



THE CENTRAL BANK OF  
THE REPUBLIC OF AZERBAIJAN

№4(16) MONETARY POLICY REVIEW  
2013 Q4

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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 convey possible impacts of the policy pursued by the CBA on the economy to the public. The review is quarterly disclosed to the public.

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# Acronyms

CBA	–	The Central Bank of Azerbaijan
ADB	–	Asian Development Bank
EBRD	–	European Bank for Reconstruction and Development
ILO	–	International Labor Organization
IMF	–	International Monetary Fund
FDI	–	Foreign Direct Investment
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
UNCTAD	–	United Nations Conference of Trade and Development
GDP	–	Gross Domestic Product
WTO	–	World Trade Organization

## EXECUTIVE SUMMARY

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

The economy continued to grow amid fragile global economic growth and the sensitive global financial system. The foreign economic position of the country was favorable fuelled by high economic activity in the reporting year.

In 2013 the CBA targeted low single-digit inflation, a stable exchange rate of manat and financial stability. The Bank attained its goals and average annual inflation made up 2.4%.

The stable exchange rate of manat was the key factor in maintaining a single-digit level of inflation. A low inflation along with stability of manat 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

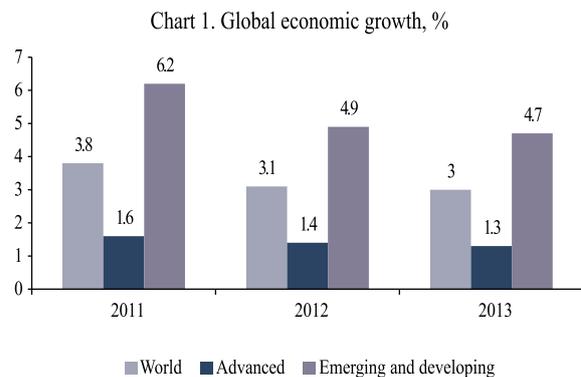
*Global economic growth accelerated in 2013 amid relatively low uncertainties. Relatively high economic activity in the advanced economies had a positive impact on the global economic growth. However, the DGCs displayed lower economic growth compared to previous years. Global growth expectations have become optimistic, though added by some new risks.*

While the global economic growth rate was below expectations in the first half of 2013, it increased primarily at the expense of economic revival in DDCs from the second half-year. The global economy grew by 3%, which was only 0.1 p.p. lower than previous year.

Advanced economies positively contributed to global economic growth. In the environment of successful fiscal consolidation in DDCs, a positive impact of the accommodative monetary policy on domestic demand, relatively low uncertainties and revival of private sector ultimately accelerated global economic growth. The IMF growth estimates in DDCs was 1.3% (0.1 p.p. lower than previous year).

Improvement of economic activity in DGCs since the second half-year was primarily owing to high external demand. However, lower capital inflows due to gradual rejection of the accommodative monetary policy in the U.S., drop in some commodity prices, and tighter financial conditions had a downward effect on positive trends.

Economic recovery in advanced economies of the euro area continued, and peripheries demonstrated near-stable economic activity. The euro area witnessed 0.4% recession in



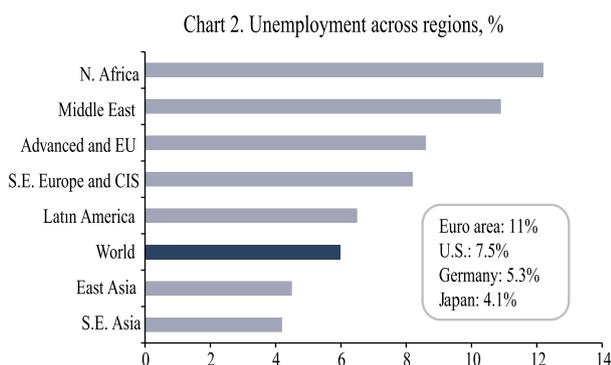
Source: IMF

2013 (0.7% in 2012). The successful fiscal policy, high external demand, and easy domestic lending conditions in the euro area supported the economic activity.

The Abenomics concept put forward in Japan in 2013 proved successful. Thus, according to the IMF estimates, the application of this concept increased economic growth by 1 p.p. Revival of private demand and partially softened fiscal consolidation (postponement of tighter policy measures until 2015) encouraged economic growth. A decrease in monthly purchase of public bonds by the Federal Reserve raised long-term interest rates in a number of countries. DGCs faced more pressures over their national currencies and capital flew from DGCs to DDCs.

In China, transmission from external to domestic demand to ensure balanced and sustainable economic growth led to lower than a sustainable level of economic activity in the first half of 2013. Growing investment demand since the second half of the year had positive effect on the economic activity. Despite economic growth of 7.7%, restrictions on lending is likely to slowdown positive trends.

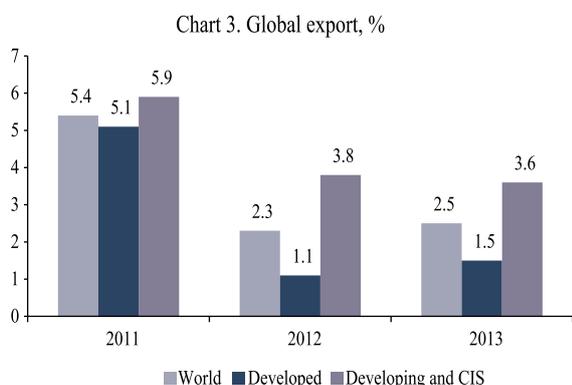
Unemployment remains a critical problem for the global economy. The current global economic growth rate is not sufficient for a significant increase in the level of global employment. In 2013 the unemployed numbered 202 million in the world, having increased by 5 million, of which 44.7 million relates to DDCs, while 161.3 million to other countries.



Source: ILO

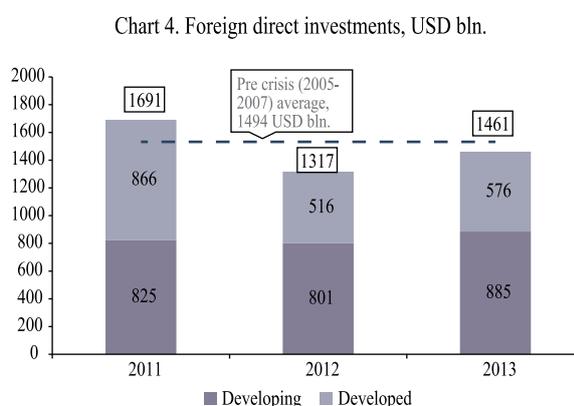
The level of youth unemployment in the world (between the ages of 15 and 24) (13.1%) is approximately two times higher than total unemployment (6%). Countries in the Middle East, North Africa and Southern Europe are main drivers of youth unemployment.

Uncertainties in the global economy and sluggish recovery of the economic activity also affected global trade. According to the WTO's preliminary estimates global trade grew by 2.5%, which is 2.9 p.p. lower than the average growth index for recent 30 years (1982- 2012).



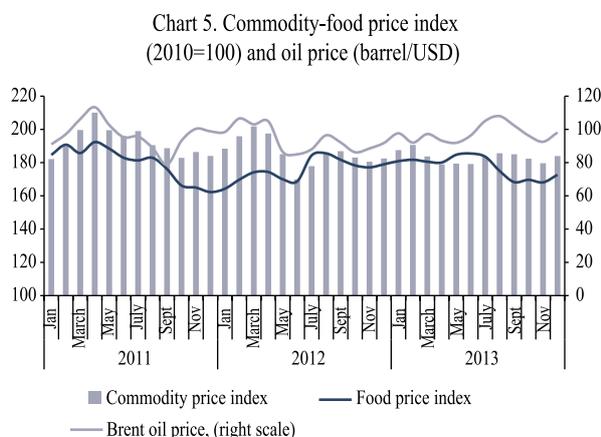
Source: WTO

The structure of global foreign direct investments (FDI) remained almost unchanged in 2013. The share of DDCs in global FDI flows was 39% during last two years. Global FDI flows increased by 11% and made up USD 1.5 trillion. However, FDI flows are below the pre-crisis level (USD 2 trillion). Inflows to the DGCs having increased by 10 %, reached a new peak (USD 885 billion). Currently, the U.S. (11%) ranks first, China (9%) second, and Russia (6%) third for the first time.



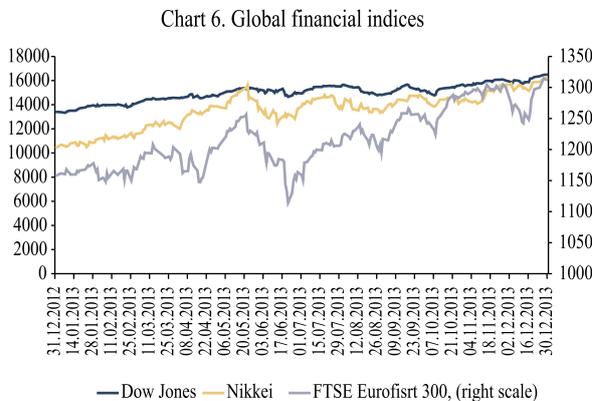
Source: UNCTAD

Amid current global economic conjuncture global commodity prices were volatile, with a rise in commodity prices and drop in food prices. Thus, while the CPI rose by 0.8%, the food price index decreased by 3.5% over the reporting year. The Brent oil price averaged USD 108.6, which is 2% lower relative to the previous year.



Source: IMF & EIU

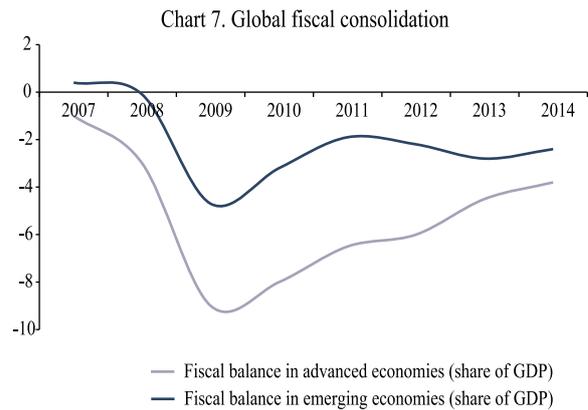
Key stock indices posted growth in 2013. The Dow Jones index rose 23%, and FTSE Eurofirst 300 index 13%.



Source: Bloomberg

Central banks continued accommodative monetary policies. In 2013 central banks across 61 countries reduced interest rates, while 11 central banks kept interest rates neutral, and only 10 central banks increased them. The ECB cut its refinancing rate by 0.25 p.p. to 0.25 percent. The U.S. Federal Reserve left the discount rate unchanged over the year. However, the Fed pursued tight policies gradually, having reduced monthly purchases of public bonds from USD 85 billion to USD 75 billion.

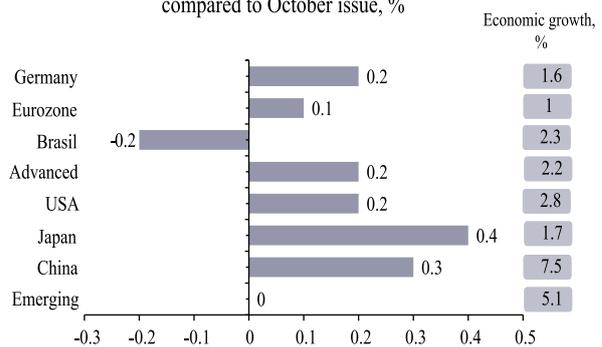
Most advanced economies continued fiscal consolidation measures to cut public debt in 2013 as well. Estimates suggest that the budget deficit to GDP ratio in DDCs is likely to fall at a highest rate (1.5%) since 2011. The size of fiscal consolidation varies across countries. Thus, the U.S., Great Britain, France, Portugal and Greece pursued a tight fiscal consolidation policy, while Italy, Spain and Ireland pursued a moderate policy, and Germany, S.Korea, Canada and Sweden chose a soft fiscal consolidation policy. Thanks to the successful fiscal consolidation policy, the public debt to GDP ratio in the euro area made up 92.7%, having declined for the first time in past 6 years.



Source: IMF

Recent global economic processes suggest an optimistic outlook for global economic growth prospects in 2014. The IMF revised up growth forecasts for the next year in its World Economic Outlook.

Chart 8. Corrections in the IMF's global growth forecasts for 2014, compared to October issue, %



Source: IMF

Global unemployment is likely to keep growing in 2014. The ILO projections suggest that the number of job seekers will surpass new job vacancies, global unemployment will reach 206 million, having increased by 2.1%.

Global trade and FDI flows are forecast to grow at slower rates. According to the UNCTAD, the global FDI is likely to reach USD 1.6 trillion, having risen 9.5%. The WTO projects a 4.5% rise in global trade.

Although global growth expectations are prone to improve, dwelling risks are added up by some new ones. In DDCs key risks stem from high unemployment, debt burden, and fiscal deficit, and in DGCs from hard landing

### Box 1. Fiscal devaluation - can it help to boost competitiveness?

The recent global financial crisis has revealed large differences in external competitiveness between euro area member countries. As is known, These countries are not able to support competitiveness through the exchange rate devaluation because of the absence of their own national currencies. In this case fiscal devaluation might become a policy tool to enhance competitiveness.

**Fiscal devaluation** – includes a decrease in interests of employers’ social security contributions and an increase in value-added tax rates. In this case unit labour cost and prices of companies’ products decline as a result of which prices of domestically produced and export-oriented goods also decrease. Likewise, higher VAT rates raise only prices of domestically consumed and imported goods. Consequently, the share of export rises, demand for import drops and trade balance improves.

**The effectiveness of a fiscal devaluation is likely to depend on the degree of openness of the economy.** If exports account for a large part of total output, firms benefit more from the cut in social security contributions vis-à-vis their (foreign) competitors. Likewise, the larger the share of imports in total demand the larger the shift from imports to domestically produced goods in terms of domestic production.

While implementation of fiscal devaluation appears simple, a couple of issues need to be addressed when putting it into action:

- **Fiscal devaluation policy has a short-term effect.** Thus, an increase in demand for the company’s workforce in the long run leads

to pay rise, eventually raising company’s total expenditures again. Besides, pay rise increases revenues, consequently raising demand for import products. Fiscal devaluation may have long-term effects only if salaries remain stable.

- **Choosing right policy.** If reduced interest rates on social security contributions apply to non-tradable goods and services this could not result in improvement in the trade balance.
- **Timing.** If the policy to be implemented is announced in advance, consumers’ demand will rise much earlier, with adverse effects on the current account balance.
- **Wealth effect.** Population groups, such as pensioners, might lose from the VAT hike and from the interest rates cut on social security contribution.
- **Fiscal neutrality.** The effect of an implemented policy on the fiscal balance should be taken into account.
- **Externalities on other countries.** If several countries of a currency union implement a fiscal devaluation simultaneously, the impact on each them could be smaller. Within a currency union this policy should be pursued only in countries that maximise their benefits for the union and might improve their competitiveness.

Empirical estimates suggest that a fiscal devaluation policy has a very little effect. Thus, substitution of social security contribution revenues of 1% of the GDP with VAT revenues bring about an increase in employment and the GDP no more than 1%.

*Source:*

*Fiscal devaluation - can it help to boost competitiveness? Isabell Koksek . 2013 OECD*

expectations, volatility in financial markets, and devaluation pressures caused by capital flows.

Given the current risks, international organizations recommend that DDCs maintain accommodative monetary policies, fiscal

consolidation is continued in a way that does not damage the recovery of job vacancies, and loan cycles be managed correctly. On DGCs recommendations include structural and institutional reforms, effective regulation

of capital flows, and depreciation of national currencies in response to weaker external borrowing opportunities.

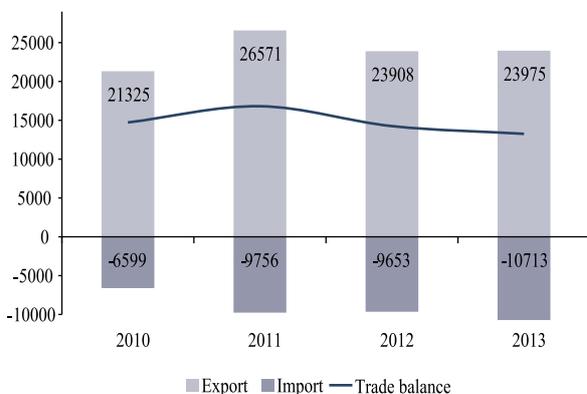
## 1.2. Macroeconomic processes in Azerbaijan

*On the backdrop of a favorable foreign position and wider internal demand in 2013, the country economy continued to grow. Double-digit growth in the non-oil economy was the major factor of employment.*

### 1.2.1. External sector

As in recent years, in 2013 the country's foreign position was favorable. According to the State Customs Committee (SCC), in 2013 the foreign trade turnover reached USD 34.7 billion, of which USD 24 billion falls to the share of export and USD 10.7 billion to import.

Chart 9. Trade balance, USD mln.



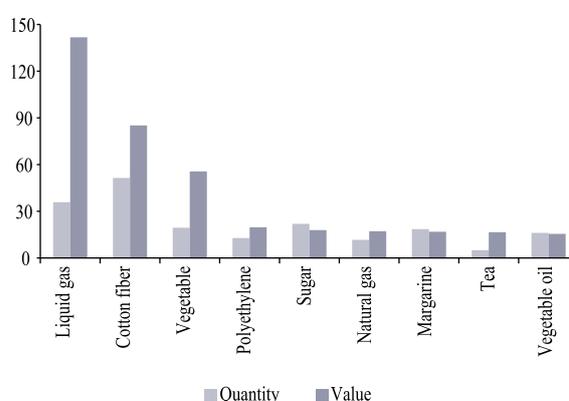
Source: SCC

In 2013 net export was USD 13.3 billion, export exceeded import by 2.2 times. 48% of export was channeled to EU countries, 6.3% to the CIS and the remainder to other countries. 35.1% of import relates to the EU, 23.8% to the CIS and the remainder to other countries. According to the State Statistics Committee (SSC), non-oil products export was USD 1.6 billion, y.o.y increase being 7.4%.

The highest monthly level of export and

import was observed in February (13% higher than monthly average of export) and May (36% higher than monthly average of import) respectively. The lowest monthly level of export and import was observed in June (20% lower than monthly average of export) and January (30% lower than monthly average of import) respectively. The sectors of export, like liquid gas, cotton, vegetables, polyethylene, sugar, etc. observe high growth rates (Chart 10).

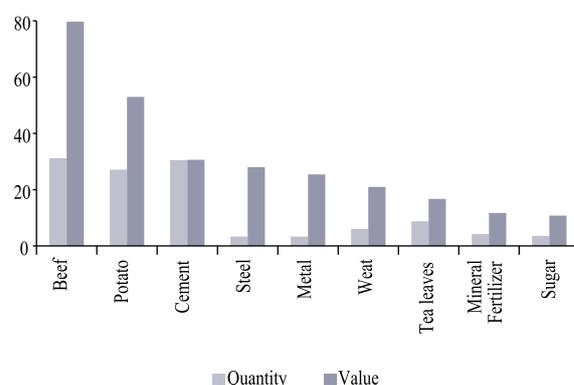
Chart 10. Quantity and value changes of main export commodities, % (2013 January-November/2012 January-November)



Source: SCC

The import of beef, potato, cement, steel, metal, wheat, tea, etc. increased. In total, decline in import of some food products indicates domestic production growth. Thus, the self-sufficiency level on most agricultural (melons and gourds, vegetables, fruits and berries) and some food products was 100%.

Chart 11. Quantity and value changes of main import commodities, % (2013 January-November/2012 January-November)



Source: SCC

In 2013 export prices changed primarily under the influence of changing world prices of energy products. Prices of imported consumer and investment products were almost unchanged, and prices of intermediate commodities slightly increased.

sufficient for three-year import of goods and services. At the same time, strategic FX reserves exceed external debt about 9 times as much.

CBA's FX reserves increased by 21% and made USD 14.1 billion, sufficient for nine-month import of goods and services.

**Table 1. Price indices of import–export commodities, % (January–November 2013 /January–November 2012)**

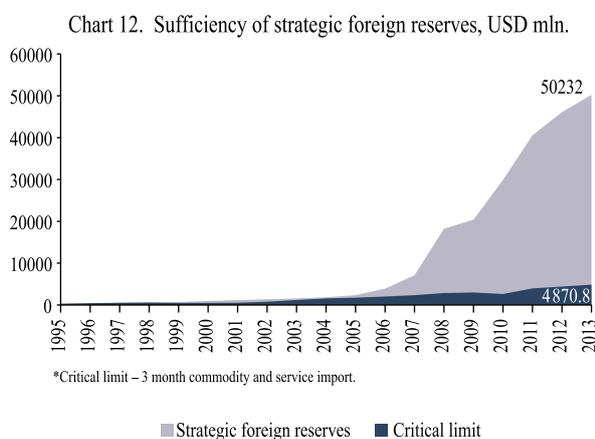
	Import commodities	Export commodities
Overall index	101.8	94.9
Processing phases		
Investment commodities	100.9	99.4
Intermediate commodities	102.4	93.6
Energy commodities	97.2	91.6
Other intermediate commodities	102.5	99.9
Consumer goods	100.2	98.5
Non-durables	101.7	98
Durables	98.3	104.4
Commodities of double use	101.3	113.0
Other commodities	99.5	98.2

Source: SSC

In 2013 surplus of the current accounts balance of the country is expected approximately 16-17% of GDP. The country is the leader in the CIS and takes one of the most leading positions among the DGCs in terms of this ratio.

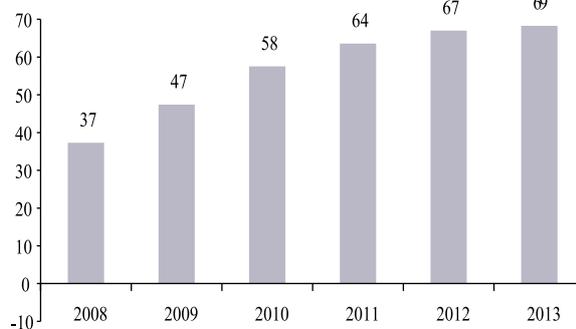
According to the SSC, in 2013 foreign investments to the country economy rose more than 28% and constituted USD 5.3 billion.

As shown in the chart below, in 2013 strategic FX reserves of the country rose by USD 4.1 billion or 9% and exceeded USD 50 billion,



Source: CBA

Chart 13. Ratio of strategic FX reserves to GDP, %



Source: CBA

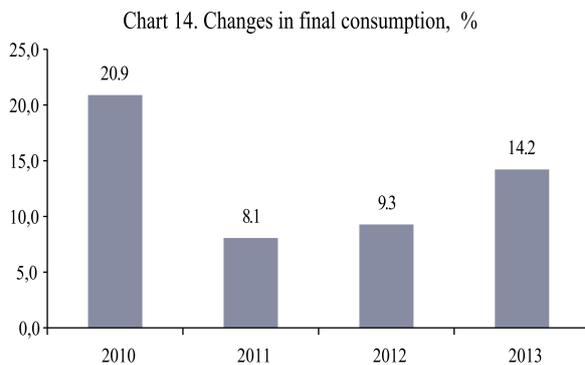
Currently, the strategic FX reserves to GDP ratio approximates 70%. Azerbaijan is on the top 20 in terms of this ratio.

### 1.2.2. Aggregate demand

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

*Final consumption expenditures.* Over the reporting period y.o.y. increase in money income of the population was 8.4% in nominal terms, and 5.6% in real terms. Per capita nominal money income of the population increased by 6.6% and real money income by 4.2%.

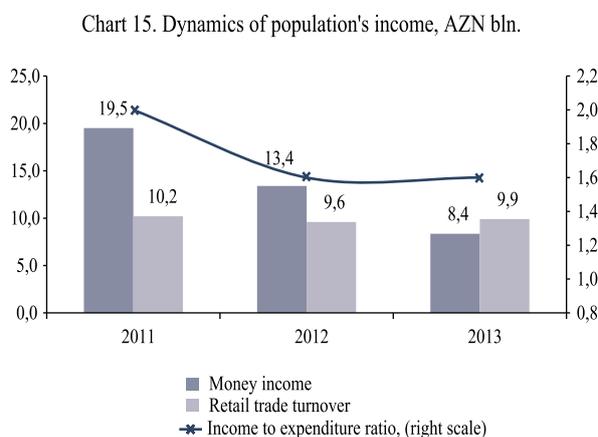
In 2013 total consumer activity was high owing to increase in average monthly salary, the number of population engaged in the economic sector and the size of consumer loans of the population. The share of final consumption expenditures in the structure of money income of the population remained high. Y.o.y increase in consumption expenditures made up 14.2% (2012 - 9.3%) (Chart 14).



Source: SSC

Y.o.y increase disposable income of the population was 8% and made up AZN 34.5 billion. The income to expenses coverage ratio of the population remained at the previous year's level.

Increasing income contributed to growth in



Source: SSC

retail trade turnover as well. Y.o.y increase in overall retail turnover was 9.9% in 2013.

In 2013 retail trade turnover rose by 2.3% on food products (2012-2.1%), and by 20.2% on non-food products (2012-20.7%). Off-free services to the population grew by 8.2%.

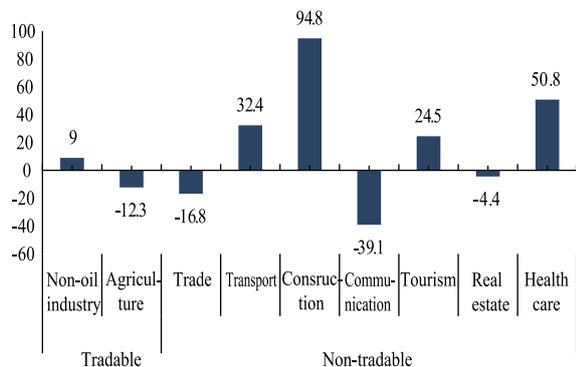
In December, 2013 the Central Bank conducted a survey called "Financial behavior, intentions and inflation expectations of households" among 4250 households (families) which proved that the Consumer Confidence Index in the country was at a level which is considered high according to international estimates. The survey findings show that households highly evaluated the overall economic state of the country for the upcoming 12 months. Results of the financial behavior and intentions survey conducted among households demonstrate an optimistic outlook for middle-term expectations and a positive consumer behavior. Note that the survey involved respondents across the country who were classified in terms of income level, occupation, work regime, education, age and gender.

The average monthly salary in the country increased by 4.1% in real terms, and made up USD 419 in January-November 2013.

*Government expenditures.* Government's consumption expenditures mainly include expenses on goods and services from the state budget. In 2013, 50,7% of budget expenditures was channeled to current expenses, 45,5% to capital expenses. Over the reporting year, 32,6% of budget expenditures was social expenses, 10,6 % higher compared to the previous year.

*Investment expenditures.* In 2013 total investments to the economy increased 15.1% and constituted AZN 17.9 billion, equal to 31% of GDP. Investments to the non-oil sector increased by 12.1%. The share of investments to the non-oil sector in total investments was 73%. In total, investments in tradable and non-tradable sector

Chart 16. Investment growth on sectors of economy, %

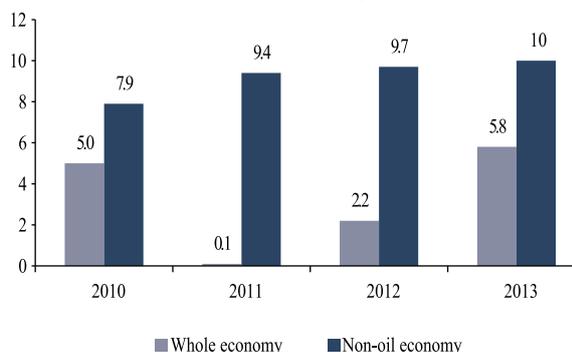


Source: SSC

rose by 4.4% and 14.2% respectively 76.7% of funds channeled to capital stock stemmed from domestic sources, while 23.3% from foreign sources.

*Economic growth.* GDP growth was primarily driven by the non-oil sector over the period. Thus, 56.6 percent of GDP fell to the share of the non-oil sector which made 5.3 p.p. contribution to overall growth.

Chart 18. Economic growth, %



Source: SSC

Chart 17. Financial sources of investments, %



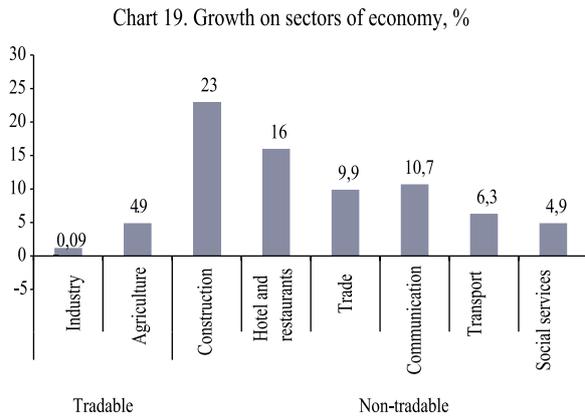
Source: SSC

44.8% of investments sourced from businesses and organizations, 43.8% from budget.

### 1.2.3. Aggregate supply

*In 2013 GDP rose by 5.8% in real terms and nominally constituted AZN 57.7 billion. Over the reporting year the non-oil sector grew by 10%. Overall, the two third of the value added falls to the share of production, and one third – to services. Per capita GDP made up AZN 6207,3 (USD7912,5).*

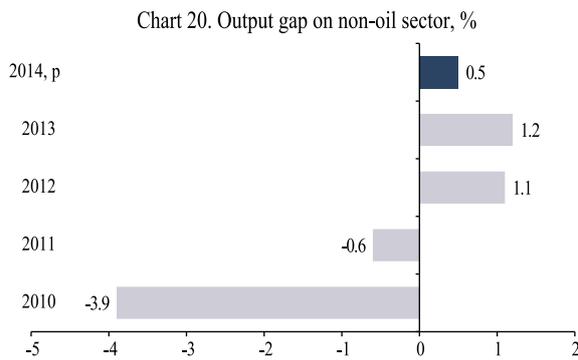
As shown in the chart below, all segments of the non-oil sector posted growth over the year. The highest growth rate among the segments was in construction, hotels and restaurants and catering, communication and trade. Roughly half of the 10% annual growth in the non-oil economy, or 4.8 p.p. stemmed from construction. The growth of the non-oil industry mainly sourced from food industry, machinery, construction materials production, leather production and furniture industry. The high growth rate in agriculture owes to both the crop sector and livestock. Of services the highest growth was



Source: SSC

observed in catering and trade.

Crude oil production increased by 0.2%, and natural gas production by 3.6% during the reporting year. 1600 kg gold and 630 kg silver were extracted. In total, excluding the oil industry, the tradable sector grew by 4.6%. The



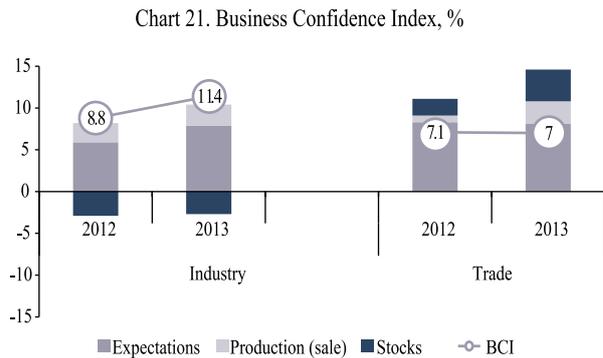
Source: CBA

non-tradable sector increased by 11.2%.

According to estimates by the CBA, in the environment of high internal demand the output gap was positive in 2013.

*Activity indices and expectations.* According to the Real Sector Monitoring (RSM) conducted by the CBA, the Business Confidence Index (BCI) further improved in 2013. The monitoring also displays optimistic economic activity expectations.

On the backdrop of stable product stock in the industrial sector, growth prone expectations and production gave rise to increase in the BCI over

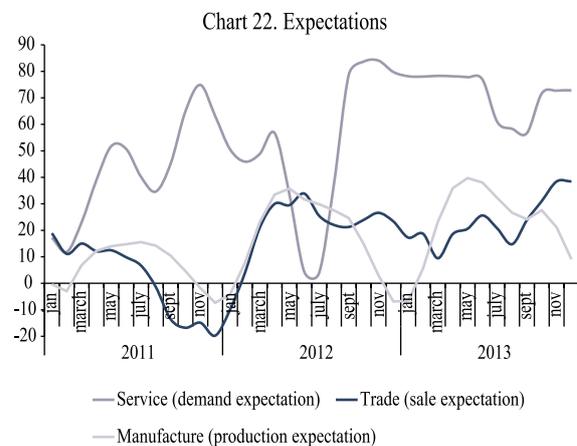


Source: CBA estimate

the period of observation.

Growth prone economic activity also led to a rise in trade of durables. Thus, trade expectations and sales were growth prone. Positive expectations were particularly observed in furniture and electric appliances segments of trade.

In total, results of the RSM conducted by the CBA demonstrate an increase in the number of enterprises which demonstrated high sustainable



Source: CBA

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

production and turnover level in recent months

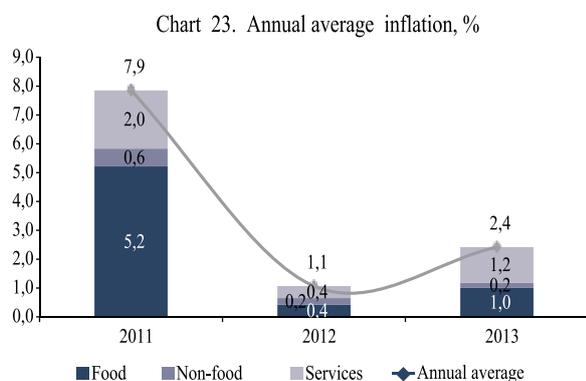
A survey, reflecting the investment behavior of businesses over the recent 12 months, was conducted in December. Survey findings suggest that 1/3 of respondents increased their investments over the year.

In total, according to forecasts of the CBA, and international organizations, economic activity in the country is expected to keep growing in 2014. The IMF and the World Bank in their recent economic outlooks respectively forecast 5.6% and 5.3% economic growth in Azerbaijan in 2013.

### 1.2.4. Inflation

*In 2013 prices remained stable and inflation was maintained within the forecasts. Lower growth rate of prices compared to trade partners supported the competitiveness of the economy. According to the World Economic Forum, Azerbaijan is amongst 7 countries with the lowest inflation.*

1.2.4.1. Consumer Price Index (CPI). In 2013 average annual inflation was 2.4%. An increase in some fuels in December had a slight impact on inflation.

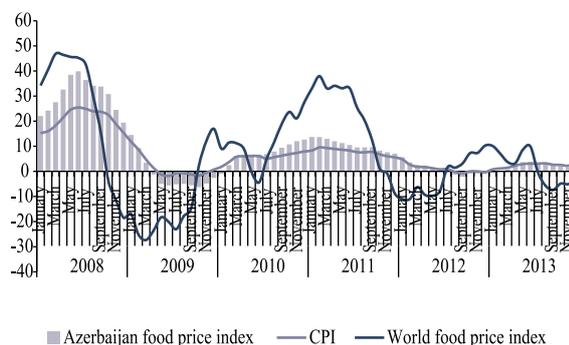


Source: CBA estimates on the basis of SSC data SSC

Estimates suggest that 1 p.p. of 2.4% average annual inflation relates to rise in food products, 0.2 p.p. in non-food products and 1.2 p.p. in services. Seemingly, the share of services in average annual inflation was higher in 2013 relative to the previous year.

Hike observed in the world food prices over the first half of the current year slowed down from Q3 (Chart 24).

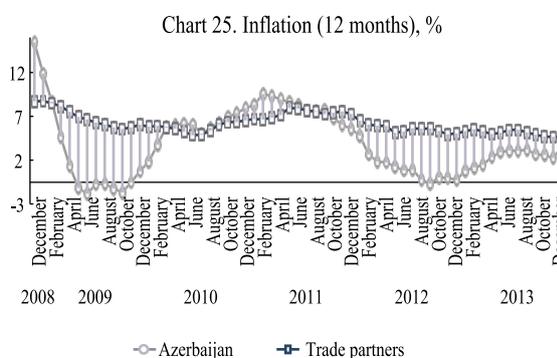
Chart 24. Azerbaijan and world food CPI (year on year), %



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

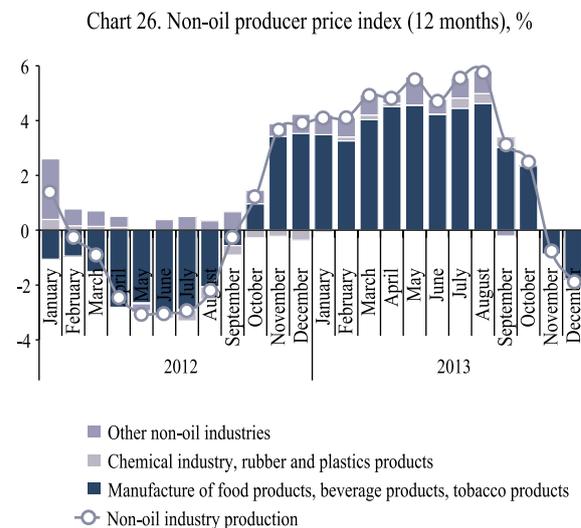
The average annual core price index, adjusted from swings in prices for commodities regulated by the government and seasonal factors increased by 0.7%, and by 1.6% relative to the beginning of the year. The headline inflation was mainly due to non-monetary factors as it was 1.7 p.p. higher than core inflation. Note that transportation and postal tariff indices decreased by 2.7% on average annual in 2013, including cargo transportation tariffs by 4.4%, and communication tariffs by 1.4%. Besides, postal and courier tariffs increased by 0.9%.

In 2013 inflation in foreign trade partner DDCs was 1.1%, in DGCs 6.7%, and in oil-exporting countries 8.2%. In total, average inflation in trade partners was 4.6%, which exceeds the average annual inflation in Azerbaijan by 1.1 p.p. (Chart 25).



Source: SSC, CBA estimates

1.2.4.2. Industrial Producer Price Index (IPPI). In 2013 annual average IPPI declined by 3.9% due to 5.4% price downswing in the crude oil and natural gas extraction industry. Prices of non-oil industrial products grew by 3.5% over the year due primarily to price upswings of 10.1% in chemistry, 4.2% in metallurgy, and 6.2% in final metal production. However, prices decreased by 1.6% on machinery and equipment manufacturing, 8% on paper and cardboard, 1.1% on wood products and 0.3% on electrical equipment manufacturing. Non-oil IPPI declined by 1.9% primarily due to 4.2% decrease in production prices of food products (Chart 26).



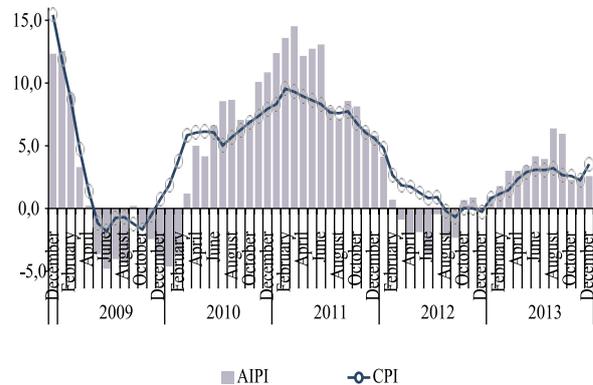
Source: SSC, CBA estimates

1.2.4.3. Agricultural Producer Price Index (APPI). In 2013 the APPI increased on average annual 3.2%. Increase on price dynamics was due to rise on annual plants (3.6%) and livestock products (3.7%). 1.8% price downswing was observed in perennials.

As is seen from Chart 27, despite rise in certain regulated prices, no sharp hikes were observed in agricultural products, prices rose only 0.4% in December.

1.2.4.4. Real Estate Prices. According to the SSC, in 2013 prices in the housing market increased by 6.5%. Secondary and primary

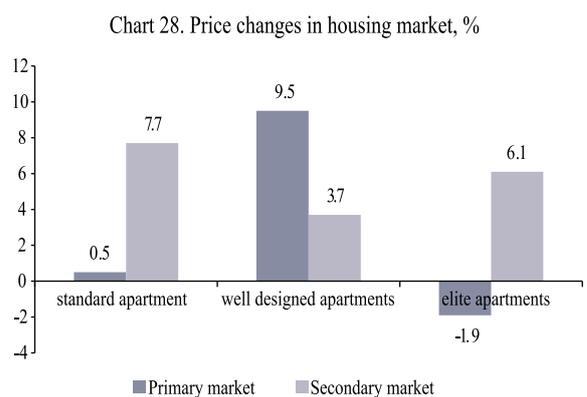
Chart 27. Changes in price indices (12 months), %



Source: SSC

markets respectively grew by 6.5% and 3.8%. A highest price hike in the secondary market was observed in standard apartments (7.7%), and in the primary market in well-designed apartments (9.5%) (Chart 28). According to the “MBA LTD” Appraisal and Consulting Company, while rent fees in residential property decreased by 1.5%, fees increased in commercial real estate by 0.8% over the period.

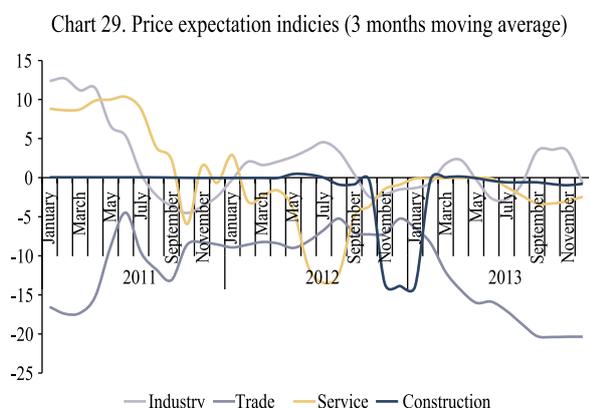
Ongoing mortgage lending factored in the activity in the real estate market, particularly the secondary market over the period. In 2013 banks issued AZN 113 million worth mortgage loans.



Source: SSC

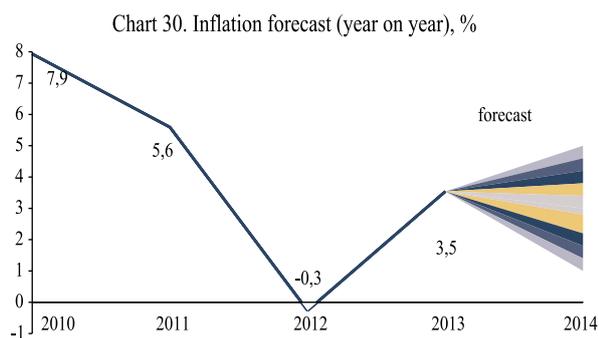
1.2.4.5. Inflation expectations. Results of the recent surveys conducted within the RSM suggest that prices on all sectors of the economy (industry, trade, service and construction) are

not likely to increase in the next three months (Chart 29.).



Source: CBA

According to the CBA’s model estimates, inflation is expected to be within projections as of the yearend.



Source: CBA

The ARIMA (Autoregressive Integrated Moving Average) model was used in estimation. Inflation changes were also identified with some probability with various scenarios through this model.

Note that international organizations also predict single-digit inflation in Azerbaijan in 2014. Thus, the IMF’s inflation forecast for 2014 is 6.3%, the EBRD’s 3.8%, the ADB’s 7%.

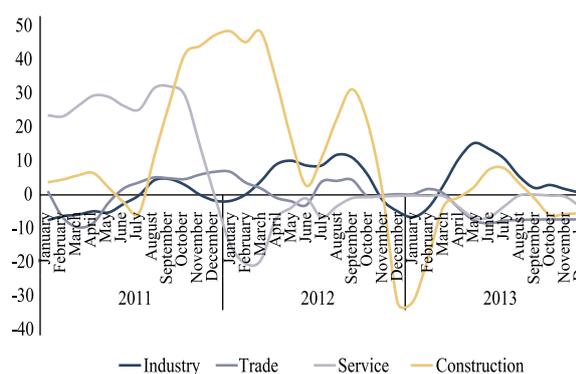
### 1.2.5. Employment

In 2013 the economically active population was numbering 4757.8 thousand persons, 95% of which was engaged in various segments of the economy and the social sector.

According to the SSC, as of the end-2013 the number of hired labor was 1505.9 thousand persons, 2.4% 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 400 enterprises within the RSM framework demonstrates stable employment expectations.

Chart 31. Employment expectation index (3 months moving average)



Source: CBA

As shown in the Chart, at the end of 2013 employment expectations on trade remained unchanged, being positively zoned on industry and relatively decreased on service due to seasonal factors.

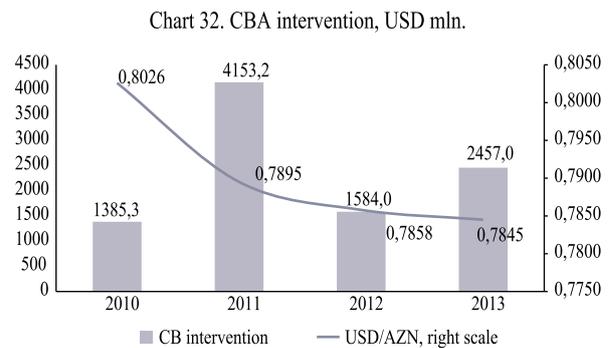
## II. MONETARY AND EXCHANGE RATE POLICY

### 2.1. FX market and the exchange rate of manat

*In 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 reporting year the CBA pursued its exchange rate policy within a corridor, targeting the bilateral exchange rate of USD/AZN.

Amid huge surplus in the external sector 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 2.5 billion worth currency over the period.



Source: CBA

The exchange rate of manat against USD remained almost unchanged and strengthened 0.06% over the year. Standard deviation of the exchange rate was also very minor (0.00017). Exchange rate stability of the national currency had a positive impact on macroeconomic environment and financial sector stability in the country.

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

	Relative to December 2012	
	Nominal bilateral exchange rate index*	Real bilateral exchange rate index
US	100.1	102.1
Euro area	95.8	98.3
Great Britain	98.6	99.9
Turkey	115.5	111.3
Russia	107.0	104.3
Ukraine	101.6	105.3
Georgia	103.3	104.3
Iran	201.5	160.0
Kazakhstan	102.5	101.1
Japan	123.7	126.4
Israel	92.8	94.3
China	97.5	98.6
Belarus	110.3	97.9
S. Korea	98.3	100.0
Switzerland	97.1	104.8

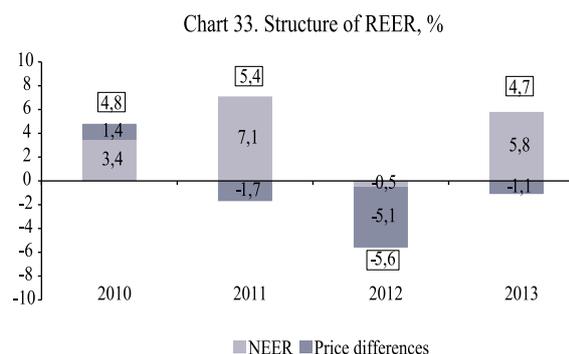
\*Average monthly change of exchange rates of manat against currencies of trade partners.

Source: CBA

Dynamics of the nominal bilateral exchange rate of manat contributed to changes in real bilateral exchange rates. Manat strengthened both in nominal and real terms against the national currencies of the U.S., Turkey, Russia, Ukraine, Georgia, Iran, Kazakhstan and Japan.

In 2013 the NEER (on gross trade turnover) on the non-oil sector grew by 5.8%. According to model estimates, 1% strengthening of the NEER reduces consumer prices 0.28 p.p.<sup>1</sup>.

Inflation differences had a downward impact on the REER. Eventually, the REER on the non-



Source: CBA

oil sector strengthened only 4.7% over the year. The REER on the non-oil sector has depreciated 0.9% since early 2012.

## Box 2. The Real Exchange Rate and Export Growth: Are Services Different?

According to the economic theory and researchers' investigations, policies supporting exports have a positive impact on economic growth. Thus, the marginal product of labor tends to be higher in the production of exports than other activities of the economy. Reflecting this, export-oriented industries pay higher wages than other sectors. Consequently, export sector encourages both its own and other sectors' development, with a positive impact on economic growth. In this context, labor-intensity of the export sector in most DGCs necessitates to identify determinants supporting growth of this sector. Various research findings show that export is influenced by different economic determinants, particularly the exchange rate. However, specifics of the exchange rate's impact on various export products have not been fully evaluated.

When looking at the world trade we can observe changes in the composition of export products. Thus, exports of services have grown by about 10% annually worldwide between 2001 and 2010. The share of DGCs in global trade in services rose from 14% to 21% between 1990 and 2008. Exports of some services (health, accounting, management services, etc) - constituents of the "non-traditional" ("modern") category<sup>2</sup> or, have been growing fast in recent years.

Source:

*The real exchange rate and export growth: Are services different.* Barry Eichengreen, Poonam Gupta. September 2013. The World Bank.

The World Bank conducted an econometric assessment in 66 countries for 1980- 2009 on how the exchange rate affects the service sector. Assessment results suggest that the impact of the exchange rate on the non-traditional services is larger than on merchandise and traditional services. Thus, a 10% depreciation of the real exchange rate (RER) accelerates the growth of exports of merchandise and traditional services by about 1.5 p.p. and that of non-traditional services exports by about 2.3 p.p..

The research also assessed the impact of the exchange rate on exports on various country groups. Findings suggest that the impact on non-traditional services is larger in DGCs than in DDCs. Likewise, the exchange rate has been found to have an asymmetrical effect. Thus, observations show that a RER depreciation has a more significant impact than its appreciation. Albeit the assessment results, stimulation of exports of services through the RER depreciation policy faces some constraints. The RER may have only short-term effects on growth since it is impossible to continuously pursue the RER depreciation policy. When pursuing such a policy, competitiveness of the country should be taken into account, and a sustainable macroeconomic policy and high saving rate be ensured.

<sup>1</sup> Calculations are based on findings of the VAR (Vector Autoregressive) model

Thus, the CBA ensured the bilateral exchange rate stability of manat over the reporting year. The nominal multilateral exchange rate of manat strengthened, which had a positive role in achieving the inflation target.

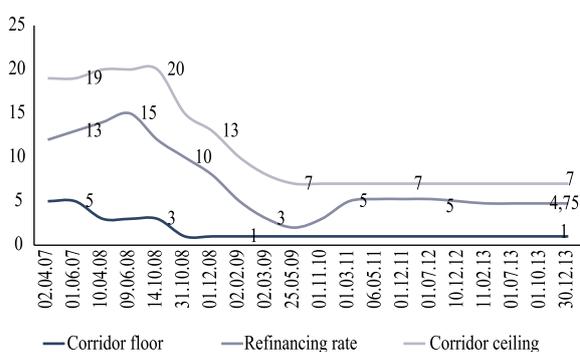
## 2.2. Monetary policy tools

*In 2013 the Bank applied the monetary policy tools considering economic growth dynamics, inflation expectations and specifics of transmission of the monetary policy to aggregate demand and prices.*

Amid low inflation the CBA used stabilizing and simulative opportunities of the monetary policy in adequacy with the economic cycle in 2013.

As inflation was in the target, the CBA decided to decrease the refinancing rate from 5% to 4.75% and keep other parameters of the interest rate corridor unaltered which will allow further drop in interest rates and consequently support economic growth in the non-oil sector..

Chart 34. Parameters of interest rate corridor, %



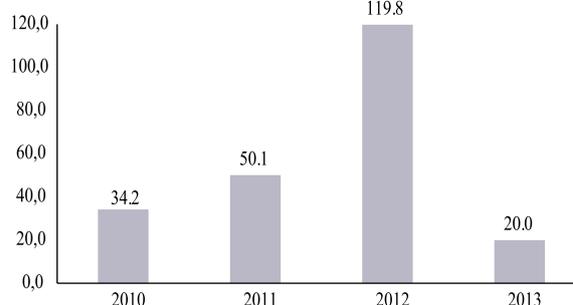
Source: CBA

Interest rates declined over the year. The CBA's monetary policy decisions was one of the factors affecting interest rates in the banking sector.

Open market operations and reserve requirements were regularly used to adjust growth rates of money supply and the liquidity level in the banking system. In 2013 AZN 1.53 billion worth notes were issued within

sterilization operations, out of which AZN 300 million worth notes were auctioned and placed.

Chart 35. CBA notes, AZN mln.



Source: CBA

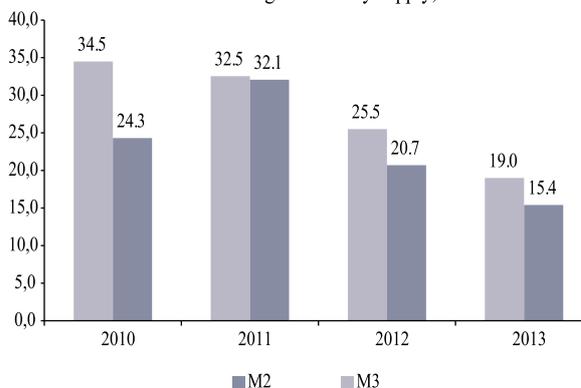
Average yield on notes in recent auction constituted 1,06%, which was 1.87% in the early year. Notes in circulation made up AZN 20 million as of the end-year.

## 2.3. Money supply

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

As shown in Chart 36, broad money supply in manat grew by 19% over the year. The money multiplier of the banking system had increasing trend (7.5% increase versus the early year) due to cashless money extension.

Chart 36. Changes in money supply, %



Source: CBA

Money base in manat increased by 10.7% and made up AZN 11.6 billion over the year. Dynamics of money supply was not strongly volatile.

### Box 3. Risk analysis system for price stability at the European Central Bank

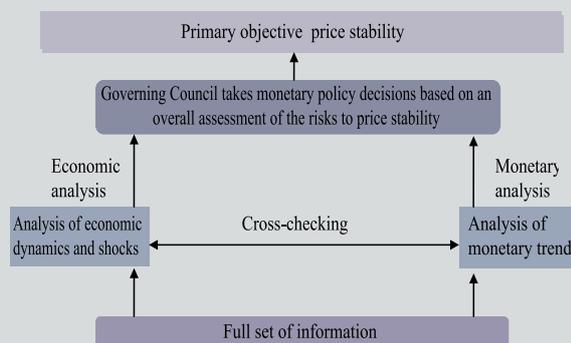
To prevent potential risks to price stability in the euro area, the European Central Bank (ECB) regularly conducts analyses. Its approach to organizing, evaluating and cross-checking all information relevant for assessing the price stability risks is based on two analytical perspectives, referred to as the “two pillars”: the economic analysis and the monetary analysis. In cross-checking results of both economic and monetary analyses are used.

The two pillar approach ensures that all information is on focus when assessing the risks to price stability. Likewise, it introduces the concept of diversified analysis to the general public.

**Economic analysis.** The economic analysis focuses mainly on the assessment of current economic and financial developments and the implied short to medium-term risks to price stability. The economic and financial variables that are the subject of this analysis include, for example: overall output; aggregate demand and its components; fiscal policy; capital and labor market conditions; price and cost indicators; the exchange rate, the global economy and the balance of payments; financial markets of euro area, etc. Moreover, macroeconomic projection plays an important role in the economic analysis

In the economic analysis, due attention is paid to the need to identify the nature of shocks hitting the economy, their effects on cost and pricing behavior and the short to medium-term prospects for their propagation in the economy. The ECB conducts a number of surveys to contribute to the economic analysis. Financial market indicators and asset prices are also monitored within the economic analysis.

**Monetary analysis** defines the link between growth of money supply and inflation in the long run. According to the monetary analysis, there is no direct link between short-term monetary indicators and monetary decisions. The main challenge is to identify the rate of money growth that might pose risks to price stability in the medium to long term.



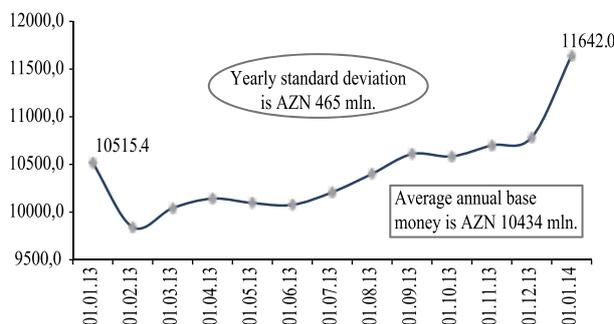
The ECB’s monetary analysis therefore adopts a more practical approach to identifying the underlying rate of monetary expansion. This approach entails a comprehensive analysis of the liquidity situation, based upon M3 aggregate. The analysis draws on expert opinion, and formal and structured methods and models. The following tools are used in the ECB’s monetary analysis: money demand models, structural general equilibrium models with an active role for money and credit, money-based inflation risk indicators and flow-of-funds analysis.

The last phase of the two pillar strategy implemented by the ECB provides a cross-check of the indications that stem from the shorter-term economic analysis with those from the longer term-oriented monetary analysis. As explained above, the monetary analysis alone cannot provide all information on future price changes. All complementarities between the two pillars are exploited at a maximum, as this is the best way to ensure that all the relevant information on price changes is obtained, enhancing the efficiency of both the decision-making process and its communication. This approach reduces the risk of policy error caused by the over-reliance on a single indicator, forecast or model. A diversified approach to the interpretation of economic conditions aims at adopting robust monetary policy decisions in an uncertain environment.

Source:

European Central Bank, “The monetary policy of the ECB”, 2011

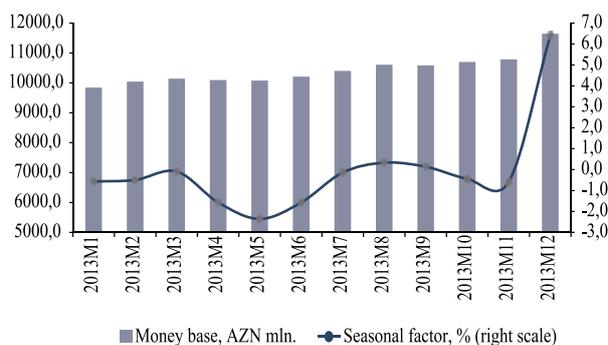
Chart 37. Manat base money, AZN mln.



Source: CBA

As shown in Chart 38, seasonally adjusted money base increased by 11.5%.

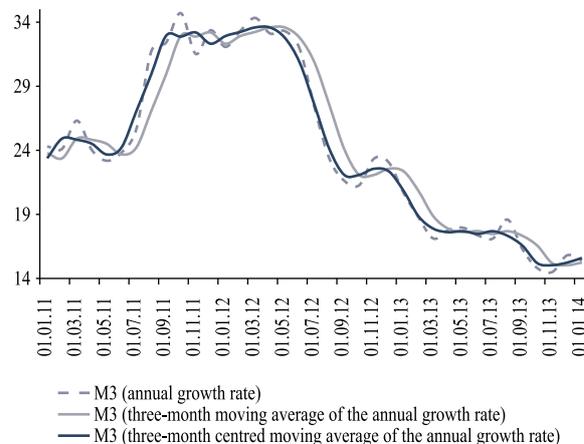
Chart 38. Effect of seasonal factors on monetary base



Source: CBA

As of 01.10.2014 broad money supply (M3) increased by 15.4% against the early year, and reached AZN 19360 million.

Chart 39. Dynamics of M3 money supply, %



Source: CBA

Dollarization indicators continued to drop in 2013. The share of foreign currency deposits in total savings and deposits decreased by 6.6 p.p. and constituted 32.9%. The share of foreign currency deposits in M3 money supply decreased by 2.6 p.p. and made up 15.1%. Besides, savings and deposits in foreign currency decreased by 1.5%, while those in the national currency increased by 31.4% over the year.

Non-cash money supply grew by 18.4% over the year, as a result of the measures taken by the Central Bank to increase confidence in the banking system.

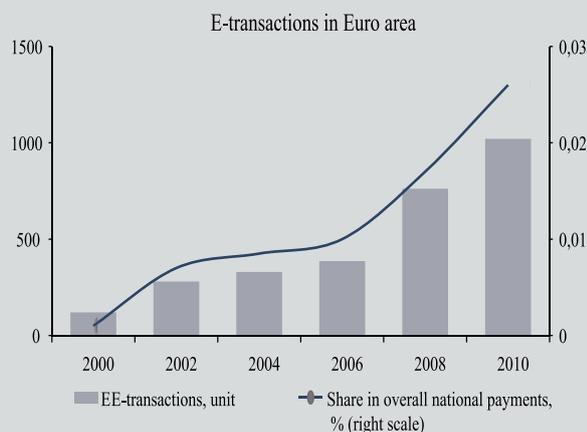
Table 3. Monetary aggregates, AZN million

	01.01.11	01.01.12	01.01.13	01.01.14
<b>M0</b> (Cash)	5455.8	7158.2	9256.6	10458.7
<b>M1</b> (Cash, demand savings and deposits)	6718.9	8824.8	11107.9	12736.9
<b>M2</b> (Cash, demand and term savings and deposits, in AZN)	8297.5	10997.2	13806.4	16434.8
<b>M3</b> (Cash, demand and term savings and deposits, in AZN and hard currency)	10527.5	13903.2	16775.3	19359.8

Source: CBA

#### Box 4. Electronic money and monetary policy

Electronic money – is a unit of account, created to be transferred through electronic facilities. First time it was issued in the middle of the last century and evolved in various forms (e-money, e-count, smart card, PayPal, Bitcoin, etc.) as a digital unit of account of the future. The current low volume of e-money does not have a significant impact on the monetary policy, however its fast growing volume and expansion all over the world in the short run draws attention. Central banks and economists argue that there is already a necessity to analyse and assess impacts of e-money on money supply in a preventive regime.



Source: Meta Zahres, «Electronic money demand», 2012

Inclusion of e-money to the scope of the monetary policy is amongst the priorities for the ECB. For this purpose 3 primary objective should be taken into consideration:

- There is a need to safeguard the reliable role of money as the unit of account for economic transactions. Over time, there may be a change in people's views on the financial system. For instance, controversies with respect to the reliability of electronic money issuers engaging in excessively risky investment activities may arise, which could gradually lead to more variable exchange rates and more volatility between electronic money.
- The effectiveness of monetary policy instruments might be affected by a widespread adoption of

Source:

Reynolds Griffith, Stephen F. «Electronic money and monetary policy» Austin State University, September, 2004;

Kristina Sova, «Electronic money trends» Turku University of Applied Sciences, 2013

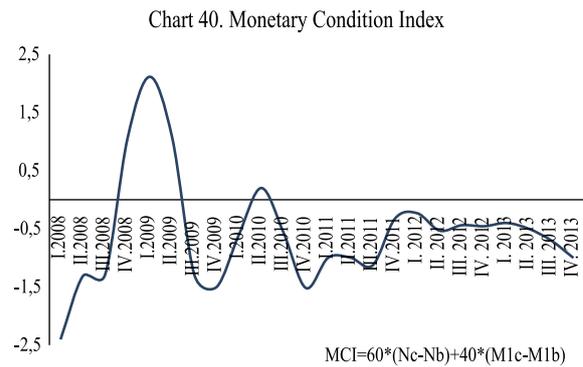
electronic money. Central banks make purchase and sale of assets through open market operations. In this case money supply, which is liabilities of, and issued by central banks is traded. Furthermore, electronic money in circulation, that affects money supply might impede the management process.

Growing share of electronic money may distort information on monetary indicators, which will ultimately hamper price stability. The key element here is who will issue electronic money. If the electronic money is issued by domestic banks, then the process could be easily measured and regulated by the banking authorities. If provided by domestic non-bank issuers, it can be treated like travelers checks and kept under general control. But if issued by a foreign organization or any other entity beyond central bank's supervision, then there might be some difficulties in measuring monetary indicators, particularly money supply, and in ensuring efficiency of monetary policy tools. This case may be compared to the conditions in the countries where dollar is currently the legal and alternative tender.

Fortunately, it takes time for electronic money to become significant portion of money supply and central banks have the ability to outline their monetary policies. The ECB has offered a comprehensive regulative program to control the electronic money phenomenon. The program covers:

- i) issuers of electronic money must be subject to prudential supervision;
- ii) electronic money schemes must have solid and transparent legal arrangements;
- iii) electronic money schemes must supply the central bank with whatever information may be required for the purpose of the monetary policy;
- iv) issuers of electronic money must be legally obliged to redeem it at par value;
- v) the possibility must exist for the central bank to impose reserve requirements on all issuers of electronic money.

Over the reporting year slight appreciation of the NEER of manat and increasing money supply had an overall easing effect on the Monetary Condition Index (MCI)<sup>3</sup>.



Source: CBA

<sup>3</sup> MCI- an indicator characterizing average change of money supply and NEER taking their share into account

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