THE CENTRAL BANK OF
THE REPUBLIC OF AZERBAIJAN

№2(14)
2013

MONETARY POLICY REVIEW
Q2

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OF THE REPUBLIC OF AZERBAIJAN

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

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Acronyms

CBA	–	The Central Bank of Azerbaijan
ILO	–	International Labor Organization
IMF	–	International Monetary Fund
FDIs	–	Foreign Direct Investments
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 entrepreneurship
NEER	–	Nominal Effective Exchange Rate
OG	–	Output Gap
OPEC	–	Organization of the Petroleum Exporting Countries
REER	–	Real Effective Exchange Rate
RSM	–	Real Sector Monitoring
PPI	–	Producer Price Index
NFES	–	The National Fund for Entrepreneurship Support
GDP	–	Gross Domestic Product
WTO	–	World Trade Organization

EXECUTIVE SUMMARY

The Central Bank of the Republic of Azerbaijan implemented its policy in the first half of 2013 in the environment of continuing macroeconomic stability and diversification of the economy in the country.

The economy continued to grow and the foreign economic position of the country was favorable in the first half of the current year. Growth dynamics of the non-oil sector further strengthened. Government's active support for socio-economic growth and infrastructure contributed to economic growth significantly. Strategic foreign exchange reserves of the country kept growing and considerably exceeded the international norm on sufficiency.

In the first half of 2013 the CBA targeted a low single-digit level of inflation, a stable exchange rate of manat and financial stability and sustainability. Average annual inflation made up 2% which contributed to real income growth of the population. Inflation was to a considerable extent lower compared to partner countries. The stable exchange rate of manat was the key factor in maintaining a single-digit level of inflation. In the environment of the stability of manat low inflation had a positive impact on international competitiveness of the non-oil economy and export.

I. GLOBAL ECONOMIC PROCESSES AND THE NATIONAL ECONOMY

1.1. Global economic trends

Global economy continues to grow, but more slowly than expected and at uneven rates. Fundamental structural problems of leading countries should be seriously considered due to Europe's failure to get out of recession line despite large-scale stimulative policy measures.

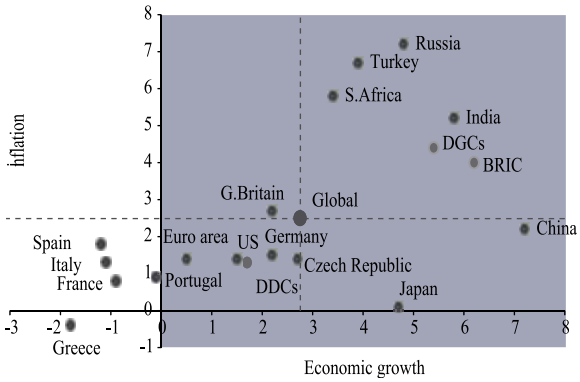
Initial estimates suggest that in the first half of 2013 global economic growth made up 2.75%, lower than expected. Lower growth stemmed from a deeper than expected crisis in Europe, negative effects of fiscal consolidation on private demand in the US, and decreased external demand in DGCs.

While 1.1% recession was observed in Eurozone in Q1of the current year, slight growth (0.5%) is projected in Q2. Germany remains the main driving force of economic growth (2.2%) in the region. The deepest recession was observed in Greece (-1.8%), Spain (-1.2%) and Italy (-1.1%). In June Morgan Stanley Capital International announced that Greece was moved from "developed country" to "developing country"status given processes in recent years and the economic structure.

Initial estimates suggest that Japan has the fastest growing economy among DDCs (4.7%). The abenomix[1] concept put forward in Japan a while ago proves useful. Thus, economic growth was higher than expected in the first half of the year at the expense of an increase in net export and consumption.

Following the decline in 2012, global trade witnessed slight growth. Given existing positive dynamics, the IMF forecasts a 3.1% rise (y.o.y. increase being 0.6%) in global trade in 2013.

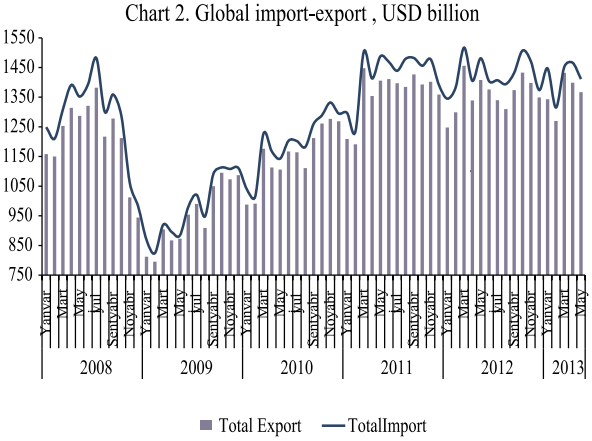
Chart 1. Global economic growth and inflation, %



*initial estimation

Source: Barclays Capital and IMF

Chart 2. Global import-export , USD billion



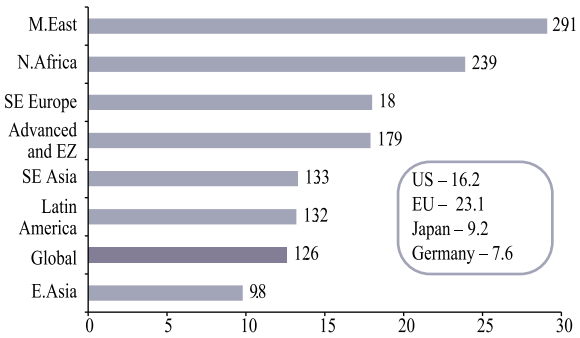
Source: WTO

The existing global unemployment rate does not allow for a significant increase in the level of employment all over the world. According to the International Labour Organization, the number of the unemployed is currently over 200 million in the world out of which 45.5 million (y.o.y. increase being 1.5 million) relates to

[1] "Abenomix" concept implies acceleration of economic growth through ensuring policy directions such as 2% annual inflation target, low exchange rate policy, negative interest rates, accommodative monetary policy, and expansion of public investments.

DDCs, and 156 million to DGCs. In some countries employment exceeded the pre-crisis level, but in others employment could not reach the pre-crisis level. Another group of countries witnessed a decline in employment. Given existing dynamics, the DDCs are likely to achieve the pre-crisis level of employment in 2015, and DGCs in 2017. The most critical problem on employment is an increase in long-term unemployment and unemployment among the youth. Thus, long-term unemployment in advanced economies rose by 60% over recent five years. Unemployment among the youth reached 73 million (36% of total unemployment).

Chart 3. Youth unemployment accross regions, % of labour resource

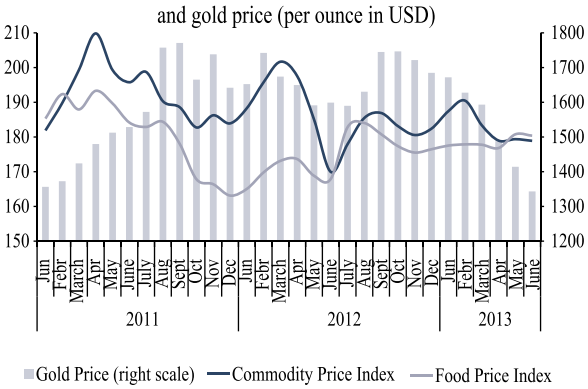


Source: ILO and OIC

World commodity prices remained highly volatile in the first half of 2013 as well. Despite a 2% decrease in the CPI as of end-Q2 compared to the early year, the FPI rose by 2%. Ongoing downswings in prices of alternative investment tool - gold since November of the previous year continued over the current year. According to the IMF, the gold price per ounce decreased by 20.3% compared to the year launch and made up USD 1343.4 as of end – Q2. As the World Gold Council's recent data suggest, gold demand was 963 tonnes, 13% smaller compared to the relevant period of the previous year. Central banks' net gold purchases decreased by 5% and made up 109.2 tonnes.

Lower demand in advanced economies has an impact on the world oil market as well.

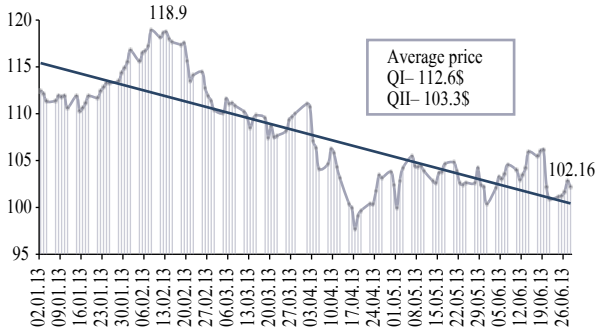
Chart 4. Commodity - Food Price Index (2005=100) and gold price (per ounce in USD)



Source: IMF

Over Q2 the price brent oil decreased by 8.2% against the previous quarter and was USD 103. Given re-escalation of the political-military situation in the Middle East, cold climate in OECD countries, a relatively higher global economic growth prospects for the next year, demand for oil is likely to increase slightly. The International Energy Agency forecasts that daily global oil demand will rise by 930 thousand/barrel in 2013, and 1.2 million barrel in 2014.

Chart 5. Brent oil price, in USD



Source: IMF

Global economic processes have also effects on financial markets. While the financial market activity has constantly increased in Japan and the US since the early year, Europe has witnessed volatility, and downswings as of end-period. Recent supportive economic policy in Japan was accompanied by an increase of activity in financial markets as

Box 1. Shale oil: the next energy revolution

Shale oil is emerging as a significant and relatively low cost new unconventional resource in the US. Shale oil production has been accelerating in the US, growing from 111,000 barrels per day in 2004 to 553,000 barrels per day in 2011 (equivalent to a growth rate of around 26% per year). As a result, US oil imports have fallen to their lowest levels for over 25 years.

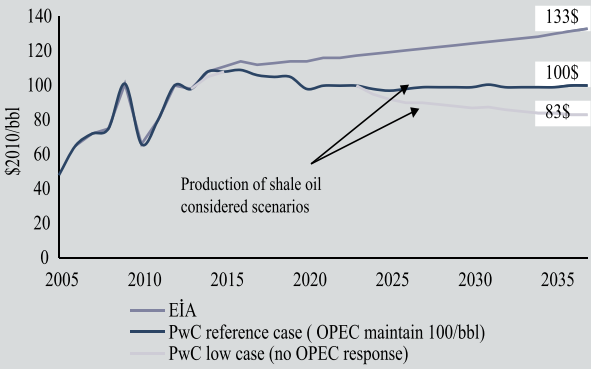
Shale oil has a huge production potential globally in the next decade. Global shale oil resources are estimated at between 330 billion and 1,465 billion barrels which will ensure a great revolution in the global energy market and energy security for a number of countries at lower costs. Like the US, other oil consumers have also started activities on shale oil production.

Analyses suggest that global shale oil production has the potential to reach up to 14 million barrels of oil per day (its peak level) by 2035; this amounts to 12% of the world's total oil supply. According to estimates, this increase could reduce oil prices in 2035 by around 25%-40% ($83-$100/ barrel in real terms) relative to the current baseline EIA projection of $133/barrel in 2035 (Chart 1a).

Global macroeconomic impacts of a lower oil price have been estimated on the basis of NIGEM (National Institute Global Econometric Model). The model indicates that the average global GDP per capita could rise up to USD 235-370 (at current prices) by 2035. However, the "benefit" of such a price fall significantly differs across countries. Thus, great net oil importers such as India and Japan could see a rise in GDP of between 4% and 7% in 2035. Other net oil importers such as the US, China, Germany and the UK could also see GDP gains of the order of 2-5% of GDP. Russian economy, on the contrary, could decline by 1-2%.

Oil producers should asses their oil portfolios (reserves) in comparison with lower oil price scenarios in order to prevent financial losses in the future strategic period. U.S. Energy Information Administration (EIA) assessed world oil reserves accross countries. In total, current world oil reserves are estimated at USD 169.1 trillion, and per capita reserves at USD 122 thousand.

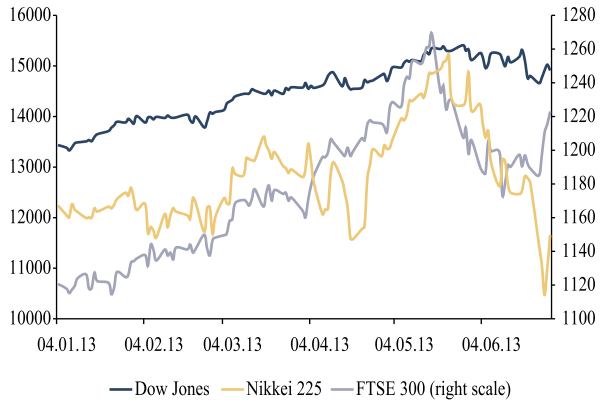
Chart 1a. Forecast of oil prices in different scenarios
(US EIA 2012, PwC analysis)



Source:
Shale oil: the next energy revolution, PwC, February, 2013 and U.S. Energy Information Administration, January, 2013.

well over the last 5 months of the current year. From the second half of May the activity slowed down, but increased again as of end-quarter.

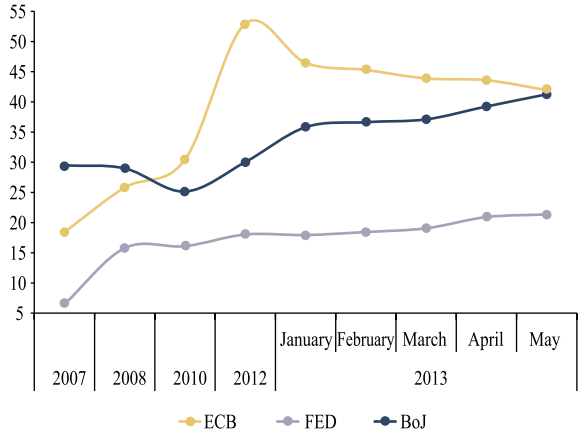
Chart 6. Dynamics of global financial indices



Source: Bloomberg

Central banks of leading countries continued accomodative monetary policies over the past period of 2013. The European Central Bank set the refinancing rate at 0.5% reducing it by 0.25 p.p.. Refinancing rates of the US Federal Reserve and the Bank of Japan remained unchanged over the last quarter (0.25% and 0% respectively).

Chart 7. Central Banks assets to GDP ratio, %

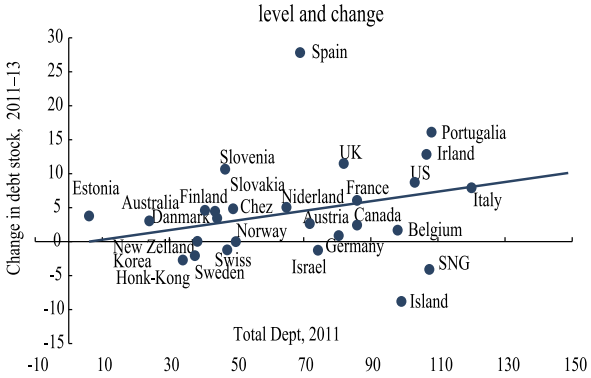


Source: Banks' websites, IMF

Majority of leading countries continued fiscal consolidation measures in 2013 in order to reduce public debt. On the backdrop of increased fiscal consolidation advanced economies need to further improve their infrastructure. McKinsey Global Institute estimates suggest that global infrastructure investment needed in 2013-2030 equals to USD 57 trillion.

Recent processes in global economy suggest a

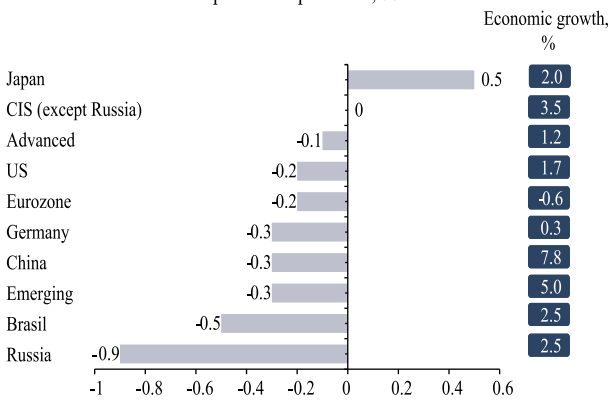
Chart 8. Advanced Economies: Gross debt to GDP, level and change



Source: IMF

pessimistic outlook for global economic growth prospects in 2013. The IMF lowered growth forecasts for the current year in its Global Economic Prospects publication.

Chart 9. Corrections in IMF's global growth forecasts for 2013, compared to April issue, %



Source: IMF

Thus, the global economic activity still remains below its potential. Besides existing risks, a number of new risks emerge in the world economy. In a number of developed countries fragile economic growth accompanied by high unemployment and weak investment activity may lead to a greater global aggregate output gap in a middle run. In the environment of limited possibilities of monetary and fiscal policy measures the most crucial policy challenge is fundamental institutional reforms. Furthermore, closer coordination of global policy measures is a must.

On the backdrop of recent global economic processes the lack of critical economic crisis trends in key trade partners is among the factors that have a positive impact on foreign economic position of Azerbaijan.

1.2. Macroeconomic processes in Azerbaijan

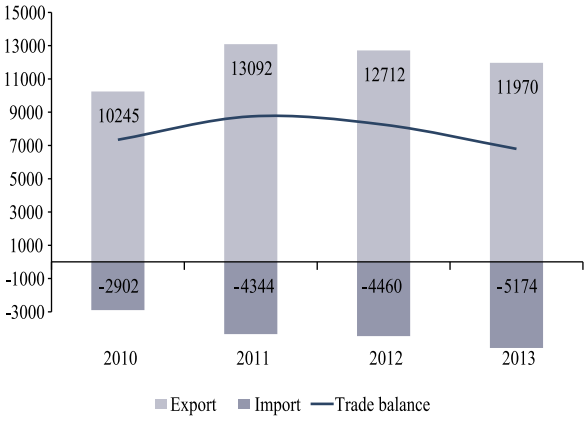
In the environment of a favorable foreign position and wider internal demand in the first half of 2013 the country economy continued to grow. Wider internal demand and implementation of large-scale socio-economic infrastructure programs had an upward impact on economic growth.

1.2.1. External sector

As in recent years, in the first 6 months of current year the country's foreign position was favorable.

According to the State Customs Committee (SCC), in the first 6 months of 2013 the foreign trade turnover made USD 17.1 billion, of which USD 12 billion falls to the share of export and USD 5.2 billion to import.

Chart 10. Trade balance in January-June, USD million



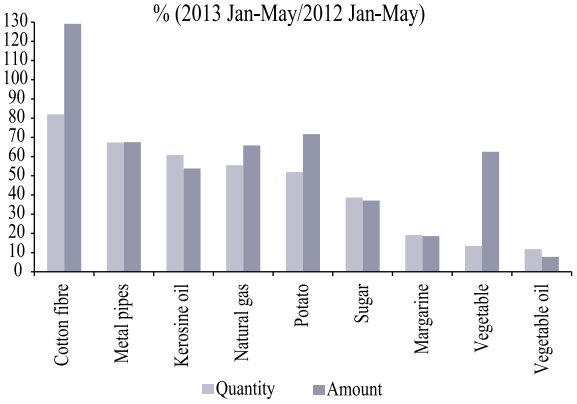
Source: SCC

In January-June export decreased by 5.8% compared to the relevant period of the previous year, while import increased by 16%. Surplus of foreign trade balance constituted USD 6.8 billion. In total, export exceeded import by 2.3 times as much. Nearly half of export was channeled to EU countries, 6% to the CIS and the remainder to other countries. 34% of import relates to the EU, 24% to the CIS and the remainder to other countries.

The highest monthly level of export and import was observed in February (13% higher than monthly average) and May (41% higher than monthly average) respectively. The lowest monthly level of export and import was observed in June (24% lower than monthly average) and January (37% lower than monthly average) respectively.

Export of cotton, metal pipes, potato, fresh vegetables, vegetable oils and others followed an incremental path.

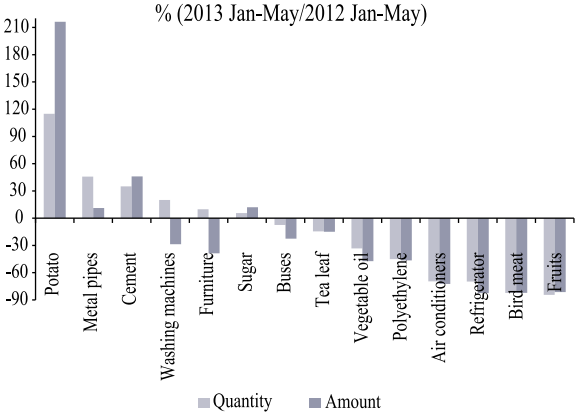
Chart 11. Quantity and amount changes of primary export goods, % (2013 Jan-May/2012 Jan-May)



Source: SSC

Commodities with incremental import include metal, machines and devices, tea, cement, wheat flour, etc. The share of food products in the

Chart 12. Quantity and amount changes of primary import goods, % (2013 Jan-May/2012 Jan-May)



Source: SSC

structure of import was 10% which fell up to 0.3% over the quarter. In total, decline in import of some food products indicates domestic production growth. Thus, self-sufficiency level on most agricultural and food products is likely to rise as of the end of the current year.

According to the SSC, import prices surge less rapidly than export prices owing primarily to declining trend in world market price of oil and oil products.

upward effect on FX flows into the country. According to the most preliminary data, the size of remittances inflow was USD 774 million over the period.

According to the SSC, in January-June foreign investments to the country economy rose more than 40% and constituted USD 2.4 billion.

As shown in the chart below, in the first 6 months of the current year strategic FX reserves

Table 2. Price indices of import – export commodities, % (Jan – May, 2013 vs. Jan – May, 2012)

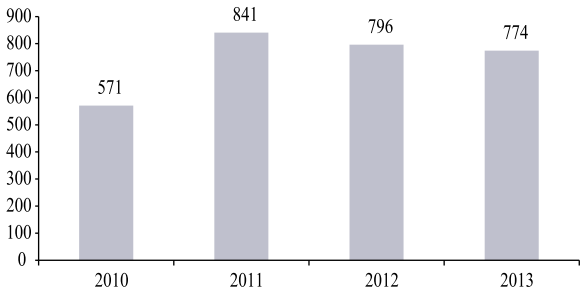
	Import commodities	Export commodities
Overall index	101.6	90.5
Processing phases		
Investment commodities	100.9	99.4
Intermediate goods	101.9	88.1
Energy commodities	98.8	85.7
Other intermediate goods	101.9	97.5
Consumer goods	100.6	101.8
Non-durables	101.5	101.3
Durables	99.3	106.4
Commodities of double use	101.7	115.1
Other commodities	101.5	96.6

Source: SSC

According to the IMF, as of the end of 2013 surplus of the current accounts balance will make up 11% of GDP. The country takes one of the most leading positions among the DGCs in terms of the given indicator. The Fund predicts huge surplus to continue in a medium-run.

Besides export, dynamics of remittances and capital flows from abroad also had an

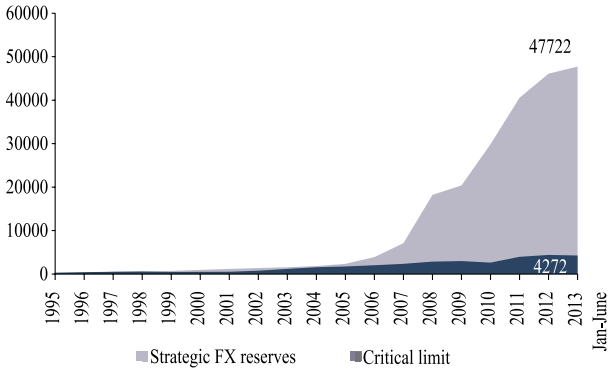
Chart 13. Remittance inflows in January- June, in USD million



Source: CBA

of the country rose by USD 1.6 billion or 3.5% and constituted USD 47.7 billion, sufficient for three-year import of goods and services. At the same time, strategic FX reserves exceed external debt about 8 times as much.

Chart 14. Sufficiency of strategic FX reserves, USD million



Source: CBA

Box 2. FDI Attraction, Potential and Contribution Indices

UN has regularly calculated FDI Attraction, Potential and Contribution Indices on countries and published country rankings in its annual *World Investment Report* since 2002.

The FDI Attraction Index ranks countries by the FDI they receive in absolute terms and relative to their economic size. It is the average of a country's rankings in FDI inflows and in FDI inflows as a share of GDP. The Attraction Index can be calculated using the average indicator of FDI flows over a longer time frame. For policymakers, looking at a longer time frame is more relevant because:

- FDI flows can fluctuate significantly year on year;
- direct investment decisions can span more than one year and imply long-term commitments;
- policy initiatives and tools to improve FDI attraction generally take time to have an effect.

China, Belgium, Singapore, Luxemburg, Ireland, Chile, Kazakhistan, Mongolia and Turkmenistan are on top tens according to country rankings on this index.

The FDI Potential Index captures four key economic determinants of the attractiveness of an economy for foreign direct investors. They are (a) the attractiveness of the market, b) the availability of low-cost labour and skills (to gain efficiency), c) the presence of natural resources, and d) the presence of FDI-enabling infrastructure. The total potential index for FDI is formed from summing of scores on each of these four determinants using equal weights.

UN has calculated the FDI potential index for 2011. As mentioned above, the ranking on this index is determined separately based on 4 determinants (the attractiveness of the market, the availability of low-cost labour, the presence of infrastructure, and the presence of natural resources) and a general average ranking is defined. Out of 144 countries, China, the US, Russia, Turkey, Germany, and Indonesia on the top ten list.

The FDI Contribution Index enables to measure the development impact of FDI in the host economy. It is calculated as an impact of foreign investments to GDP, employment, wages and salaries, exports, expenditures, and tax payments.

Countries have been combined in a large group in terms of their impact on each indicator above. The ranking of an economy in the FDI Contribution Index is calculated based on the simple average of the percentile rankings for each of the impact types, using equal weights. An economy is ranked only if it has at least four data points. Currently, only 79 countries have been ranked due to limited possibilities to get indicators on each of 7 variables from all countries.

In World Investment Report this index has been calculated on most countries for 2011 and those countries have been ranked. Hungary, Belgium, Czech Republic, Romania, Poland and Malaysia are on the top ten list. Thus, FDI significantly affects economic development of those countries.

Using the Indices as Policy Tools. FDI policy generally aims to set the conditions and create a climate conducive to the attraction of FDI and to maximize the *development contribution* of FDI. The indices help assess the effectiveness of economic policy. The assessment can be made by plotting their countries' real performance against potential and by measuring the contribution of FDI, making comparisons with peer countries or within regional groupings, and tracking changes in performance over time. Although the Indices can provide only rough guidance, because they necessarily exclude country-specific factors, they can be a useful starting point for the assessment of policy effectiveness.

Source :
World Investment Report -2012, www.unctad.org

CBA's FX reserves increased by 8.8% and made USD 12.7 billion, sufficient for nine-month import of goods and services.

Chart 15. Strategic FX reserves to GDP ratio , %

Source: CBA

Currently, the strategic FX reserves to GDP ratio approximates 70%. Overall, a high growth rate of strategic forex reserves is the factor that reduces vulnerability of the country economy to possible foreign shocks and shapes a strong macroeconomic buffer, as a result of which, the country's Net International Investment Position is favorable.

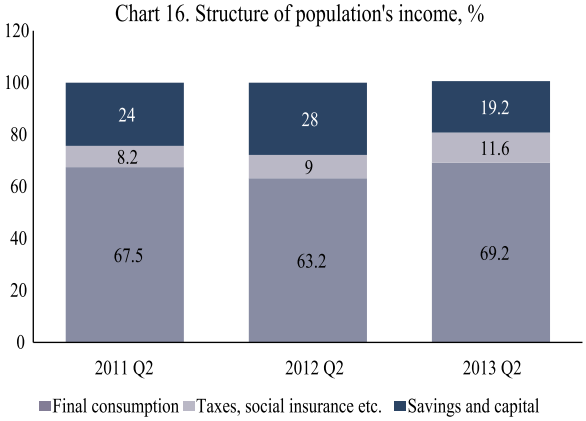
1.2.2. Aggregate demand

In the first half of 2013 all components of the aggregate demand, including final consumption expenditures, investments and public expenditures positively contributed to the economic growth.

Final consumption expenditures. Over the reporting period money income of the population grew by 7.1% in nominal terms, and by 5.1% in real terms against the relevant period of the previous year. Per capita nominal money income of the population increased by 5.7% and real money income by 3.7%.

In the first six months of the current year total consumer activity was high owing to increase in average monthly salary, the number of population engaged in the economic sector and the size of consumer loans of the population. The share of final consumption expenditures in the structure of money income of the population remained high (Chart 16). Y.o.y increase in consumption expenditures made up 14.6% (Q1 of 2012 - 4.8%).

Chart 16. Structure of population's income, %

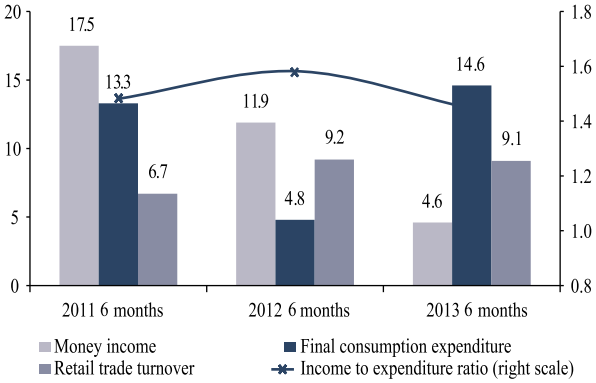


Source: SSC

Y.o.y increase in net income of the population was 7.1% and made up AZN 14.4 billion. The income to expenses coverage ratio of the population remained stable compared to the relevant period of the previous year.

Increasing income contributed to growth in retail trade turnover as well. Y.o.y increase in overall retail turnover was 9.1% (Chart 17).

Chart 17. Income and expenditure dynamics of the population , %



Source: SSC

In January-June of 2013 retail trade turnover rose by 0.4% on food products (H1, 2012 – 0.4%), and on non-food products by 21.2% (H1, 2012 – 23.2%). Free services to the population grew by 7.5%.

According to the RSM by the CBA, commodity stock diminished in trade and

industry in the first half of 2013 followed by new orders.

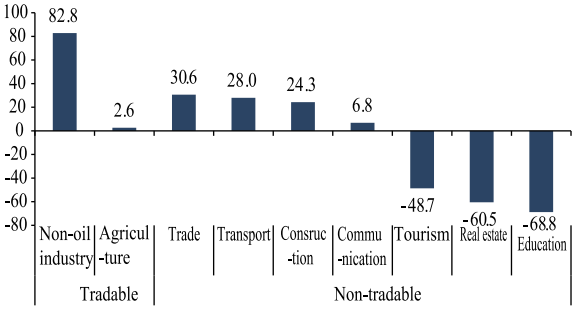
In January-May of 2013 growth of average monthly salary in the country economy contributed to the high share of final consumption in the structure of GDP. Thus, average monthly salary increased by 6.8% in nominal terms, 4.8% in real terms against the relevant period of the previous year and constituted AZN 408.8. Salaries rose by 8.7% in the oil sector, 7.1% in the non-oil sector, 1.8% in the public sector, 11% in the private sector.

High credit activity of the population had an incremental impact on aggregate demand. Thus, y.o.y. increase in the size of consumer loans to the population made up 21% over the first half of the current year.

Government expenditures. Government's consumption expenditures chiefly include expenses on goods and services from the state budget. In January-May, 44.9% of budget expenditures was chanelled to economic growth, 10.3% to social costs, and 9.2% to education and healthcare.

Investment expenditures. In the first half of 2013 total investments to the economy increased 22.9% and constituted AZN 7.4 billion, equal to 27% of GDP. It included 19.5% increase in investments to the non-oil sector. The share of investments to the non-oil sector in total investments was 69.4%. Investments in construction increased by 24.3%, in transportation by 30.6%, in non-oil industry[2] by 82.8%, and in education by 28%.

Chart 18. Increase in investments on sectors of non-oil economy over 6 months, %



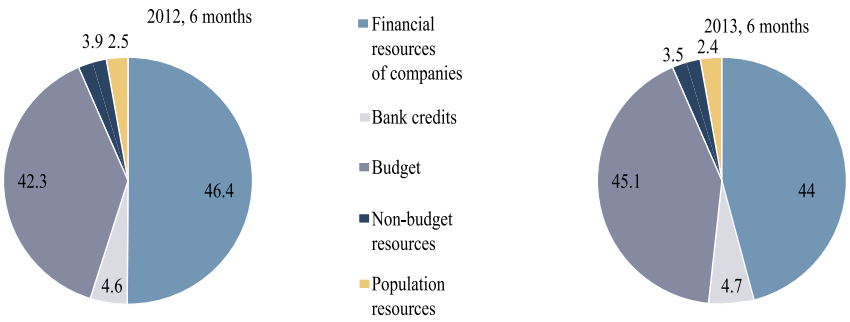
Source: SSC

As shown in the chart 18, of the non-oil sector, investments to trade increased by 56%, to non-trade by 9.8%.

74.9% of the funds channeled to Tier I capital stemmed from domestic sources, 25.1% from foreign sources. The share of budget funds in financing investments increased.

As shown in the chart, 44% of investments sourced from businesses and organizations, 45.1% from budget, and 4.7% from bank loans.

Chart 19. Funding sources of investments, %



Source: SSC

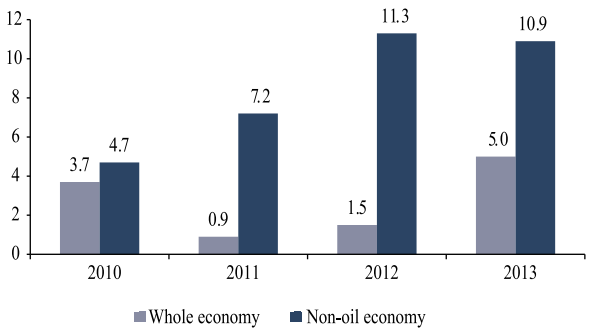
[2] Processing industry, electric industry, gas and water supply

1.2.3. Aggregate supply

In the first half of the current year GDP rose by 5% in real terms and nominally constituted AZN 27.2 billion. Over the reporting period the oil-and-gas sector declined by 0.7%, while the non-oil sector grew by 10.9%. The two third of the value added falls to the share of production, and one third – to services.

Economic growth. GDP growth was driven by the non-oil sector over the period. Thus, 54% of GDP fell to the share of the non-oil sector.

Chart 20. Economic growth, January-June, %

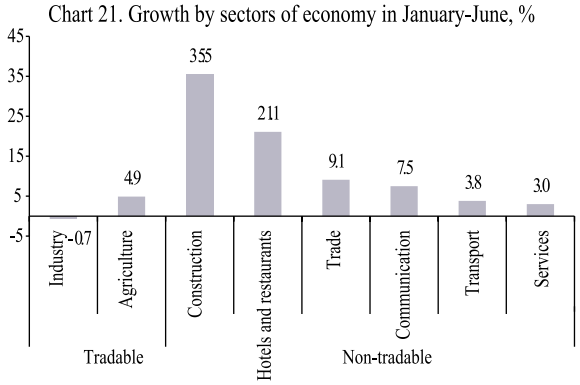


Source: SSC

As shown in chart 21, in January-June all segments of the non-oil sector posted growth. The highest growth rate among the segments was in construction, hotels and restaurants and catering, communication and trade. The share of construction sector in 10.9% annual growth is two-third or 7.5 p.p. If to skip the oil industry, growth in the industry mainly sourced from food industry, machinery, construction materials production and furniture industry. The high growth rate in agriculture owes to both crop sector and livestock. Of services the highest growth was observed in catering and communication.

Crude oil and natural gas production dropped by 1.5%, 544 kg gold and 331 kg silver were extracted during the reporting period. In total, excluding the oil industry, the trade sector grew

Chart 21. Growth by sectors of economy in January-June, %

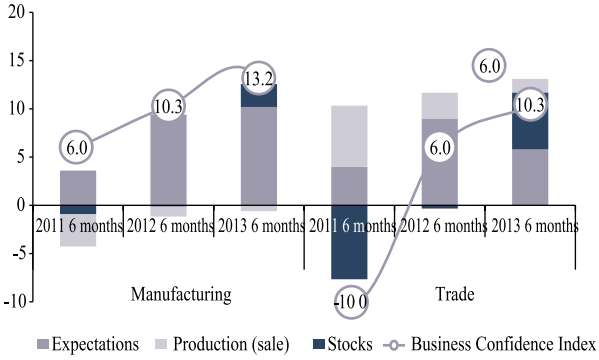


Source: SSC

by 3.7%. The non-trade sector increased by 13.7%.

Economic growth expectations. According to the Real Sector Monitoring (RSM) conducted by the CBA, the Business Confidence İndex[3] (BCI) improved over the first half of 2013 due to high industrial production and trade sales. At the same time, the monitoring also displays optimistic economic activity expectations.

Chart 22. Business Confidence Index, %



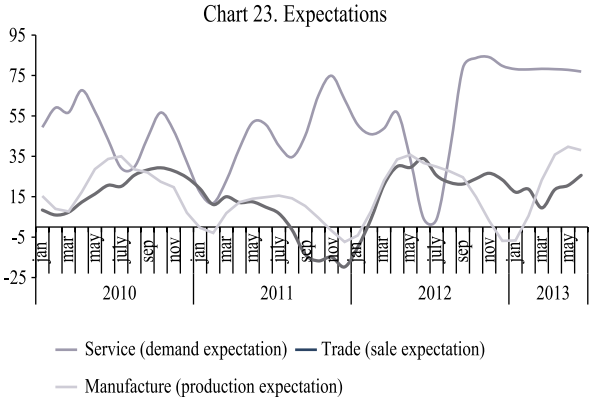
Source: CBA estimations

Thus, according to the RSM findings, since early year the demand expectation index on services and the sale expectation index on trade have been prone to growing. Positive expectations were also observed in food, construction materials production and weaving sub-sections of the industry, and furniture and electric appliances segment of trade. Such positive expectations resulted in decrease of stocks. In total results of the RSM conducted by

[3] Industrial Business Confidence Index = (production – product stock + production expectation)/3
Trade Business Confidence Index = (actual sale – product stock + sale expectation)/3

the CBA in recent months demonstrate increase in the number of enterprises with incremental production and risen growth and sustainability of this growth.

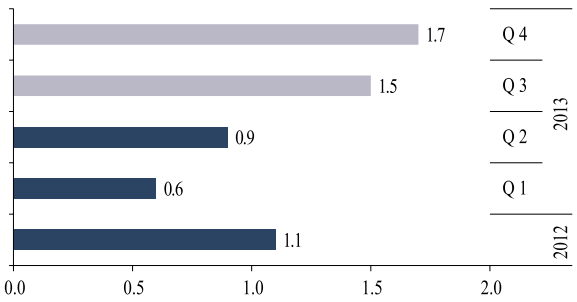
Chart 23. Expectations



Source: CBA
Note: Three-month moving average was used to smooth out fluctuations, as monitoring findings are likely to be exposed to seasonal adjustments.

According to expectations of the Government, the CBA, as well as international organizations, economic growth in the country is expected to continue in the short run. The IMF and the Asian Development Bank in their recent economic outlooks, respectively forecast 4.1% and 3.1% economic growth in Azerbaijan in 2013.

Chart 24. Output gap, %



Source: CBA
Note: Light colour shows forecasts

According to estimations by the CBA, as a result of high internal demand the output gap will continue to rise above +0.7% level of the first half of the year and be positively zoned in 2013.

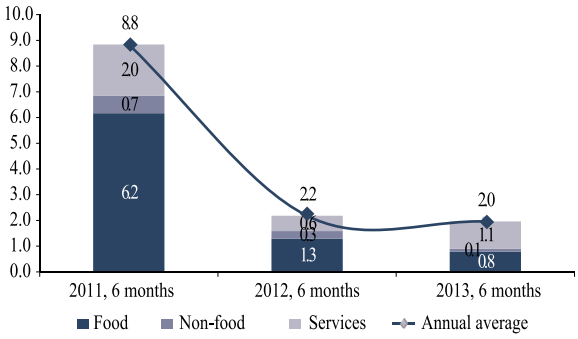
1.2.4. Inflation processes

In the first 6 months of 2013 prices remained stable and inflation was maintained within the target.

1.2.4.1. Consumer Price Index (CPI). In the first half of 2013 average annual inflation was 2%. In June prices rose by 1.2% compared to the beginning of the year, 3.1% against the relevant period of the previous year.

Higher price increase in annual terms was observed in food products and services over the period. Thus, non-food prices by 0.5%, food prices rose by 3.8% and service prices by 3.3%. Such a price rise in services is due to price hike in tariffs of air transportation and notarial services in January.

Chart 25. Annual average CPI, %

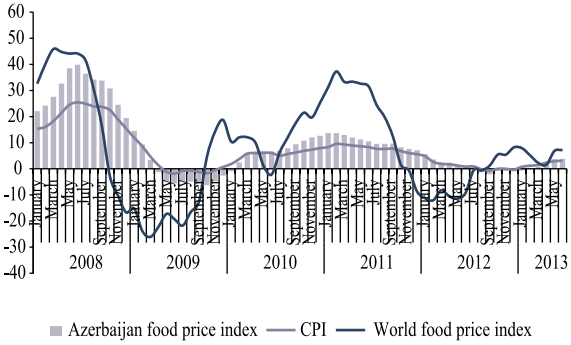


Source: CBA estimations on the basis of SSC data

Estimations suggest that 0.8 p.p. of 2% average annual inflation relates to rise in food products, 0.1 p.p. in non-food products and 1.1 p.p. in services. So, the share of food prices in average annual inflation was low enough against the relevant periods of the previous two years.

While the growth rate of world food prices dropped over the first quarter of the current year, it increased over the second quarter (Chart 26).

Chart 26. Azerbaijan and world food CPI , (annual change,%)

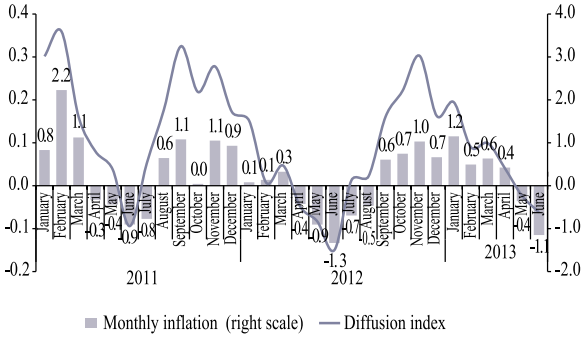


Source: CBA estimations on the basis of SSC and IMF data

While average annual core price index, adjusted from swings in prices for commodities regulated by the government and seasonal factors increased by 0.5%, prices decreased by 0.1% compared to the beginning of the year. From the beginning of the year 1.3 p.p. lower core inflation in comparision with headline inflation shows that seasonal factors and regulated prices play a great role in formation of inflation. Thus, in the first six months of 2013 transportation and postal tariff indices increased by 1.9% on average annual. Communication tariff indices increased by 3.8%, postal and courier tariff indices by 0.8%, and cargo transportation tariff indices by 2.6%.

As shown in chart 27, the diffusion index[4] that reflects scalability of changes in price swings was negatively zoned in Q2, 2013 which demonstrates that products in the consumption basket with price downswings outnumber.

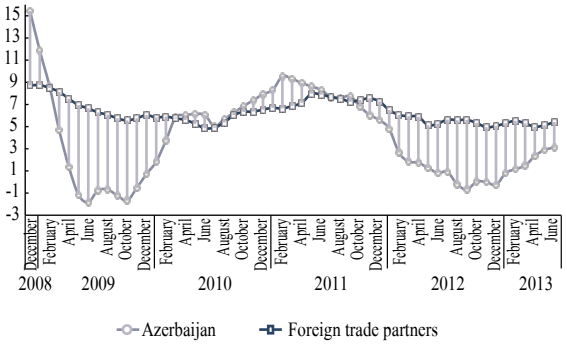
Chart 27. Diffusion index



Source: CBA estimations on the basis of SSC data

In 2013 inflation in foreign trade partner DDCs was 1.7%, in DGCs 7.8%, and in oil-exporting countries 9.8%. In total, average inflation in trade partners was 5.4%, which exceeds the annual inflation in Azerbaijan by 2.3 p.p..

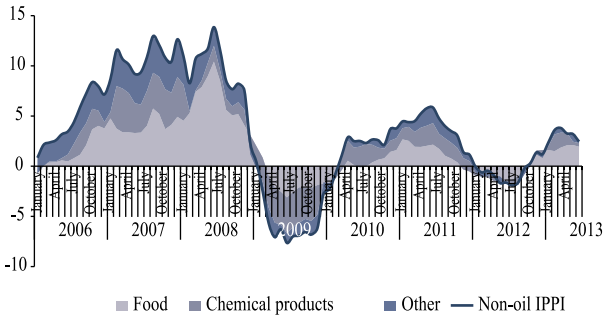
Chart 28. Inflation (y.o.y, %)



Source: SSC, CBA estimations

1.2.4.2. Industrial Producer Price Index (IPPI). In the first 6 months of 2013 annual average IPPI declined by 6.5%. due to 8.6% price downswing in crude oil and natural gas production industry. Prices of non-oil industrial products grew by 2.6% over the quarter due primarily to price upswings of 7.6% in processing chemistry, 9.3% in metallurgy, and 8.2% in final metal production. However, prices decreased by 12% on machine and equipment manufacturing, 11.2% on paper and cardboard, and 12.2% on textile industry.

Chart 29. Non-oil PPI (annual, %)



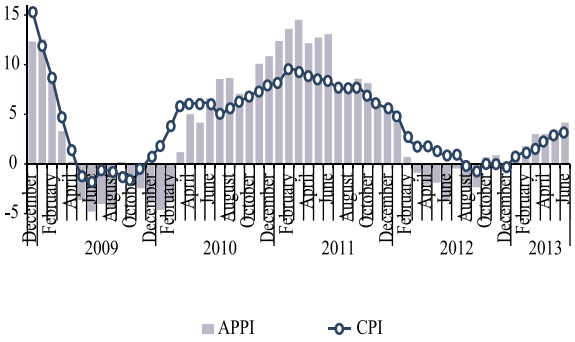
Source: CBA

1.2.4.3. Agricultural Producer Price Index (APPI). In the first half of 2013 APPI increased on average annual 2.7%. Increase on price dynamics was due to rise on annual plants (3%)

[4] Diffusion index – difference in the number of products in the consumption basket with price upswings and those with downswings to the total number of products ratio.

and livestock products (3.6%). 3.6% price downswig was observed in perennials.

Chart 30. Price indices (y.o.y. %)



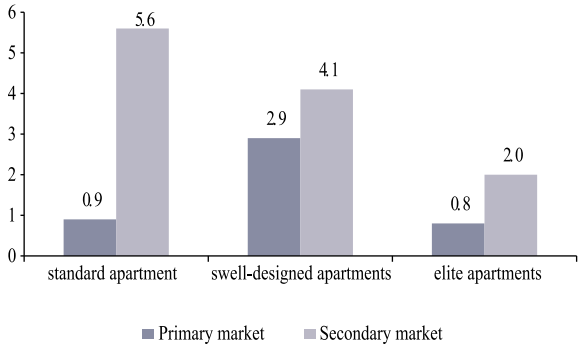
Source: SSC

As shown in chart 30, while APPI is more volatile than CPI, they display the same change trajectory. In the first 6 months of 2013 prices increased on both indices, and change in APPI exceeded total inflation 1.1 p.p., the reason for which is low pass-through capacity of price changes in agricultural products to total prices.

1.2.4.4. Real Estate Prices. According to the SSC, in the first half of 2013 prices in the housing market increased by 4.6% against the relevant period of the previous year. Secondary and primary markets respectively grew by 4.6 % and 1.6%. Highest price hike in the secondary market was observed in standard apartments (5.6%), and in the primary market in well-designed apartments (2.9%) (Chart 30). According to the "MBA LTD" Appraisal and Consulting Company, rent fees increased over the period. Thus, the rent fee in residential and commercial real estate rose by 10.3% and 1.6% respectively.

Ongoing mortgage lending was an influential factor on the activity in the real estate market, particularly in the secondary market over the period. In the first half of 2013 banks issued AZN 61.2 million worth mortgage loans.

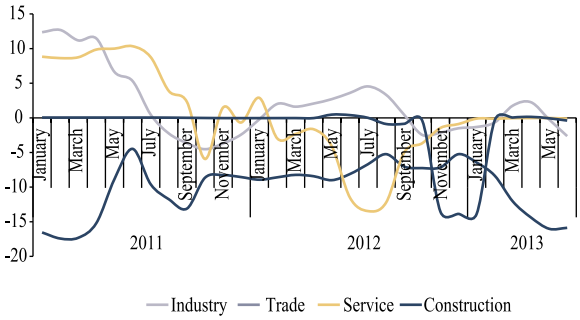
Chart 31. Price changes in the housing market (2013 - 6 months/2012 - 6 months, %)



Source: SSC

1.2.4.5. Inflation expectations. Regular RSM by the CBA suggests that a decrease was observed in price expectations on all sectors (industry, construction, service and trade) in the first six months of 2013. Prices are expected to decline more in the trade sector.

Chart 32. Price expectation indecies (3 months moving average)



Source: CBA

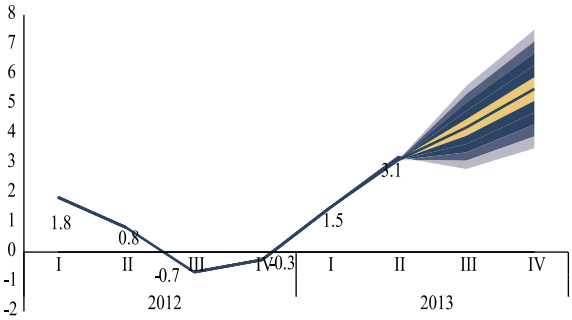
According to the last report of the IMF, annual average inflation in Azerbaijan in 2013 is forecast to be 3.4%, 3.4 p.p. lower than in CIS countries, 1 p.p. lower than in CEE countries, and in total 2.5 p.p. lower than in DGCs.

According to the CBA's model estimations, inflation as of the yearend is forecast to be within the target set in the CBA statement on key directions of the monetary and financial stability policy.

The ARIMA (Autoregressive Integrated Moving Average) model was used in

estimation. Inflation changes were identified with some probability in various scenarios through this model (Chart 33). Estimation suggests that annual average inflation is more likely to be 5-6%.

Chart 33. CBA inflation forecast (annual, %)



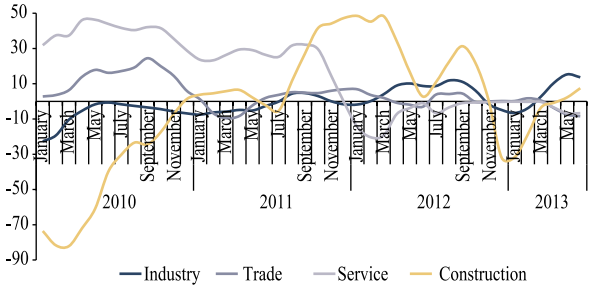
Source: CBA

1.2.5. Employment

As of the end-Q2, 2013 the economically active population was numbering 4720.9 thousand persons, 94.9% of which was engaged in various segments of the economy and the social sector. According to the SSC, as of the end-February the number of hired labor was 1480 thousand persons, 8.1% higher against the relevant period of the previous year. 97.5% of hired workers was engaged in the non-oil sector, while 2.5% in the oil sector.

The CBA monitoring in up to 300 enterprises within the RSM framework also demonstrates high employment.

Chart 34. Employment expectation index (3 months moving average)



Source: CBA

As shown in the chart, employment expectations on industry and construction sectors increased over 3 months of 2013. However, employment expectations on trade and service sectors decreased.

II. MONETARY AND EXCHANGE RATE POLICY

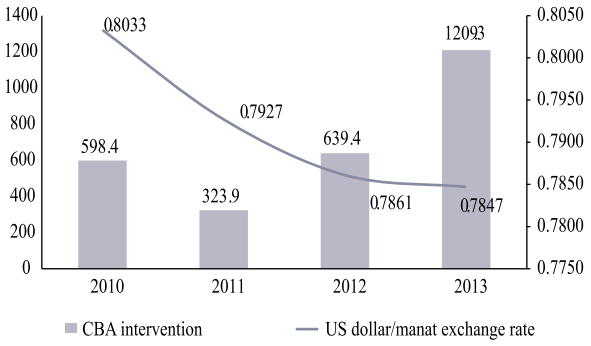
2.1. FX market and the exchange rate of manat

In the first half of 2013 the exchange rate policy targeted balancing between demand and supply in the FX market and a stable exchange rate of manat against USD.

In the first half of 2013 the CBA pursued its exchange rate policy within a corridor targeting the bilateral exchange rate of USD/AZN.

Amid huge surplus in the balance of payments supply prevailed over demand in the forex market. However, to prevent considerable strengthening of the exchange rate and neutralize negative impacts on competitiveness of the non-oil sector the CBA sterilized USD 1209.3 million worth currency over the period.

Chart 35. CBA intervention over the first six months, USD million



Source: CBA

The exchange rate of manat against USD remained almost unchanged and strengthened 0.06% over the quarter. Standard exchange rate deviation was also slight (0.02). Exchange rate stability of the national currency had a positive

Table 2. Bilateral nominal and real exchange rate indices of manat in the first half of 2013, %

	Compared to December 2012	
	Nominal bilateral exchange rate index*	Real bilateral exchange rate index
US	100.0	100.5
Euro area	99.4	99.8
Great Britain	104.2	104.7
Turkey	106.3	103.4
Russia	105.2	102.9
Ukraine	100.5	101.5
Georgia	99.8	100.6
Iran	99.9	84.6
Kazakhstan	100.7	99.2
Japan	116.4	117.2
Israel	96.6	95.9
China	98.5	99.0
Belorussia	101.8	96.1
S. Korea	105.5	105.4
Switzerland	101.3	100.0

**Average annual change of exchange rates of manat against currencies of trade partners.*

Source: CBA

impact on macroeconomic environment and financial sector stability in the country.

Dynamics of the nominal bilateral exchange rate of manat contributed to swings in real bilateral exchange rates. Manat strengthened both in nominal, and real terms against the national currencies of the U.S., Great Britain, Turkey, Russia, Ukraine, Japan and S.Korea.

In the first half of 2013 NEER (on gross trade turnover) on the non-oil sector grew by 2.6%. According to model estimations[7], 1% strengthening of NEER reduces consumer prices 0.28%.

Box 3. Currency intervention and foreign trade imbalances

Current account (or trade) imbalances grew to record levels just before the global financial crisis of 2008. At the same time purchases of foreign assets by governments also reached record levels. Currently, this process has retreated somewhat, but an obvious question is whether there is a relation between these phenomena. There is a close correlation between aggregate current account balances and aggregate net official financial flows[5] of countries with large stocks of official foreign assets. Economists argue that governments with current account surpluses conduct currency intervention either to increase foreign exchange reserves or prevent national currency appreciation. Recent findings suggest that the large and persistent current account surplus is related to massive net purchases of foreign assets by governments.

In the absence of measurement error, the current account balance (CAB) equals the sum of net official and net private financial flows[6].

$$CAB=NOF+NPF \quad (1)$$

NOF means Net official flows (purchase and sale oriented intervention), NPF means Net private flows. Exogenous variables, such as the cyclically adjusted fiscal balance, the level of economic development, capital controls, and other factors also influence CAB and NPF. NOF may respond to the same factors that influence CAB and NPF, but there are other variables that influence NOF, for example, the ratio of the stock of official foreign assets (reserves) to imports or to external short-term debt.

Observations on 40 economies over 25 years from 1986 through 2010 showed that there is a very strong correlation across countries between CAB and NOF and essentially no correlation between NOF and NPF. In other words:

1) shocks to CAB are larger than other shocks;

2) Central banks' aggressive purchases of foreign assets (NOF) usually aim to stabilize real exchange rates of their national currencies;

3) NPF can not affect the changes in CAB in the absence of NOF;

4) Domestic volatility is in most cases generated through NPF;

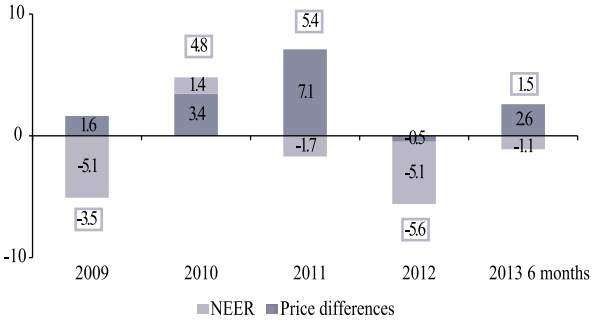
5) NOF mitigates the effect of such shocks generated by NPF on the real exchange rate;

Final conclusion is that net purchase of forreign assets by Central Banks or governments in countries with limited capital mobility has a persistent upward impact over current account or trade balance. Estimates suggest that private financial flows may neutralize official financial flows 0-40%. As shown in formula (1), CAB varies between 60 and 100 per 1 dollar spent for currency intervention.

Source:
«The Elephant Hiding in the Room: Currency Intervention and Trade Imbalances», Joseph E. Gagnon, Peterson Institute for International Economics,WP 13-2, March 2013.

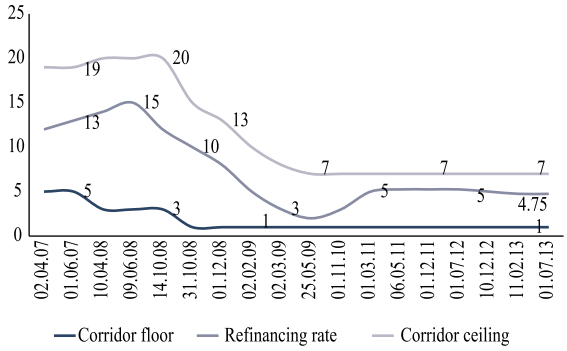
[5] NOF- purchase of foreign currency by governments or central banks (sale of foreign currency in case of CAB deficit)
[6] NPF- purchase of foreign currency by private business entities (sale of foreign currency in case of CAB deficit)
[7] Calculations are based on the result of the VAR (Vector Autoregressive) model.

Chart 36. Structure of REER , %



Source: CBA

Chart 37. Parameters of interest rate corridor, %



Source: CBA

Inflation differences had a downward impact on REER. Eventually REER on the non-oil sector strengthened only 1.5% over the first half of 2013.

Thus, the CBA maintained bilateral exchange rate stability of AZN over the reporting period. The nominal multilateral exchange rate of AZN rose, which, in its turn, had a positive impact on achieving the inflation target.

2.2. Monetary policy tools

In the first half of 2013 the Bank applied monetary policy arsenal allowing for economic growth dynamics, inflation expectations and specifics of the pass-through capacity of the monetary policy to aggregate demand and prices.

The key goal of the monetary policy was to ensure control over inflationary factors and their regulation in a preventive mode within the established target over the period.

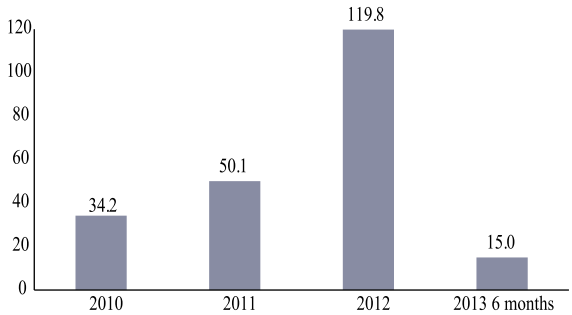
To allow further drop in interest rates given the optimum level of inflation and thus support economic growth in the non-oil sector the CBA decided to shift the refinancing rate from 5% to 4.75%, and leave other parameters of the interest rate corridor unaltered at the beginning of the year.

The CBA's monetary policy decisions factored in changes to interest rates in the banking sector. Interest rates declined over the period.

Open market operations and reserve requirements were also used to regulate growth rates of money supply and the liquidity level in the banking system. Due to application of a new charter of accounts for the banking system the list of accouts attracted to required reserves was renewed and relevant changes were made to the regulations on reserve requirements.

In the first half of 2013 AZN 750 million worth notes were issued within sterilization operations, out of which AZN 180.1 million worth notes were auctioned and placed.

Chart 38. CBA notes in circulation, AZN million



Source: CBA

Box 4. Unconventional monetary policies –recent experience and prospects

Prior to the crisis, Monetary policy was conducted in a relatively predictable and systematic way, and its transmission mechanism was reasonably well understood. The key policy tool was an interest rate. The crisis necessitated to reconsider convential approaches to the monetary policy model.

In recent years, central banks in the US, Great Britain, Japan, and Euro area pursued unconventional monetary policy to address two broad objectives: first, to restore the proper functioning of financial markets and intermediation, and second to provide further monetary support to economy at the ZLB. The two objectives are closely related. Both ultimately aim to support macroeconomic stability, and have their policy tools.

Central banks responded to the crisis by expanding dramatically their traditional role as lenders-of last-resort. This role as traditionally conceived was to resolve banks' temporary constraints on deposit and interbank funding. In the recent crisis, central banks became market makers of last resort for nonbank intermediaries, governments and in some cases for derivatives markets.

The risk of financial markets' failure was met with aggressive liquidity provision. First, liquidity provision was extended to a wider set of recipients. Second, targeted funding was provided to specific markets. Third, funding was offered at long maturities, and against considerably expanded collateral. Finally, certain tools were used to minimize risks arising from price changes in certain highly volatile markets. Examples include foreign exchange swap lines between central banks.

During the crisis, real economic activity slowed sharply, and inflation dropped, inducing central banks to cut interest rates aggressively. However, in the environment of weak financial intermediation monetary policy softening has affected economic growth of various countires differently. In the U.S. and core euro area countries, lower bond yields seem to have been passed through to lower lending rates, in turn supporting credit volumes. In the U.K. and euro area countries under market stress, instead, credit volumes as a share of GDP have been contracting despite low policy rates. .

Unconventional policy measures could continue if the economic situation deteriorates further rather than improving. Some of these measures could also be replaced by macroprudential policy tools in that structural problems of the banking system can not be solved and potential long-term growth increased through the unconventional monetary policy. Unconventional monetary policy measures are effective only in terms of preventing segmentation in financial markets and supporting aggregate demand during the peak period of the crisis. Therefore, possible risks of the unconventional monetary policy should always managed effectively.

Source:
International Monetary Fund, "Unconventional Monetary Policies – Recent Experience and Prospects", April 18, 2013.

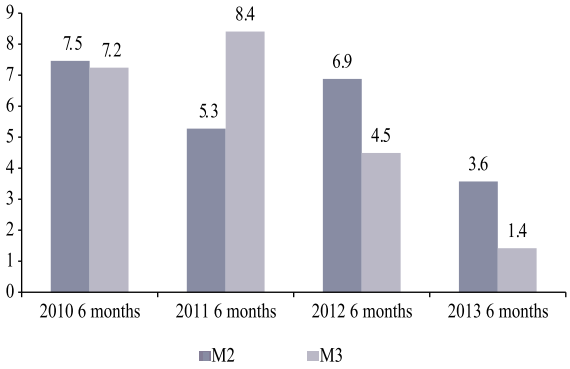
Average note yield in recent auction constituted 1.2%, which was 1.87% in the beginning of the year. Notes in circulation made up AZN 15 million, REPO operations AZN 43.1 million as of 01.07.2013.

2.3. Money supply

In the first six months of 2013 money supply kept pace with the demand of the economy, the structure of which continued to improve.

As shown in chart 38, broad money supply in manat grew by 3.6% over the period. The money multiplier of the banking system demonstrated an incremental trend (6% increase against the beginning of the year) due to cashless money extension.

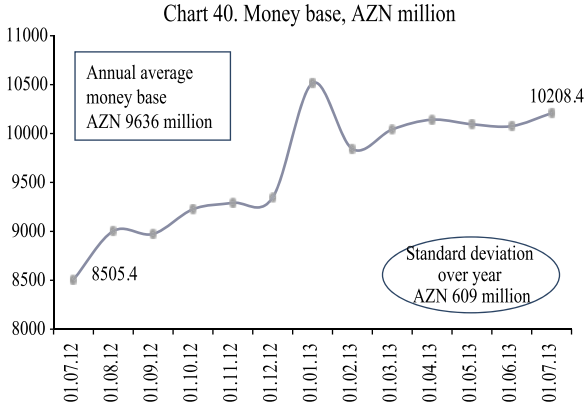
Chart 39. Change in broad money, %



Source: CBA

Money base made up AZN 10.2 billion as of the end of the period. Dynamics of money supply was not strongly volatile.

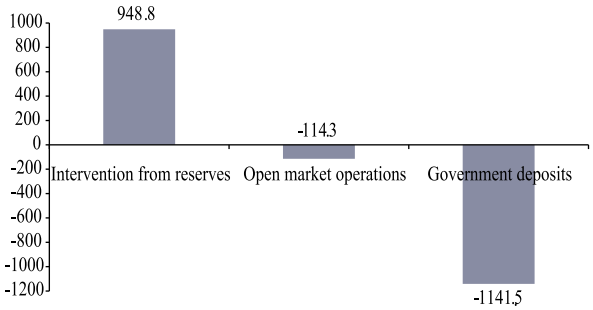
Chart 40. Money base, AZN million



Source: CBA

Decline in money base primarily sourced from seasonal factors. Thus, in December of the previous year rapid growth was observed due to budget expenditures, and total remainder of government accounts increased as of the end of June of the current year.

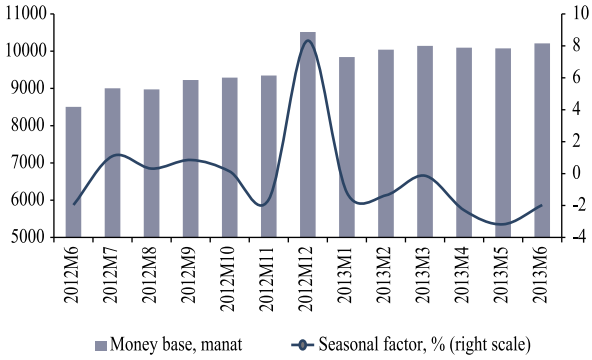
Chart 41. Change in money base, AZN million



Source: CBA

As shown in chart 41, seasonaly adjusted money base increased by 8% against the beginning of the year, and 20% against the relevant period of the previous year.

Chart 42. Impact of seasonal factors on monetary base



Source: CBA

As of 01.07.2013 broad money supply (M3) increased by 1.4% agaist the beginning of the year and 17.1% against the relevant period of the year and reached AZN 17013.1 million.

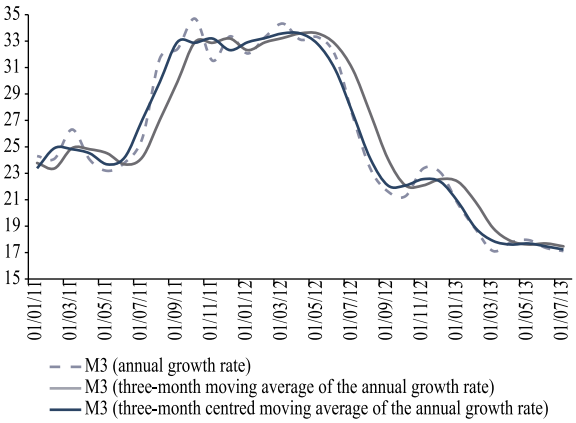
Table 3. Money aggregates, AZN million

	01.01.11	01.01.12	01.01.13	01.07.13
M0 (Cash)	5455.8	7158.2	9256.6	9219.7
M1 (Cash, demand savings and deposits)	6718.9	8824.8	11107.9	11356.4
M2 (Cash, demand and term savings and deposits, in AZN)	8297.5	10997.2	13806.4	14299.7
M3 (Cash, demand and term savings and deposits, in AZN and hard currency)	10527.5	13903.2	16775.3	17013.1

Source: CBA

Dollarization indicators continue to drop. The share of deposits in hard currency in total savings and deposits decreased by 6.1 p.p. and constituted 34.8%. The share of deposits in hard currency in M3 money supply decreased by 3.1 p.p. and made up 15.9%.

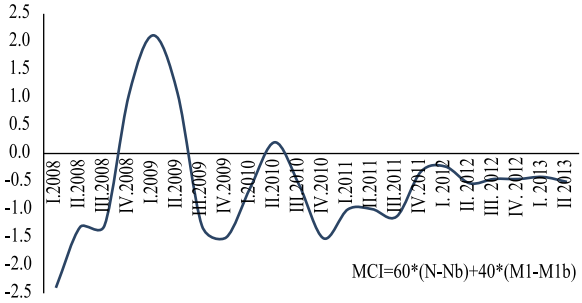
Chart 43. Dynamics of M3 money supply, %



Source: CBA

Cashless money supply grew by 3.7% over the quarter, and 15% against the relevant period of the previous year.

Chart 44. Monetary Condition Index



Source: CBA

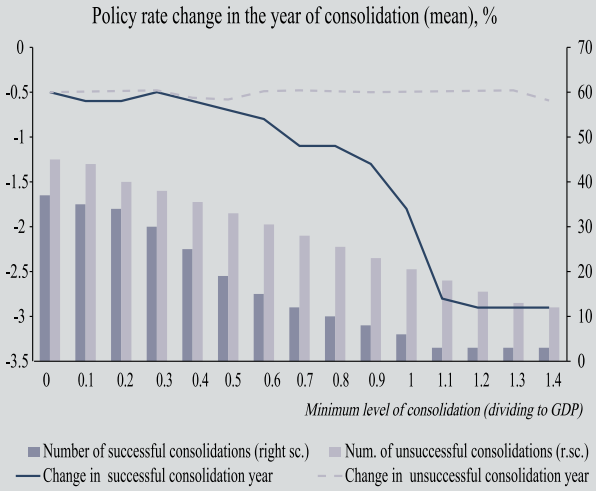
During the year slight appreciation of the NEER of manat and stable money supply had an overall easing effect on the Monetary Condition Index (MCI)[8].

[8] MCI – an indicator charactarizing average change of money supply and NEER taking their share into account.

Box 5. Impact of fiscal consolidation on monetary policy

The result of the study on the macroeconomic impacts of fiscal consolidation supported by the monetary policy suggests that central banks should soften their monetary policy if the fiscal policy is tightened since fiscal sequester manifesting itself in the form of expenditure reduction and tax increase restricts economic growth (as well as inflation). The only solution to this problem (also to eliminate social tension) is transmission of extra monetary stimulus to economy.

178 fiscal consolidation epizodes in 17 DDCs between 1978 and 2009 have been observed and grouped within the study, and "successful" and "unsuccessful" consolidation cases classified according to results. The success of fiscal consolidation is characterized by its effect on key fiscal variables (reduction of the share of public debt and budget deficit in GDP) and long-term durability of these positive changes. 45 successful and 37 unseccessful fiscal consolidation samples consistent with the terms of the study have been chosen and compared. In this case relationship with the monetary easing that started before the onset of and continued during the consolidation period has been analysed.



** X=0 status means that all fiscal consolidatons are included in the analysis irrespective of their scale. X=0.1 means that only fiscal consolidations above 0.1% of GDP are included in the analysis and stretch to the right on this logic.*

As shown in the chart, successful fiscal consolidation is supported by accomodative monetary policy since the onset of its implementation. If the consolidaton proves unseccessful monetary policy does not change substantially. Consequently, the more ambitious implemented (successful) fiscal consolidation is, the greater monetary policy softening range would be. Confidence in economic policy increases when policymakers are goal-oriented and achieve their goals in a fixed period of time.

Source:
Peterson Institute for International Economics, April 2012; King, S (2013) "Era of independent central banks is over", Financial Times, January 10.

Charts and tables used

Charts

Tables

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