sector challenges during the crisis. Housing investment declined from about 12-13 percent of GDP before the crisis to about 6 percent of GDP in Spain and to about 2-3 percent of GDP in Greece and Ireland after the crisis. Currently investments to the euro zone, particularly private investments fall below the pre-crisis level.

Weak investment relates to output dynamics, high cost of capital, financial constraints, corporate leverage and uncertainties:

- *Output dynamics. GDP in the euro zone is lower than the pre-crisis level. Output gap is negative, the recovery of the economy is weak compared to post-crisis periods of previous crises.*
- *High cost of capital. While the ECB's policy rate is effectively at the lower bound, the lending rates in some countries remain elevated. Given that debt financing in the euro area is about 90 percent bank-based, higher bank lending rates increase the cost of capital.*
- *Financial constraints. Many smaller companies have had difficulty accessing credit. Recent improvements in corporate bond and stock markets are likely to benefit only larger corporations with better access to capital markets.*
- *Corporate leverage is negatively correlated with investment in Portugal, Italy, and France. These results are robust to using alternative definitions of firm leverage. In these countries, one percentage point increase in the leverage ratio would reduce investment to capital ratio by about 0.01-0.04 percentage points.*
- *Uncertainty makes enterpreneurs to be more cautious when making future plans. Uncertainty reduces investment in the majority of the countries in the sample (Spain, Italy, Greece, and Ireland) and in the euro area as a whole. A one standard deviation increase in the uncertainty index reduces investment to capital ratio by 0.03-0.1.*

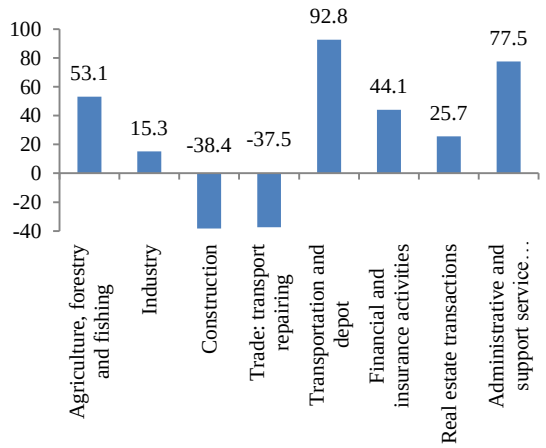
Stimulating aggregate demand, reducing uncertainties, structure reforms and other comprehensive measures are needed to further strengthen the euro area economy.

Source: Bergljot Barkbu, S. Pelin Berkmen, Pavel Lukyantsau, Sergejs Saksonovs, and Hanni Schoelermann "Investment in the Euro Area: Why Has It Been Weak?" İMF Working Paper, February 2015

Y.o.y increase in the size of investments was 15.3% in segments of industry, 92.8% in transportation and warehousing, 2.5 times in information and communication, 25.7% in real estate related operations, 8.1 times in tourism and catering, 44.1% in financial and insurance activities. 7.1% of total non-oil investments were used for the development of the non-oil industry.

Over the period YoY increase in the overall residential area was 5.5% to 870.4 thousand square meters.

Figure 17. Investments to the sector of economy, %, over previous year



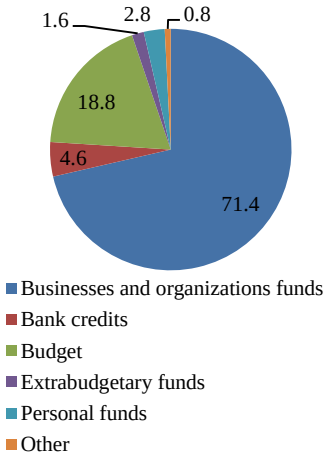
Source:SSC

59.4% (AZN 4.7 B.) of funds channeled to capital stock stemmed from domestic, while 40.6% (AZN 3.2 B.) from foreign sources.

As in previous years funds of entities and organizations prevailed in total investments over the reporting period.

CBA's surveys also exhibit ongoing investment activity. The recent monitoring by the CBA revealed that 41.6% of surveyed entities say that investments have increased or remained unchanged.

Figure 18. Structure of investments, 2015 Q 2, %



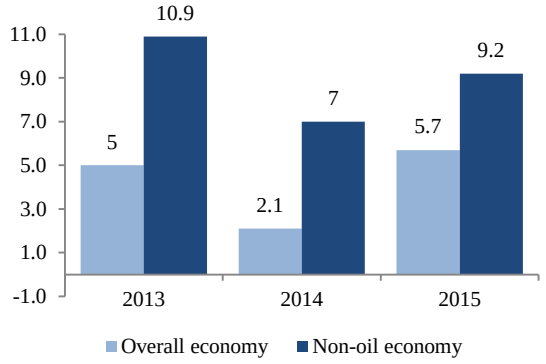
Source:SSC

2.2. Aggregate supply and employment

GDP kept pace with aggregate demand in the first half of 2015.

Economic growth. Real gross domestic product (GDP) increased at an annual rate of 5.7% in the first half of 2015 and nominally reached to AZN 26.3B.

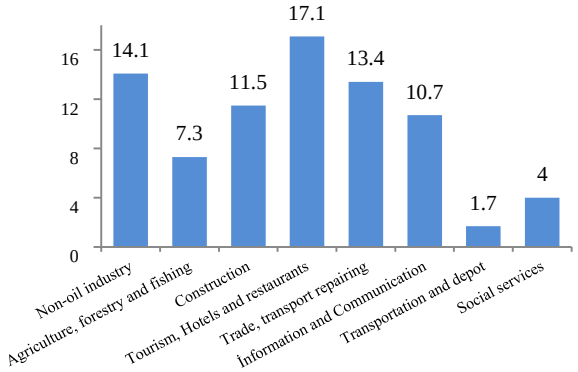
Figure 19. Economic growth in the I half of the year, %, over previous year



Source:SSC

GDP growth was driven by the non-oil economy. Over the reporting period the oil sector demonstrated 1.3%, and the non-oil sector 9.2% growth. The non-oil economy accounts for 67% of GDP, with 5.2 p.p. contribution to total growth. As seen from the below figure, over the period all sectors of the non-oil economy demonstrated growth.

Figure 20. Non-oil sectoral growth of the economy in the I half of 2015, %, over previous year

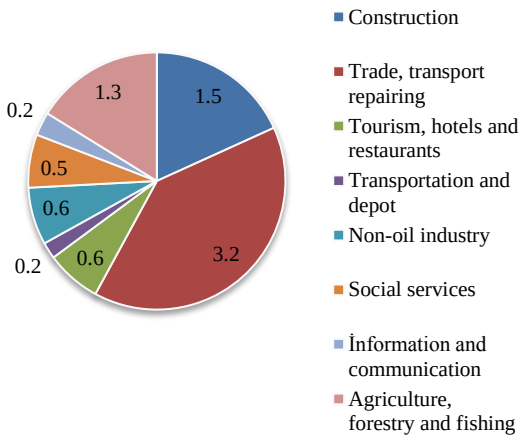


Source:SSC

The highest growth rate among sectors was in the non-oil economy, as well as tourism and catering.

The construction sector made 1.5 p.p. contribution to 9.2% growth of the non-oil economy.

Figure 21. Contributions of sectors to non-oil economic growth in the I half of 2015, %



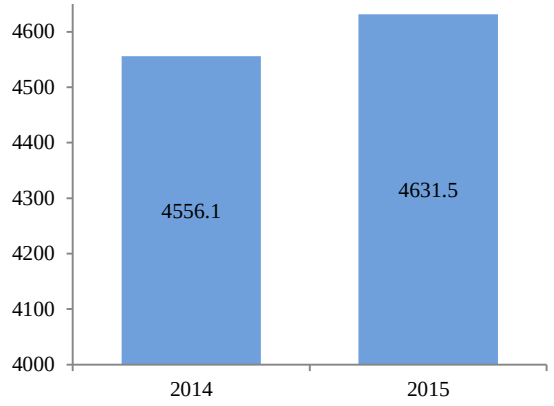
Source: CBA estimations based upon SSC data

Efforts of previous years yielded ongoing positive trends in the non-oil industry over the period. Overall, the non-oil industry posted 14.1% growth in Half I, 2015.

Over the reporting period the mining industry yielded 20.9 M. ton crude oil, 10.2 m/m^3 natural gas, 46.5 kg silver, and over 1117 kg gold.

Employment. The dynamics of employment is another sign of economic activity in the country. As of the end-period economically active population was numbering 4867.7 thousand persons, of which 95.1% was engaged in various segments of the economy.

Figure 22. Number of persons employed, as of the end of I half of 2015, in thousands



Source:SSC

Over the quarter newly created jobs numbered 59.5 thousand, as well as 48.4 thousand permanent jobs.

According to the SSC, the number of hired labor was 1505.6 thousand people as of June 1. Of the hired labor engaged in enterprises and organizations 21.8% are engaged in production and 78.2% in services.

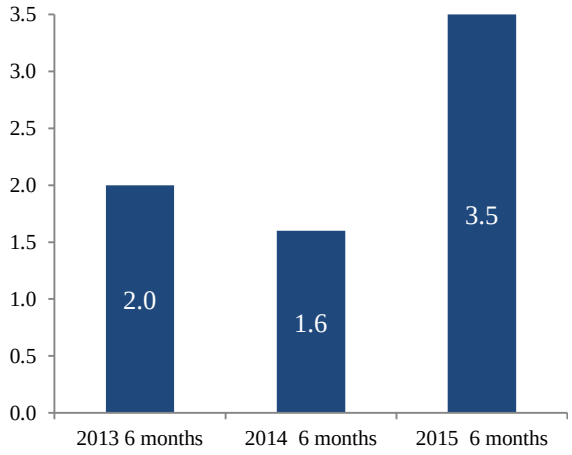
The number of hired labor engaged in the non-oil industry was 1470.3 thousand people as of the end-period. Overall, 97.7% of hired labor is engaged in the non-oil, while 2.3% in the oil industry.

2.3. Inflation

Price stability was maintained and inflation was at an acceptable level in Half I, 2015.

Consumer Price Index. According to the SSC, average annual inflation was 3.5% in Half I, 2015.

Figure 23. Average annual inflation, %

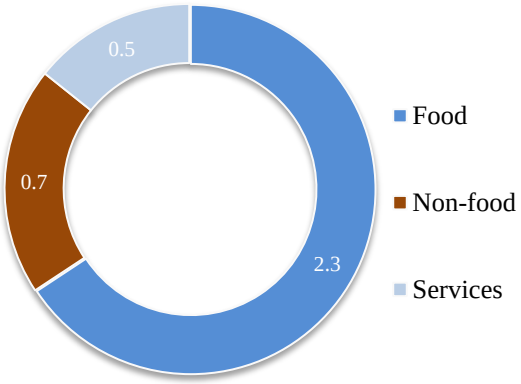


Source: SSC

The CPI components - food prices changed 5.5%, non-food prices 2.8%, and services 1.3%.

Estimations suggest that food prices made higher contribution to average annual inflation vs. other components over the reporting period.

Figure 24. Components of average annual inflation, %

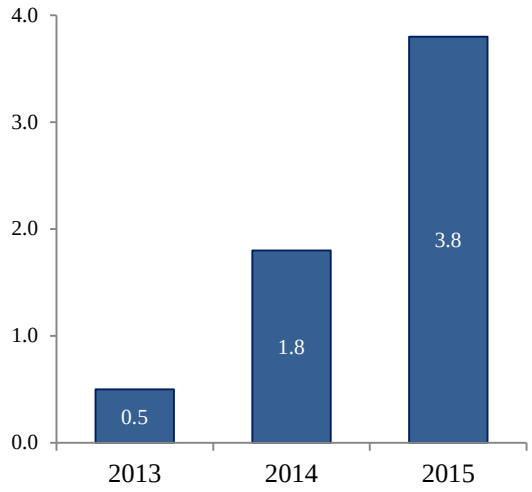


Source: CBA estimations based upon SSC data

Over the reporting period prices for breadstuffs and cereals gained 9.5%, oils and fats 11.8%, fruits 10.5%, coffee, tea and cacao 9.4%, while prices for vegetables declined.

The average annual core inflation, which is inflation adjusted from fluctuations in prices for commodities regulated by the Government and seasonal factors made 3.8%.

Figure 25. Average annual core inflation in first half of the year, %

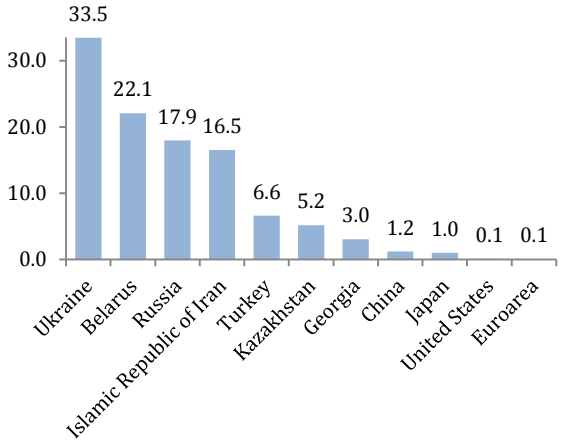


Source: SSC

In the first half of 2015 the NEER, inflation expectations and high inflation in trade partners had an upward effect on prices, with a downward effect by seasonal factors and shifts in the money base and global food prices.

Average annual inflation in foreign trade partners was 8.2% (non-oil import weighted average), which is by 4.7 p.p. more than the one in Azerbaijan. CBA estimations built upon IMF projections suggest that average annual inflation in key trade partners will be 7.9% in 2015.

Figure 26. Average annual inflation forecast on certain trade partner countries, 2015, %



Source: IMF

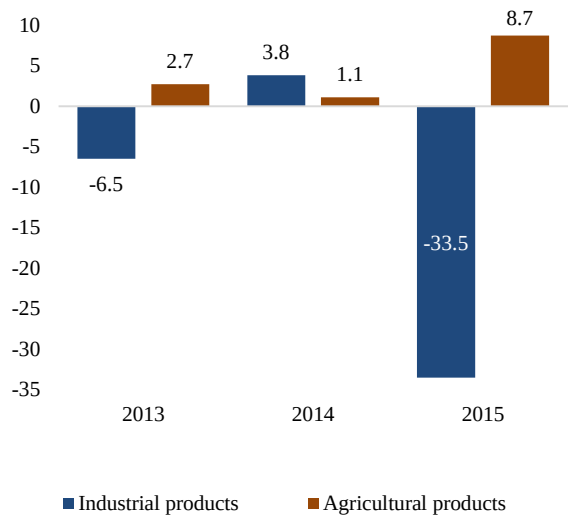
Prices for imported goods in January – May, 2015 YoY increased 0.9%, while prices for all exported products decreased 45.5%. Price slides primarily relate to slump in the global oil market.

CBA conducted model estimations suggest that as of the end-year average annual inflation in the country will remain in single-digits. CBA monitorings also display that price expectations on most sectors have declined over recent months.

Producer Price Index. In Half I, 2015 the PPI decreased 33.5%, due to slump in oil prices. Prices

decreased by 37.1% in mining and 10% in processing industries.

Graph 27. Average annual change in producer price index, %

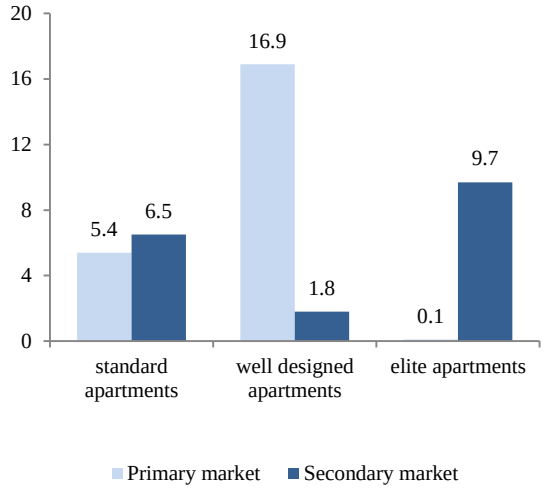


Source: SSC

In Half I, 2015 agricultural producer prices rose 8.7%. Price hike was 1.5% on animal products, 15.6% on plant products and 3.8% on fish and fish products.

Real estate prices. According to the SSC, prices in the housing market YoY gained 6.1% in terms of manat.

Figure 28. Price changes in housing market, %, over previous year



Source: SSC

Prices in secondary and primary markets grew by 6% and 12.6% respectively. The highest price hike in the secondary market was in luxury apartments (9.7%), and in the primary market in well-designed apartments (16.9%).

Over the reporting period residential rent fees YoY decreased by 24.1%, and 31.2% on commercial facilities (MBA LTD Consulting and Appraisal Co).

III. MONETARY AND EXCHANGE RATE POLICY

3.1. FX market and the exchange rate of manat

Over the reporting period CBA's exchange rate policy targeted enhancing country's international competitiveness and maintenance of macroeconomic stability in the environment of increasing demand pressure for foreign exchange.

Slump in oil prices in global commodity markets from the end of 2014, and devaluation in our country's key trade partners triggered high demand for foreign currencies, particularly US dollar in the domestic FX market.

Over the reporting period total size of the FX market YoY grew over 2 times. 89% of transactions were conducted in the US dollar, while 11% in other currencies. The size of turnover of currency transactions in the US dollar YoY increased 2 times, while the volume of euro operations rose 2.3 times.

Hike in turnover on the FX market in Half I is affected by the processes in Quarter I. In this sense, whereas YoY increase in the size of turnover of US dollar denominated transactions was 2.4 times in Quarter I, it was 1.6 times in Quarter II.

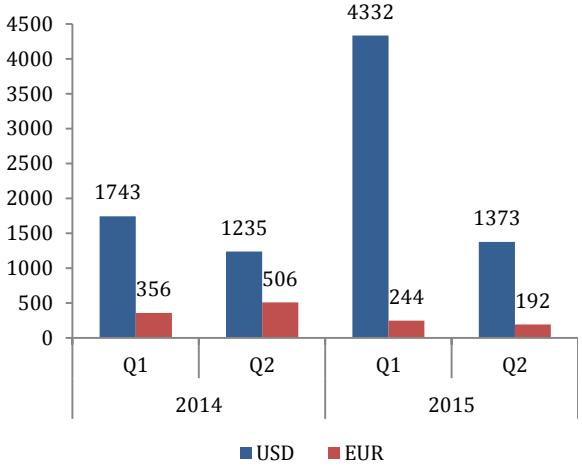
Table 2. Volume of FX market turnover, *M. currency units*

	Q1	Q2	H1
In USD	**21719**	**16275**	**37994**
YoY, %	*236*	*162*	*198*
In Euro	**1634**	**1844**	**3479**
YoY, %	*235*	*227*	*231*

Source: CBA

Over the reporting period banks sold 2 times as much net cash foreign currency to the population.

Figure 29. Net cash foreign currency sold by bank FX divisions, USD

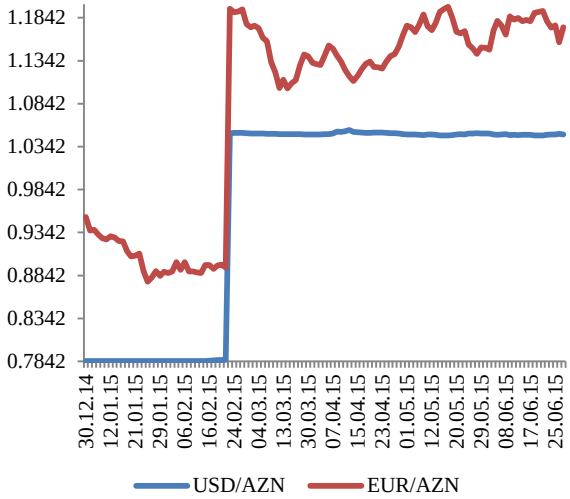


Source: CBA

Quarter I also witnessed high demand in cash foreign exchange. Quarter I accounts for 76% of net cash USD and 56% of net euro sold in Half I.

The Management Board of the CBA decided to set the exchange rate of US dollar against AZN at AZN 1.05 as of 21 February 2015 in light of the situation in the FX market. The decision was taken to create additional stimuli for the diversification of the national economy, further enhance its international competitiveness and export capacity, and ensure strategic sustainability of the balance of payments and country's international solvency.

Figure 30. Exchange rate of USD&EUR against manat



Source: CBA

Also the CBA changed the operational framework of the exchange rate policy over the reporting period and abandoned the dollar peg and started to target the currency basket value comprising USD and EUR *(for additional information please see Monetary Policy Review, Quarter I, 2015).* Quantative parameters of the new operational framework, introduced in Quarter I (the structure and value of the basket etc.) was optimized in Quarter II.

The CBA remaining one of the most active players in the FX market under the newly introduced operational framework intervenes the FX market within the corridor (range between ‘buy’ or ‘sell’ rates).

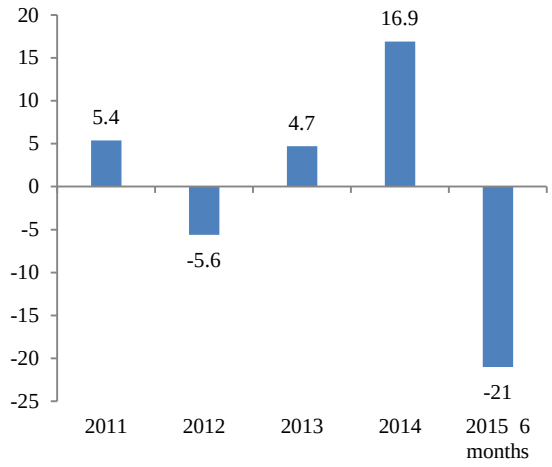
The CBA conducted buy operations in the FX market from May 2015 onward, as a result of which foreign exchange reserves of the CBA rose about USD 132 M. (1.6%) from end-April. It should be noted that currently the sufficiency indicator of CBA’s foreign exchange reserves is far above the internaitonally approved standards. As of end-Half I CBA’s foreign exchange reserves sufficed for 5.4 month import of goods and services (international norm – 3 months), exceeded the foreign debt of the country by 1.2 times, and equaled to 81.3% of broad money supply in manat (M2) (international threshold 10-20%). CBA’a FX reserves account for 68% of foreign exchange reserves of central banks in the Southern Caucasus region.

The nominal bilateral exchange rate of Manat depreciated against currencies of major partner countries in Half I. Manat depreciated against currencies of all trade partner countries on 15 reviewed countries, except for the Belarus ruble and the Ukraine hryvnia.

The dynamics of the nominal bilateral exchange rate of Manat caused shifts in real bilateral exchange rates, which in turn affected shifts in the REER.

Over the reporting period the REER (non-oil trade weighted) depreciated 21% stemming from 19.4% depreciation of the NEER.

Figure 31. Dynamics of REER, %



Source: CBA

As seen from the figure, real appreciation of the manat in 2013 – 2014 was neutralized in Half I, 2015.

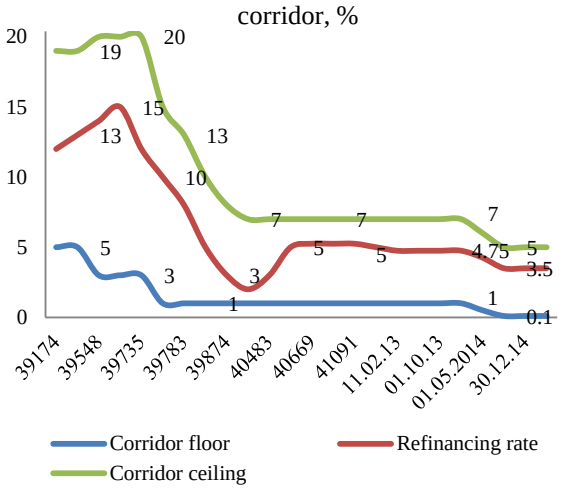
The depreciated REER positively affects the competitiveness of the non-oil sector, offsets import and stimulates the development of export oriented sectors.

3.2. Monetary policy tools

In Half I, 2015 the CBA applied monetary policy tools in light of the dynamics of money supply, economic growth prospects, as well as price and financial stability targets.

The CBA left the parameters of the interest rate corridor unchanged over the reporting period in consideration of the inflation rate, aggregate demand factors affecting economic growth and growth rates of money supply.

Figure 32. Parameters of interest rate corridor, %

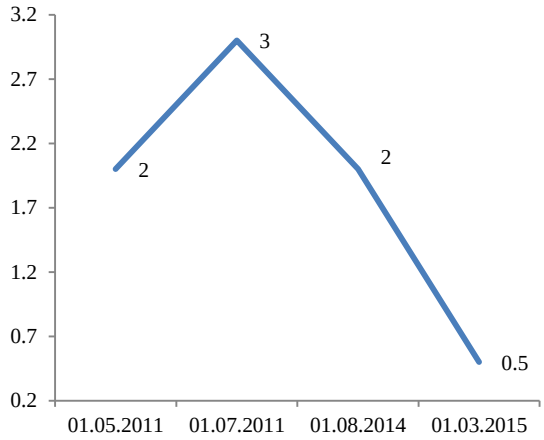


Source: CBA

The CBA's refinancing rate is 3.5%, the corridor ceiling is 5%, and the floor is 0.1%. The Bank deployed the above parameters to regulate liquidity injections and absorptions of the banking system.

Open market operations and required reserves were conducted to adjust growth rates of money supply and the liquidity level in the banking system over the reporting period.

Figure 33. Reserve requirements, %



Source: CBA

The CBA decreased the reserve requirement to 0.5% from 2% in view of recent trends in movements in money supply and in an effort to support economic growth by allowing drops in interest rates.

Box 3. The transmission of US monetary policy shocks to EMEs

It has empirically proved that US monetary policy has an impact on monetary policy's global business cycle, as well as economies of EMEs. Using linear regression models experts researched the impact of 25 basis point decrease of interest rates on US federal funds on 15 countries with data for the 22 quarters preceding the crisis (Ql 2003 to Q2 2008) and, in a separate estimation, with data for the 22 subsequent quarters (Q3 2008 to Q4 2013). They studied effects through policy rate, exchange rate and long-term interest rate channels on a set of 15 EMEs that have varying exchange rate arrangements, monetary regimes, degrees of financial openness, and policy responsiveness. The study suggests that unconventional monetary policy measures in the USA have a stronger effect on EMEs than conventional ones.

US monetary policy shocks are transmitted to EMEs on ***uncovered interest rate parity***.[1] Under the uncovered interest rates parity, countries with capital mobility don't have room for arbitration and accordingly domestic profitability equals external profitability in the long-term. When money supply increases in the USA interest rates decrease and profitablity drops, and the currency depreciates in the short-run. While in the long-term it goes up, due to price elasticity in the USA, real money supply (money supply/price level) goes back to the previous level and the exchange rate appreciates. In the same vein, although exchange rate appreciates in EMEs in the short-term, it depreciates in the long-term under the uncovered interest rate parity. In countries with fixed exchange rates central banks intervene foreign exchange markets and prevent depreciation of the exchange rate against the USD in the long-term which breaks the uncovered interest rate parity.

Researches suggest that response to drops in federal funds rates in the USA varies across EMEs. But in most countries it results in rise in ***interest rates.*** In Columbia and Mexico which use the floating interest rate and target inflation, interest rates go up in response to drops in interest rates in the USA and the exchange rate depreciates in response to the uncovered interest rate parity. For the policy rate channel, the coefficient for only two economies - Indonesia and South Africa - attained statistical significance. For the rest of the EMEs, the coefficient either lost or maintained significance. Some responses do not strictly conform with what one could expect under the assumption of uncovered interest rate parity. Specifically, the responses of Brazil are negative and statistically significant, due to high inflation and low financial openness within the sample. Correlation between interest rates in Brazil vary across pre- and post-crisis periods, but remains unchanged in Mexico and Columbia. For Indonesia and Poland, it attains statistical significance only in the second period.

Researches suggest that overall, the effect of the ***exchange rate channel*** is not statistically significant. Exchange rate of only three developing economies display statistically significant appreciation.

[1]*Under the uncovered interest rate parity, difference between interest rates of two countries equals to expected changes in exchange rates of two countries:* ***i1 – i2 = E(e);*** *where* ***i1****- interest rate in country 1,* ***i2*** *– interest rate in country 2,* ***E(e)****- expectations of changes in exchange rates.*

In some countries the lag time is several quarters. The effects depend on exchange rate regimes. In the countries that target inflation, these effects are very high and have lags, since the exchange rate plays the role of buffers for external shocks.

For example, the exchange rate of Hong Kong SAR which pegs its currency to the US dollar have little reaction to monetary easing in US while South Africa responds with 100 basis points of currency depreciation on impact. China and Poland may be highy impacted through the exchange rate channel. One of the reasons why impact varies is that business cycles have not been synchronized even among EMEs.

To contain impact of an easing in US monetary policy these countries pursue relevant ***monetary policy measures.*** Large intenventions of EMEs prevent impact on REER in the short term. As in the case of Indonesia, the country's policy rate neutralizes reduction shocks of US Fed interest rate and the exchange rate in the country appreciates in opposition to expectations, which is likely in harmony with the uncovered interest rate parity. In some instances, exchange rate appreciation is asynchronous to country's policy response. When South Korea's policy rate is increased 2 basis points in response to monetary easing in the USA, the exchange rate of the country gains 80 basis points. The deeper and wider financial markets develop, the more vulnerable countries to global shocks are, monetary policy framework needs to be strengthened with more space for moneatry flexibility to combat external shocks.

Sources:

Manuel Ramos-Francia and Santiago-Garcia-Verdu "The transmission of US monetary policy shocks to EMEs: and empirical analysis" BIS, 2014; Sohrab Rafiq "The effects of Unconventional Monetary Policy on Asia Frontier Developing Economies", IMF, 2015

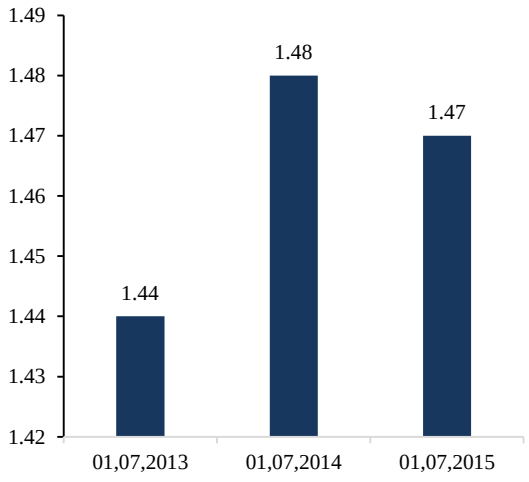
3.3. Money supply

Money supply in Manat was affected by the processes in the FX market over 6 months of 2015.

In Half I, 2015 money base in manat decreased 35% to AZN 7487 M. CBA's currency sales had a decreasing, while other factors (CBA's market operations etc.) had an increasing effect on shifts in the money base.

The money multiplier of the banking system YoY remained nearly unchanged.

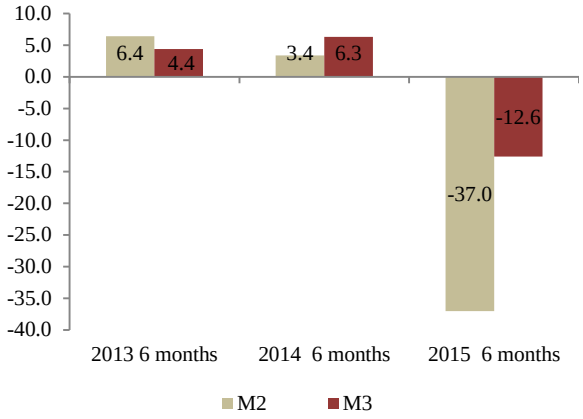
Figure 34. Money multiplier



Source: CBA

Over 6 months broad money supply in manat (M2) decreased 37% to 10992 M. As of the end-period. Broad money supply in manat decreased at the expense of cash money supply.

Figure 35. Change in money supply, %



Source: CBA

Over the period broad money supply (M3) decreased by 12.6% to AZN 18849.4 M. as of 01.07.2015. The M3 money aggregate YoY decreased 8.4%.

Table 3. Money aggregates, M. manat

	01.01.2014	01.01.2015	01.07.2015
M0	*10459*	*10153*	*6356*
M1	*12737*	*12830*	*8301*
M2	*16435*	*17436*	*10992*
M3[2]	*19289*	*21566*	*18849*

Source: CBA

[2] *Cash, demand, term deposits and savings, manat and foreign currency.*

Box 4. Consumer cash usage:cross country comparison

During the past several decades, payment systems worldwide have become increasingly electronic, transformed by innovations in financial markets and information technology. Large-scale payment diary surveys conducted in 7 countries (Australia, Austria, Canada, France, Germany, and the Netherland), by the ECB in 2009 – 2012 suggest that cash usage varies across countries. Cash usage prevails in low value transactions. Moreover, there is a correlation between cash usage and the size of transactions, demographics and payment behavior.

In most of these countries, the ratios of currency in circulation relative to nominal GDP generally declined in 1980s or even early 1990s, but stabilized and even increased later. Between 46% and 82% of the number of all payment transactions are conducted by cash. The level of cash balances might affect consumers' use of cash. Austria and Germany are cash intensive. However, it is hard to say whether cash is widely used because cash balance is high or cash balance is high because there is need for cash.

Cash usage decreases with education and income. The role of age is of interest. Older people hold and use more cash while young consumers are more likely to use new payment technologies. One could argue that consumers are using cash because they have no choice, e.g., because payment cards are not accepted or for reasons of costs, safety, or convenience. This evidence suggests that cash usage by consumers is not the sole result of lack of alternatives, on the contrary, cash is valued by consumers because it is perceived more positively than, or as positively as, credit and debit cards with respect to cost. In the above countries nearly all consumers have electronic cards. The vast majority of consumers hold payment card, with the lowest card dissemination share of 86% in Austria, which indicates that consumers widely use cash though they hold cards.

High cash usage is attributable to insufficient payment card acceptance. There is an almost 10 percentage point increase in card usage for low-value transactions if payment cards were universally accepted, card usage would increase for large-value transactions too with cross-country variances. For instance, card usage would increase in Austria and Germany in large-scale transactions, it will not change in the Netherlands which has a high card acceptance rate. Cards would be more widely used both in low and large scale transactions.

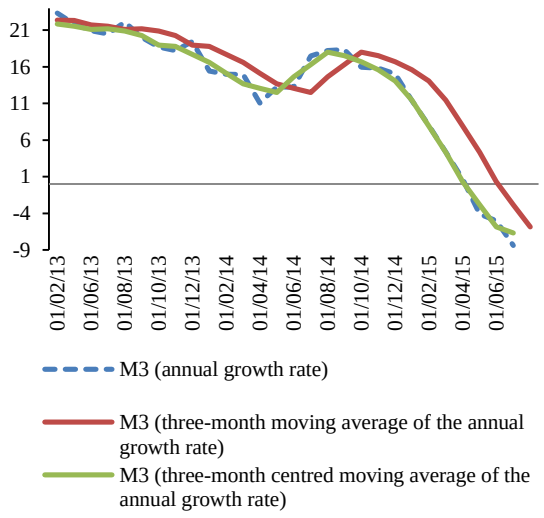
Overall, in some European countries such as Austria and Germany, cash even dominates consumer payment choices for all transaction values.

Source: ECB Working paper " Consumer cash usage. A cross-country comparison with payment diary survey data".1685/June 2014.

The decline in the M3 money aggregate in Half I is associated with the drop in net foreign assets, which accounted for 68% in the decrease of the broad money supply.

The share of foreign currency denominated deposits and savings in total deposits and savings was 62.9% as of the end-period. Deposits and savings in foreign currency accounted for 41.7% of M3 money supply.

Figure 36. Dynamics of M3 money supply, %



Source: CBA

Figures and tables

Figures

Tables

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