



THE CENTRAL BANK OF
THE REPUBLIC OF AZERBAIJAN

№2(10)
2012

MONETARY POLICY REVIEW
Q2

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Acronyms

CBA	–	The Central Bank of Azerbaijan
ILO	–	The International Labor Organisation
IMF	–	The International Monetary Fund
SAR	–	The South African Republic
SSC	–	The State Statistics Committee
DGCs	–	Developing Countries
DDCs	–	Developed Countries
OECD	–	The Organisation 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	–	The Organization of the Petroleum Exporting Countries
REER	–	Real Effective Exchange Rate
FX	–	Foreign Exchange
RSM	–	Real Sector Monitoring
PPI	–	Producer Price Index
NFES	–	The National Fund for Entrepreneurship Support
GDP	–	Gross Domestic Product
WTO	–	The World Trade Organisation

EXECUTIVE SUMMARY

In the first half of 2012 the Central Bank implemented its policy in the environment of weak global economy, high risks in Eurozone related to debt problem, low international investment flows, and volatile world financial and commodity markets.

Azerbaijan maintained macroeconomic stability, economic growth continued, and the non-oil sector was the key driver of the growth amid complicated global environment. Ongoing increase in strategic foreign exchange reserves further contributed to the economic sustainability of the country.

Over the past period of the current year the Central Bank targeted single-digit inflation, a stable exchange rate of manat, enhanced growth and sustainability in the banking – financial sector, and reliable and non-interruptible operation of payment systems in harmony with the prima directions of the declared monetary and financial stability.

As a result of the joint effort by the Central Bank and the Government over the period the inflation was maintained on a single-digit level, the paramount factor of the macroeconomic stability – the exchange rate of manat remained stable and the banking system kept pace with the economic growth.

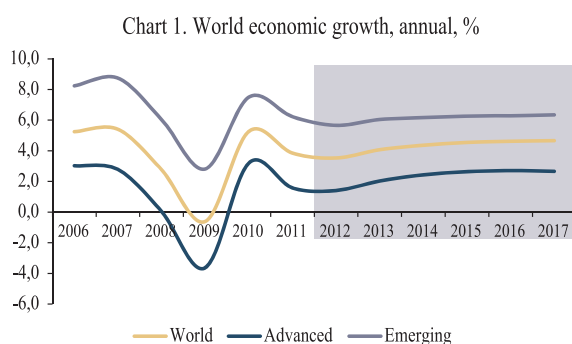
I. GLOBAL ECONOMIC PROCESSES AND THE NATIONAL ECONOMY

1.1. Trends in the world economy

The growth trends of the first half of 2012 were fragile in the world economy. The slight revival observed during the first three months was followed by high slowdown trends. International financial institutions found severe sovereign debt problems in the Euro area and higher unemployment in the world economy as the vital global economic risks.

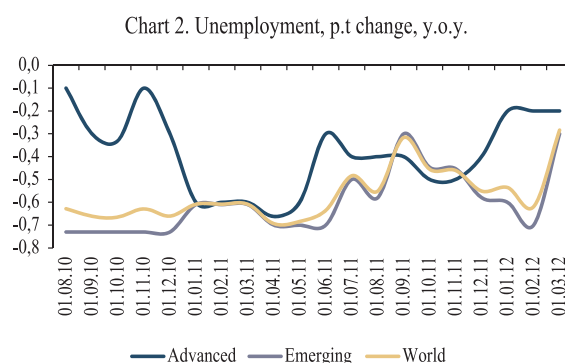
While the world economy grew by 3.6% over the first quarter of the current year, it started to subdue from April. Preliminary estimations display 3-3.5% global economic growth in the first half of the year.

Slack in the global growth mainly sourced from deepened problems in the Euro area. Strengthened crisis trends contributed to decline in business and consumer indices, investment activity and lower job places.

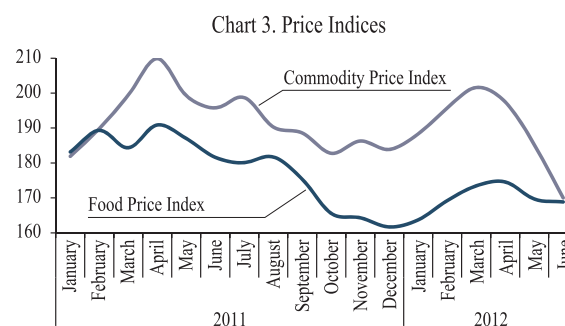


Unemployment remains the key problem in the global economy. Particularly in the Eurozone the unemployment reached its highs – 11% compared to the most advanced countries. According to the ILO, additional 48 million.

new job places need to be created on a global scale to reach the pre-crisis employment level. Out of the existing unemployed population, 75 million are the youth (ages 15-24). The fiscal consolidation in the Euro area causes significant reduction in the public sector.



Over the period the dynamics of commodity prices in global markets tended to decline. Thus, year over year decline in the commodity prices index was 13.2%, while that of food price index declined by 7%. Decrease in commodity prices may be explained by low global aggregate demand.

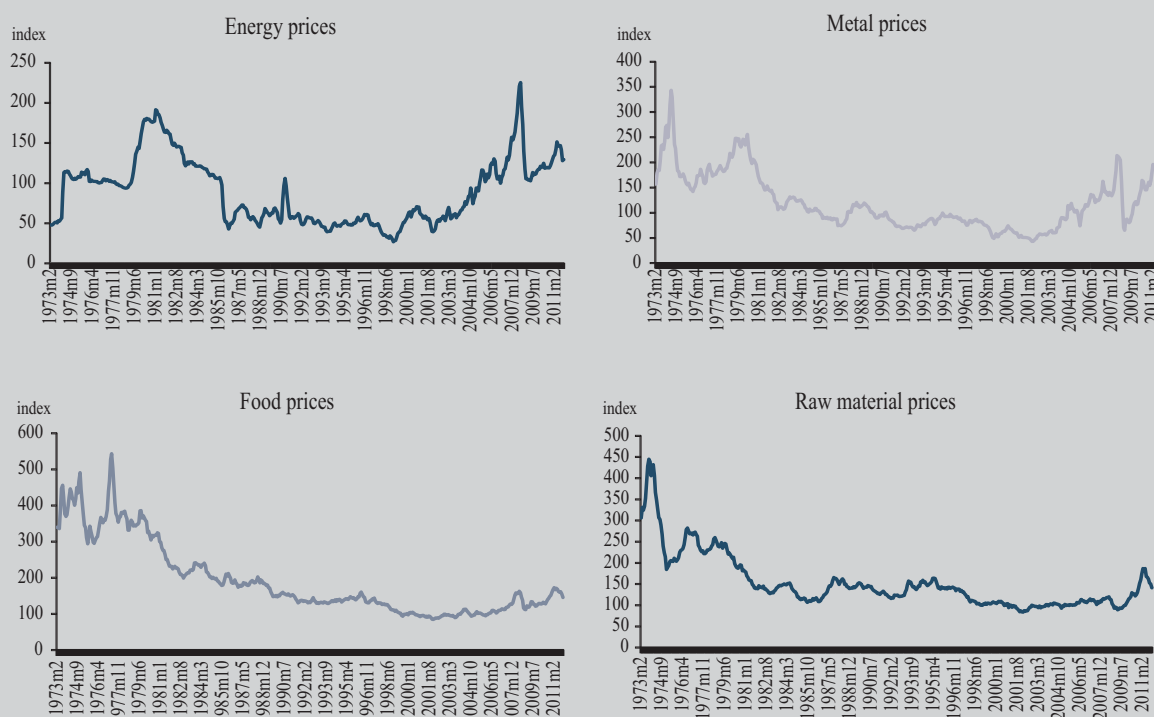


Box 1. Macroeconomic effects of swings in world commodity prices

The world market has witnessed sharp rises in commodity prices over the last 10 years. Late in 2011 the average price for energy and metals surpassed the average of the last 10 years by 3 times and reached its highs in the last 40 years. Such a situation had a crucial effect on a macroeconomic performance of every country, particularly commodity export, including economic growth, foreign and fiscal balances and required relevant fiscal and monetary policies.

account for a higher share in total exports. Thus, while 1% increase in world demand respectively caused 5.8% and 3.2% rise in prices for oil and copper, it increased cotton prices only by 0.8%.

The sources of the commodity price change. Commodity prices underpinned by unexpected changes in global activity (demand) have a significant effect on exporters' real activity and external and fiscal balances, while those driven by unexpected changes to global commodity production (supply)



Source: International Monetary Fund

According to the IMF studies, the following factors need to be considered when studying reasons and effects of fluctuations in commodity prices:

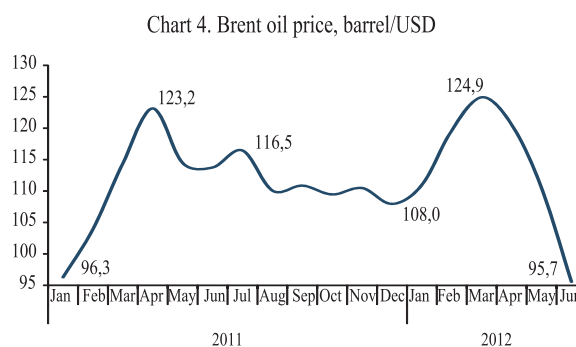
Diversity of commodity types. Over the past period the macroeconomic performance in commodity exporters tends to move with commodity price cycles. Thus, economic activity and external and fiscal balances deteriorate (improve) with downswings (upswings) in the world commodity prices. This behavior is more prominent for energy and metal exporters more than for exporters of food and raw materials, because energy and metal prices are more sensitive to the global business cycle and

are not always significant. This effect is generally stronger for oil exporters than for exporters of other commodities. According to estimations, upswing in oil prices (demand shock equals to 1 standard deviation) increases the real GDP of oil exporters by 0.4%.

The IMF researches show that during swings in commodity prices the countercyclical fiscal policy is the optimum policy in commodity exporter countries. Also, the studies revealed highly effective fiscal policy in the countries with floating exchange rate that target inflation.

Source: "World Economic Outlook: Growth resuming, dangers remain" April, 2012

Close to the end of the reporting period oil prices in the world market also started to decline. The average six-month price for Brent crude oil was USD 114. The oil price has decreased by 11% since the beginning of the year. The key reasons for recent volatile oil prices are global economic pessimism, high crude oil reserves and a low economic activity in China.



Source: IMF

Box 2. New post-crisis fiscal rules

The deeper sovereign debt crisis in the world necessitated further focus on higher effectiveness of fiscal management. In order to strengthen and increase flexibility of the fiscal framework some countries introduced innovations to their fiscal

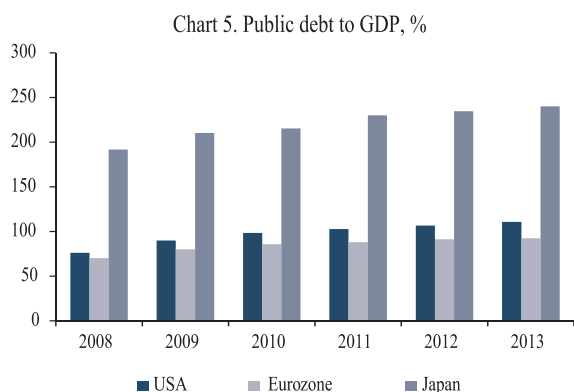
rules and budget frames. The changes primarily encompass improvement of the relevant legislation, high flexibility in techniques and procedures, and elevation of effectiveness of fiscal institutions.

New fiscal rules adopted since 2010

Country	Description
US	Application of <i>discretionary spending caps</i> are expected to save USD 900 billion, over the next decade with additional USD 1.2 trillion automatic spending cuts. These spending cuts will be in defense and domestic programs
Austria	From 2017 onward <i>deficit at the federal level</i> will not be allowed to exceed 0.35% of GDP.
Israel	A <i>debt-to-GDP ratio</i> of 60% has been established and the expenditure rule adjusted to achieve this target.
Japan	The Fiscal Management Strategy, which includes a pay-as-you-go rule, was adopted in 2010. The rule implies that any measure that involves increases in expenditure or decreases in revenue needs to be compensated for by permanent reductions in expenditures or permanent revenue-raising measures. A Medium-Term Fiscal Framework, including a limit on expenditure, was also introduced.
Poland	A new expenditure rule limits the increase in central government discretionary spending and all <i>newly enacted spending</i> to 1 percent in real terms.
Romania	<i>General government expenditure growth</i> should not exceed projected nominal GDP for three years until the budget balance is in surplus.
Slovak Republic	A public debt is capped at 60% of GDP. Automatic adjustment mechanisms take effect when the debt-to-GDP ratio reaches 50%.

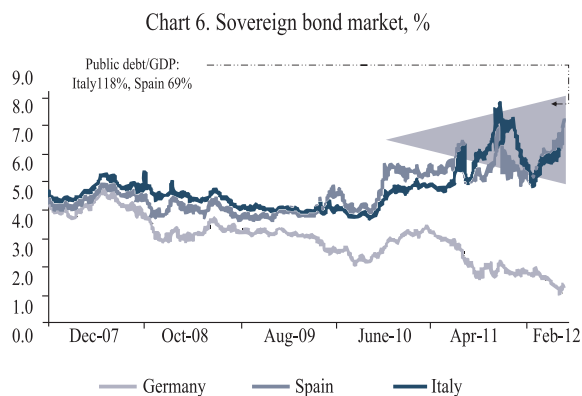
Source: IMF, Fiscal Monitor April 2012

During the reporting period the most advanced countries kept realizing fiscal consolidation programs. As a result, in 2012 – 2013 a cyclically adjusted gap is expected to rise by 1% of the GDP.



Source: IMF

Deeper fiscal problems in the most advanced countries reduce reliability of government securities as an investment tool. They limit realization of government securities in the market that eventually leads to high interest rates on these tools and additional risks for the financial stability.



Source: Financial Times, Haver Analytics

The economic situation varies across the world's leading economic regions over the period.

No economic growth was observed in the Euro area in the first quarter of 2012, which was negatively affected by the debt crisis, low business and consumer confidence indices, shrinkage of the lending channels and decline in private demand and fiscal consolidation. Deeper

problems in the countries like Italy and Spain with systemically important banking sector, as well as higher political risks and pressures in Greece along with economic problems brought about the possibility of break-up of European Monetary Union.

The Euro area is of special importance for the global economy owing to the diversified banking system and export capacity. Estimations suggest that 1 percentage point decline of GDP in the Euro area reduces growth in other countries by 0.4% percentage point. The Euro area crisis can spillover to other countries through trade and financial channels:

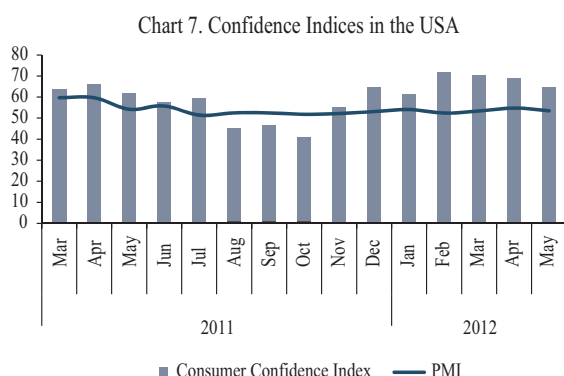
- Contraction in demand in the Euro area reduces spending on goods and services imported from remainder countries. The regional import level is highly vulnerable to the level of internal demand. Over the past 20 years import has changed by 2.8% per 1% change in GDP.

- While not so predictable as the trade channel, the effect of the financial channel also has huge potential impact. Thus, 40% of claims of the global banking system goes to the share of the Euro area. Particularly, accelerated deleveraging in the Euro zone banks elevates the possibility of recall (withdrawal) of certain portion of EUR 5 trillion. worth external demand from other countries.

The Eurozone countries held a summit to define the short-term measures to maintain stability in the Euro area. Three critical decisions were taken as a result of the summit: (i) form a unified banking supervision body under the ECB; (ii) inject the European Stability Mechanism with necessary funds to ensure direct support for banks; (iii) launch a unified treasury system. The summit identified new challenges on the way to a sustainable economic and monetary union.

Over the period, the US economy underwent more positive trends compared to other advanced countries. The first quarter witnessed lower-than-expected growth (1.9%), however, private demand and export were the key drivers of the

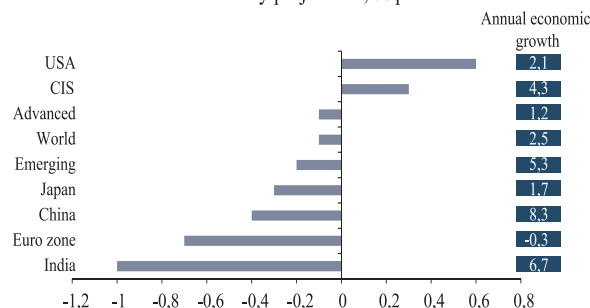
growth, which is found to be a positive case. The unemployment rate was 8.2% in June.



Source: Federal Conference Board

Deterioration of the global economic background urged leading world institutions to revise the growth outlook. The UN in its recent report made a downward revision to previous growth expectations on a number of leading countries.

Chart 8. 2012 year growth corrections, difference between January projections, % points



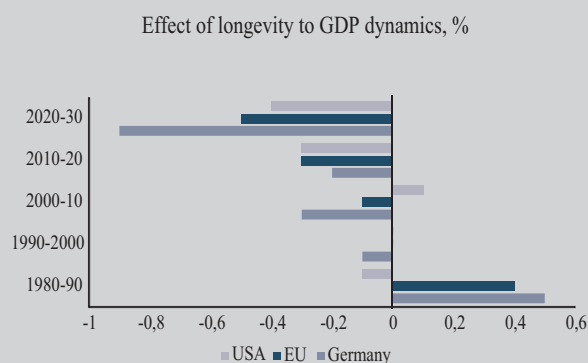
Source: UN

Thus, the first half of 2012 brought about uncertainties with respect to prospects of the global economy. However, the global economic growth continued, though at a lower-than-expected rate. The realization of the scenario of strengthened positive trends may enable more optimistic development line by the end of the year.

Box 3. Correlation between the economic growth and longevity

High longevity and low death rates in Europe, particularly in Germany, Italy and Spain have accelerated aging of the population. Whereas average age in Italy was 28.6 in 1950, in 2010 it was 43.3. Aging of the population poses severe pressures on the economic growth and social burden of the state budget. While the aging of the population in the EU (15) made a positive 0.4 percentage point contribution to the economic growth, it is expected to be negative 0.5 percentage point in 2020.

Despite high immigration processes, the labor force in the EU (15) over upcoming 20 years is expected to decline by 0.1% on annual. While the age dependency ratio (the number of the population aged 0-14 and over 65 to those aged 15-64) in 2012 made 0.27, it is expected to equal 0.52 in 2060. In 2036 the social spending to GDP ratio will increase by 3.4%



Source: Eurostat, OECD, McKinsey Global Institute

against 2007. Out of which, 1.8% will be channeled to pensions, 1% to healthcare and 0.6% to long-term social provisioning.

Source: McKinsey Global Institute, *European growth and renewal: The path from crisis to recovery*

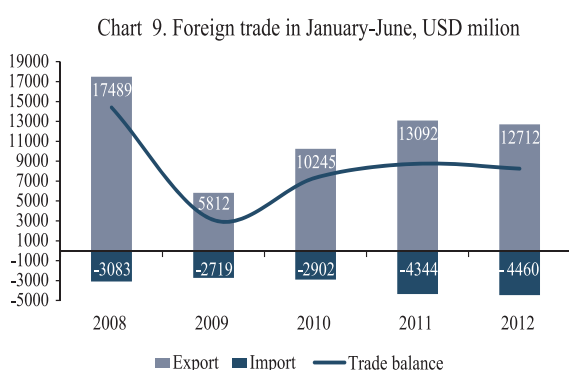
1.2. Macroeconomic processes in Azerbaijan

In the first half of 2012 the Azerbaijani economy continued to grow and the foreign position of the country remained favorable. Wider internal and external demand, state support for the economic activity and ongoing reforms had a positive effect on the dynamics of the economy. Despite certain risks imported from the global environment, macroeconomic and financial stability was maintained over the period.

1.2.1. External sector

In the first half of 2012 the external position of the country remained favorable. Over the period, the average USD 115 price for the Azerbaijani oil and high demand for goods and services on the non-oil sector generated large surplus in the foreign trade balance.

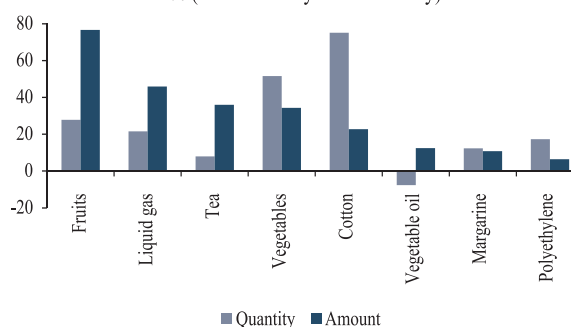
According to the State Customs Committee (SCC), the foreign trade turnover over 6 months of the current year was USD 17.2 billion, out of which USD 12.7 billion was export and USD 4.5 billion import. In January – June, 2012 the surplus of the foreign trade balance equaled USD 8.2 billion.



Source: SCC

The export of fruits, liquid gas, tea, vegetables etc. followed an incremental path. While the quantity of exported goods decreased in certain sectors, an inverse process was observed in others.

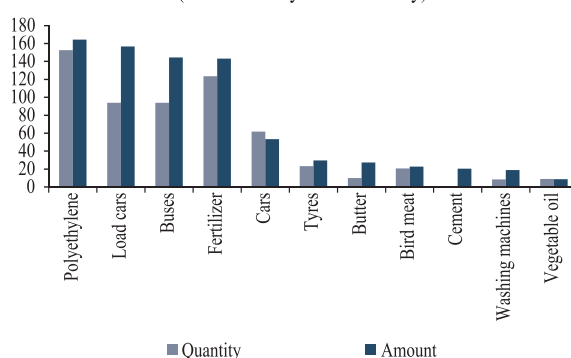
Chart 10. Quantity and amount changes of main export goods, % (2012 Jan-May/2011 Jan-May)



Source: SSC

Import of polyethylene, durables, fertilizers, automobiles etc. was high. Machines, mechanisms and vehicles make one third of import, which declined 7% during the period. The analogous decline in a number of food products indicates high domestic production.

Chart 11. Quantity and amount changes of main import goods, % (2012 Jan-May/2011 Jan-May)



Source: SSC

In total, most imports increased in terms of both quantity, and amount. Some products decreased in terms of quantity however increased in terms of amount.

According to the SSC, prices for the Azerbaijani export commodities surge more rapidly than those of imports, which display increase in opportunities to import more commodities and services through less export, in other words, improved trade conditions.

Besides export, dynamics of remittances and capital flows from abroad also had an upward effect on FX flows into the country.

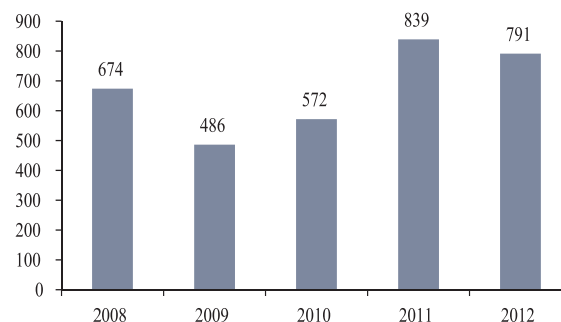
According to the most preliminary data, the

scale of inflows went up by USD 791 million over 6 months.

According to the SSC's estimates, the foreign investments into the economy increased by 5.2% over the first half of the year and reached USD 1.7 billion.

The rise in FX reserves also indicates the improvement of foreign position of the country. In January – June, 2012 strategic FX reserves of the country rose by 9% against the beginning of the year and surpassed USD 44 billion, which

Chart 12. Remittances inflow in January-June, USD million



Source: CBA

Box 4. Correlation between remittances and macroeconomic indicators

The IMF experts conducted a special survey using economic indicators of Middle East, North Africa, Central Asia and Caucasus to estimate the dependency between the volume of remittances and a number of macroeconomic indicators in remittance-sending and receiving countries. The focus was on 2009 – the global downturn and 2010 – the year of recovery. The results of the study are:

The first result was that the economic downturn or upturn in a remittance-sending country has a significant effect on the volume of remittances from the country in question. According to the World Bank, in 2009 global remittances declined from USD 443 billion to USD 416 billion for the first time. The economies of the Central Asia and the Caucasus, 80% of remittances of which inflow from Russia, were particularly affected by this downturn.

According to the study, 11% - 46% of initial balance change in these countries was related to the downturn in the Russian economy.

It was identified that the elasticity of remittances against per capita GDP of a remittance-sending country is high, positive and statistically critical, and when estimated via various mathematical economic methods approximates to 1.7, 2.29 and 3.2.

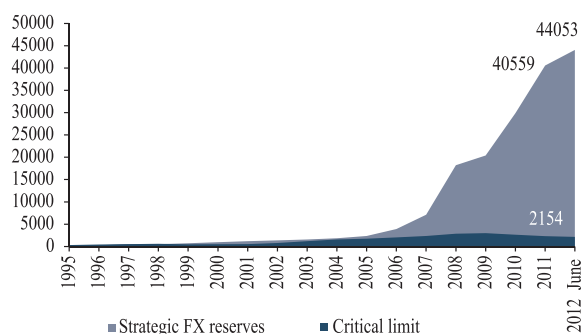
The elasticity of remittances and the *long-term*

economic growth of a remittance-receiving country is weak. Thus, remittances have a considerable effect on the scale of consumption and import, since remittances are, in the first place, directed at domestic and imported goods. Estimations show that, remittances have a positive and significant effect on *import* whose elasticity equals 0.04-0.08. The elasticity of remittances to *private consumption* is also positive and high and, if to calculate through diverse methods, its elasticity is around 0.125 or 0.127. The elasticity of remittances vis-a-vis *private investment* is established to be -0.09 or -0.06, which is statistically of no importance. Remittances, not directed at growth of investments, fail to contribute to long-term economic growth.

The scale of remittance-driven *trade taxes* from consumption and import is also flexible. *The total taxes to remittances* elasticity ratio is 0.06, which displays that remittances have considerable impact on fiscal performance of remittance-receiving countries. The fiscal effect of remittances mostly shows up in trade tax revenues, because the countries from these regions generate their tax revenues primarily from trade taxes.

Source: Yasser Abdih, Adolfo Barajas, Ralph Chami and Christian Ebeke, "Remittances Channel and Fiscal Impact in the Middle East, North Africa, and Central Asia", IMF, April 2012

Chart 13. Sufficiency of strategic FX reserves, USD million

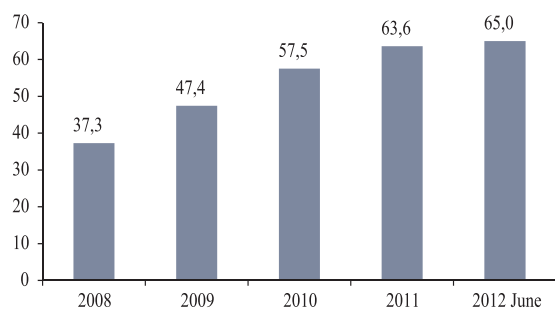


Source: CBA

is sufficient for three year import of goods and services.

The CBA's FX reserves increased by 5% and exceeded USD 11 billion, sufficient to finance one year goods and services import.

Chart 14. Ratio of strategic FX reserves to GDP, %



Source: CBA

Currently, the FX reserves to GDP ratio is around 65%. In general, a high growth rate of strategic FX reserves is the factor that dampens vulnerability of the country economy to possible foreign shocks or shapes a robust macroeconomic buffer.

1.2.2. Aggregate demand

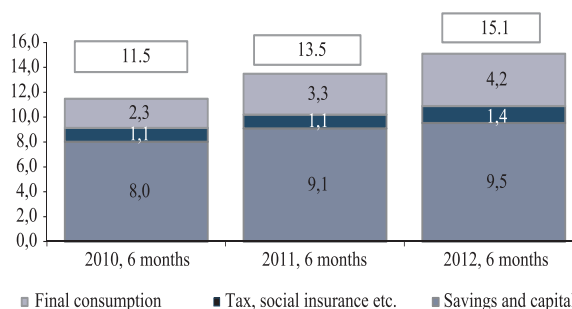
In the first half of 2012 all components of the aggregate demand, including final consumption expenditures, investments and external demand positively affected the economic growth. During the period, increase in income of the population

and domestic investments revived all demand components of the GDP.

1.2.2.1. Final consumption expenditures. During the first half of the current year the positive contribution of final consumption to the economic growth was high.

Household's consumption. In the first 6 months of the current year per capita nominal money income of the households increased by 12.7% against the relevant period of the previous year and made AZN 1651.2 or AZN 275.2 on monthly average. The households directed roughly 63.2% of the income to final consumption on purchase of commodities and services. Final consumption expenditures of the households increased by 4.4% in nominal terms and made AZN 9.5 billion, or equaled to 37% of the GDP.

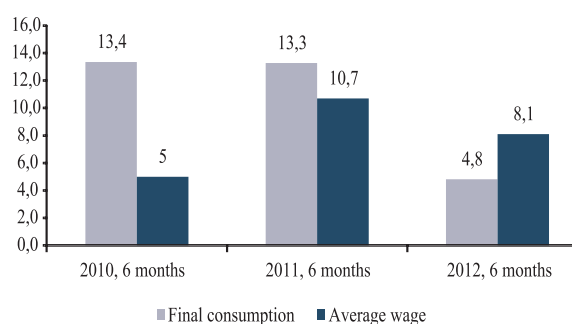
Chart 15. Money income of population, AZN billion



Source: SSC

Average monthly salary increased by 8.1% and made AZN 382.6 that contributed to maintenance of the high share of final consumption in the GDP.

Chart 16. Changes in wages and final consumption, % (year on year)

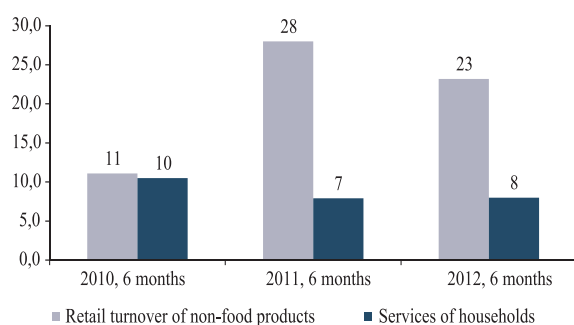


Source: SSC

Parallel step-up in loans to households also had an upward effect on demand. Thus, loans to households rose by 14.7% in the first half of 2012 (by commercial banks and NBCIs).

Demand continued to grow and contributed to the retail trade turnover and off-free services to the population.

Chart 17. Non-food product turnover and services to households, %
(year on year)



Source: SSC

Retail trade turnover increased by 9.2%, whereas retail trade turnover on non-food products rose by 23.2% in the first half of the year. Growth in off-free services to the population constituted 8.0%. The volume of trade commodity stock diminished and its index fell down to 1.3% from 25.9% against the beginning of the year.

Government and public organizations. The main share of Government consumption expenditure was spent on commodities and services. In January – May of the reporting period salaries, pensions and allowances of the population made up 25.3% of the budget expenditures.

1.2.2.2. Investment expenditures. Investment to the economy from all sources in the first half of 2012 made AZN 5.9 billion, having increased

Box 5. Vital results of selective study of households

The State Statistics Committee, based upon the methodology and recommendations from the World Bank, conducted a selective survey covering all economic regions of the country in 2011. Out of surveyed families, 28,8% reside in large cities, 21,6% in towns and 49,6% in rural areas. The study surfaced data on income and consumption expenditures, as well as a healthy life-style, housing conditions of the population and others.

The survey results display ongoing incremental rise in per capita average monthly income of the population. Per capita average monthly income at the disposal of the population rose by 18.1% against 2012 and reached AZN 282. As for the structure of income, its 58,2% comes from employment and self-employment, 14,1% - agriculture, 16,6% pensions and social allowances, 1% - property and rent, 10,1% other sources.

According to the survey, in the previous year average annual per capita consumption by the

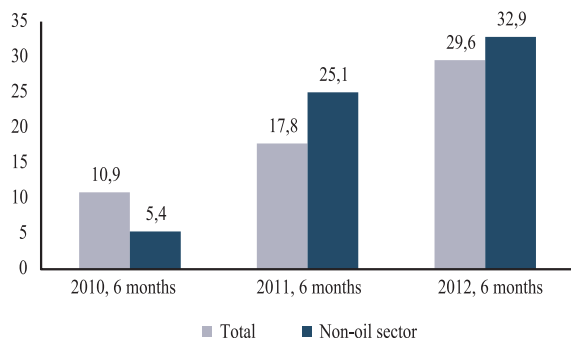
population on all types of food products prevailed over bread and bakery products. In 2011 caloricity of daily dietary intake increased against the previous year and made 2682 kilocalories per day, which exceeds the minimum threshold of the set of food products established in the Minimum Consumption Basket by 424 kilocalories or 18.8% (daily per capita 2258 kilocalories). Increase in food products consumed by the population changed the structure of the dietary intake and transformed it to a multi-caloric protein-rich ration.

The survey estimated health condition of 76% of the population good, 21% - satisfactory and only 3% - poor. As for self-evaluation of health on age groups, most population aged 15 – 44 (92%) consider themselves quite healthy, at the ages of 45-64 this indicators equals 68% and over 65 – 23%.

Source: SSCAR, Social economic growth bulletin, January – March 2012

by 29.6%, which equals 22.9% of the GDP. It included 22.1% increase in foreign and 77.9% increase in domestic investments.

Chart 18. Changes in Investment, %



Source: SSC

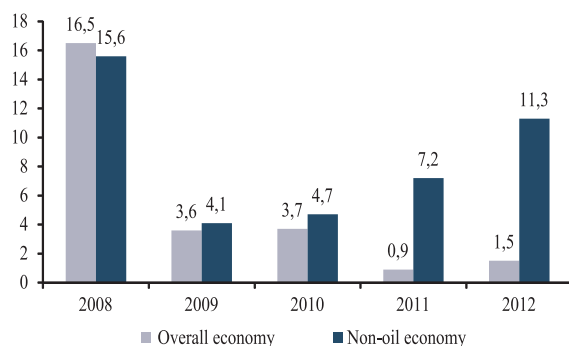
71.4% of investments was directed to the non-oil sector. In total, investments to the non-oil sector in the first quarter surpass the previous year level by 32.9%. In the non-oil sector, the growth rate of investments to agriculture, communications and information technologies, and tourism was particularly high.

1.2.3. Aggregate supply

In January – June of 2012 the growth in GDP was mainly due to activity in the non-oil sector. Two thirds of the additional value added was due to the share of production and one third to services.

Economic growth. The GDP growth was 1,5% in real terms and exceeded AZN 26 billion in nominal terms in the first half of the year. During the reporting period the oil-and-gas

Chart 19. Economic growth in January-June, %

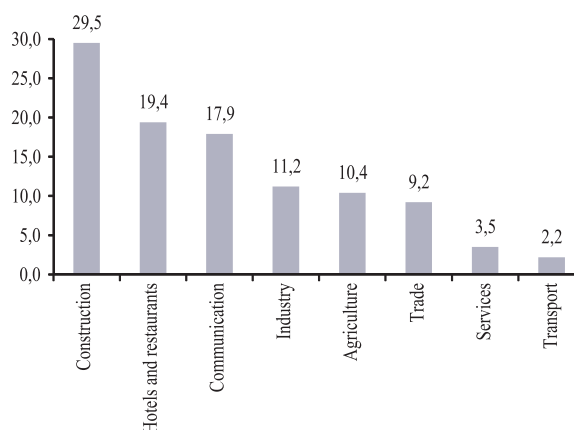


Source: SSC

sector experienced 6.4% drop whereas the non-oil sector increased 11.3%. The half of the GDP was the share of the non-oil sector, which made a 5.5% points contribution to the overall growth.

All segments of the non-oil sector posted growth in six months of the current year. The highest growth rate among segments was in construction, catering, communications and industry refining. Growth in the industry mainly sourced from the food industry, metallurgy, machinery and chemistry. The high growth in agriculture occurred both in the crop sector and in livestock.

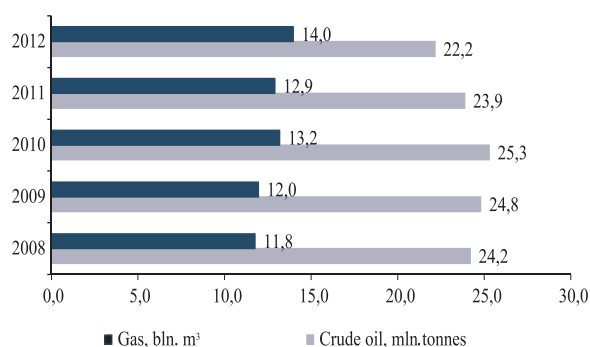
Chart 20. Economic growth, %



Source: SSC

During the reporting period crude oil extraction dropped by 6.8%, while natural gas production rose by 8.2%. Over 674 kg gold and 378 kg silver was extracted during the period.

Chart 21. Crude oil and gas natural production in January-June



Source: SSC

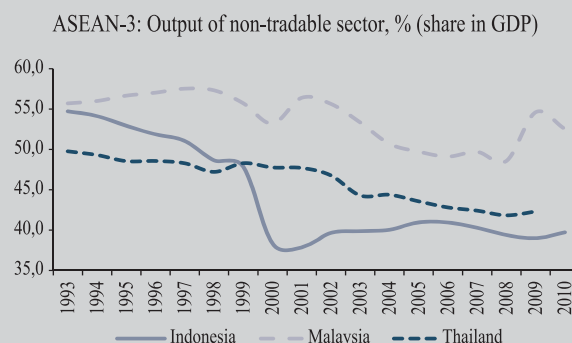
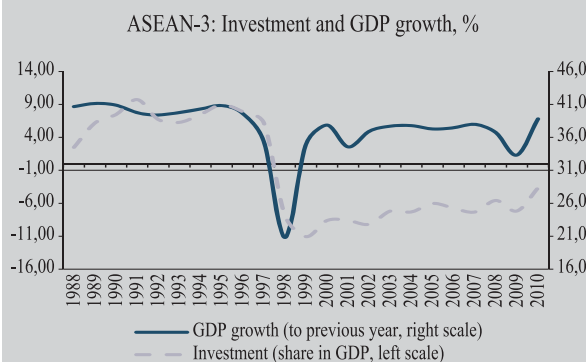
Box 6. Investment experience in ASEAN-3: destiny of two sectors

After the financial crisis of the 1990s Asian transition countries partially returned to the pre-crisis level in the short run. However, investments failed to fully recover, and currently follows the lowest level. On average in every ASEAN-3 country (Indonesia, Malaysia and Thailand) the share of investments in GDP makes 10%, which is much below the 1996 level. In 2011 loans to the private sector constituted 70% of GDP, whereas in 1996 it was 100%. The reasons for decline in investments are: (i) transition to a technological growth strategy through weak and risky investment environment, and reduction in physical capital needs and incremental competition with China with respect to allocation of physical capital; (ii) sectoral breakdown of aggregate output, and the volume of loans, particularly the gap between tradable and non-tradable sectors. In the ASEAN-3 countries the share of non-tradable output in GDP went down by 5 percentage points in 1996-2007, which is in contrast with the growth in developed economies in the similar period. In parallel, the share of loans to the non-tradable sector in GDP and total loans declined by 10 percentage points in 1996-2007.

3 economies the share of debts and debt liabilities of the non-tradable sector has a negative effect on investments.

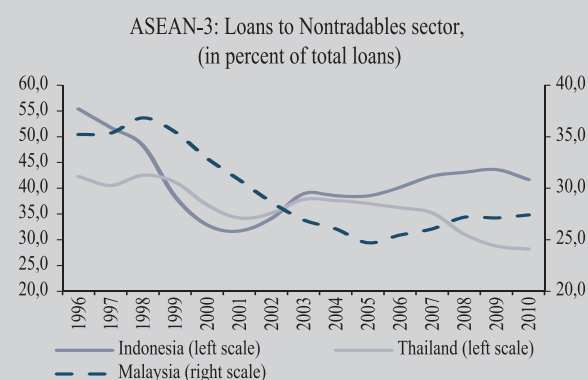
The scale of investments in Asian countries may go up with the elimination of financial restrictions for entities of the non-tradable sector, which, in its turn, will affect growth in labour productivity, income and social protection. The non-tradable is also the key factor in creation of new jobs.

Launch of credit registries and credit bureaus is of critical importance to eliminate asymmetric information in the lending market. For instance, the credit bureaus of Malaysia provide data on loans, as well as SME ratings. Further development of the capital market and updates to the normative basis of the legal nature with respect to expansion of the spectrum of pledgeable assets will develop risk-based financing and the venture capital. Such a policy may accelerate SME lendings, that enjoy a large share in the non-tradable sector. Openness of the non-tradable sector to foreign capital will motion high investments in the regional non-tradable sector.



It displays that the post-crisis lending slump had an asymmetric influence on the companies across sectors in Asian countries. The scale of the tradable sector is high, its access to domestic and international capital market, internal bank resources is broad. The non-tradable sector goes through an adverse situation.

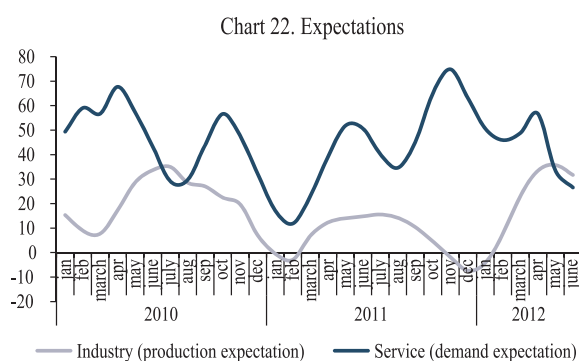
The IMF studies also suggest that there is a close correlation between total output and loans to the non-tradable sector in the ASEAN-3 countries. The level of investment in these countries depends on the scale of internal funds of companies which makes the non-tradable sector more vulnerable. In the ASEAN-



Source: IMF, *Regional Economic Outlook: Asia and Pacific*, 2012

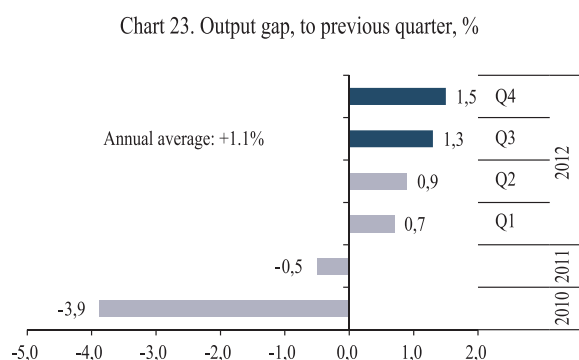
Economic growth expectations. According to forecasts of the Government, as well as international institutions, the economic growth is expected to endure in the country in the nearest horizon. The World Bank, in its recently released economic outlook, indicates that the economic growth in Azerbaijan will continue in the current and following years. The Bank predicts 3.1% and 3.5% economic growth in the country respectively for 2012 and 2013, including 5.5 – 6% growth in the non-oil sector in both years.¹ In general, the UN, the IMF, the EBRD and the WB forecasts shows on average 3.5% economic growth in Azerbaijan.

The Real Sector Monitoring (RSM) conducted by the CBA also confirms optimistic expectations over economic activity. Thus, according to the results of the RSM, demand expectation index on production and supply expectation on services have been prone to growing compared with the same period of the last year. Positive expectations were particularly observed in chemical, construction materials production and textile subsections. The highest positive expectations in services belong to communication, hotel and transport subsectors. Such positive expectations resulted in decrease of stocks. In general, findings of the RSM conducted by the CBA demonstrate increase in the number of enterprises with incremental production and risen turnover and sustainability of this growth.



Source: CBA. Note: Moving average is used to smooth out fluctuations, as monitoring findings are likely to be exposed to seasonal changes.

According to the CBA estimations, output gap (gap between the potential and actual levels of the GDP) is expected to be positively zoned being equal to +1.1%. High public demand will significantly contribute to positive zoning of the output gap.



Source: CBA

Note: Dark colour stands for forecast

1.2.4. Macroeconomic equilibrium

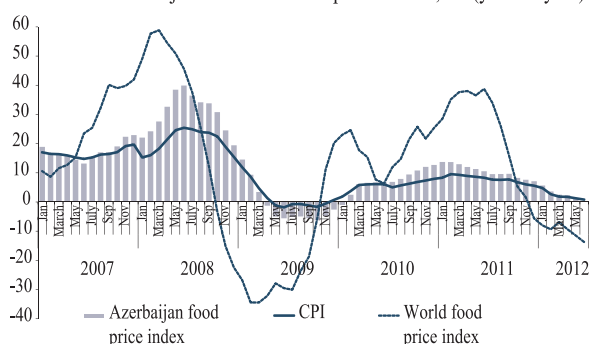
Although aggregate demand continued to grow during the period, price rise on food products in world commodity markets slowed down, prices for agricultural products went down and inflation was maintained on a single digit level.

1.2.4.1. Consumer Price Index (CPI). In the first six months of 2012 average annual inflation was 2.2%, which significantly falls below the previous year's level. Thus, while the average annual rise in food prices was 2.1% in six months of 2011, it decreased by 4.4% in the similar period of 2012, and resulted in (-2.1%) deflation in total prices.

The average annual inflation on non-food products was 1.3%, and -0.1% against the beginning of the year. Inflation on services was 0.3% against the year launch, the average annual being 1.7%.

¹ Source: World Bank, www.worldbank.org / Global Economic Prospects, June 2012

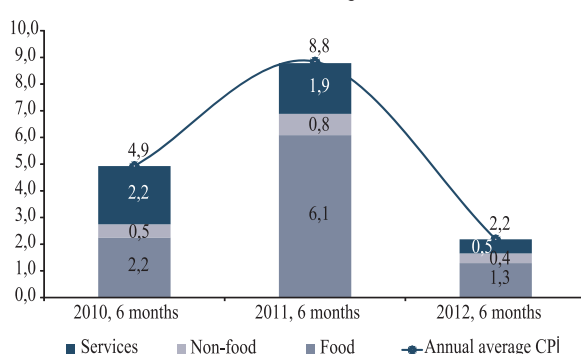
Chart 24. Azerbaijan and World food price indices, % (year on year)



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

The decomposition analysis of inflation in six months of 2012 indicates that inflation was mainly caused by price changes in food products. Thus, 1.3 percentage points of the average annual inflation relate to increase in price of food products, 0.4 percentage points – non-food stuff, and 0.5 percentage points – services.

Chart 25. Annual average CPI, %

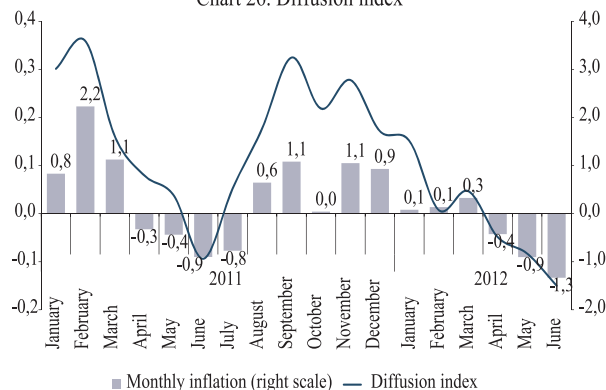


Source: CBA estimations on the basis of SSC data

Core inflation, adjusted from changes in prices for commodities regulated by the government and seasonal factors, made 2.3%, whereas it was -0.5 percent at the beginning of the year.

The *diffusion index*², that addresses comprehensivity of price swings, displays prevalence of price reductions of the current year over those in the relevant period of the previous year. In other words, the number of products in the consumption basket with declining prices dominated, and price reductions were more comprehensive.

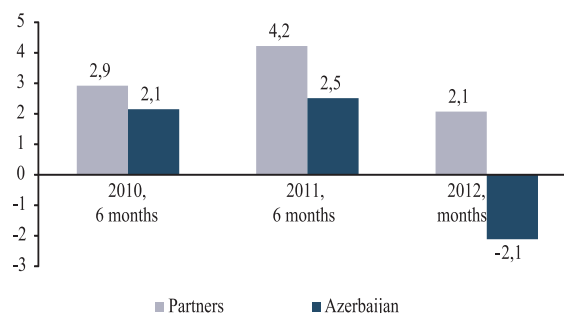
Chart 26. Diffusion index



Source: SSC

Over 6 months of 2012 the inflation was 1.2% in trade partner DDCs, 2.4%, in DGCs whereas it was 2.7% in oil exporters. Totally, on average 2.1% inflation in trade partners surpassed that of Azerbaijan by 4.2 percentage points.

Chart 27. Consumer Price Indices (domestic and trade partners), %



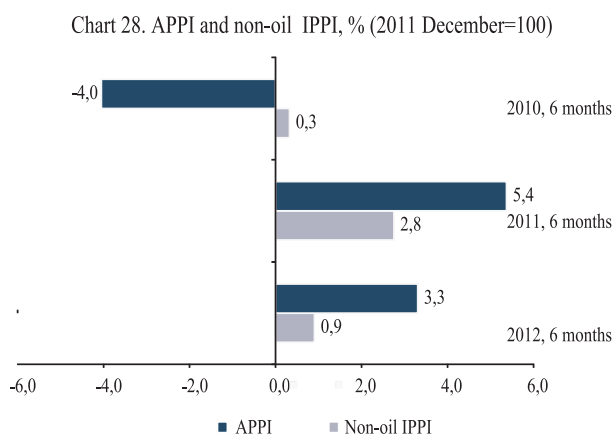
Source: SSC

1.2.4.2. Industrial Producer Price Index (IPPI).

In six months of 2012 the average annual IPPI went up by 8.4 %, which is explained by the price rise in many sectors of the industry. Thus, on average annual producer prices were up by 9.4 % in the mining industry, 6.6% in the machinery and equipment, 6.2% in the metallurgy, 5.0 % in the chemical industry. At the same time, price reduction was observed in some industry sectors. Price fall was 6.0 % in food products, 5.2% in tobacco and 3.7% in rubber and plastic mass. Prices for non-oil industry products increased by 0.3% against the beginning of the year.

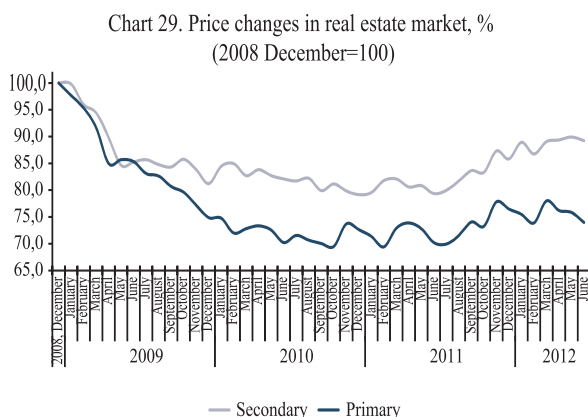
² Diffusion index – the difference between the number of products in the consumption basket with price upswings and those with downswings to the total number of products ratio.

1.2.4.3. Agricultural Producer Price Index (APPI). In six months of 2012 the APPI declined by 4% on average annual. Decline on price dynamics was 1.7% on annual plants and 2.3% on perennials. 1.2% price rise was observed on livestock and livestock products.



Source: SSC

1.2.4.4. Real estate prices. According to the MBA LTD Appraisal and Consulting Co, the activity in the first quarter of the current year was followed by slight slowdown in the second quarter. In total, during six months of 2012, prices in the secondary market rose by 4%, and in the primary market – declined by 3.3%. The key reason for price rise in the secondary market is the shrinkage of supply in the real estate market (MBA LTD Appraisal and Consulting Co). However, the price for 1 sq. m. residential space in the secondary market falls below the level of December, 2008 by 10.9% and 26%

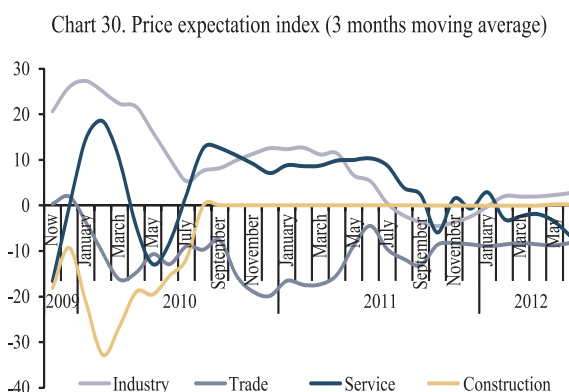


Source: «MBA LTD» Appraisal and Consulting Co.

in the primary market. Rent fees increased by 10.1% and 10.6% respectively in residential and commercial property over the period.

Ongoing mortgage lending had an upward effect on the activity in the real estate market, particularly in the secondary market. AZN 15 million worth social mortgage lending was issued for over 450 families from the state budget in the first half of 2012. Market resources were still being attracted for mortgage lending. Over the first half of 2012 AZN 22 million worth mortgage lending was issued for more than 560 families by assigned credit institutions through the Mortgage Fund, except for social mortgage.

1.2.4.5. Inflation expectations. Inflation in 2012 is expected to be on a single-digit level according to international financial institutions. The IMF, in its latest report, predicts 5.6% average annual inflation for Azerbaijan, which is 1.5% and 0.7% lower than that of the CIS and DGCs respectively. The findings of the RSM regularly conducted by the CBA display no high inflation expectations in the country. In two quarters of 2012 the price expectations index is negatively zoned in all segments of trade and services. The price expectations index in construction and industry was not up, although positively zoned.



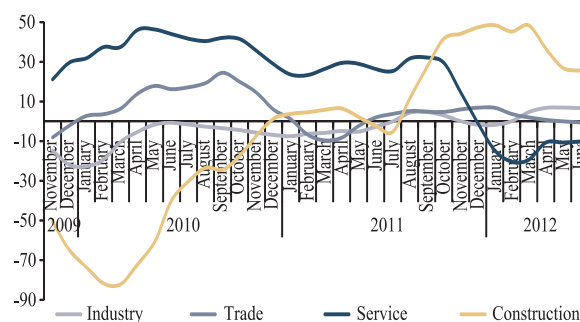
Source: CBA

1.2.4.6. Employment. As of the end of the reporting period economically active population was numbering 4634.1 thousand persons, out

of which 4388.6 thousand persons are engaged in industry and various sectors of the social area. According to the SSC, in January – May the number of hired labor was 1368.8 thousand persons, out of which 1332.1 thousand persons are employed in the non-oil sector.

The CBA observations within the real sector monitoring in up to 300 enterprises also demonstrate increase in employment. The important increase in the number of employees was observed in construction and industry. This growth is expected to continue in the following months. Thus, employment expectations index is positively zoned in industry and construction.

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



Source: CBA

II. MONETARY AND EXCHANGE RATE POLICY

In the first half of 2012 the Central Bank targeted a single-digit level of inflation, prevention of exchange rate volatility of manat and maintenance of stability in the banking-financial system under the declared directions of the monetary policy.

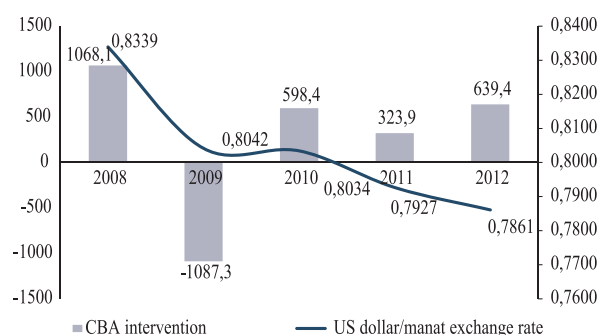
2.1. FX market and the exchange rate of manat

Over the first half of 2012 the Central Bank continued to conduct its exchange rate policy targeting bilateral exchange rate of USD/AZN within the corridor.

Supply in the FX market of the country broadened in the environment of large volume surplus in the balance of payments. However, to prevent significant strengthening of the exchange rate and thus neutralize negative impact on competitiveness of the non-oil sector,

the Central Bank sterilized USD 639.4 million, worth currency in the first half of 2012.

Chart 32. CBA's intervention in the first half of 2012, USD million



Source: CBA

As a result, manat strengthened against USD at a moderate rate – only 0.1%. Stability of the national currency had a positive effect on macroeconomic condition and the financial sector stability in the country.

Table 1. Bilateral nominal and real exchange rate indices of manat in the first half of 2012, %

	Against December 2011	
	Nominal bilateral exchange rate index*	Real bilateral exchange rate index
USA	100.1	97.4
Eurozone	105.2	101.7
Great Britain	100.4	97.8
Turkey	97.7	93.8
Russia	104.6	99.1
Ukraine	100.9	98.7
Georgia	98.6	97.8
Iran	111.9	101.4
Kazakhstan	100.7	95.9
Japan	102.0	99.5
Israel	103.1	99.9
China	100.3	97.4
Belarus	98.1	87.0
South Korea	101.6	98.6

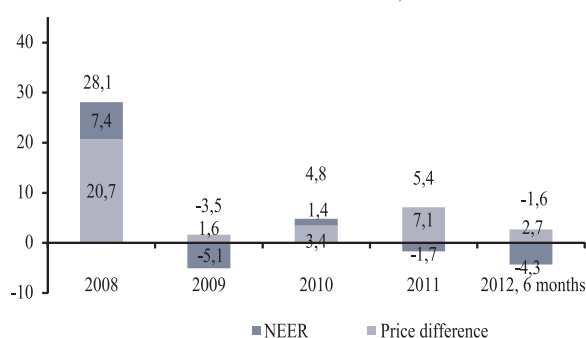
* Average monthly change in exchange rate of manat against the currency of the partner-countries.

Source: CBA

The dynamics of the nominal bilateral exchange rate of manat changed real bilateral exchange rates. In January – June manat appreciated both in nominal and real terms against the currencies of Eurozone and Iran. Manat depreciated both in nominal and real terms against the currencies of Turkey, Georgia, Belarus. Manat appreciated in nominal terms, but depreciated in real terms against the currencies of the USA, Great Britain, Russia, Ukraine, Kazakhstan, Japan, Israel, China, and South Korea.

In the first half of the current year, the NEER on the non-oil sector (trade turnover weighted) appreciated 2.7%. The difference between the inflation in partner countries and in Azerbaijan had a 4.3 basis points downward effect on REER. As a result, the non-oil weighted REER of manat depreciated only by 1.6% during the first 6 months of the year.

Chart 33. Structure of REER, %



Source: CBA

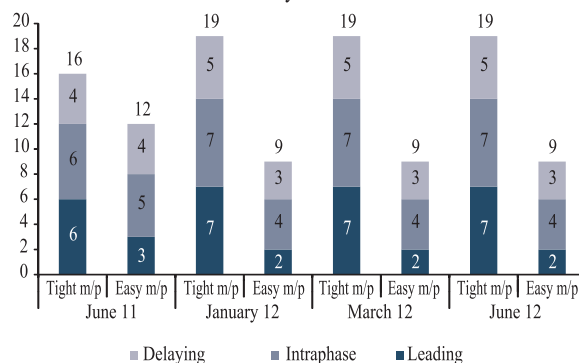
Hence, the Central Bank ensured a stable bilateral exchange rate of manat during the reporting period. The real effective exchange rate of manat depreciated, which indicates improvement of competitiveness of the non-oil sector.

2.2. Monetary policy tools

The key goal of the monetary policy in the first half of 2012 was to ensure control over inflationary factors and their regulation in a preventive regime within the established target. The ratio of the economic cycle indices in

favour of tightening and easing of the monetary policy remained unchanged during the period.

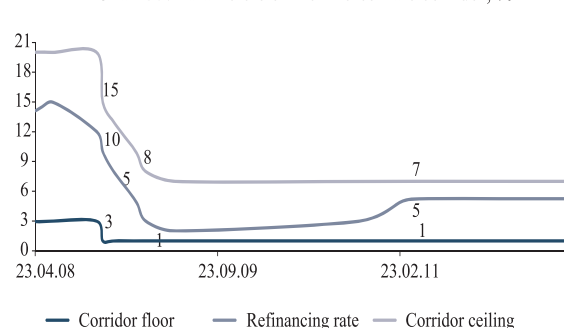
Chart 34. Cycle indicators



Source: CBA

Given worsening of optimistic predictions on the global economic growth, declining oil prices in recent months and food price reduction expectations, no changes were made to the interest rate parameters and the refinancing rate was maintained at 5.25% over the period.

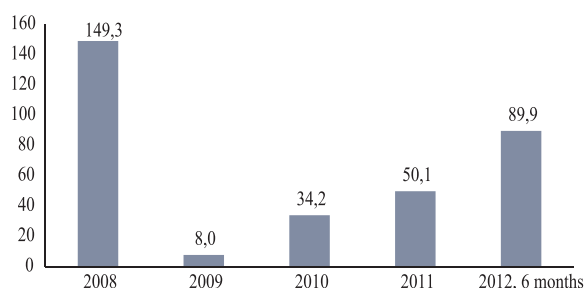
Chart 35. Parameters of the interest rate corridor, %



Source: CBA

To regulate the growth rate of money supply, as well as increase the level of provisioning in the banking system, the reserve requirements on banks' internal and external liabilities in manat and precious metals were raised from 2% to 3% from the beginning of 2012. AZN 940 million worth notes were issued during the first half of 2012 within the sterilization operations. Out of which, AZN 605 million worth notes were auctioned and placed.

Chart 36. CBA notes, end of period, AZN million



Source: CBA

Return on notes at the last auction made 1.38%, while this indicator was 2.84% at the beginning of the year. As of July 1, 2012 the volume of notes in circulation constituted AZN 89.9 million. The scale of REPO operations decreased by 8.2 % during 6 months and made AZN 37.6 million.

In total, liquidity balance³ on Central Bank's operations with commercial banks increased by AZN 251 million.

Box 7. Monetary policy: lessons from the crisis

The global crisis of 2007-2009 necessitated review of the science of monetary policy. Taking into account pre-crisis macroeconomic and monetary theories as well, the following lessons have changed existing opinions on the monetary policy strategy:

Inflation targeting as the monetary policy strategy is still critical. The inflation targeting regime incorporates regulation of inflation on an established level by central banks for the long run and enables to maintain a potential production level in the country.

Developments in the financial sector has a more effect on the economic activity. The 2007-2009 financial crisis showed that negative impacts of financial frictions on the economic activity may have a higher-than-expected effect for developing economies. Central banks were capable to manage the financial crisis started in August. The subprime mortgage market covered a small portion of the capital market and the losses of this market, though significant, appeared manageable. However, the bankruptcy of the Lehman Brothers on September 15, 2008, and collapse of the Reserve Primary Fund, the shocks to the financial systems, like approval of the TARP plan by the US Treasury by the Congress transformed the financial crisis to the global one. This crisis displayed that financial frictions are on the focus of macroeconomic studies and they need to be considered in macroeconomic models, central banks employ in forecasting and policy analyses.

Financial frictions in the economy require risk management approach in the monetary policy. The key element of this approach is that the monetary policy needs to act as the vital policy when financial disbalances emerge. Particularly, the monetary policy

needs to target macroeconomic risks and this policy needs to be independent to take proper decisions during financial disbalances.

The monetary policy needs to preventively fight with asset bubbles when they occur, rather than after asset bubbles burst. When the Federal Reserve System reduced interest rates in order to eliminate consequences of bubbles during the crisis, it led to the problem of moral irresponsibility. Financial institutions considered that the monetary policy would help them recover from bad investments. The systemic risk further went up, since this policy was pursued when financial institutions were in danger. Moreover, the crisis showed that consequences cost more to be mitigated upon asset bubbles burst.

The crisis showed that the monetary and financial stability policies are considerably correlated and supplement each other. There is a close interrelation between the macroprudential policy that ensures financial stability and the monetary policy. If the macroprudential policy is pursued to dismount asset bubbles, the lending growth goes down, which leads to decrease in overheating in the economy. If that is the case, the monetary policy may be more favorable to revive weak aggregate demand. If the policy rate is maintained on a low level to revive the economy, it will lead to asset bubbles, which would necessitate a tough macroprudential policy to prevent this. The coordination between the monetary and macroprudential policies will be considered more effective if price stability, sustainable economic growth and sustainable financial policy are maintained.

Source: NBER, M.Bunu, *Monetary Policy Strategy: Lessons from the Crisis*

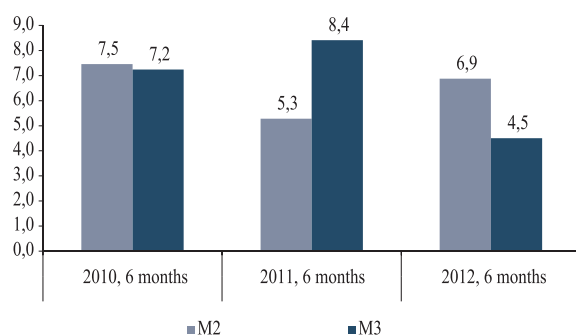
³ Balance on Central Bank's assets and liabilities operations with commercial banks during the period

2.3. Money supply

Money supply growth adequately responded to the demand of the economy in the first 6 months of 2012 if to compare with the relevant

Broad money supply (M3) reached AZN 14528 million as of July 1, 2012, year over year increase being 27.3%. Broad money supply in manat (M2) reached AZN 11754 million having risen by 34.6% as of the yearend.

Chart 37. Change in money supply, %

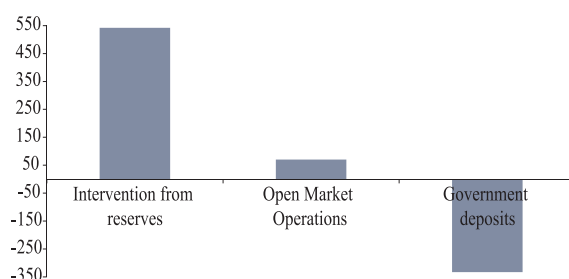


Source: CBA

periods of the previous years, broad money supply in manat increased by 6.9%.

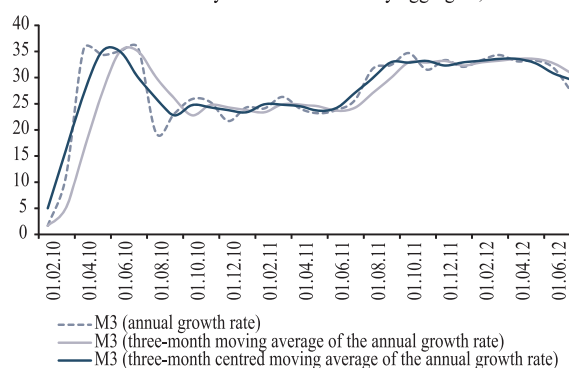
Monetary base increased by 4.2% during the first 6 months; year over year increase was 33%.

Chart 38. Change in base money, AZN million



Source: CBA

Chart 39. Dynamics of M3 money aggregate, %



Source: CBA

Both cash and non-cash growth contributed to the rise in broad money supply.

Non-cash money supply increased by 4.2% during the period which was the result of the measures taken to stimulate non-cash payments.

Table 2. Monetary aggregates, AZN million

	01.01.10	01.01.11	01.01.12	01.07.12
M0 (Cash)	4147.8	5455.8	7158.2	7751.8
M1 (Cash, demand savings and deposits)	5239.8	6718.9	8824.8	9456.6
M2 (Cash, demand, term savings and deposits in manat)	6169.2	8297.5	10997.2	11753.7
M3 (Cash, demand, term savings and deposits in manat and hard currency)	8469.2	10527.5	13903.2	14527.5

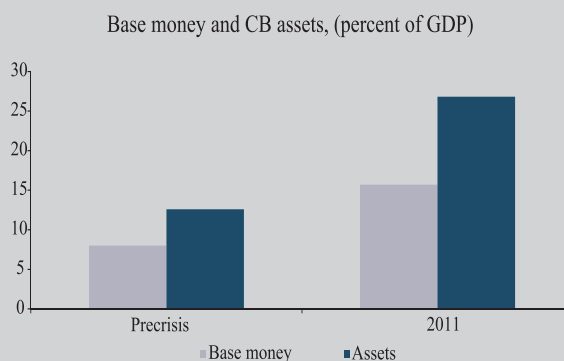
Source: CBA

Box 8. The evolution of the seigniorage during the crisis

Central banks have expanded their balance sheets significantly by stepping up purchases of sovereign and bank debt since the beginning of the Global Financial Crisis (GFC). Since the key portion of this expansion is financed by an increase in money base, the share of the money base nearly doubled as a percentage of GDP in 2007-2011. Substantial purchases of assets by central banks to provide financial markets with liquidity have two consequences for the government. Such purchases support demand for government securities and also boost government revenues through the collection of higher seigniorage-the revenue from printing money. Seigniorage revenues have been sizable as a result of quantitative easing strategies in the context of the crisis, with little impact so far on inflation expectations. However, governments cannot rely on these revenues, as the central bank may need to unwind its positions (sterilize cash in circulation) as market conditions improve and money demand returns to more normal levels.

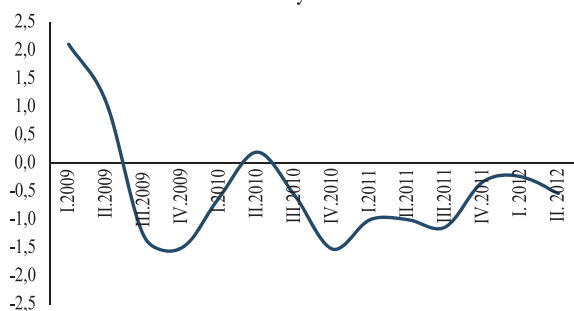
Seigniorage can be decomposed into “pure seigniorage” and an “inflation tax.” Pure seigniorage is not inflationary; it is derived from the increase in real base money as a consequence of economic growth and other factors. The inflation tax is additional money released to circulation the private sector needs to offset the impact of inflation on the real value of its stock of money over time (e.g. rise in salary, closing budget deficit). It is like a regular tax, it urges agents to forego consumption to maintain an equal level of real income.

Seigniorage revenues have risen rapidly, as central banks have expanded their balance sheets through quantitative easing and huge liquidity support for the banking sector. In DDCs the total cumulative seigniorage revenues collected in 2007 – 2011 reached 8% of GDP – more than five times pre-crisis level. Also profit of some central banks grew rapidly (in 2011 revenues of the Federal Reserve System equaled 0.5% of GDP). Major portion of the monetary expansion was net seigniorage; this can be explained by the surge in demand for reserve currencies (USD, the Japanese yen, the Euro). The relationship between monetary expansion and changes in one-year ahead inflation expectations has weakened since the onset of the crisis. Since a predominant part of expanded balance sheets has been accumulated as excess reserves, which are either non-remunerated, or remunerated at a very low interest rate. The inflation tax nearly remained unaltered compared to the pre-crisis period (0.7% of GDP).



Source: IMF, Fiscal Monitor, April 2012

Chart 40. Monetary Condition Index



Source: CBA

Partial appreciation of the NEER of manat and growth of the money supply had an easing effect on the Monetary Condition Index (MCI) during 6 months.

2.4. Institutional base of the monetary policy

The CBA continued to develop the institutional base of the macroeconomic management and monetary policy in the first half of 2012.

The CBA Monetary Policy and Financial Stability Committee continued to function. The Committee promptly supervised the macroeconomic situation, analyzed foreign and domestic factors, reviewed the monetary policy framework and macroeconomic forecasts, took adequate decisions on monetary and financial stability policies for the upcoming period.

Relevant measures were taken to improve the monetary policy and the macroprudential regulation regime to formulate the monetary and financial stability policies. The status of monetary and financial stability policies were regularly monitored through relevant reporting.

To assess the sustainability of financial system, the Bank continued to estimate financial stability indices on improvement of macro stress testing; the banking sector underwent stress-testing to evaluate risks.

In parallel, the Bank finalized short term studies on development of the methodology on evaluation of the liquidity effect in the banking sector, evaluation of the asymmetry of the transmission effect of the monetary policy, estimation of the technical impact of changes in the effective exchange rate basket on the NEER and the REER, and assessment of the capital mobility on Azerbaijan.

The existing models, that study and forecast macroeconomic grounds, are improved on an ongoing basis and brand-new econometric and statistical methods on modeling and forecasting are underway. To that end, econometric – panel co-integration of the resource effect and the role of unstable banking liabilities in the preventive prudential diagnosis were evaluated.

To provide methodological support for the banking-financial system through adequate statistics in line with best practices, guidelines on banking-financial statistics are being updated, the content and design of reporting formats, as well as monetary-financial statistics are being aligned to the IMF standards.

Statistic and prudential reports were being placed on a unified statistic platform, analytic functionality portion of reports (data selection, dynamic series, tables and graphic view etc.) was under way, data navigation in the ESAS was launched and respondent banks were appropriately trained in the framework of establishment of the Electronic Statistical database and Analytical Reporting System (ESAS) in the CBA.

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