THE CENTRAL BANK OF
THE REPUBLIC OF AZERBAIJAN

№1(13)
2013

MONETARY POLICY REVIEW

Q1

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OF THE REPUBLIC OF AZERBAIJAN

The key goal of the review is to address financial stability analyses and expectations of the Central Bank of the Republic of Azerbaijan (CBA). Another goal of the present review is to regularly deliver possible impact of the financial stability decisions taken by the CBA on the banking system 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
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 CBA implemented its policy in Q1, 2013 in the environment of fragile global economy and financial system, strong macroeconomic sustainability and diversification of the economy in the country.

Azerbaijan could successfully balance economic growth and macroeconomical stability targets and the economy continued to grow in Q1 of the current year as well. The foreign economic position of the country was favorable, growth dynamics of the non-oil sector further strengthened. Government's active economic support for socio-economic growth contributed to economic growth significantly. Strategic foreign exchange reserves of the country kept growing and considerably exceeded the international norm on sufficiency.

In Q1, 2013 the CBA targeted a low single-digit level of inflation, a stable exchange rate of manat and financial stability, and achieved those targets. Thus, average annual inflation made up 1.2% which contributed to real income growth of the population. Inflation in Azerbaijan 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. The CBA maintained stability of manat through sterilization of excessive currency supply in the foreign exchange market over the reporting period. 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

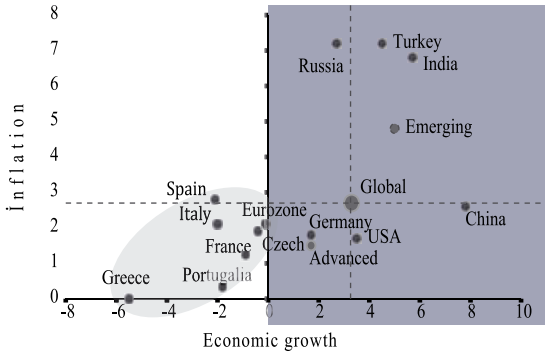
Global economic revival trends continue at fragile and uneven rates. A relatively higher growth rate compared to the previous quarter stemmed from slightly decreasing recession trends in the Euro area. Global unemployment, particularly among the young remains a severe economic problem. At this stage a decrease has been observed in aggregate global demand and prices of energy carriers.

High global economic risks are particularly explained by a gradual decrease in stimulative policy initiatives for economic recovery. Strong consolidation trends minimize the potential of fiscal impulses for possible growth in a number of countries. Central banks' swollen balance sheets raise a question whether it is expedient to continue monetary support for the economy. Key risks in a short run stem from the unsolved domestic problems of the Euro area. Risks for a middle run are poor institutional reforms and continuing public finance crisis. While some fiscal and monetary policy incentives to revive poor aggregate demand existed in developing countries (DGCs), advanced economies have very limited opportunities.

Acceleration of capital flows are accompanied by economic overheating in DGCs. At the same time, price hikes in real estate markets of those countries created risks on financial markets. Thus DGSs prefer lower financial market risks widely using macroprudential tools.

As shown in Chart 1, in terms of domestic rebalancing, the most critical economic performance is observed in the Euro area.While recession accompanied by low inflation in the first quarter, the policy measures taken have not led to economic growth.

Chart 1. Global economic growth and inflation (quarterly), %

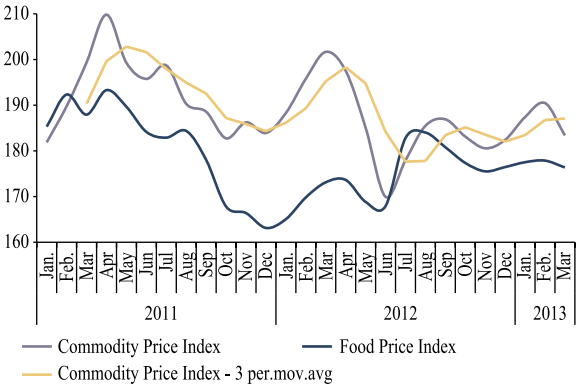


Source: Barclays, IMF, Eurostat

Since the start of the year the industry growth rate in DDCs has accelerated due to the rise in reserves, while in DGCs the growth rate has slowed down due to decrease in foreign demand. Revival of consumer demand varies across the world. Thus, consumer demand decreased in the U.S. as a result of growing income tax rates and dropping fiscal expenditures, but increased in Germany, Japan and Canada.

Observations suggest that consistency amongst economic growth-unemployment-inflation processes is gradually changing. Thus, recession is followed by inflation in most of the Euro area countries. This in fact verifies that the Philips curve gradually loses its empiric bases. The main reason is a decreasing impact of unemployment on salaries and increasing macroeconomic disbalances against the previous periods.

Chart 2. World commodity and food price indices



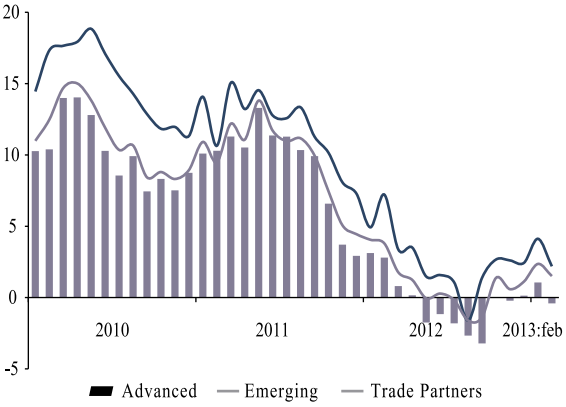
Source: IMF, Eurostat

The growth rate of global trade remains weak. In January-February, 2013 trade volume increased by 1% in the U.S. and the Euro area against the previous year, while it dropped by 10% in Japan. Given recent trends, the WTO forecasts the growth rate of global trade to be 3.3% increasing by 1.3 p.p. against the previous year. However, a 30% drop in global current account imbalances can be taken as a positive trend.

Prices in world commodity markets demonstrated a decreasing trend amid weak global trade. 9.1% y.o.y decrease was observed in commodity price index, while the figure increased by 0.5% against the beginning of the year. Low aggregate demand and high macroeconomic risks contributed to a decrease in price indices. The price of gold, arising great interest as a continuous investment tool from the outset of the global crisis, dropped by 12% over the quarter. While the price of an ounce of gold was USD 1685 as of the previous year-end, it dropped and made up USD 1488 as of the end-quarter.

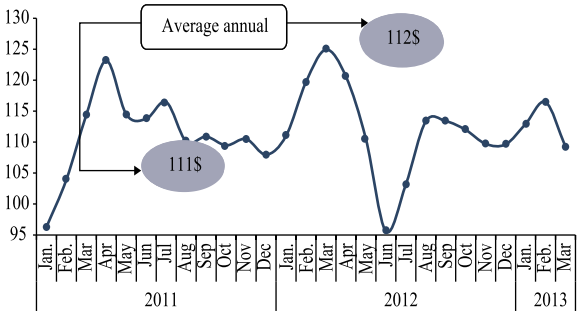
Energy carrier prices are also decreasing. Daily oil demand dropped all over the world in parallel with deteriorating global growth indicators, and Brent Oil price (USD 113) decreased by 13% against the relevant period of the previous year. Since it is impossible to fully finance expenditures at a low level of prices in some OPEC countries, price stability is expected to be ensured through decreasing the crude oil extraction. In 2013 demand for oil grew by 1.09 million barrel per day (m.b/d), while supply remained stable. Decrease in supply by OPEC members was compensated by an increase in extraction in the US, Canada and Russia. World oil prices are expected to drop in 2013 owing to high extraction in non-OPEC countries and low demand in industrialized countries.

Chart 3. Global export, y.o.y., %



Source: IMF, Eurostat

Chart 4. Brent oil price, in USD



Source: IMF

Box 1. Response of global energy landscape to high oil prices and nature of substitution

The landscape of the global energy map is changing rapidly. The International Energy Agency recently announced that thanks to increased production of natural gas and shale oil1, the United States will become world's largest oil producer surpassing Saudi Arabia by the mid-2020s. These developments are to a large extent a natural market reaction to the quadrupling of international oil prices in 2000 - 2012, which made profitable extraction technologies. In the United States, new techniques such as horizontal drilling and hydraulic fracturing, have permitted the wide-spread exploitation of until-now uneconomic shale oil; shale natural gas; and so-called - tight-oil deposits. As a result of these technologies, global proven reserves have risen by 33 percent since 2000, with 70 percent of the increase coming from increased extraction, 30% from new discoveries.

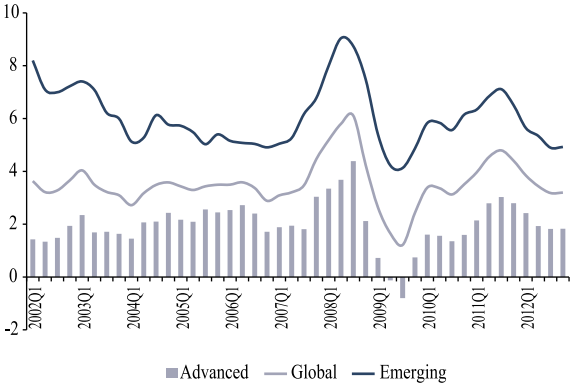
The demand-side has also reacted, with a rapid increase in the energy efficiency of motor vehicle fleets both through the introduction of new more energy efficient technologies such as hybrid cars and reduced demand for energy inefficient vehicles. Since 2000, the average automobile mileage of new cars sold in the United States has increased by 18 percent and that of the existing fleet by 7.7 percent. Similar trends are observable throughout the high-income world. As a result, OECD demand for oil has declined a total of 7.6 percent since 2005. Over the long run the IEA now expects OECD total liquids demand (crude and refined hydrocarbons) demand to fall a further 11 to 21 percent depending on policies. Demand outside of the OECD (mainly DGCs) has been more robust, with total liquids consumption rising 3.5 percent annually since 2005, partly reflecting rising vehicle use. More than half of global oil output is consumed by the transportation industry, which is the fastest growing component of oil demand. These trends are expected to continue at an annual average rate of 0.6 and 0.7 percent between 2011 and 2035. Despite the equilibrating trends in supply and demand, world prices remain in excess of $100 per barrel, and are expected to remain above $100 over the medium-to-long term, mainly because of the elevated extraction cost of newly discovered and new-technology oil. Yet, downside and upside risks exist. The downside risks include the process of energy substitution, use of battery technology in transportation and expanded use of natural gas. The upside risks include increased sensitivity to environmental issues and limited use of new technologies. Yet, the shift from crude oil to other types of energy, notably natural gas, alternative and renewable energy has been very slow. Such slow response reflects the different physical properties of these types of energy, namely density (the amount of energy stored in a unit of mass) and scalability (how easily the energy conversion process can be scaled up). The above factors are mainly applicable to the transportation system. Estimations suggest that the energy densities of the fuels relevant to the transportation industry are 37 MJ/liter for crude oil, 0.036 MJ/liter for natural gas (in its natural state) and 24 MJ/liter for Liquefied Natural Gas (LNG). For comparison note that one MJ of energy can light one 100-Watt bulb for about 3 hours. Thus, considerably higher energy capacity of one MJ of oil compared to other energy carriers gives rise to wider use of oil. At the same time it means longer distance with smaller recourses. In terms of other energy carriers vehicles need high volume fuel tanks which is inefficient economically. In total, reduced use of substitutable energy sources in the transportation system and difficulties in fuel supply of vehicles are key obstacles to substitute oil by other energy carriers.

Source:
"Global Economic Prospects: assuring growth over the medium term", World Bank, volume 6, January 2013.

[1] Shale oil is a mixture of oil and natural gas contracted in rock type formations in deeper layers of a sea or an ocean. Thanks to recent technologies, these rocks can be fracured and inner gas extracted. Shale oil makes up 14% of total oil and gas extraction of the USA and is expected to reach 46% in 2035.

Low global aggregate demand and energy carrier prices were accompanied by a slowdown of inflation rates in most countries.

Chart 5. Global inflation, %

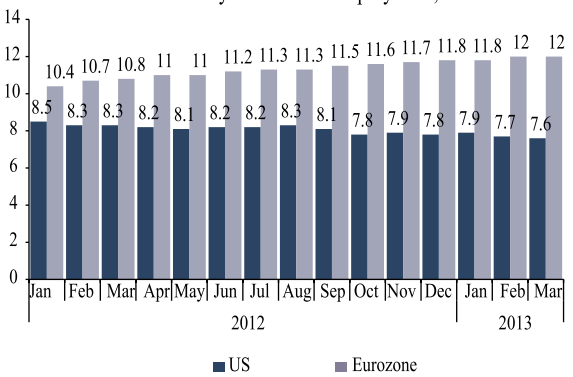


Source: IMF

Unemployment remains a serious problem in the global economy. Unemployment is particularly on a high level among the young. According to recent assesments of the ILO, the number of unemployed young people aged from 15 to 24 increased by 3.8 million from 2007 and made up 74.2 million.

Unemployment rate has been increasing in the Euro area over the last 7 quarters. In Germany unemployment rate has been stable (5.4%) over the recent 7 months, while it has been above 25% in Spain and Greece. Only in 5 countries – Austria, Germany, Luxembourg, and Malta unemployment rate dropped to the pre-crisis level. Over 40% of the existing unemployed is long-term unemployed in 19 countries. However, unemployment is continually dropping in the US.

Chart 6. Dynamics of unemployment, %



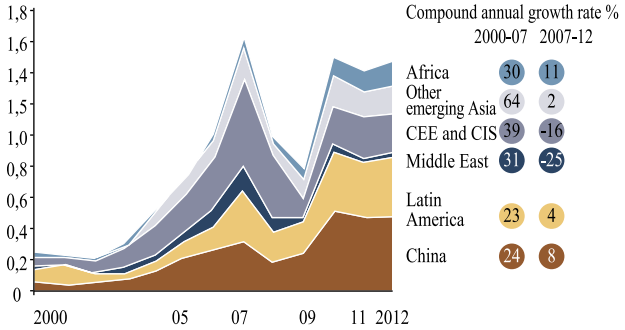
Source: IMF

High unemployment – the sign of recession – further elevates the risk of economic downturn as an aggregate demand reducing factor. When fiscal consolidation is maintained, countries' employment support opportunities diminish.

Over the reporting period investment activity remained weak in leading countries. From the outset of global economic crisis the volume of capital flows dropped by up to 60% primarily thanks to DDCs. Foreign direct investments make up roughly 40% of capital flows. Ongoing capital flows in DGCs over the quarter considerably heighten the risk of economic overheating.

A number of countries accelerated institutional reforms over the quarter in order to improve investment environment. China, India and Algeria further simplified provisions for foreign investment attraction. As shown in the chart below, capital flows in DGCs are closer to the pre-crisis level.

Chart 7. Capital flows in DGCs, in USD trillion



Source: McKinsey Global Institute

High capital flows into DGCs created bubbles in the real estate markets. The size of the global real estate market is likely to rise 1.8 times as much and reach USD 49 trillion 36% of growth will relate to China, 16% to the USA, 25% to the Middle East and Asia (Source: PwC).

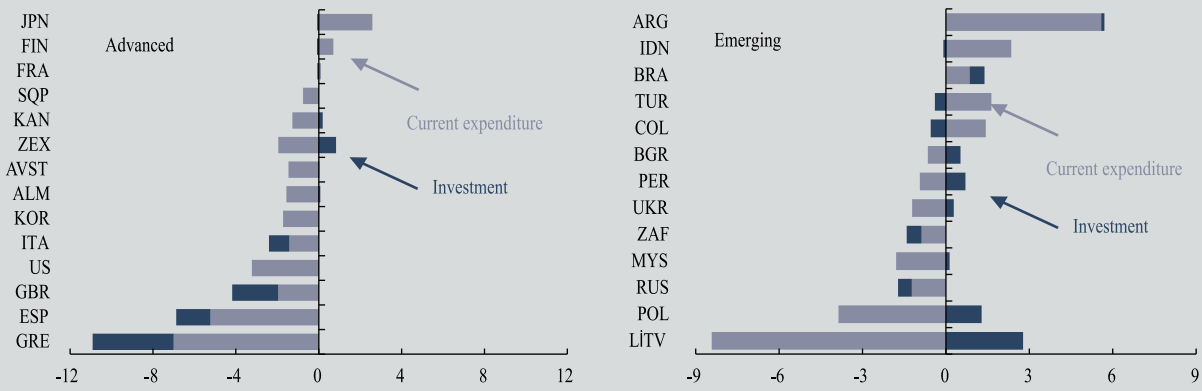
Box 2. Impacts of Fiscal Consolidation: ever positive?

Fiscal consolidation measures taken by advanced economies to address the severe public financial crisis have had positive results in terms of budget deficit reduction. The budget deficit reduced through fiscal consolidation programs (Greece, Island, Ireland and Portugal) supported by the EU and IMF since 2009 makes up 11% of GDP.

(>1.5% of GDP) has a negative impact on social inequality when allocating income. Particularly in case of cost-based fiscal regulation, the Gini ratio on countries displays an incremental trend.

The study in *the Harvard University suggests that* fiscal regulation through *cost reduction* has a much more positive impact on reduction of

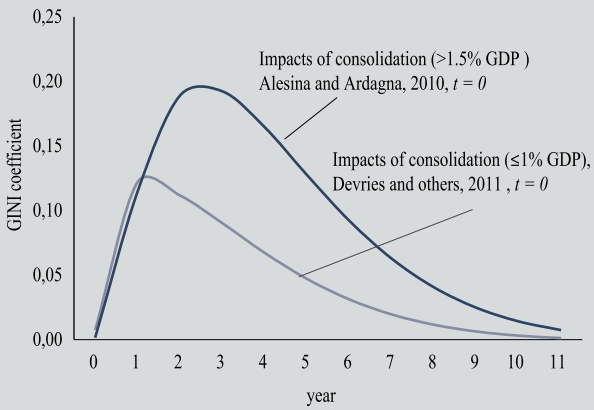
Changes in current and investment expenditures (Share in GDP, %)



public debt and budget deficit, and on economic growth rather than income increase. After cost-based fiscal expansion, a higher growth rate has been achieved compared to the past two years. At the same time, the study shows that unlike capital expenditures, reduction in current expenses has a low negative impact on economic growth, in some cases no impact at all.

Social impacts of fiscal consolidation measures and their impulses for *economic growth* are broadly debated. Large scale fiscal consolidation

Impacts of fiscal consolidation measures



Source:

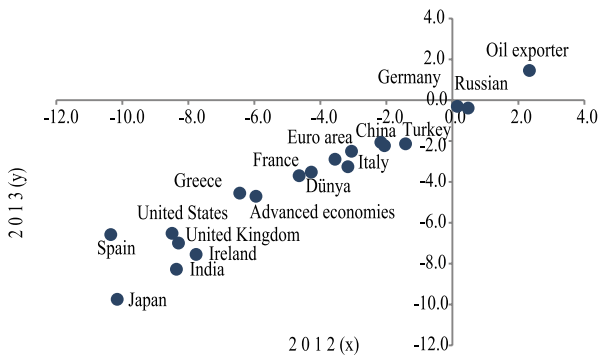
1. Fiscal Monitor, Taking Stock a Progress Report on Fiscal Adjustment, 2012, IMF.

2. The design of fiscal adjustments, Harvard and IGIER Goldman Sachs, 2012.

Risks of losses from fiscal compromise have decreased to a certain extent from the beginning of the quarter and tax burden of high income population have been increased for the first time since 1993 with enactment of the American Taxpayer Relief Act of 2012. Fiscal cliff estimated to be USD 607 billion is likely to be settled through increasing tax rates. Thus, over the next 10 years the budget is likely to gain additional USD 620 billion The budget deficit is to be decreased by USD 737 billion according to the signed law.

In total, albeit dwelling problems in public finance, fiscal consolidation measures in some countries have yielded results. Fiscal deficit (seasonally adjusted) on DDCs decreased by 0.75 p.p. in the previous year. Fiscal consolidation is mainly conducted through reduction of articles of expenditure. Analysis of existing trends suggest that fiscal balance will improve relatively in leading economies in the current year.

Chart 8. Fiscal balance, in % of GDP



Source: according to IMF, Fiscal Monitor

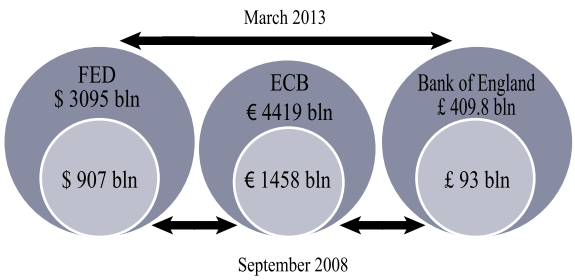
However, as the IMF's recent report suggests, fiscal correction have caused "tiredness" in the Euro area.

The monetary policy remains the only policy tool to revive private demand. However, accommodative monetary policy leads to swollen central bank balances eventually causing the financial stability risk. The ways to address these risks emerging from increased monetary support since 2008 have not been identified.

The US Federal Reserve (Fed) continues to buy USD 85 billion worth assets monthly. Some downswings were observed in dynamics of the money base due to repayment of loans from the European Central Bank. In Japan introduction of "abenomics" – a new economic policy concept – is of interest. Key points of the economic policy cover 2% annual inflation target, prevention of sharp appreciation of yen (an indirect cheap exchange rate policy), negative interest rates, dramatically accommodative monetary policy and extension of public investments.

In Q1, 2013 18 countries made changes to their monetary policies, out of which 14 countries – 1 DDC (Israel) and 13 DGCs eased, and 4 countries – Denmark, Egypt, Uruguay and Serbia tightened monetary policies. The Bank of Japan implemented money expansion amounting to 5% of GDP over the past 1 year.

Chart 9. Central Banks' balances

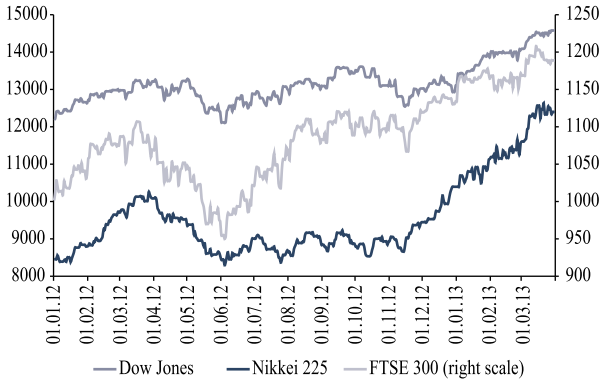


Source: according to IMF, Thomson Reuters

As shown in the chart below, certain positive results of fiscal consolidation measures have a favourable impact on financial markets.

Amid the complicated situation, international organizations recommend to strengthen institutional reforms and increase their efficiency, improve macroprudential policy tools and support their application in order to fuel global growth.

Chart 10. Financial indices

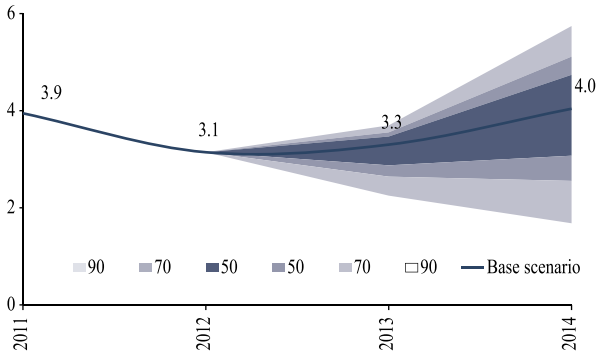


Source: Bloomberg

Conflicting global economic processes trigger some uncertainties in economic growth prospects for 2013. The IMF made mainly pessimistic revisions to growth forecasts for the current year in its Global Economic Outlook.

High stagnation trends in the Euro area, fiscal problems in the US and Japan, unpredicted rise in inflation, unconventional monetary policy and limited de-facto independence of central banks are considered to be the key risks to global growth.

Chart 11. Global growth scenarios, %



Source: IMF

On the backdrop of global economic processes major trade partners of Azerbaijan did not face crucial economic crisis trends which positively affected the foreign economic stance of our country.

Table 1. Recent global forecasts of the IMF, y.o.y. %

	2012	2013(p)	2014(p)
		Economic growth	
World	3.2	3.3 ↓	4.0 ↓
DDCs	1.2	1.2 ↓	2.2 ↓
USA	2.2	2.0 ↓	3.0 ↓
Euro Area	-0.6	-0.3 ↓	1.1 ↓
DGCs	5.1	5.3 ↓	5.7 ↓
China	7.8	8.0 ↓	8.2 ↓
CIS	3.4	3.4 ↓	4.0 ↓
		Export	
DDCs	1.9	2.8	4.6
DGCs	3.7	4.8 ↓	6.5 ↓
		Consumer prices	
DDCs	2.0	1.7	2.0
DGCs	5.9	5.9 ↓	5.6

Source: IMF

1.2. Macroeconomic equilibrium in Azerbaijan

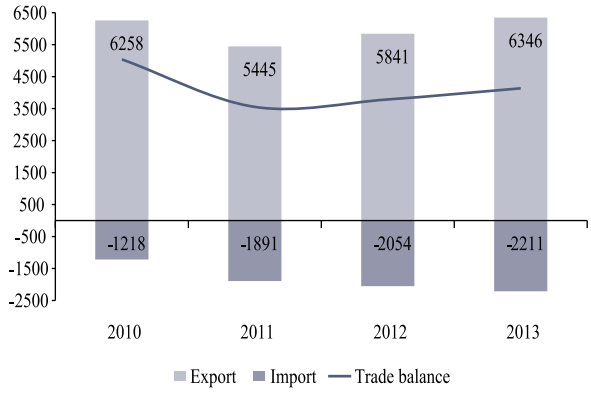
In the environment of a favorable foreign position and internal demand in Q1, 2013 the country economy continued to grow. The state support for the economic activity, ongoing structural and institutional reforms also had an upward impact on economic growth.

1.2.1. External sector

In the first quarter the country's foreign position was favorable as in recent years.

According to the State Customs Committee (SCC), in Q1, 2013 the foreign trade turnover made USD 8.6 billion, of which USD 6.3 billion falls to the share of export and USD 2.2 billion to import.

Chart 12. Foreign trade in January-March, USD million

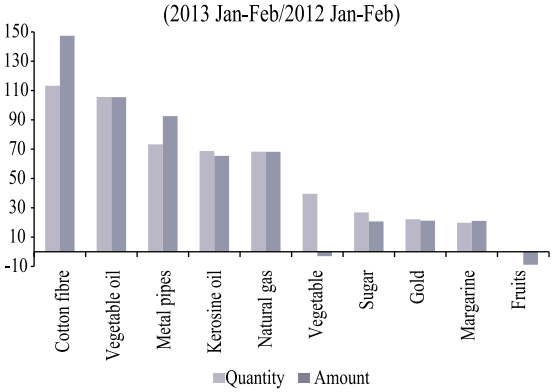


Source: SCC

In January-March y.o.y. increase in export was 8.7%, while in import it was 7.6%. Surplus of foreign trade balance constituted USD 4.1 billion and export exceeded import by 2.9 times. Nearly half of export was channeled to EU countries, 6% to the CIS and the remainder to other countries. 28% of import relates to the EU, 25% to the CIS and the remainder to other countries.

Besides oil and oil products, export of cotton, vegetable oils, metal pipes, fresh fruits and others followed an incremental path in export. As shown in the chart, while the quantity of exported goods decreased in certain sectors, their amount gained; an inverse process was observed in others.

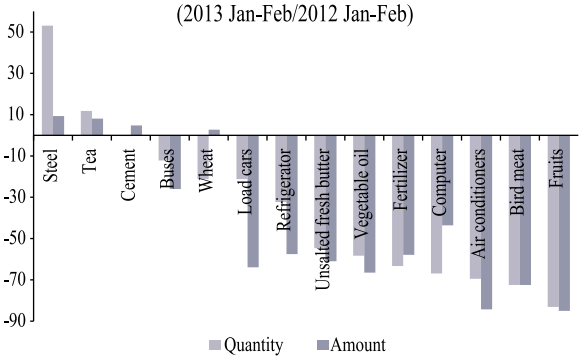
Chart 13. Quantity and amount changes of primary export goods, % (2013 Jan-Feb/2012 Jan-Feb)



Source: SSC

Commodities with incremental import include metal, machines and devices, tea, cement, wheat flour, etc. The share of food products in the structure of import was 11% which fell to 9% 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-quarter. Even self-sufficiency level on some products (water-melon and vegetable crops, fruits and berries) is expected to be under 100%, as a result of which the country becomes a net exporter.[2]

Chart 14. Quantity and amount changes of primary import goods, % (2013 Jan-Feb/2012 Jan-Feb)



Source: SSC

[2] From Mr. President Ilham Aliyev's speech on finals of the 4th year of implementation of State Program on Socio-economic Development of Regions of the Republic of Azerbaijan for 2009-2013.

According to the SSC, export prices surge more rapidly than import prices.

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

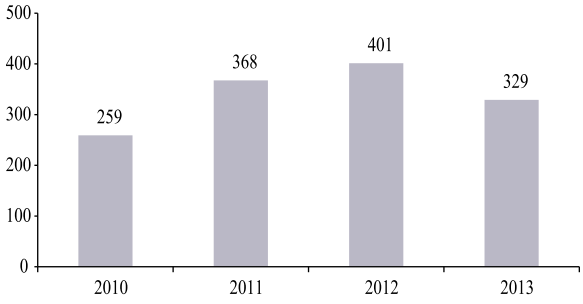
	Import commodities	Export commodities
Overall index	101.5	96.2
Processing phases		
Investment commodities	100.8	99.3
Intermediate commodities	101.7	90.4
Energy commodities	98.6	89.3
Other interim commodities	101.7	97.5
Consumer goods	101.4	107.2
Non-durables	101.8	107.0
Durables	100.9	106.8
Commodities of double use	102.2	117.0
Other commodities	101.6	95.8

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 is the leader in the CIS in terms of the given indicator, and takes one of the most leading positions among the DGCs. The Fund predicts huge surplus to continue in a medium-run.

Besides export, dynamics of remittances and capital flows from abroad also had an upward effect on FX flows into the country. According to the most preliminary data, the size of remittances inflow was USD 329 million over the period.

Chart 15. Remittances inflow (January-March), USD million

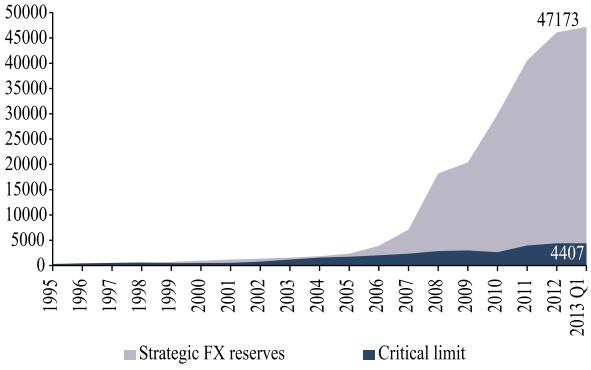


Source: CBA

According to the SSC, in January-March foreign investments to the country economy rose more than 60% and constituted USD 1.2 billion.

As shown in the chart, in current Q1 strategic FX reserves of the country rose by USD 1.1 billion or 2.3% and constituted USD 47.1 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 16. Sufficiency of strategic FX reserves, USD million



Source: CBA

CBA's FX reserves increased by 5.5% and made USD 12.3 billion, sufficient for one-year import of goods and services.

Currently, the strategic FX reserves to GDP ratio approximates 70%. Azerbaijan is among top 15 countries in terms of this indicator. Overall, a high growth rate of strategic FX

Chart 17. Ratio of strategic FX reserves to GDP, %

Source: CBA

reserves is the factor that reduces vulnerability of the country economy to possible foreign shocks or shapes a strong macroeconomic buffer, as a result of which, the country's Net International Investment Position is favorable.

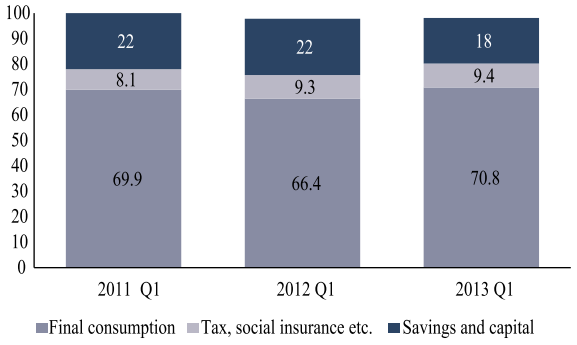
1.2.2. Aggregate demand

In Q1, 2013 all components of the aggregate demand, including final consumption expenditures, investments and public expenditures positively contributed to the economic growth.

Final consumption expenditures. In Q1, 2013 money income of the population grew by 5.9% in nominal terms, and by 5.4% in real terms against the relevant period of the previous year. Per capita nominal money income of the population increased by 4.5% and real money income by 3%.

In current Q1 total consumer activity was high owing to increase in average monthly salary, the

Chart 18. Structure of money income of the population, %



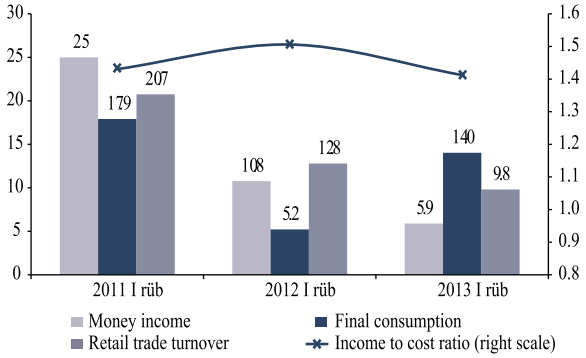
Source: SSC

number of employed population 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 18). Y.o.y increase in consumption expenditures made up 14% (I quarter of 2012 - 5.2%).

Y.o.y increase in net income of the population was 5.5% and made up AZN 7 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 9.8% (Chart 19).

Chart 19. Dynamics of incomes and expenditures of the population, %



Source: SSC

In January-March of 2013 retail trade turnover rose by 2.4% on food products (Q1, 2012 – 8.4%), and on non-food products by 21% (Q1, 2012 – 20%). Off-free services to the population grew by 8%.

According to the RSM by the CBA, commodity stock diminished in trade and industry in Q1, 2013 followed by new orders.

In January-March 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 7.8% in nominal terms, 6.3% in real terms against the relevant period of the previous year and constituted AZN 397.1. Salaries rose by 13.1% in the oil sector, 7.6% in

the non-oil sector, 3.9% in the public sector and 11.1% in the private sector.

High credit activity of the population had an incremental impact on demand. Thus, y.o.y. increase in the size of consumer loans to the population made up 6% over Q1.

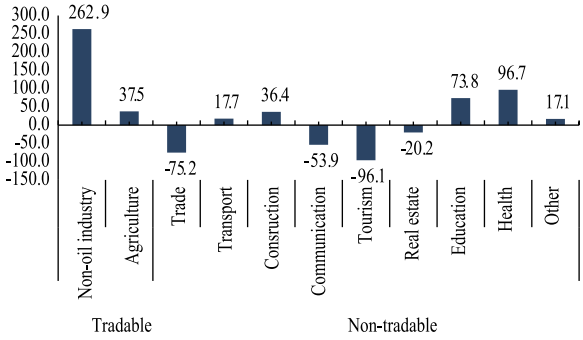
Government expenditures. Government's consumption expenditures mainly include expenses on goods and services from the state budget. In Q1, 51.9% of budget expenditures was channeled to economic growth, 11.9% to social costs, and 6.4% to education and healthcare.

Investment expenditures. In Q1, 2013 total investments to the economy increased 36.1% and constituted AZN 2.9 billion, equal to 22.5% of GDP. It included 34% increase in investments to the non-oil sector. The share of non-oil investment in total investment was 62.8%. Non-oil investments on agriculture, construction, transportation, social services and education increased particularly rapidly. In total, investments to trade increased 2.5 times as much, to non-trade by 12.5%.

72.6% of the funds channeled to Tier I capital stemmed from domestic sources, 27.1% from foreign sources. The share of budget funds and bank loans in financing investments increased.

As shown in the chart, 43.2% of investments sourced from businesses and organizations, 46.2% from budget, and 6.1% from bank loans.

Chart 20. Investments by sectors of economy, %



Source: SSC

1.2.3. Aggregate supply

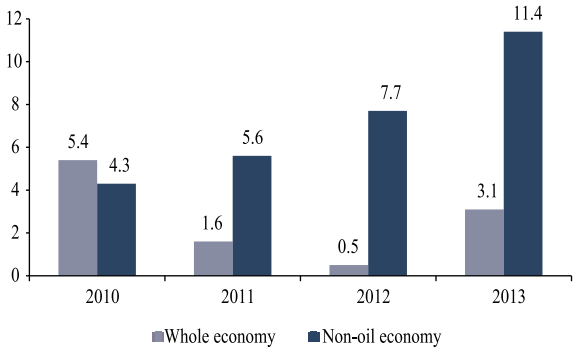
In current Q1 GDP rose 3.1% in real terms and nominally constituted AZN 13 billion. Over the reporting period the oil-and-gas sector declined by 4%, while the non-oil sector grew by 11.4%. The two third of the value added falls to the share of production, and one third – to services.

Economic growth. GDP growth was driven by the activity in the non-oil sector. Thus, half of GDP fell to the share of the non-oil sector that made 4.6 p.p. upward contribution to total growth.

As shown in the chart, in January-March 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 11.4% annual growth is 45% or 5 p.p. The growth in the non-oil industry was mainly due to food industry, machinery,

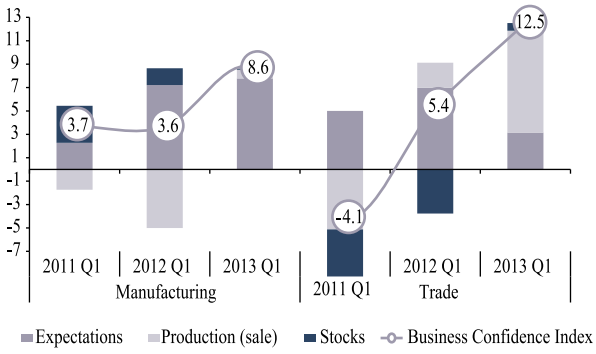
Chart 21. Financial sources of investments, %

Chart 22. Economic growth (January-March), %



Source: SSC

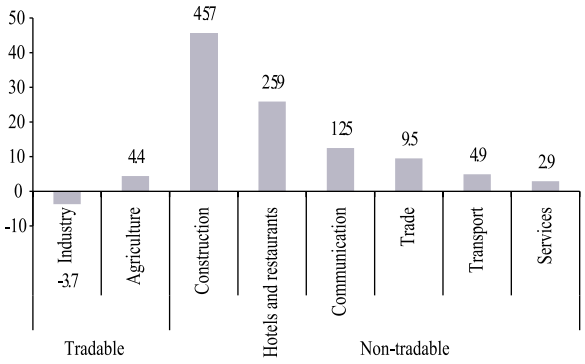
Chart 24. Business Confidence Index, %



Source: CBA estimations

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.

Chart 23. Non-oil economic growth, %



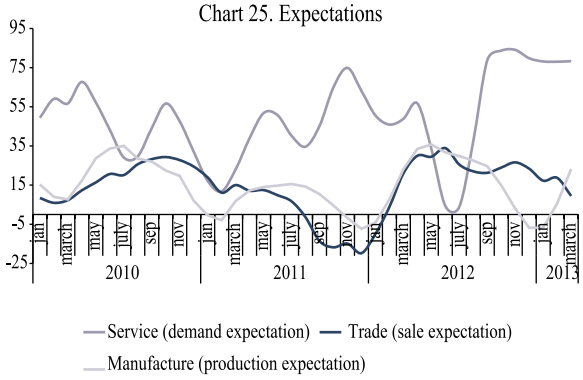
Source: CBA

Crude oil and natural gas production dropped by 5%, 267 kg gold and 207 kg silver were extracted during the reporting period. In total, excluding the oil industry, the trade sector grew by 4%. The non-tradable sector increased by 13.3%.

Economic growth expectations. According to the Real Sector Monitoring (RSM) conducted by the CBA, the Business Confidence Index[3] (BCI) improved over Q1, 2013 due to high industrial production and trade sales. At the same time, the monitoring also displays optimistic economic activity expectations.

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

Chart 25. Expectations



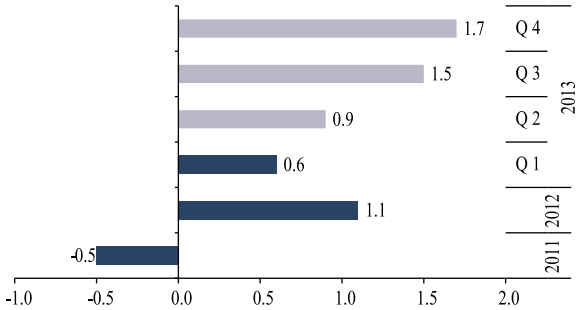
Source: CBA
Note: Three-months moving average was used to smooth out fluctuations, as monitoring findings are likely to be exposed to seasonal adjustments.

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

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

the Asian Development Bank respectively forecast 4.1% and 3.1% economic growth in Azerbaijan in 2013 in their recent economic outlooks.

Chart 26. Output gap, %



Source: CBA
Note: Light colour shows forecasts

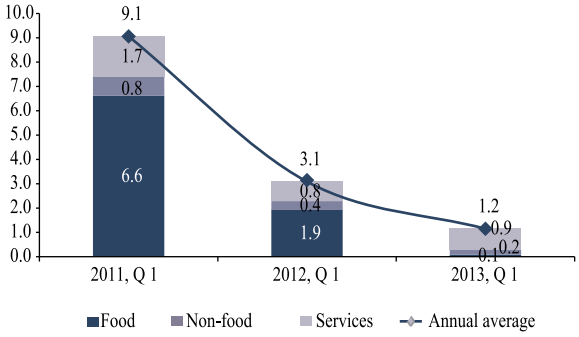
According to estimations by the CBA, as a result of high internal demand the output gap will continue to rise above +0.6% level of Q1 and be positively zoned in 2013.

1.2.4. Inflation processes

In Q1, 2013 prices remained stable and inflation was maintained within the target set by the CBA.

1.2.4.1. Consumer Price Index (CPI). In Q1, 2013 average annual inflation was 1.2%, the lowest in recent years. Prices rose by 2.3% compared to the beginning of the year, 1.5% against the relevant period of the previous year.

Chart 27. Annual average CPI, %

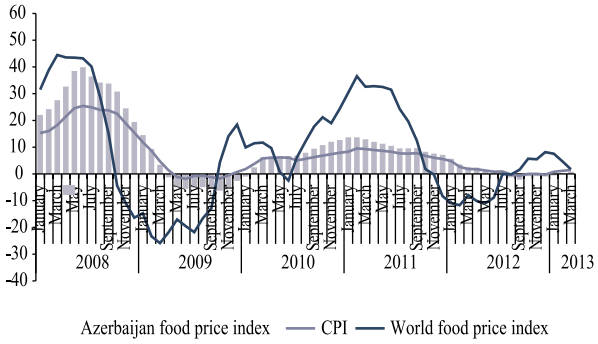


Source: CBA estimations on the basis of SSC data

Relatively higher price increase in annual terms in March was observed in services. Thus, food prices rose by 0.9%, non-food prices by 0.4% 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.

Estimations suggest that 0.1 p.p. of 1.2% average annual inflation relates to rise in food products, 0.2 p.p. in non-food products and 0.9 p.p. in services. So, the share of food prices in total prices was low enough against the relevant periods of the previous two years. Declining trend of global food prices has a potential impact on dynamics of domestic food prices.

Chart 28. Azerbaijan and world food CPI (year on year, %)



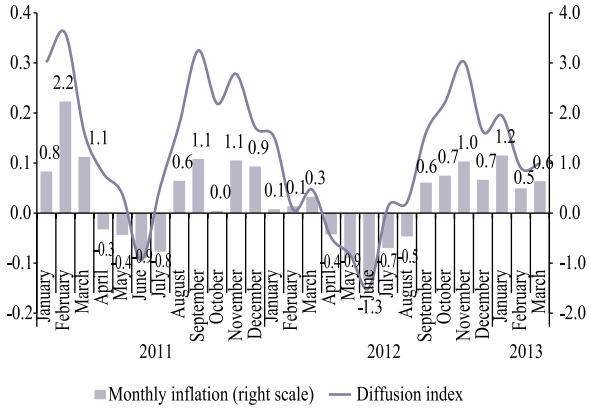
Source: CBA estimations on the basis of SSC and IMF data

Average annual core inflation, adjusted from swings in prices for commodities regulated by the government and seasonal factors was 1.6%, while it was 0.3% compared to the beginning of the year. Thus, in Q1, 2013 transportation and postal tariff indices increased by 3.7% on average annual. Communication tariff indices increased by 3.9%, cargo transportation tariff indices by 5%.

As shown in the chart below, the *diffusion index*[4] that reflect the scale of changes in price swings was positively zoned in Q1, 2013. Albeit high number of products in the consumption basket with price upswings in the past 12 months, price rise of the majority of these products was on a single digit level.

[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.

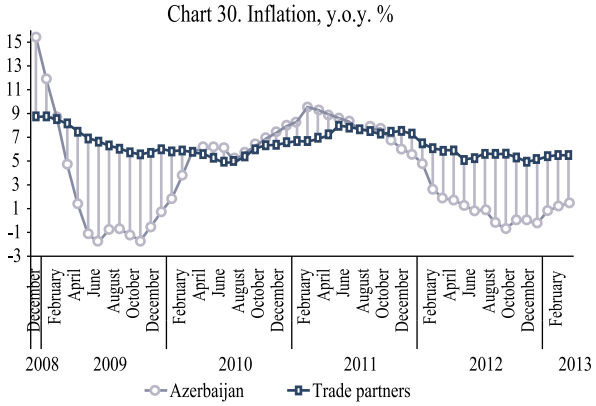
Chart 29. Diffusion index



Source: CBA estimations on the basis of SSC data

In Q1, 2013 inflation in trade partner DDCs was 1.6%, in DGCs 7.7%, and in oil-exporting countries 10.1%. In total, average inflation in trade partners was 5.5%, which exceeds the inflation in Azerbaijan by 5 p.p. Results of recent 5 years suggest that the rate of domestic price rise was in most cases considerably lower than in trade partners (Chart 30).

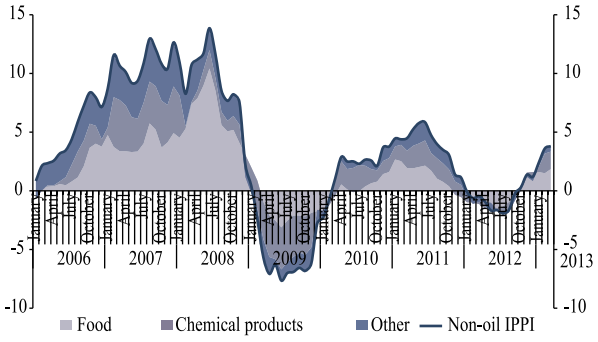
Chart 30. Inflation, y.o.y. %



Source: SSC, CBA estimations

1.2.4.2. Industrial Producer Price Index (IPPI). In Q1, 2013 annual average IPPI declined by 6.6% due to 9% price downswing in mining industry. Prices of non-oil industrial products grew by 3.3% over the quarter due primarily to price upswings of 9.9% in processing chemistry, 9.1% in metallurgy, and 12.1% in final metal production. However, prices decreased by 1.6% on electrical equipment, 9.6% on paper and cardboard, and 7.2% on textile industry.

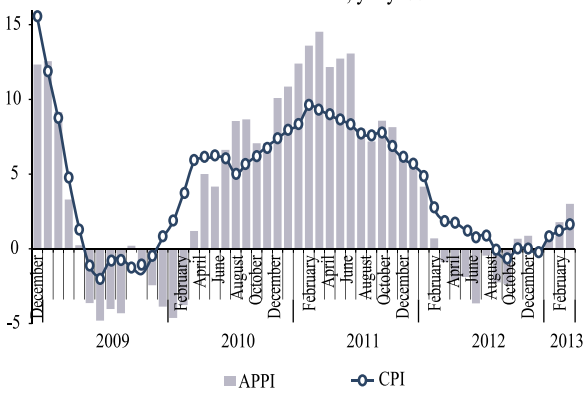
Chart 31. Non-oil PPI, y.o.y. %



Source: SSC, CBA calculations

1.2.4.3. Agricultural Producer Price Index (APPI). In Q1, 2013 APPI increased on average annual 1.9%. Increase on price dynamics was due to rise on annual plants (1.3%) and livestock products (4%). 6.4% price downswing was observed in perennials.

Chart 32. Price indices, y.o.y. %



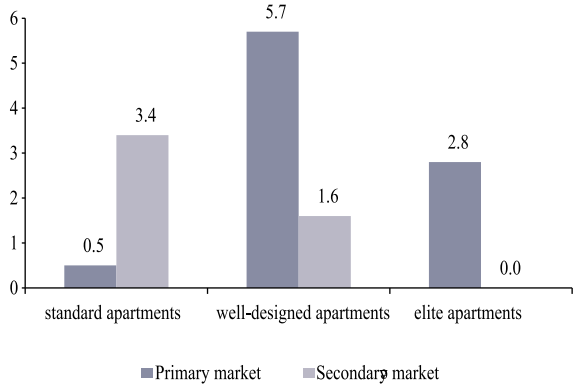
Source: SSC

As shown in the chart, while APPI is more volatile than CPI, they display the same change trajectory. In Q1, 2013 prices increased on both indices, and change in APPI exceeded total inflation 1.5 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 Q1, 2013 prices in the housing market increased by 2.5%. Secondary and primary markets respectively grew by 2.5% and 2%. Whereas prices for elite apartments in

the secondary market remained stable, prices rose on other types of apartments. According to the "MBA LTD" Appraisal and Consulting Company, the rent fee in residential and commercial real estate rose by 12.1% and 2.2% respectively.

Chart 33. Price changes in real estate market, %

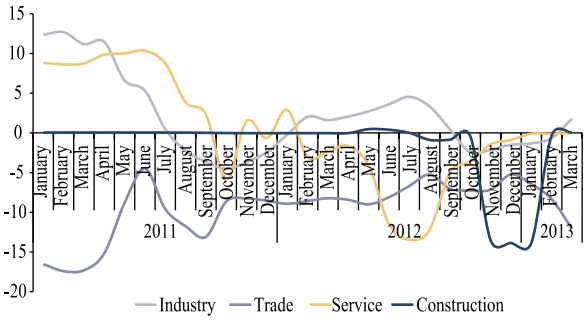


Source: SSC

Ongoing mortgage lending was a major influential factor on the activity in the real estate market, particularly the secondary market over the period. In March, 2013 banks issued AZN 15.2 million worth mortgage loans.

1.2.4.5. Inflation expectations. Regular RSM by the CBA suggests no considerable increase in price expectations in the economy. In Q1, 2013 neutral price expectations were observed in industry, construction and service sectors. Trading enterprises expect prices to decline in next 3 months.

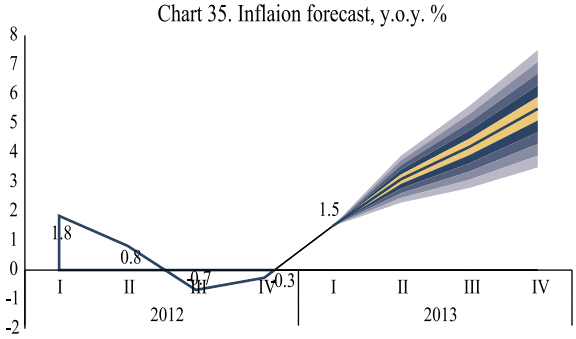
Chart 34. Price expectation indicies (3 months moving average)



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.

Chart 35. Inflaion forecast, y.o.y. %



Source: SSC

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 35).

In total the CBA forecasts inflation using various econometric models. The Bank forecasts based upon macroeconomic fundamentals that determine price swings and volatility using the VAR (Vector Auto Regression) model. Price swings are also forecast through *Financial Programming* on the basis of macroeconomic indicators that include 4 key sectors of the economy (Real, Fiscal, Foreign and Monetary). Moreover, the CBA develops the DSGE (Dynamic Stochastic General Equilibrium) model in order to determine the reasons of price swings allowing for behaviors of economy agents on the microeconomic level.

Box 3. Asset prices, financial stability and monetary policy

Analysis of 14 OECD economies covering the years 1980-2007 suggests that bank capital adequacy, broad liquidity and residential property price growth are the most important determinants of crises in the OECD.

According to estimations by Barrell and others (2010), one p.p. rise in real house price growth was sufficient to raise the probability of a crisis by at least 0.07% (US) and by as much as 0.74% (France). The results show an income effect with an elasticity of 0.8 % for all countries. Rise in real estate prices of current year has its effects for next year as well. In other words, a rise of 10% in house prices one year gives rise to a 5% rise next year. The long run income elasticity is around 0.7-0.8. The long run interest rate effect on real estate prices is significant, with a long run elasticity of around 4. The results were that there was indeed a significant impact of credit on house prices in OECD, with a quite consistent elasticity of around 0.15. Except for the G7, the results for the remaining OECD suggest that elasticity for debt changed from 0.44 before financial liberalisation to 0.09 thereafter. Financial liberalization gives rise to upswings in real estate prices and crisis impacts are worse in small countries than the G7, and in bank dominated countries than in market based. A 1% rise in unemployment reduces house prices by around 1% in the first year. A 1% rise in real financial wealth boosts house prices by around 0.1-0.15%.

Central banks use a conventional policy tool – interest rate to affect prices in a real estate market. Analysis results on 17 OECD countries for 1986-2006 conducted by Assenmacher-Wesche and Gerlach (2008, 2010) suggest that interest rates are costly tool as central banks have to reduce the real GDP by 5% to address 15% price rise.

A variety of alternative tools are employed to influence real estate market prices: i) *credit restrictions on house value* – e.g. credit institutions providing credit against residential property as collateral should restrict the loan so that the loan-to-value ratio does not exceed 85 per cent of the market value of the property at the time of granting credit, ii) *credit restrictions on income* – loans should not exceed certain percentage of annual retained earnings of a household. In Sweden this indicator is 170%. iii) *Amortization requirements* – households must borrow for all or part of the mortgage for a predetermined period. It is usually applied when loan-to-value exceeds a certain limit. In Hong Kong the maximum amortization period is 30 years; iv) *Risk insurance* - in several countries there are different insurance solutions that protect the borrower, the lender, or both against price falls or payment difficulties on the part of the borrower; v) *Fixed rate requirement* - a fixed-rate requirement means that the borrower must borrow at a fixed interest rate for all or part of the mortgage for a predetermined period.

Source:
The Swiss National Bank, Franklin Allen and Kenneth Rogoff, «Asset prices, financial stability and monetary policy», 2011

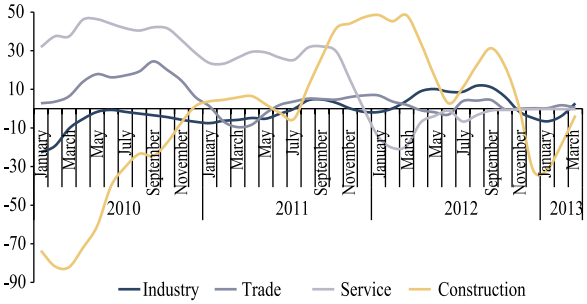
1.2.5. Employment

As of the end-QI, 2013 the economically active population was numbering 4701.3 thousand persons, 94.8% 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 1470.8 thousand persons, 7.9% higher against the relevant period of the previous year. 97.5% of hired workers were 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 demonstrates stable

and growth-oriented employment for the next 3 months (Chart 36).

Chart 36. Employment expectation index (3 months moving average)



Source: CBA

Employment expectations on construction enterprises declined due to the seasonal factor (winter).

II. MONETARY AND EXCHANGE RATE POLICY

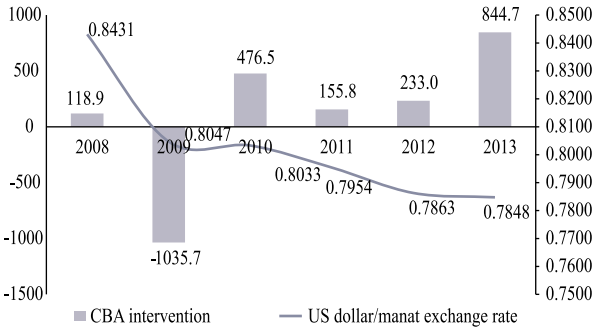
2.1. FX market and the exchange rate of manat

In Q1, 2013 the exchange rate policy targeted balancing between demand and supply in the FX market and a stable exchange rate of manat against USD. Parameters of the exchange rate have been established through considering the stance of the balance of payments, and targets of maintaining financial stability in the banking sector and competitiveness of the non-oil sector.

In Q1, 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 FX 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 844.7 million worth currency over the quarter.

Chart 37. CBA intervention (Q1), USD million



Source: CBA

Table 3. Bilateral nominal and real exchange rate indices of manat in Q1, 2013, %

	Compared to December 2012	
	Nominal bilateral exchange rate index*	Real bilateral exchange rate index
US	100.0	101.8
Euro area	101.1	102.8
Great Britain	107.0	109.2
Turkey	101.1	100.7
Russia	100.2	100.6
Ukraine	100.2	102.3
Georgia	100.0	102.4
Iran	99.8	92.7
Kazakhstan	100.2	100.6
Japan	113.1	116.1
Israel	97.7	100.1
China	99.8	99.2
Belorussia	100.3	97.4
S. Korea	102.4	103.2
Switzerland	102.7	98.9

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

Source: CBA

While the average appreciation indicator of manat against USD in the first quarters of the past 5 years made up 0.4%, the exchange rate remained almost unchanged over the quarter. Standard deviation of exchange rate was also slight (0.0001). Exchange rate stability of the national currency had a positive 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. Amid stable exchange rate of manat NEER changes stemmed from exchange rates of other currencies over the

Box 4. Currency wars

Currency war, also known as competitive devaluation, is a condition in international affairs where countries compete against each other to achieve a relatively low exchange rate for their own currency. Countries seek more competitive exchange rate to primarily improve their foreign stance.

The first currency war in history occurred in the 1930s. As countries abandoned the Gold Standard during the Great Depression, they used currency devaluations actively to stimulate their economies. Since this effectively pushes unemployment overseas, trading partners quickly retaliated with their own devaluations. The period is considered to have been an adverse situation for all concerned as unpredictable changes in exchange rates reduced overall international trade.

According to Guido Mantega, the Brazilian Minister of Finance, a global currency war broke out in 2010. This view was echoed by numerous other financial journalists and government officials from around the world. They started to use the phrase «currency war» actively.

Observations suggest that states engaging in competitive devaluation since 2010 have used a mix of policy tools, including direct government intervention, the imposition of capital controls, and, indirectly, quantitative easing. In January 2013, measures announced by Japan sparked concern of a possible second 21st century currency war breaking out. By late February, concerns of a new outbreak of currency war has been partially allayed after statements from the G7 and G20 groups of nations made commitments to avoid competitive devaluation.

According to some economists, when putting forward the challenges to end currency wars it should be taken into consideration in which countries currencies are overvalued, in which undervalued. Observations in 30 advanced economies suggest that there has recently been no intervention to avoid devaluation. However, a number of countries carry out interventions to prevent revaluation. China, Hong Kong, Malaysia, Singapore, Switzerland and Taiwan try to prevent the market correction of their undervalued currencies. On the contrary, another group of countries which also include Japan and Brazil – the names of these countries have been involved in the international currency wars debates lately - tries to prevent further appreciation of overvalued currencies.

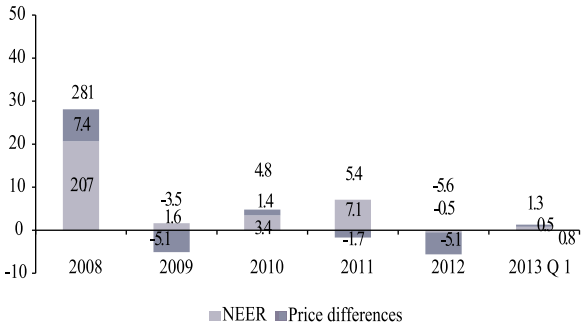
Studies show that countries should effectively regulate domestic demand along with exchange rate corrections to reduce the global disbalance. e.g. in China – the key "winner" of currency wars, revaluation of the national currency should be accompanied by stimulation of domestic demand.

Source:
"Currency Wars?", Peterson Institute for International Economics, Policy Brief number PB10-26 and Wikipedia

quarter. Manat strengthened both in nominal, and real terms against the national currencies of USA, Euro area, Great Britain, Ukraine and Georgia.

In Q1, 2013 NEER (on gross trade turnover) on the non-oil sector grew by 0.8%. The average share of change in exchange rate of AZN against USD in change of NEER was 32.8%, and the share of changes in exchange rates of partner countries' currencies against USD 67.2%. According to model estimations, 1% strengthening of NEER reduces prices 0.28%.

Chart 38. Structure of REER, %



Source: CBA

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.

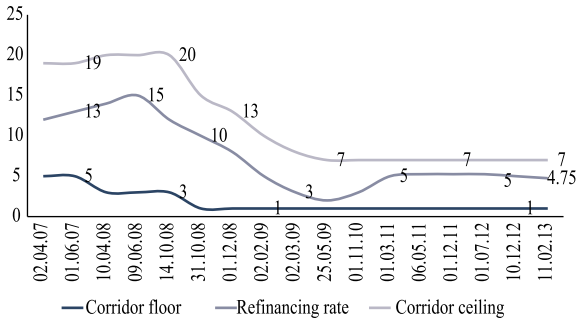
2.2. Monetary policy tools

In Q1, 2013 the CBA applied monetary policy tools allowing for economic dynamics, inflation expectations and the pass-through capacity of the monetary policy to aggregate demand and prices – transmission specifics.

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 Management Board decided to shift the refinancing rate from 5% to 4.75% from 11 February 2013, and leave other parameters of the interest rate corridor unaltered.

Chart 39. Parameters of the interest rate corridor, %



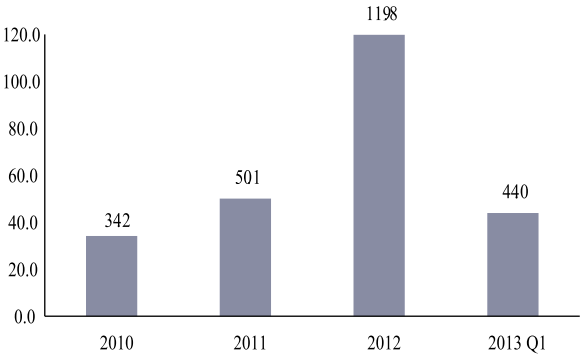
Source: CBA

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 actively 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 accounts attracted to required reserves was renewed and relevant changes were made to the regulations on reserve requirements.

In Q1, 2013 AZN 252.6 worth notes were issued within sterilization operations, out of which AZN 164 million worth notes were auctioned and placed. Repo operations of the CBA with commercial banks made up AZN 11 million as of the end-quarter.

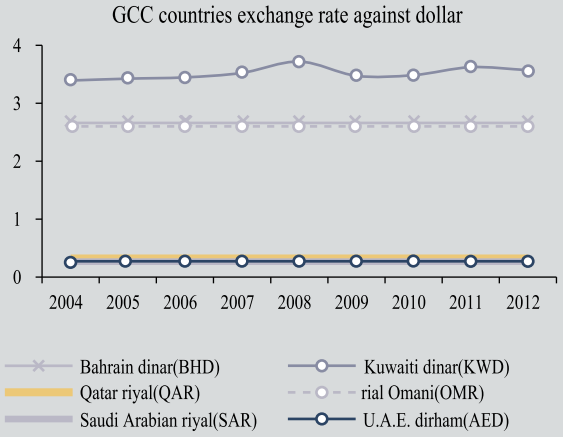
Chart 40. Amount of CBA notes (end of period), AZN million



Source: CBA

Box 5. Monetary Policy Transmission in the GCC Countries

The GCC[5] countries maintain a policy of open capital accounts and a pegged exchange rate, thereby reducing their central banks' independence to run monetary policy. The dollar peg provides the nominal anchor for monetary policy for all GCC countries, but the monetary authorities in the region employ a variety of instruments to influence liquidity conditions.



In the GCC countries the central bank's monetary policy is limited. Monetary policy transmission as a mechanism, measuring an impact of monetary decisions on economic indicators, is weak in the GCC countries. Due to the exchange rate stability one of the 4 transmission channels[6] of the monetary policy – the exchange rate channel is not active.

As the peg to the U.S. dollar restricts independence of the monetary policy, macroeconomic management mostly relies on fiscal policy, prudential regulation, and various controls to achieve the desired balance between price stability and growth.

The pegged exchange rate regime provided certainty about future exchange rates and was overall successful in anchoring inflationary expectations at low levels. Nevertheless, the GCC monetary authorities pursue the monetary policy and manage short-term liquidity conditions through open market operations, while using reserve requirements and long-term government bonds to manage structural liquidity conditions.

In total in pegged exchage rate monetary policy shocks come from two sources. Monetary policies pursued both in the USA and domestically are considered to be the sources affecting the country's interest rate, lending, asset prices and economic activity.

The IMF, using various econometric approaches, estimated the behavior of GCC interbank monthly interest rates with respect to the 3 months U.S. LIBOR rate in order to identify the transmission mechanism in these countries. Finally, estimation results suggest that there is a significant impact of the U.S. monetary policy on broad money, non-oil activity, and inflation in the GCC region. The identification of U.S. monetary policy shocks is more convincing when data for 1980–1994 are used. In different periods dramatic changes to broad money supply increase prices but have no significant effects on non-oil GDP.

Monetary policy in the GCC countries is vulnerable to external factors, particularly to the USA economy. Interest rate changes in the USA have effects primarily on Bahrain and S. Arabia. The impact of interbank interest rates on deposit interest rates is of importance in Kuwait. An upswing in the FED policy rate by 100 basis points reduces the size of money supply and the non-oil economy by 0.6% and 0.1% relatively. The estimations suggest that a decrease in world commodity prices by 2% reduces the prices in the GCC by 0.8%.

Due to weak financial markets, the pass-through is low in the GCC countries. The IMF estimations show that in order to ensure short-term and more effective transmission of monetary policy signals in the GCC financial tools and institutions should be diversified. Small financial markets and the limits on the size and interest rate of financial resources lended restrict transmission of the interest rate.

Source:
Raphael Espinoza and Ananthakrishnan Prasad, "Monetary Policy Transmission in the GCC Countries", IMF, May 2012.

[5] Gulf Cooperation Council –incorporates 6 arab countries around the Persian Gulf – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE economically and politically.
[6] Transmission channels – interest rate, credit volume, asset prices and exchange rate channel

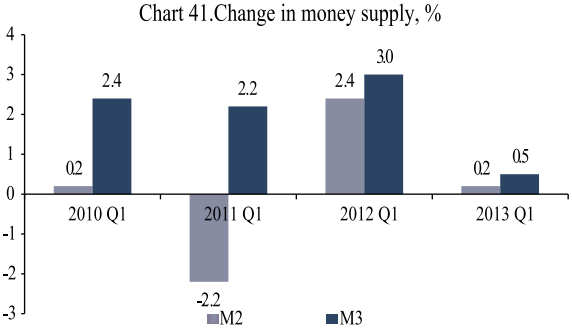
Average note yield in recent auction constituted 1.22, which was 1.76% in the beginning of the year. Notes in circulation made up AZN 44 million as of 01.04.2013.

2.3. Money supply

In Q1, 2013 money supply kept pace with the demand of the economy, the structure of which continued to improve.

As shown in the chart below, broad money supply in manat grew by 0.2% in Q1. Over the period the money multiplier of the banking system demonstrated an incremental trend (3.4 p.p. increase against the beginning of the year) due to cashless money extension of banks.

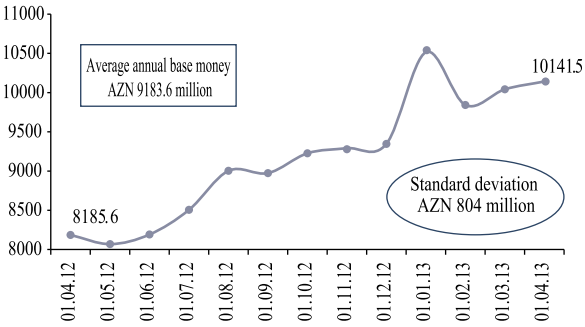
Chart 41.Change in money supply, %



Source: CBA

Money supply dropped by 3.6% and made up AZN 10.1 billion over the quarter. Dynamics of money supply was not strongly volatile, and only in December of the previous year rapid growth was observed due to budget expenditures.

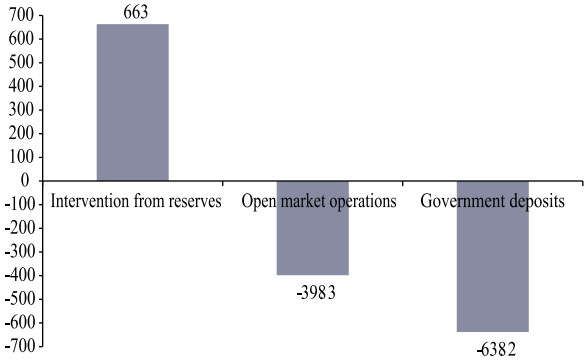
Chart 42. Dynamics of money base in national currency, AZN million



Source: CBA

Decline in money base primarily sourced from seasonal factors.

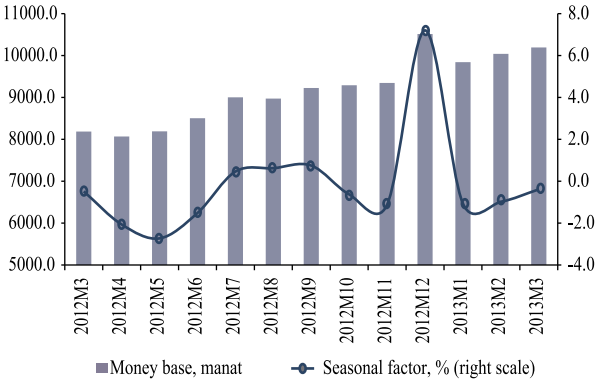
Chart 43. Stucture of base money, AZN million



Source: CBA

As shown in the chart below, seasonally adjusted base money increased by 5% against the beginning of the year, and 24.4% against the relevant period of the previous year.

Chart 44. Impact of seasonal factors on monetary base



Source: CBA

As of 01.04.2013 broad money supply (M3) increased by 0.5% against the beginning of the year and 17.8% against the relevant period of the year and reached AZN 16863.7 million.

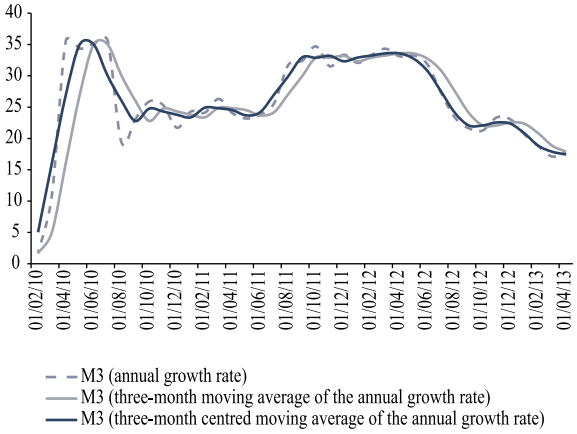
Dollarization indicators continue to drop. The share of deposits in hard currency in total savings and deposits decreased by 4.7% p.p. and constituted 38.5%. The share of deposits in hard currency in M3 money supply decreased by 3.4 p.p. and made up 17.9%.

Table 4. Money aggregates, AZN million

	01.01.11	01.01.12	01.01.13	01.04.13
M0 (Cash)	5455.8	7158.2	9256.6	8999.2
M1 (Cash, demand savings and deposits)	6718.9	8824.8	11107.9	10982.8
M2 (Cash, demand and term savings and deposits, in AZN)	8297.5	10997.2	13806.4	13837.4
M3 (Cash, demand and term savings and deposits, in AZN and hard currency)	10527.5	13903.2	16775.3	16863.7

Source: CBA

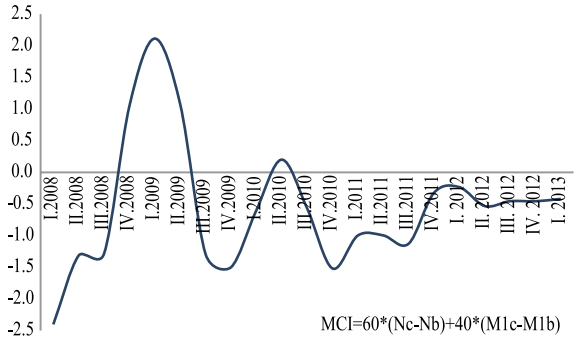
Chart 45. Dynamics of M3 money aggregate, %



Source: CBA

Cashless money supply grew by 4.6% over the quarter, and 11.1% against the relevant period of the previous year, which resulted from the measures taken to increase confidence in the banking system.

Chart 46.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).

Charts and tables used

Charts

Tables

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