

CENTRAL BANK OF THE REPUBLIC OF ARMENIA

FINANCIAL STABILITY REPORT

2012

First half

2012

This Financial Stability Report presents an assessment of potential risks that could threaten the stability of financial system of the Republic of Armenia as well as the capacity of the financial system to absorb such risks.

More detailed information on Armenia's macroeconomic environment and financial system analyses is available in the Central Bank's periodicals, such as *Annual Report of the Central Bank*, *Status Report on Monetary Policy Implementation* and *Armenian Financial System: Development, Regulation, Supervision*.

The data published in this report are as of 15.07.2012

The Central Bank of the Republic of Armenia
Vazgen Sargsyan 6, Yerevan 0010
Phone: (374 10) 58 38 41
Fax: (374 10) 52 38 52
Internet website: www.cba.am

TABLE OF CONTENTS

Preface	5
1. Developments in World Economy	8
1.1. Macroeconomic Environment	8
1.2. International Financial Markets	12
1.3. Developments in Regional Economies	14
2. Developments in Macroeconomic Environment in Armenia	18
2.1. Macroeconomic Developments	18
2.2. Foreign Trade	21
2.3. Net Factor Incomes and Remittances	22
2.4. Household Incomes and Debt Burden	22
2.5. Real Estate Prices	24
3. Financial Market Stability in Armenia	27
3.1. Money and Capital Markets	27
3.2. Foreign Exchange Market	29
4. Financial Institution Stability in Armenia	31
4.1. Commercial Banks	31
4.1.1. <i>Financial Intermediation; Concentration</i>	32
4.1.2. <i>Credit Risk</i>	32
4.1.3. <i>Liquidity Risk</i>	35
4.1.4. <i>Market Risk</i>	36
4.1.5. <i>Capital Adequacy and Profitability</i>	38
4.2. Credit Organizations	40
4.3. Insurance Companies	41
4.4. Securities Market Participants	44
4.5. Other Financial System Participants	45
5. Financial Market Infrastructures Stability	46
5.1. Interbank Payments	46
5.2. Guaranty of Deposits	49
5.3. Credit Registry and ACRA Credit Bureau	49
Charts	53
Tables	56
Abbreviations	56

Financial stability can be characterized as concurrence of financial and macroeconomic conditions when the financial system i.e. financial institutions, markets and market infrastructures are capable to withstand the probable shocks and instability, in this way minimizing the probability of interruption of intermediation function.

In defining the financial stability, what is taken into consideration is that financial instability can emerge as a result of interruption of internal functions of the financial system as well as unfavorable developments in domestic and world economies, credit risk issues connected with major borrowers and lenders, shifts in economic policies and infrastructures.

Maintaining the financial stability presumes the efforts for the identification of main risk sources, poor-managed financial risks, ineffective asset pricing and finally implementation of the policy as appropriate.

PREFACE

The Financial Stability Report of the Central Bank of the Republic of Armenia is prepared on a semiannual basis. It contains a broad assessment of risks that could threaten the stability of financial system as well as the capacity of financial system to withstand such risks. Through publishing of information concerning a variety of reviews on financial stability, the Central Bank seeks to bring interested parties' attention to those risks and events that could undermine financial stability of the Republic of Armenia as well as provide an opportunity to debate on how to minimize such risks.

The Central Bank has a task to maintain the stability and functionality of the financial system of Armenia. The Central Bank's statutory responsibility for the country's financial stability is directly related to its primary goal of price stability. Serious disruptions in the financial sector may create impediments to effective implementation of monetary policy. Contrariwise, the monetary and macroeconomic stability contributes to the minimization of risks threatening financial stability. The financial sector plays an important role in overall economic system, and the financial sector needs to maintain continuity and sustainability of processes thus contributing to the normal development of the entire economy.

The Central Bank carries out an ongoing monitoring and analysis of financial stability for early disclosure of any changes and variations that could threaten financial stability. The report refers to the risks revealed in macro-environment and financial sector and their influence on the developments in all sectors of the economy and financial system.

Risks affecting financial stability of Armenia can emerge in the domestic economy, external economy and the financial sector itself. In this sense, the main preconditions for financial stability are:

- a domestic and external macroeconomic environment with sustainable development whereby households and companies would be creditworthy enough,
- a stable and effective financial system with risks that are prudent and manageable,
- efficient financial infrastructures with operational continuity to the benefit of functioning of the financial system.

As presented in this report, risks that can potentially undermine financial stability of Armenia derive from:

- developments in world economy,
- developments in macroeconomic environment in Armenia,
- developments in financial market in Armenia,
- financial institutions of Armenia, and
- financial infrastructures of Armenia.

The report addresses the risks revealed in those areas and attempts to measure their possible impact on the developments in the economy on the whole and all parts of the financial sector. The report mainly focuses on the risks to the banking sector and development trends: the role the sector plays in overall financial system is vital as assets of commercial banks account for more than 90 percent of entire financial system assets. The banking sector as a principal pillar to the financial system of today determines overall financial stability and development trends.

ABSTRACT

During the first half of the year financial stability of Armenia was sufficient enough although the risks observable in the financial sector in the previous year persisted while uncertainties over further developments have become more pronounced.

An admitted level of prices of raw materials as well as recovering inflow of transfers and domestic demand contributed to the growth of GDP. At the same time, the banking sector further posted increased lending.

The global economic growth continued in spite of more downside risks to the economic growth. In advanced economies the sovereign and private debt burden persisted at high levels, limiting the state's ability to intervene and hindering the growth of demand and preventing the economy from reviving further. In a complicated situation like this, implementing exceptionally coordinated policies and taking unified approaches to regulation and supervision reforms in the financial system is equally important to all countries. The reported fall in prices of manufacturing goods and food products in the second quarter of the year somehow brought the advanced and emerging countries' attention off the issue of curbing of inflation, making further economic growth outlook a key priority instead. Economic recovery in Armenia's main trade partners – Russia, some Euro-area countries – has not slowed down and this has positively contributed to the growth of the Armenian economy.

In view of skepticism over global economic growth outlook and other developments in the international arena, Armenia saw growth of private transfers, factor income and external trade turnover. These developments contributed to the enhancement of financial stability (see details in *Developments in world economy* section).

In the first half of 2012 Armenia posted an estimated economic growth in the region 5.4 – 5.7 percent, according to the Central Bank. Growth was reported in all sectors of the economy, including construction which saw increased volumes of privately funded construction.

In the first six months of 2012, the Central Bank has left the monetary policy rate unchanged amid a minor inflationary environment. At the end of the reporting period inflation was within the confidence band as a result of neutralized external inflationary pressures and slowing growth rate of agricultural product prices owing to high growth reported in that sector. Based on June data, the 12-month inflation was 0.7 percent (see details in *Developments in macroeconomic environment in Armenia* section).

Throughout the first half of the year commercial banks maintained their capital adequacy and liquidity ratios above normative requirements and further kept market risks manageable. Based on semiannual estimations, profitability of the banking sector amounted to AMD 15.4 billion, with return on assets reaching 1.5 percent and return on equity, 8.4 percent.

In the course of the reporting period risks existing in the financial sector were within a comfortable territory of manageability, not binging about vulnerabilities in terms of financial stability. Overall, the developments in the domestic economy were also favorable in the financial stability point of view (see details in sections *Stability of financial institutions in Armenia* and *Stability of financial infrastructures of Armenia*).

1. DEVELOPMENTS IN WORLD ECONOMY

1.1. MACROECONOMIC ENVIRONMENT

Economic developments in the first half of 2012 were mainly conditional on persisting debt crisis in the Euro-area. The start of the reporting period was marked by escalated situation and downgraded rates in a bunch of countries. Although upcoming months saw some positive developments - higher-than-predicted economic growth in the U.S.A., some more effectiveness in state regulatory policies steered to settle down problems in European countries - the reporting period ended with an even more uncertainty over the future.

Developments in the global economy were considerably different in the first two quarters. As estimated by the IMF, world economic growth in the first quarter of 2012 was 3.6 percent y-o-y driven by such factors as somewhat relaxed conditions of financing and restored confidence as a result of long-term refinancing operations carried out by the ECB. In the first quarter, concurrent with the industry growth, global trade volumes have expanded, which was most beneficial for export-oriented countries such as Germany and some Asian countries. Developments in the second quarter, however, were negative in the main. Unemployment rebounded at a more sluggish pace while persisting at a high level in some countries, as well as debt problems in Euro-area countries remained unsettled.

IMF revisions of the 2012 estimation of world economic growth outlook

Indicator (economic growth)	2011 forecast as of 30.06.11	2011 forecast as of 30.09.11	2011 forecast as of 30.01.12	2012 forecast as of 30.01.12	2012 forecast as of 30.04.12	2012 forecast as of 30.07.12
World economy	4.3	4	3.8	3.3	3.6	3.5
Developed countries	2.2	1.6	1.6	1.2	1.4	1.4
USA	2.5	1.5	1.8	1.8	2.1	2.0
Euro-area	2	1.6	1.6	-0.5	-0.3	-0.3
Emerging countries	6.6	6.4	6.2	5.4	5.7	5.6
CIS	5.1	4.6	4.5	3.7	4.1	4.1
Russia	4.8	4.3	4.1	3.3	4.0	4.0
China	9.6	9.5	9.2	8.2	8.2	8.0

Source: IMF.

Predictions and analyses made by international organizations suggest that world economic growth would be slow in the second half of 2012 too.

At the end of the reporting period, in consideration of existing structural problems, international institutions lowered their forecast of world economic growth outlook for 2012 and 2013. In particular, the 2012 world economic growth was estimated by the IMF¹ to be 3.5 percent and that estimation for 2013 was lowered to 3.9 percent from the former forecast of 4.1 percent. The World Bank predictions are warier: economic growth of 2.5 percent for 2012 and 3.1 percent for 2013.

In 2012 economic growth in the U.S.A. was estimated by the IMF to be 2.0 percent whereas economic decline (-0.3 percent) is predicted for Euro-area. The U.S. economy for 2013 is forecast to post somewhat higher growth and some economic growth will be recorded in Euro-area as well.

Economic developments in early 2012 were negative. This urged international rating agencies to downgrade credit ratings of many developed countries and even institutions, including Europe's Financial Stability Fund which was graded by a level down. Expectations somehow improved when it was decided to increase the funding to overcome debt crisis in Euro-area countries and when information came in that some U.S. macroeconomic indicators exceeded expectations.

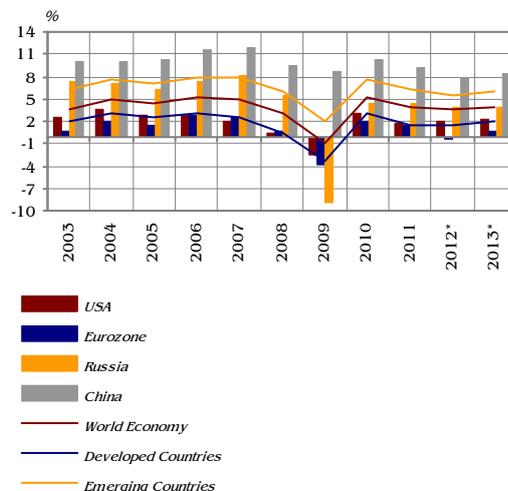
Fragile economic growth during the first half of the year triggered debt accumulation of debt problems in a number of developed countries and resulted in budget constraints in another group of countries. The Euro-area remains the center of turmoil for debt problems where, along with Greek problems, hardships in the banking sector of Spain have become increasingly alarming. Although numerous measures which the Euro-area governments took to remedy the situation in problem countries were of short-term benefit in earlier the year, these however proved non-sufficient and further brought in anxieties and new waves of negative expectations in financial markets (see details in *International financial markets* section).

In the first half unemployment in world economy persisted at a high level (nearly 8.0 percent), determined by sluggish economic recovery, and served a risk to the potential GDP for the years ahead. The issue of young unemployment and long professional idleness is worrying.

In 2012 the unemployment rate in developed countries is still a concern. In the U.S.A. in particular, creation of new jobs has trended down since February and in the period April-May that indicator has even reduced twice as much.

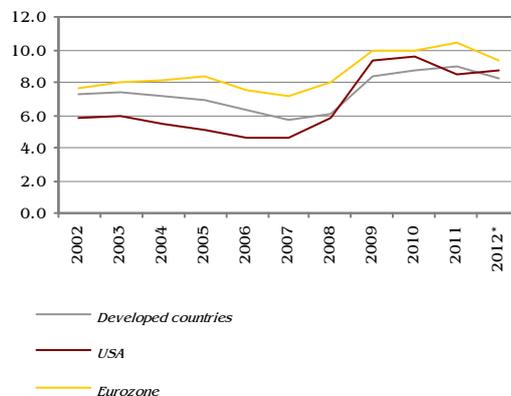
Predictions suggest that the unemployment rate would not improve notably during the year in part conditioned by

Regional growth rates



Source: IMF.

The unemployment in developed countries

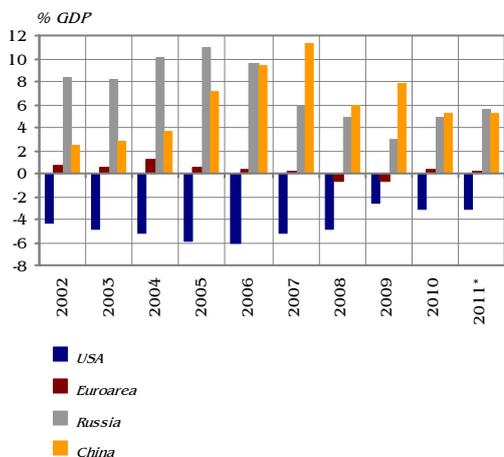


Source: UNO.

* Indicators marked by asterisk in this chart and the ones following thereafter are the IMF estimates (July 2012).

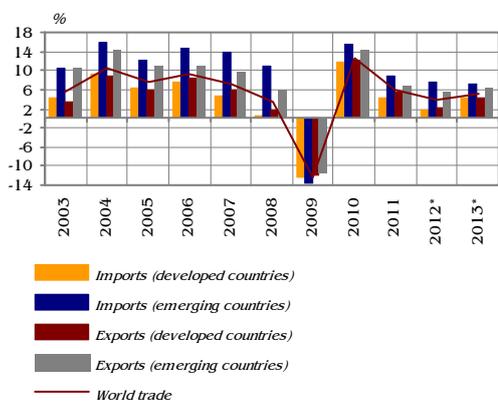
¹ IMF estimates according to World Economic Growth Outlook Update, July, 2012.

Current accounts of USA, Russia, China and Euroarea countries



Source: IMF.

Annual growth rate of world trade



Source: IMF.

worries over cutting public expenditures. In Euro-area unemployment is at historically high levels, close to 10.9 percent, and some analysts reckon that it may reach 11.5 percent this year. It should be mentioned however that unemployment is historically low in Germany, 6.8 percent.

Uncertainties over global economic recovery also determined the slowdown of growth rates in world trade which is estimated to stand notably behind the 2011 indicator. More to the point, the declining trend of the indicator was discernible back in the previous year.

The growth of trade of goods in 2012 will be 3.8 percent against 5.9 percent in the previous year. Forecasts available suggest that growth of trade will further be slow-pacing in the years ahead mostly due to timid economic growth in developed countries. Though emerging countries were more resilient to the crisis consequences, and they further played an increasingly important role in global trade, there is anticipation that these countries would see slowdown in growth of trade this year, too. As reported by World Trade Organization and European Committee, there has been a considerable rise in economic protectionism in the crisis aftermath; new tools of protectionism hinder the rebounding of trade growth rate. During 2012 there has been some shift in the structure of current accounts with heavyweights in global trade. Though still on a huge positive trade balance with the U.S.A., China's current account surplus has reduced notably and even a deficit on current account was posted in February. Japan, a country that boasted a positive trade balance in pre-crisis times, keeps running a current account deficit.

In the first half of the year main commodity markets saw various developments and trends. Despite somewhat a steeper performance in early the year, prices of commodities changed their path during the semi-annum, keeping abreast with current developments – worries over Euro-area financial stability, dubious macroeconomic environment in the U.S.A., signs of obviously slowing recovery in emerging economies (China, Brazil). It is predicted that a low level of average prices of commodities would persist over 2012, mostly driven by weak consumption growth.

In the first half of 2012 the average price of Brent oil was USD 113.7 a barrel, staying roughly unchanged in relation to the same period of the previous year. During the reporting period international oil prices have fallen down to USD 90 a barrel, a 25 percent slump from the March peak, due to weak demand, somewhat a relaxed political tension with Iran and more extraction of oil by OPEC than determined under quotas. However, oil product markets are anticipating minor inflationary trends amid moderate growth in world demand, and oil prices are going to be sensitive to geopolitical developments on the whole.

Prices of base metals posted much increases at the start of semi-annum, as opposed to the drop in the previous yearend, but they went down during the second quarter primarily due to weaker-than-expected economic activity in the U.S.A and China. The declining trend in prices of base metals will continue over 2012 in anticipation of slowing economy in China and elsewhere in emerging countries.

At the end of the reporting period the average copper price was USD 8087.1 per ton, dropping by 14.0 percent in relation to the same period of the previous year. The average molybdenum price has fallen by more than 18 percent in relation to the previous year's average.

Prices of food products also reported some decreases although they were more resilient to financial vulnerabilities. At the end of the reporting period, relative to the end of the previous year, wheat prices have fallen by about 8 percent and reached USD 7.5 a bushel which is historically still a high level.

Wheat prices are predicted to rise in the marketing year 2012/2013 due to adverse weather conditions in main exporter countries, the U.S.A. and Russia in particular. What is more, the price-rise has been prominent this year, too.

Uncertainties and negative sentiment in international financial markets caused the gold price to soar often during the reporting period, although new sharp price rises were not reported. At the end of the reporting period average gold price was USD 1651.5 per troy oz, up by 14 percent against the same reference period of the previous year.

In the first half of 2012 inflation pressures subsided in both developed and emerging countries amidst down-trending path of prices of main commodities. Inflation in Euro-area is predicted in the region 2.3 – 2.5 percent for 2012, against 2.7 percent in the previous year, and 1 – 2.2 percent for 2013. Such downside prediction of inflation is explained by reduced impact of raised taxes as well as expectations of falling of oil prices. The annual inflation indicator has reduced in Great Britain as well, which amounted to 2.8 percent in May. Up until yearend, inflation is predicted in the region 2.5 – 2.8 percent. Some 1.7 percent of inflation was recorded in the U.S.A. in June of 2012 whereas at the end of 2011 the level of inflation was 3.2 percent. The IMF's prediction of inflation for 2012 is 2.0 percent in developed countries and 6.3 percent in emerging countries for 2012 (the figures were 2.7 percent and 7.2 percent, respectively, in the previous year).

The central banks of most countries kept on implementing an accommodative monetary policy in the face of high unemployment, weak economic growth and relaxed inflationary pressures. In July the ECB even lowered the refinancing rate by 0.25 pp to 0.75 percent, historically the

Brent oil prices
(USD a barrel)



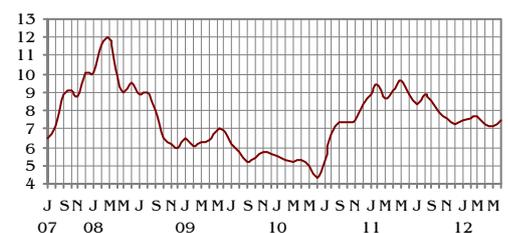
Copper prices
(USD per ton)



Molybdenum prices
(thousand USD per ton)



Wheat prices
(USD a bushel)

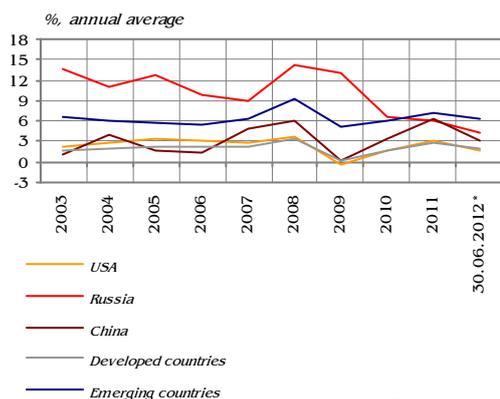


Gold prices
(USD per troy oz)



Source: Bloomberg.

Inflation in selected countries



Source: IMF.

lowest value. The U.S. Federal Reserve System and the Bank of England left their policy rates unchanged, at 0.25 percent and 0.5 percent, respectively. Under such developments, no lifting of interest rate in the short run by policymakers will be expected.

During the year global macroeconomic developments did not virtually create higher risks to the domestic economy and financial stability, which is described in detail in the *Macroeconomic developments* section.

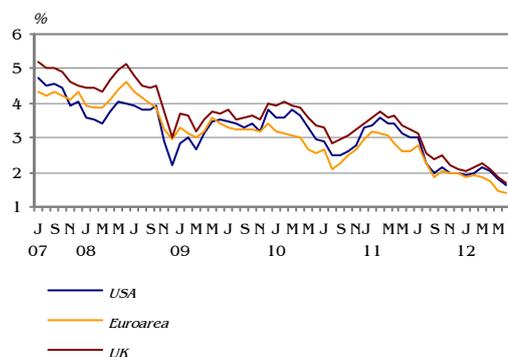
1.2. INTERNATIONAL FINANCIAL MARKETS

Robust measures taken by governments of European countries and international financial institutions at the end of 2011 allowed banks and debtor countries to win some precious time to restore their balance sheets. The ECB's 3-year refinancing transactions somewhat eased the tightness caused by non-accessibility to financing and triggered steep increases in individual assets markets. This positive development however did not last in the face of growing uncertainties over perspectives of the global economy. Tensions escalated in May amid Greek elections not least because of the fears that the country would leave the Eurozone as well as growing concerns over stability in Spanish banking sector. The situation in financial markets worsened in May-June when the results of stress-testing came closer to and even got beyond the worst results reported in November of the previous year. Volatilities in major stock exchanges and currency markets reached their peak, reflecting poor performance of yields and stock indices. The high amount of uncertainties at a global scale pushed up the demand for non-risky assets, i.e. treasury bills, while stock indices behaved extremely volatile.

Yields on treasury bills of vulnerable Eurozone countries have grown sharply. Though the 3-year refinancing transactions have built a certain demand for treasury bills of such countries, the main pressures however were along with downside positive impact. Capital fleeing to safer assets has driven yields of the U.S., German, Swiss treasury bills to narrow while bringing the U.S. dollar exchange rate to climb its 20-month highest versus other currencies. The flow of financial resources driven by low risk considerations resulted in the lowest ever yields on Japanese bonds, whereas appreciated Yen in turn hampered the country's rapid economic growth.

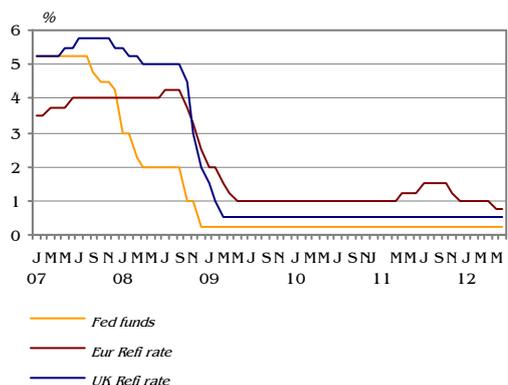
The tension in Eurozone and the lack of solution to structural problems prompted credit agencies to downgrade a bunch of countries and banks. The downgrade in turn has made banks' access to finances more difficult.

10-year government bond yield



Source: Bloomberg.

Central bank policy rates



Source: Bloomberg.

The sovereign debt and deteriorating budget deficit urged monetary authorities in emerging economies to tighten the fiscal policies, which had somewhat a contractionary impact on the rapid economic growth of those countries. In the main countries in the reporting period, however, monetary policies remained mostly accommodative, and further tightening in the near future is not anticipated.

The ECB maintained the policy rate at the former 1 percent level but lowered it in July down to 0.75 percent. The US Federal Reserve System and the Bank of England continued implementing a moderate monetary policy. Given the current rates at which the global economy recovers as well as the existing structural problems, an increase of the refinancing rate in the main countries is not anticipated.

Low base interest rates, weak investment demand at a global scale and high risk levels have, in turn, ensured a low level of interbank interest rates.

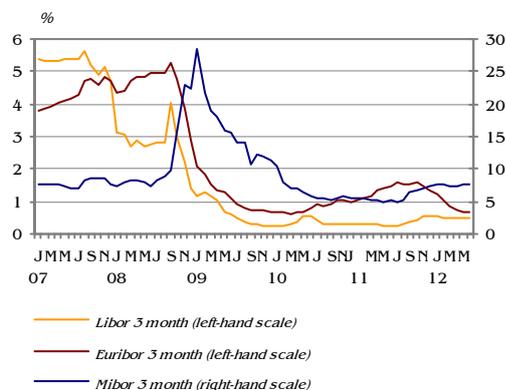
In times of uncertainty and low investor confidence, a strong demand for the US treasury bills and other reliable assets (gold, oil) persisted.

During the reporting period currencies performed in a volatile manner along with precarious developments in Euro-area economies. The U.S. dollar notably appreciated versus Euro mainly starting from April. The lack of solution to structural problems in Eurozone re-steered investors to historically safer assets, the U.S. dollar and Japanese Yen among them. At the end of the reporting period the dollar appreciated considerably in response to good macroeconomic developments in the U.S. economy as well as because European countries were still in search of clear solution to their debt problems. In the meantime, debt problems in Eurozone dragged emerging countries' economic growth down and currencies of some key players in this array of countries (China, Brazil, India) have begun experiencing depreciation pressures.

Stock indices of developed and emerging countries performed in a volatile manner, reflecting change in economic developments, with some reported decrease though, especially during the second quarter.

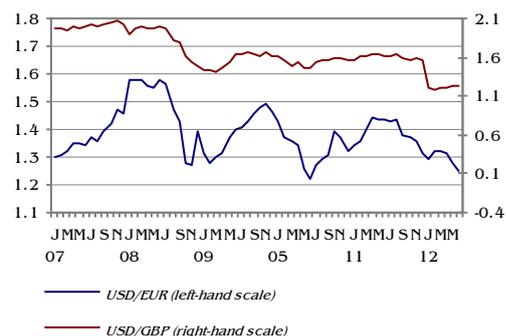
In the first half of 2012 capital inflow to emerging economies remained unsteady and further incurred the influence of developments with Euro-area debt problems. The narrowing which was observed back in the previous year is perhaps to carry on over 2012. Net inflow of private capital to emerging countries will reduce by 11.5 percent compared to the previous year's indicator and will amount to USD 912 million, according to the Institute of International Finance.

Interbank interest rates



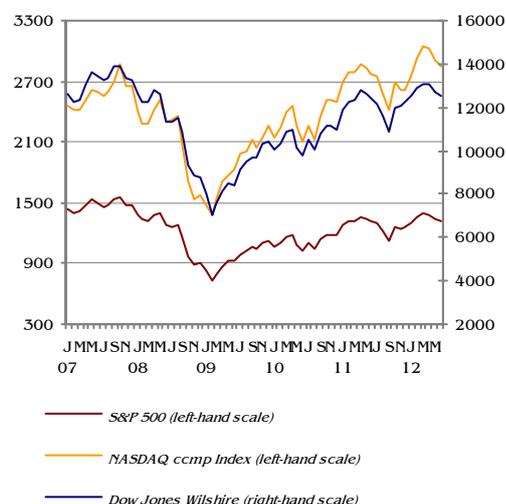
Source: Bloomberg.

USD exchange rate versus EUR and GBP



Source: ECB.

Stock exchange indices



Source: Bloomberg.

1.3. DEVELOPMENTS IN REGIONAL ECONOMIES

RUSSIA

In the first half of 2012 Russia posted 4.4 percent y-o-y economic growth. The economic growth was reported for all branches, with construction and trade having posted the fastest growth, by 5.4 percent and 7.1 percent, respectively. At the end of the reporting period some down-trending path was observable however.

Real disposable income has grown by 2.7 percent y-o-y and investment in core capital, by 10.2 percent compared to the previous year, according to estimations.

Based on semiannual results, foreign trade turnover amounted to USD 419.3 billion, up by 6.1 percent compared to the previous year's figure. In the reporting period the y-o-y growth of export reached 7.2 percent and that of import, 4.4 percent. The balance of trade was further running positive, reporting 11.4 percent growth in relation to the previous year.

During the first six months the ruble exchange rate trended differently. In the period January-April, in view of favorable developments in external economic environment, the foreign currency supply has increased in the domestic market which, in turn, led to ruble appreciation pressures. In May-June, on the brink of falling of international prices of energy resources as well as escalated debt crisis in Eurozone, the demand for foreign currency has grown, bringing forward a trend for depreciation of the ruble.

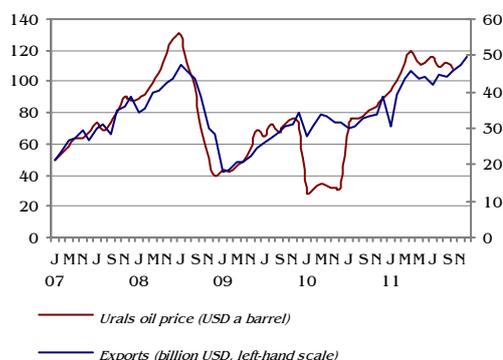
In the reporting period net outflow of capital continued, at somewhat a slower pace though. Based on the Russian Central Bank estimations for the first five months, net outflow of capital has amounted to USD 46.5 billion. In the event of a baseline scenario of USD 100/barrel the Bank further predicts that there will be USD 10.5 billion of net outflow of capital in 2012. The capital flows will largely depend on economic growth trends in China and the Eurozone developments.

In the reporting period the unemployment rate subsided to 5.5 percent of economically active population, whereas growth of real disposable income has been considerable. The situation in the labor market has stabilized owing to continued economic recovery and an effective public policy steered to boost up employment.

The first half of the year saw another historically low level of inflation – 3.2 percent (5.0 percent in the previous year).

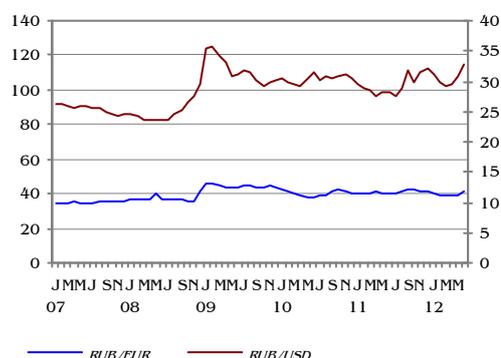
In view of a minor inflationary environment and current economic growth outlook, in the reporting period the Russian Central Bank left the refinancing rate unchanged, at 8.0 percent.

Oil price and Russia export trends



Source: Ministry of Economic Development of Russia.

Ruble average monthly exchange rate



Source: Ministry of Finance of Russia.

The developments in the financial sector were as follows: in the period January-May banking assets have increased by 3.8 percent. Lending volumes have also grown; in particular, lending to legal persons and individuals has grown by 4.8 percent and 14.7 percent, respectively. The share of non-performing loans has reduced to 4.6 percent at the end of the reporting period (3.9 percent in 2011). Gross profit of financial institutions has increased by 13.8 percent y-o-y, according to the first five months' results.

TURKEY

In the first quarter of 2012 the Turkish economy posted 3.2 percent growth, the lowest since 2009. This is determined by the problems confronted in European countries which are considered main trade partners. Increased domestic demand made the largest contribution to the economic growth. Based on the first five months' data exports have grown by 11.1 percent y-o-y whereas imports have decreased by 1.5 percent y-o-y. As a result, the trade balance deficit has further improved, reaching USD 27.1 billion.

Developments in the labor market have been positive. As of April 2012 the rate of unemployment has been very close to the pre-crisis level, making up 9.0 percent.

The Turkish lira went a path of appreciation in the light of global economic developments and balance of payments flows. Based on the first half data the nominal lira exchange rate has appreciated by 3.7 percent y-o-y.

The first six months of 2012 were characterized by existing high inflationary environment: with an established 5.0 percent target, the 12-month inflation reached 8.9 percent. Under high inflationary pressures the Central Bank of Turkey conducted a very tight monetary policy during the year by keeping the policy rate at 5.75 percent.

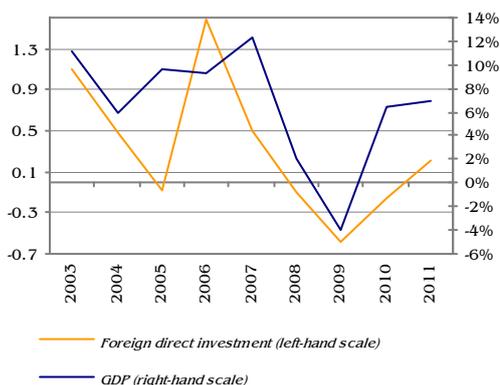
Based on the six month's data there has been 9.7 percent growth of lending in the banking sector mostly owing to lending to businesses. The share of non-performing loans in total loan portfolio has not changed either, making up 2.7 percent. According to the first quarter 2012 results, such ratios as return on assets has been 2.5 percent and return on equity, 20.5 percent.

GEORGIA

Based on preliminary data, the Georgian economy posted 6.8 percent real growth in the first quarter of 2012.

Foreign trade has been sluggish enough: in the first quarter exports shrank by 0.8 percent y-o-y and imports grew

Georgia GDP and FDI growth (%)



Source: National Bank of Georgia.

by 2.4 percent y-o-y. As a result, the trade balance deficit has broadened by 9.7 percent and the current account deficit has increased by 2.5 percent and amounted to USD 384.3 million.

The inflow of foreign direct investment further grew as the domestic economy continued recovering. In the first quarter of 2012 FDI amounted to USD 269.46 million, which represented 53.7 percent increase y-o-y. In the first quarter inbound remittances grew by 6.3 percent and amounted to USD 629.0 million. As a result of such foreign currency flows in the first six months of 2012 the appreciation of the Georgian lari has been 0.5 percent.

In the first half of 2012 average inflation in Georgia was 1.3 percent and the growth of real wages was 8.5 percent.

The volumes of lending to the economy further increased, by 7.8 percent in the first quarter of 2012. The share of non-performing assets shrank by 0.7 percent to 7.9 percent in June. Yet profitability ratios deteriorated as return on assets contracted by 1.5 pp to 1.4 percent and return on equity slumped by 9.4 pp to 7.8 percent. The dollarization in the economy has grown by 2.8 pp and reached 60.3 percent.

The developments in neighboring countries during the year did not create negative risks to financial stability.

SUMMARY

In the first half of 2012 the global economy further recovered, with downside risks prevailing however. High level of unemployment, escalated debt problems and sluggish, unsustainable economic growth in both developed and emerging countries remained key areas of concern. Finding radical solutions to sovereign debts and budget deficits, coordinated and timely anti-crisis measures are still imperative for sustainable economic recovery.

Throughout the reporting period financial markets performed in volatility mainly driven by the situation and circumstances associated with debt problems.

In the first six months of 2012 emerging countries saw trends of slowing economic growth, as opposed to surpassing growth rates recorded previously, and these trends are likely to be persisting in the face of current developments in global economy. The IMF forecasts some 3.5 percent of economic growth for 2012, pointing to increasing risks to sustainable economic growth. The current level of global economic growth will not be sufficient for the labor market to recover and will drive world trade growth rates to slow down.

In general, the first half 2012 developments in the global economy did not create high risks to the Armenian economy and financial stability.

Declining prices of base metals in world markets is not impediment to the growth of industrial product while the developments in partner countries determined the growth of exports and household incomes.

Gradual decrease of international prices of main commodities has contributed to the creation of minor inflationary environment in the Armenian economy.

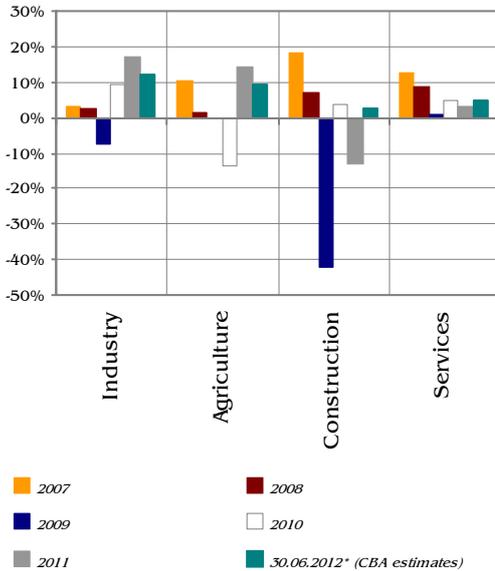
There has been a reported growth of private transfers and factor income inflowing to Armenia from Russia as well as increased volumes of external trade. All this has contributed to the increase of household incomes and company profits, thereby boosting up their credibility. The growth of private demand in Russia and Georgia determined the increase of volumes of industrial product processed in, and exported from, Armenia.

In general, Armenian commercial banks do not hold investments in securities of foreign countries, so the developments in international financial markets did not drive the domestic banking sector to greater price risks. The developments in financial markets did not impair abilities of domestic banks to borrow from external sources (mainly parent banks).

2. DEVELOPMENTS IN MACROECONOMIC ENVIRONMENT IN ARMENIA

2.1. MACROECONOMIC DEVELOPMENTS

Economic growth rates, by sector



Source: National Statistics Service of Armenia.

In Armenia in the first half of 2012 there was an estimated economic growth in the region 5.4 – 5.7 percent, according to the Central Bank². The actual economic growth in the first quarter of the year was 4.7 percent. The growth has been driven mainly by increased outputs in industry, agriculture and services.

During the first six months industry reported nearly 12 percent growth of value added in spite of some falling in metals prices in global markets. The growth is explained by the fact that *ore mining* did not incur any big impacts from the slump in metals prices while *processing industry* has grown as a result of robust external and domestic demand as global economy further recovered. The highest growth rates were reported in metal ore mining, food, tobacco and energy sub-branches.

Growth in agriculture remained strong also in the first half of 2012, owing to good weather conditions as well as government measures taken to improve this branch. In the first quarter of 2012 agriculture posted 1.8 percent growth y-o-y and about 9.5 percent of growth was estimated for the first half of the year.

Construction further reported a decline which amounted to 0.6 percent y-o-y in the first quarter. However, based on the first six months' results, there was an estimated 2.6 percent growth. Increased volumes of construction financed by households as well as a WB loan disbursed to finance the construction in infrastructures in agriculture were the main drivers to the aforementioned growth.

In the first quarter of 2012 the growth in services reached 4.1 percent y-o-y mostly owing to increased volumes of wholesale trade. Based on the first six months' results, there was an estimated 5.0 percent growth, pointing out to rebounding private demand and household incomes.

During the first half of 2012 the lending market remained active amidst positive developments and more optimism about economic environment. Strong lending growth fuelled a buoyant consumption by almost all sectors of the economy and households while stimulating aggregate demand and aggregate supply.

² The macroeconomic indicators based on first half data as presented in this section and the ones following are the Central Bank estimates, unless otherwise specified.

Commercial banks and credit organizations, while responding to the surveys³ conducted by the Central Bank, stated that they had further eased lending terms and procedures for small and medium size businesses but tightened lending terms and procedures for large-scale businesses. The main factors affecting the change in terms and procedures included more expensive borrowing and foreign currency risk. Reportedly, such branches as trade, energy and industry were most conducive for lending, whereas construction and agriculture were considered less enticing in terms of loan viability.

In the reporting period, with some 18.7 percent increase in bank lending (y-o-y growth of 37.1 percent), the share of non-performing loans grew a little relative to the start of the year and reached 4.3 percent. The largest share of non-performing loans was reported in agriculture (5.9 percent) and trade (5.8 percent).

The results of the survey conducted during the first two quarters of 2012 showed that the composite indices⁴ trended differently. In particular, Economic Activity Indicator dropped to some extent in the first quarter primarily due to the developments in services whereas the declining demand was named as the main factor that impeded expansion of activity. In the second quarter EAI rose by 2.3 percent; furthermore, all sub-branched, except for the construction, reported increases. Business Climate Indicator went an up-trending path during the first two quarters of the year. Construction was the only sub-branch where BCI reported decline in the two quarters whereas increases were reported in the rest of branches of the economy. Both sub-indexes have reported increases during the first two quarters of the year.

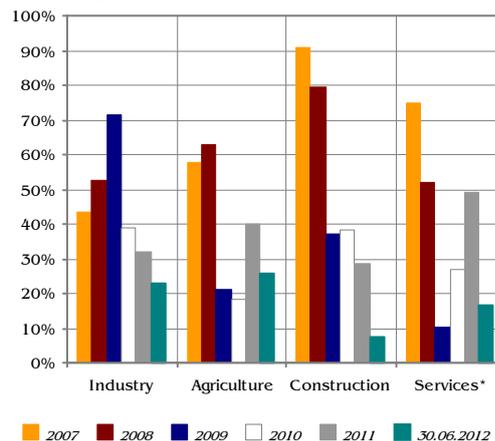
By GDP expenditures structure, the annual real growth of private consumption reached 6.8 percent, which was determined by some increment in real household incomes and economic activity as a result of rebounded inflow of private remittances, wage growth rates, improved consumer confidence and lower price levels. On the other hand, there was an estimated 1.3 percent decline in public consumption, mostly a result of the policy to slash the deficit of state budget. Capital investment has reduced further, with private investment contracted by 12.2 percent and public investment shrunk by 25.5 percent, again mainly as a result of a state budget deficit-cutting policy.

With imports growing faster over imports as well as reported growth of GDP, the contribution of net exports to GDP has been negative.

³ Source: surveyed results on "Loans made by commercial banks and credit organizations of the Republic of Armenia", as conducted by the Central Bank in the course of two quarters of 2012.

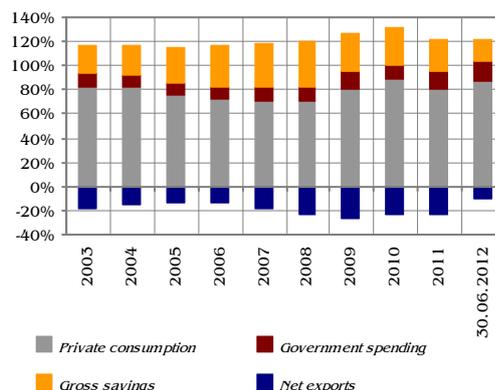
⁴ For more details on indices calculated on the basis of the Central Bank surveys, please see the CBA website.

Growth of lending to main sectors of economy



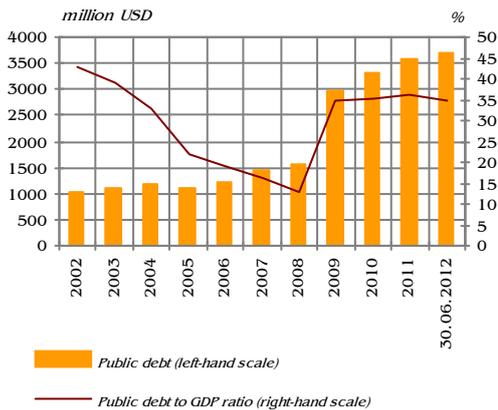
Source: Central Bank of Armenia.

GDP expenditure components (share in GDP)



Source: National Statistics Service of Armenia.

Public debt and public debt to GDP ratio



Source: Ministry of Finance of Armenia.

In the first half of 2012, relative to the end of the previous year, the public debt has grown by 3.6 percent and reached USD 3695.4 million. The debt to GDP ratio was an estimated 34.7 percent, representing a slight decrease in relation to the previous year. The debt sustainability indicators performed positively, primarily owing to faster growth rates of exports and economic growth over debt.

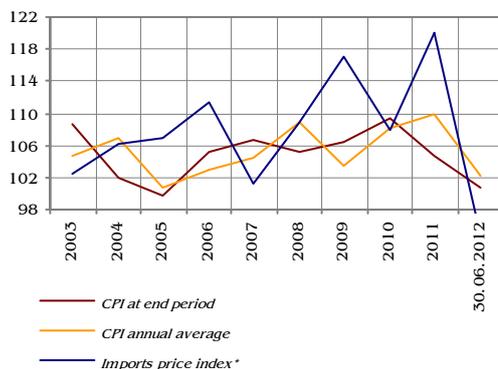
The structure of external public debt has changed to some extent. In the first half of 2012 the share of concessionary loans in the structure of public debt reduced to 55.7 percent. The share of loans with floating interest rate remained unchanged, 36.6 percent.

Qualitative public debt indicators of the Republic of Armenia

Ratio	2005	2006	2007	2008	2009	2010	2011	2012 I half
Debt/GDP (limit 50%)	22%	19%	16%	14%	34.7%	35.1%	36.2%	34.7%
Debt/ Export	78% (less indebted)	80% (less indebted)	82% (less indebted)	90% (less indebted)	227% (moderately indebted)	182.1% (moderately indebted)	154.0% (moderately indebted)	
Debt service/ Export	4.6% (less indebted)	4.2% (less indebted)	2.9% (less indebted)	3.1% (less indebted)	6% (less indebted)	5.0% (less indebted)	4.2% (less indebted)	
Interest/ Export	0.9% (less indebted)	0.7% (less indebted)	0.6% (less indebted)	0.7% (less indebted)	2.0% (less indebted)	2.4% (less indebted)	2.1% (less indebted)	

Source: Ministry of Finance.

Consumer price and imports price indices



The National Statistics Service of Armenia started a new methodology for calculation of imports prices in 2007; the 2002-2006 indicators have been estimated by the Central Bank based on the former methodology for calculation of imports prices.

Source: Central Bank of Armenia, National Statistics Service of Armenia.

Encouraging developments in the domestic economy in the first half of 2012 contributed positively to the state budget. There has been a reported increase in collection of revenues during the reporting period: budget revenues have grown by more than 5.0 percent y-o-y and budget expenditures, by 3.4 percent. As a result, the budget deficit has reduced by 26.8 percent in relation to the previous year and amounted to AMD 16846.1 million (PIU funds inclusive). The growth of tax revenues has been relatively high, 6.2 percent, and the fastest growth was reported on profit tax, 16.7 percent. In the expenditures structure, almost all expenditures items posted increases.

The budget deficit has reduced slightly attributable to surpassing revenues over expenditures and amounted to 1.1 percent of GDP, according to the six months' results.

In the first half of 2012 the domestic economy saw a general price level trending down, which was explained by the fall in prices of food products and raw materials in world markets. In June, therefore, the 12-month inflation was as low as 0.7 percent.

2.2. FOREIGN TRADE⁵

On the back of developments in global and domestic economies, the current account deficit has deteriorated in relation to the previous year and amounted to USD 380 million. This was driven largely by broadened deficit of trade balance. The volume of foreign commodity turnover has increased by 8.3 percent y-o-y and reached USD 2.7 billion.

In the period January-June 2012 import of goods and services has increased by 6.04 percent y-o-y, whereas the real growth⁶ has been 9.3 percent. The growth of import was determined by increased activity in domestic economy as well as reduced dollar prices of import.

There has been a notable increase of import volumes in such items as “mineral produce”, “machinery and equipment”, “precious and semi-precious stones, precious metals and articles made thereof” and “transport means”.

In the first half of the year the y-o-y growth of export of goods and services has been 10.2 percent⁷. High growth of export was attributable to the reported high growth in industry branch. The largest contribution to the growth of export came from items such as “mineral produce”, “items of prepared food and agricultural product”, “non-precious metals and articles made thereof” and “precious and semi-precious stones, precious metals and articles made thereof”.

With imports having grown faster than exports, the trade balance deficit has deteriorated to certain extent in relation to the same period of the previous year and amounted to USD 1333.2 million.

In terms of geographic distribution of external trade, major concentrations remain, and the composition of the main partner countries did not change much, either. In the exports structure, the share of CIS has grown by nearly 1 pp and the share of the EU countries reduced by around 2 pp, while the change in shares of other partner countries was negligible. Export remains concentrated by geography and by commodity, which means that vulnerability of ore mining and food production sub-branches will increase in the event of possible shocks in any particular country of export or elsewhere in the global economy.

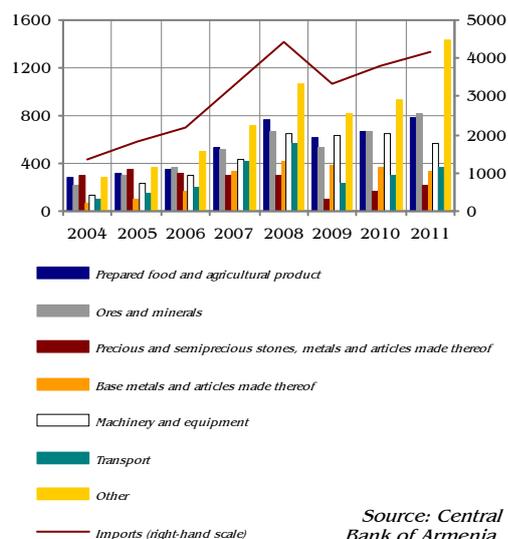
In terms of imports, the EU countries and CIS, which together constitute 59.1 percent share, remain the main trade partners to Armenia.

⁵ Data are presented according to the Balance of Payments.

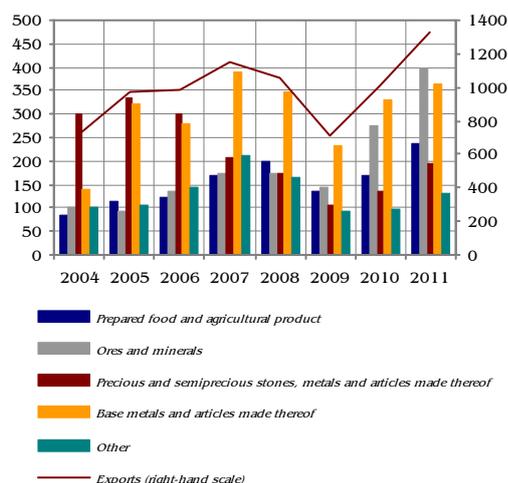
⁶ According to the Central Bank estimates.

⁷ Real growth of export has been 13.0 percent, according to the Central Bank estimates.

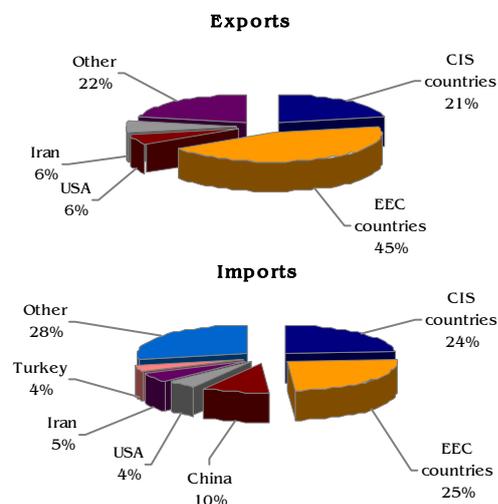
Armenia's imports by commodity groups
(mln USD)



Armenia's exports by commodity groups
(mln USD)

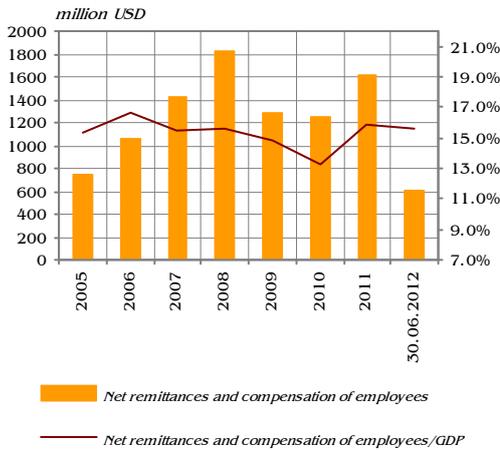


Armenia's foreign trade, by country, as of 30.06.2012



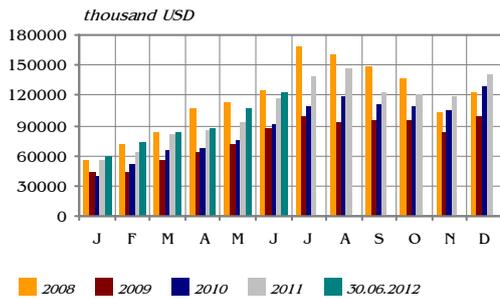
2.3. NET FACTOR INCOMES AND REMITTANCES

Net remittances and compensation of employees



Source: Central Bank of Armenia.

Net non-commercial transfers of banking system



Source: Central Bank of Armenia.

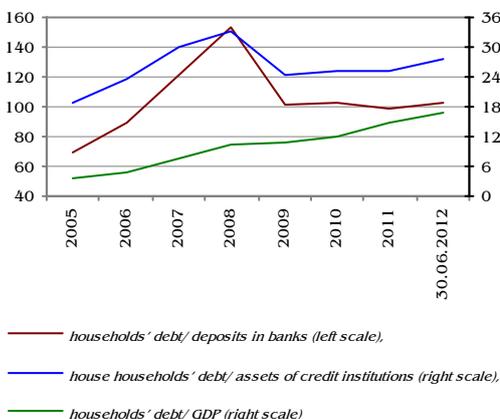
Private transfers and seasonal worker income is an important part of disposable income of households in Armenia, and the prevailing part of such income comes from Russia. In the reporting period the Russian economy posted high growth, particularly in construction and trade – the two main areas where seasonal workforce from Armenia goes to (see details in section 1.2 *Developments in Regional Economies*). The aforementioned positive developments in Russia determined the increase of net private transfers and seasonal worker income. In the first half of 2012 the growth of net inflow of private transfers and seasonal worker income has been 9.6 percent y-o-y. Relative to the first half of 2011, there has been 0.1 pp growth in the ratio of non-commercial transfers of individuals to GDP. Where change in foreign exchange is taken into account the ratio has grown by 1.2 pp and amounted to 15.6 percent.

The 2012 forecasts of net inflow of non-commercial transfers of individuals will depend primarily on how fast the Russian economy grows. In the context of Russian economic forecasts made by international organizations, the Central Bank predicts that the growth of net inflow of non-commercial transfers of individuals would be in the region 10 - 12 percent which in turn could bolster current consumption and housing construction volumes.

In the reporting period net inflow non-commercial transfers of individuals executed via the banking system has grown by 8.06 percent y-o-y and amounted to USD 532 million, getting closer to the pre-crisis level. The prevailing part of net transfers has come from Russia and the U.S.A., making up 89.6 percent and 4.3 percent, respectively.

2.4. HOUSEHOLD INCOMES AND DEBT BURDEN

Household debt burden (%)



Source: Central Bank of Armenia.

In the first half of 2012 the household debt burden⁸ has increased as economic activity grows. With debt growing faster than GDP and household deposits, the debt to GDP ratio and debt to deposits ratio have grown by 3.6 pp and 2.3 pp and amounted to 17.0 percent and 102.2 percent, respectively. Nevertheless, Armenia's household debt burden remains lower in comparison with the respective figures reported in East European countries.

In the reporting period, grown non-commercial remittances, higher nominal wages as well as increased employment rates all have positively affected the disposable household incomes. The share of low income population is still high, however⁹.

⁸ In this context the household debt burden represents the total sum of liabilities of households to credit institutions.

⁹ Source: the Central Bank quarterly survey of households, Q2, 2012.

In the first half of 2012 there has been 6.2 percent y-o-y increase in nominal wages as well as 1.7 percent rise in real wages as a result of lower level of inflation. Wage increases were reported in both private and public sectors, owing to increased productivity and more demand for labor. The demand for labor has grown primarily thanks to increased output in industry and services, which pushed unemployment down by 0.7 pp y-o-y to 5.6 percent in the first half of the year. In expectation of economic growth, the demand for labor is predicted to grow which will be concurrent with ascending employment rate and nominal wages. There is also expectation that real wages would grow by 3.4 percent, which is backed by the Central Bank's forecast of inflation.

Current conditions index and future conditions index as two components of Consumer Confidence Index¹⁰ are used to denote households' economic conditions and their expectations for income. In the first and second quarters of 2012, relative to the previous reference period, Current Conditions Index has increased by 3.3 percent and 1.4 percent, respectively. More to the point, a considerable increment in the second quarter was due to the movement in *income change sub-index*. Estimation of households over general economic situation is quite modest though. In the second quarter of 2012, however, there was some improvement in households' expectations over making major purchases and positive shift in their incomes. Yet all FCI elements are standing behind the second quarter of 2011 levels.

Increment in income affected the level of savings. In particular, the level of household deposits with banks in the reporting period has risen by 16.0 percent compared to 15.2 percent reported for the same period of the previous year. The deposit growth was fueled by 1.1 pp increment in volumes of Dram time deposits in total time deposits portfolio.

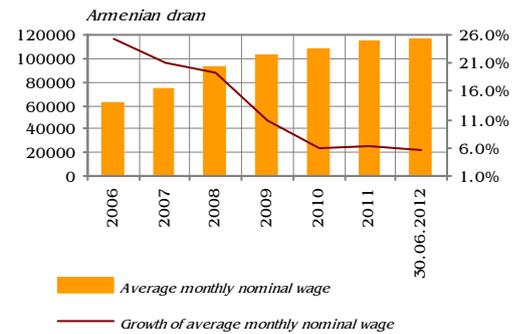
In the first half of 2012, in relation to end-2011, there has been 19.4 percent increase in household liabilities to financial organizations. In the structure of household debt burden, liabilities to financial organizations still makes up the largest part, nearly 65 percent, in total household debt, according to the Central Bank surveys¹¹. Though growing at a rapid pace, the share of household liabilities to credit organizations and pawnshops is however as low as 13.0 percent of total financial liabilities.

In household lending, most activity was reported in the segment of consumer loans, with such lending having grown by 20.2 percent over the first six months of 2012. Increased consumer lending was attributable to all types of loans, except for car loans and home appliance loans. The surveys showed that consumer lending remains a preferred area for

¹⁰ Source: the Central Bank quarterly survey of households, Q2, 2012.

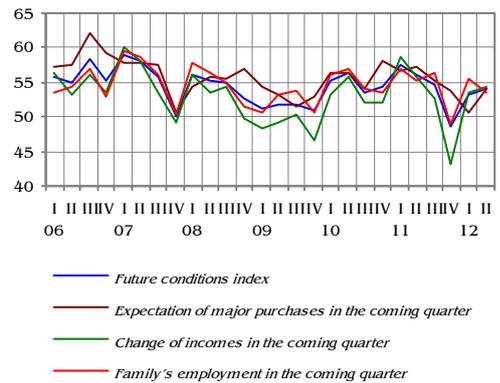
¹¹ Source: the Central Bank annual survey of cash foreign currency stock and debt held by households.

Average nominal wage



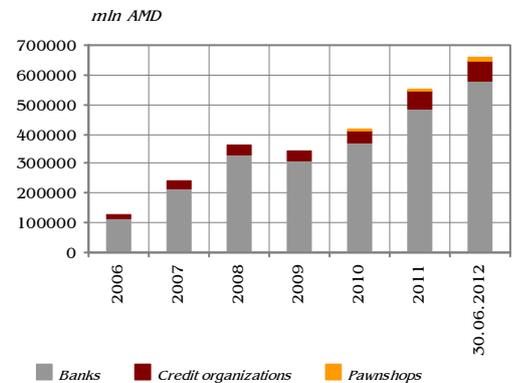
Source: Central Bank of Armenia, National Statistics Service of Armenia.

Future conditions index and its components



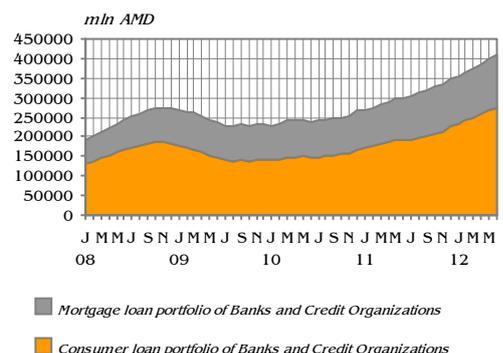
Source: Central Bank of Armenia.

Households' financial liabilities



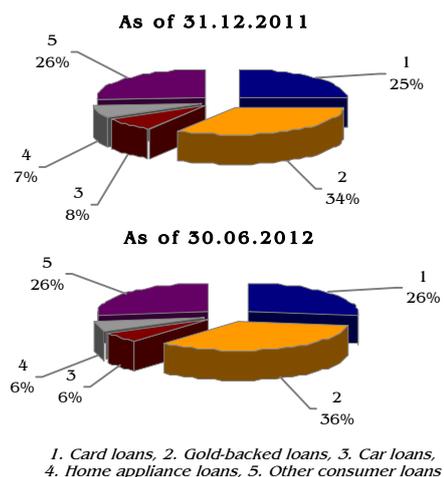
Source: Central Bank of Armenia.

Consumer and Mortgage loan portfolio of banks and credit organizations



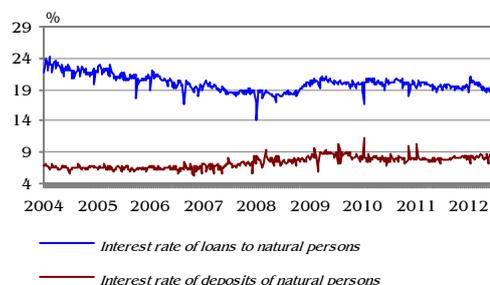
Source: Central Bank of Armenia.

Bank and credit organization consumer loan portfolio



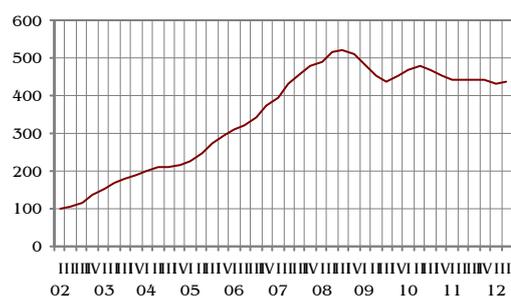
Source: Central Bank of Armenia.

Average weighted interest rate of loans and deposits of natural persons



Source: Central Bank of Armenia.

Average apartment price index in Yerevan (sq m)



Source: State Committee of Real Estate Cadastre at the Government of Armenia.

financial organizations to do business¹². Strong competition prompted financial organizations to introduce new loan instruments and provide more quality services. Interest rates of consumer loans and mortgage loans did not change much.

In the reporting period mortgage lending has increased by 11.1 percent (by AMD 13.5 billion), which is a 2.8 pp increment in relation to the respective indicator of the previous period. Mounting demand for real estate purchase mortgage lending contributed to the growth of mortgage lending and it reached AMD 10.0 billion. The market now expands and has a potential to expand further, which is backed *inter alia* by banks' and credit organizations' expectations¹³. It should be mentioned that the National Mortgage Company also contributes to the development of mortgage market by making home loans more accessible to buyers.

In the first half of 2012 credit risk associated with households has grown to some extent as volumes of household lending broadened. Specifically, the share of non-performing consumer and mortgage loans originated by banks and credit organizations has grown by 0.6 pp and 1.2 pp and reached 3.9 percent and 5.3 percent, respectively, in total.

Risks deriving from household lending amidst reported economic growth, inflow of non-commercial remittances and reported improvements in the labor market cannot have a significant impact on financial stability.

2.5. REAL ESTATE PRICES

Monitoring changes in real estate prices and their possible impact, whether direct or indirect, on sustainable functioning of the financial sector is very important in the financial stability point of view. In the reporting period banks further originated mortgage loans against collateral not exceeding 60-80 percent of its market value. Under such circumstances, in a financial stability point of view, risks deriving from real estate price fluctuations were not significant (see details in *Market risk of commercial banks* section).

In June 2012, relative to the beginning of the year, prices of multi-apartment homes in Yerevan have grown by 2.4 percent¹⁴ fuelled by home price increases reported in all administrative units and Ajapnyak (3.4 percent) and Kentron (3.3 percent) districts of Yerevan in particular. However, in

¹² Source: the Central Bank survey of "Bank and Credit Organization Loans", Q1 and Q2, 2012.

¹³ Source: the Central Bank survey of "Bank and Credit Organization Loans", Q1 and Q2, 2012.

¹⁴ In Armenia an average composite real estate price index is lacking, therefore the average price index of homes in Yerevan has been accepted as benchmark to which all real estate price developments are measured. Until June of 2005, the real estate pricing has been in US dollar which is why the dram prices of real estate were calculated using the dram/US dollar exchange rate.

the period January-June 2012, relative to the same period of the previous year, average market prices of apartments in Yerevan have fallen by 1.9 percent (there has been 5.9 percent y-o-y decrease of prices in the first six months of 2011). Prices dropped as the number of real estate transactions (purchase and sale of apartments) declined by 7.9 percent y-o-y. In the reporting period the number of home purchase and sale transactions decreased by 5.1 pp. The number of pledges which have diminished by 18.8 percent y-o-y in the reporting period is an indirect pointer to how active the real estate market is.

The real estate supply has contracted as prices dropped. This has somewhat prevented the prices from falling further. In the first half of 2012, relative to the same period of the previous year, the real estate construction volumes have shrunk by 3.8 percent. Yet the share of the latter in total construction has grown by 0.9 pp to 28.8 percent. The volumes of homes commissioned to operate contracted by 4.4 percent due to reduced volumes of construction financed by organizations in June. As a result, in the first half of 2012, relative to the same period of the previous year, the share of home operation supported by organizations has shrunk by 18.4 pp to 35.4 percent. On the other hand, home operation supported by households has increased in volume after reported decline in the last two years in a row. This new trend however is not prominent. The volumes of home operation supported by households reported increases in Yerevan as well as Lori, Kotayk and Tavush regions. In the reporting period the volumes of credit institution loans to dwelling and non-dwelling home construction have increased by 6.5 percent.

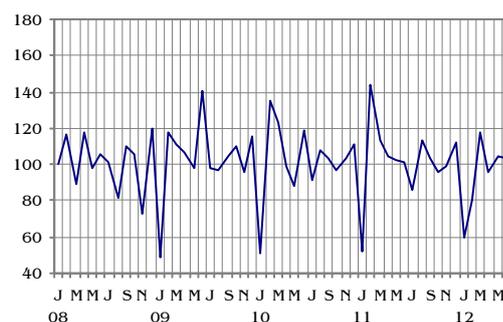
Dwelling home operation by sources of financing

Source of financing	Operated residential apartments in 2012 1 half (sq m)	Share in total	Percentage change to 2011 1 half
Total, o/w:	116647	100%	13.9%
state budget	21268	18.2	6.7
resources from organizations	44654	38.3	35.4%
household funds	50725	43.9	2.1%

Source: National Statistics Service of Armenia.

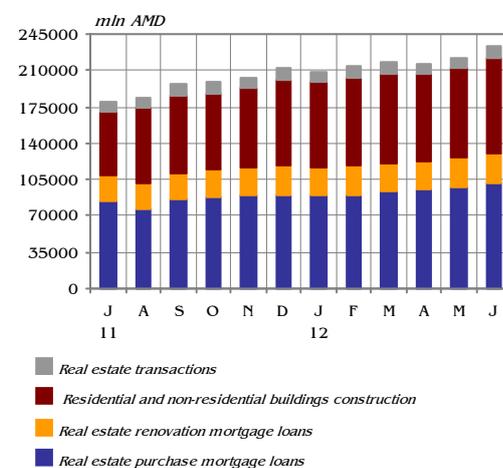
Mortgage lending, a persistently popular trend, somewhat affected the growth of demand for real estate. The mortgage market may expand if household incomes continue to grow and reforms are further carried out in the real estate market. As the Central Bank survey results suggest, banks and credit organizations are expecting more activity in mortgage lending. The number of real estate transactions and the number of mortgage loans originated were almost similar in terms of geographic distribution: home sale transactions and mortgage market operations remain concentrated in Yerevan.

Real estate transactions index



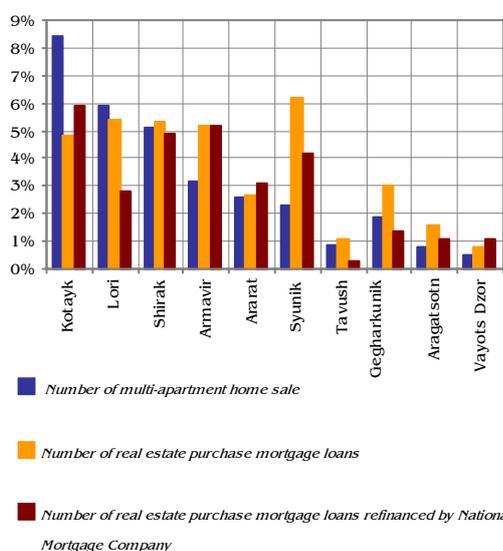
Source: State Committee of Real Estate Cadastre at the Government of Armenia.

Volume of Loans to Real estate market



Source: Central Bank of Armenia.

The number of multi-apartment home-sale and real estate purchase mortgage loans by regions



Source: Central Bank of Armenia, NMC.

SUMMARY

The recovery of the economy, which started from the previous year, continued during the first six months of 2012, reflecting the developments in both external and domestic sectors. Increased demand for industrial product, large inflow of private remittances, reported growth in agriculture and strong lending all promoted to economic activity.

Increased private remittances, factor incomes and nominal wages have positively affected real incomes of population hence credibility. Reported growth in sectors of the economy and increased exports bolstered credibility of legal persons, further strengthening financial stability.

Price developments in domestic and external environment as well as monetary policy implemented by the Central Bank made it possible to maintain weak inflationary environment which, in turn, positively reflected credibility of economic agents.

3. FINANCIAL MARKET STABILITY IN ARMENIA

3.1. MONEY AND CAPITAL MARKETS

The trends of easing inflationary environment persisted over the first half of 2012. With the 12-month inflation at a low level, balanced risks and optimistic outlook, the Central Bank had all reasons to believe that attaining the inflation target under the existing refinancing rate in the first quarter of the year was real. In the second quarter, with inflation at a lower level, the Central Bank left the refinancing rate unchanged, 8.0 percent, since some depreciation of the Dram in the period May-June led to the relaxed monetary conditions. In the light of these developments the financial market's response was neutral on the whole so interest rates in all segments of the market stayed roughly unchanged.

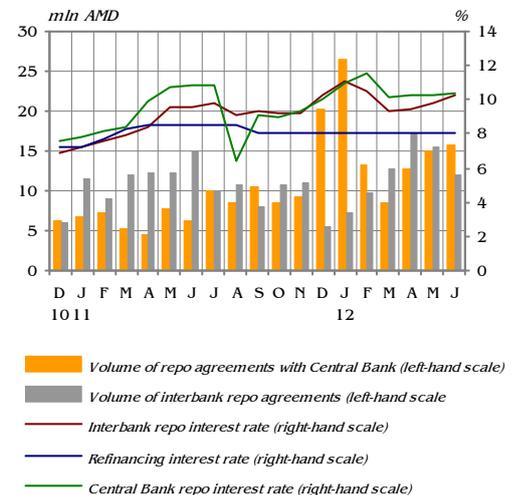
The interbank money market has been lively enough in the first six months of 2012. The average monthly transactions in interbank repo markets and Central Bank repo markets amounted to AMD 12.4 billion and AMD 15.3 billion, respectively. Relative to the end of the previous year, interest rate of the repo market (excluding repo transactions with the Central Bank) has reduced by 0.7 pp to 10.5 percent. As interest rates tended to drop since the start of the year, there has been increased activity in interbank credit platform, with reported average monthly turnover of AMD 498 million.

Commercial banks' dram excess liquidity with the Central Bank has been low throughout the first half of 2012, owing to the change in reserve requirement (changing the currency of reserves for attracted foreign exchange funds to Armenian dram) in 2011.

The review of yield curves shows that in the secondary market of securities yields have reduced, except for a 5-year segment. Convexity of the curve changed from 0.27 to 0.37, which points to the widened spread in short-term and long-term interest rates.

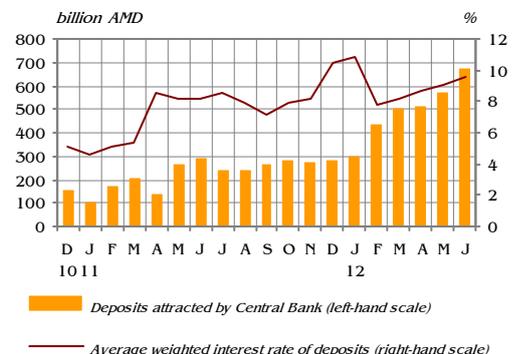
As of end-June 2012, the average maturity (duration) of government bonds outstanding ranged 1135 days, which is 120 days more compared to the end of the previous year, and the ratio of Average Modified Duration (D_M) calculated to evaluate interest rate risk was 2.5 for government bonds outstanding, up by 0.1 points relative to the end of previous year.

Repo agreements and repo interest rates



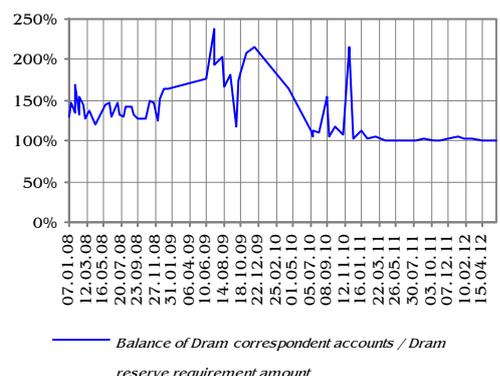
Source: Central Bank of Armenia.

Volume of transactions on credit resource platform and average weighted interest rate



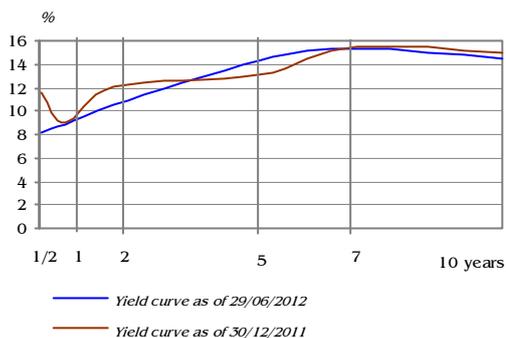
Source: Central Bank of Armenia.

Dram correspondent accounts of commercial banks with Central Bank and Dram reserve requirement



Source: Central Bank of Armenia.

Government bond yield curves



Source: Central Bank of Armenia.

Modified Duration of Outstanding Government Securities as of 30.06.2012 for Different Maturity Groups

D_M	up to 6 months	from 6 months to 1 year	1-2 years	2-5 years	5-7 years	7-10 years
	0.21	0.62	1.35	2.29	3.57	5.23

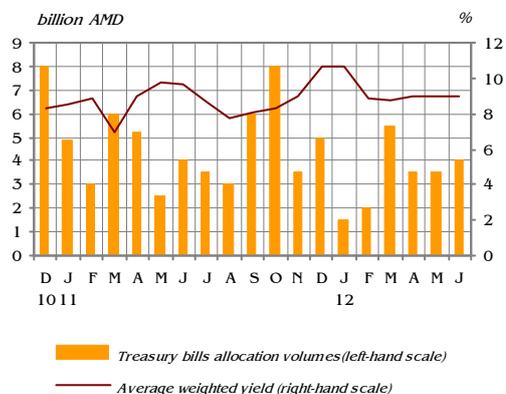
Source: Central Bank of Armenia.

Modified Duration of Available-For-Sale and Trading Government Securities of Commercial Banks as of 30.06.2012 and Probable Profit/Loss in case of 1% Change in Yield for Different Maturity Groups

	up to 6 months	from 6 months to 1 year	1-2 years	2-5 years	5-7 years	total
Trading government securities (million AMD)	6735.27	11820.72	28680.73	41661.11	17471.61	106369.44
Share in total portfolio	6.33%	11.11%	26.96%	39.17%	16.43%	100%
D_M	0.19	0.63	1.43	2.84	5.23	2.44
Price change +/- (million AMD)	13.01	74.34	411.55	1182.05	914.41	2595.34

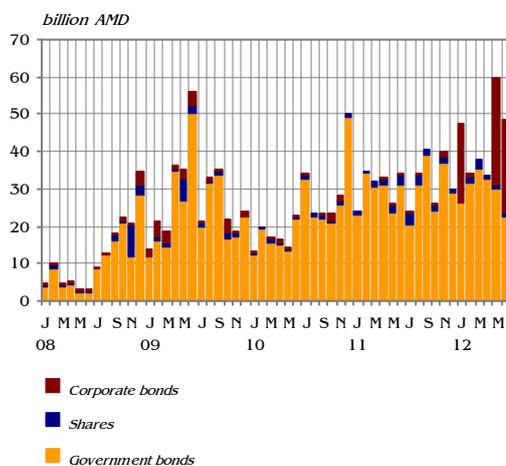
Source: Central Bank of Armenia.

Treasury bills allocation volumes and average weighted yield



Source: Central Bank of Armenia.

Securities trades by investment service providers



Source: Central Bank of Armenia.

In case of 1 percent increase of the yield on government securities, the potential loss in commercial banks' portfolio of government securities could reach AMD 2.6 billion (constituting 0.7 percent of commercial banks' regulatory capital). As such, most loss is likely to come from revaluation of medium-term and long-term securities as they have a large share in the securities portfolio of the banking sector.

In the first six months of 2012 average variance for yields on transactions performed in secondary markets of government bonds has increased by 0.14 against the previous year and reached 2.64. Average variance for interest rates in repo market (excluding repo transactions with the Central Bank) has decreased by 0.25 points and amounted to 0.94 points.

Operations in securities markets (including repo transactions but excluding operations with the Central Bank) carried out by investment service providers¹⁵ have grown by 7.8 percent compared to the same period of the previous year and amounted to AMD 1 trillion 226 billion. Transactions involving securities trades constituted 21.3 percent of the above said operations, which represents a 5.1 pp increase in relation to the same period of the previous year.

¹⁵ As of 30.06.2012, investment service providers included 21 commercial banks and 8 investment companies.

In the first half of 2012 the government securities market liquidity¹⁶ performed in a less volatile manner: the standard deviation of the government securities market liquidity reached 2.1 versus 2.7 recorded in the same period of the previous year.

The share of trades in long-term and medium-term securities amounted to 47.1 percent and 41.2 percent, respectively, of total transactions involving government securities trades. The share of short-term securities made up 11.7 percent.

In the first half of 2012, relative to the first half of 2011, the volume of repo transactions (excluding operations with the Central Bank) carried out by investment service providers has increased by 1.3 percent and amounted to AMD 965.4 billion. Again, operations with government securities accounted for the largest share, 99.7 percent, of repo transactions. Repo transactions with corporate bonds and with equity shares constituted, respectively, 0.3 percent and 0.1 percent of total transactions executed.

The total volume of securities trades and repo operations in regulated market amounted to AMD 2.6 billion in the first six months of 2012, with repo operations accounting for 23.1 percent in total.

The share of trades in the regulated market in investment service providers' transactions on securities is still small, a mere 0.8 percent, which restricts influence of operational risks in the regulated market on financial stability.

In the reporting period, the structure of transactions with securities trades in the regulated market was as follows: the share of transactions with government securities accounted for 64.8 percent in total stock exchange turnover; the transactions with corporate bonds and with equity shares constituted 27.5 percent and 7.7 percent, respectively.

The securities market capitalization to GDP ratio¹⁷ was 1.5 percent which went up by 0.1 pp against the end of the previous year.

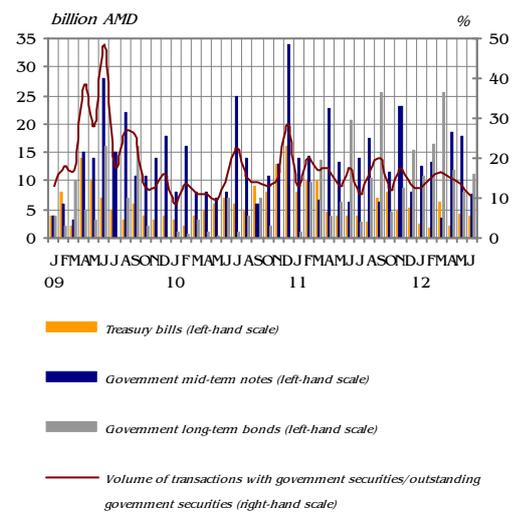
3.2. FOREIGN EXCHANGE MARKET

In the first half of 2012 the Armenian dram tended to depreciate. The depreciation versus the U.S. dollar has been 7.71 percent and the variation coefficient amounted to 101.21.

¹⁶ The liquidity of government securities market is calculated as ratio between an amount of monthly trade transactions executed by investment service providers in the secondary market of government bonds and an amount of government bonds outstanding.

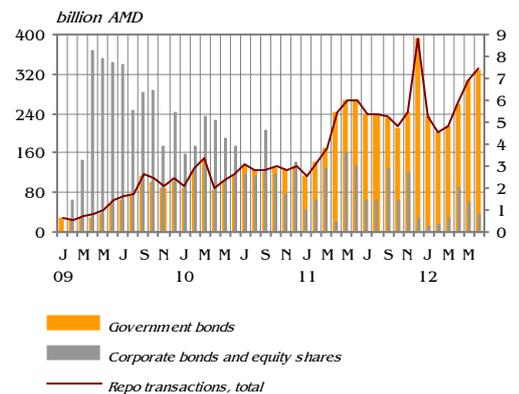
¹⁷ The ratio of market price of listed securities to GDP.

Volume of transactions with government securities and volume of transactions with government securities / outstanding government securities ratio



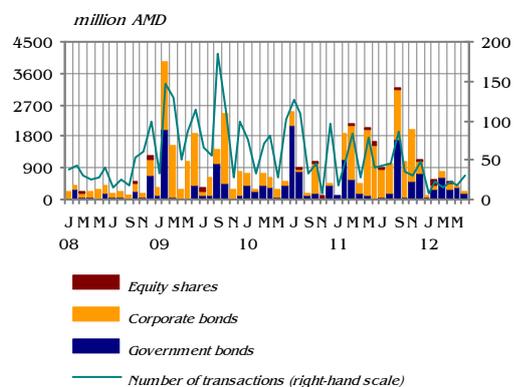
Source: Central Bank of Armenia.

Repo transactions by investment service providers, by types of security (excluding transactions with Central Bank)



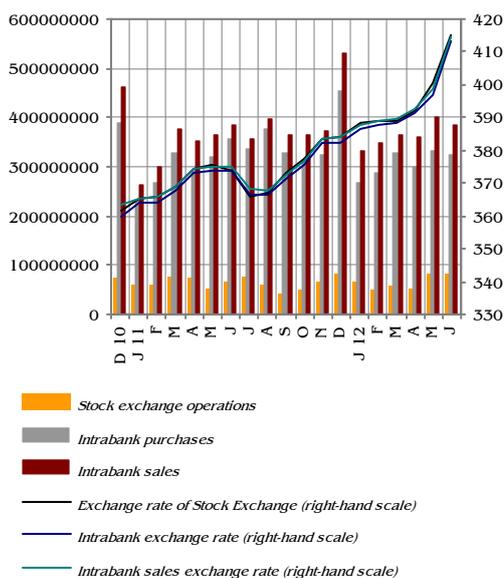
Source: Central Bank of Armenia.

Securities trades at regulated market of securities



Source: Central Bank of Armenia.

Volumes of operations in Armenian foreign exchange market and exchange rates



Source: Central Bank of Armenia.

In the first half of 2012 average semiannual nominal effective exchange rate has depreciated by 0.9 percent and real effective exchange rate, by 2.5 percent, in relation to the same period of the previous year, according to preliminary estimations of the Central Bank¹⁸.

Monthly stock exchange turnover has been roughly the same relative to the previous period and averaged USD 63 million. The intrabank trade volumes were much the same either, compared to the previous period, with average monthly purchase and sale transactions amounting to USD 307 million and USD 365 million, respectively. In the reporting period the banking sector's gain from trading of foreign exchange was AMD 5.8 billion.

SUMMARY

In the first half of 2012 the Central Bank left the refinancing rate unchanged amidst relatively steady international prices as well as mitigated inflationary pressures and second-round effects in the domestic environment. The financial market responded to such policy with neutrality. Interest rates did not change much.

Interbank market has been lively enough along with mounting demand for loans. This contributed to the creation of mechanisms for effective liquidity distribution.

Government bonds constituted the largest share in securities trades and repo transactions performed by investment service providers and in the regulated market.

In the domestic foreign exchange market the dram tended to depreciate. This has not however led to vulnerability in the financial stability point of view.

The impact of the money market on overall domestic financial sector remains to be minor for such reasons as still a limited choice of instruments, a small secondary market and a low level of integration to world markets.

¹⁸ When reviewing the dram exchange rate behavior as well as Armenia's competitiveness in external sector, the nominal effective exchange rate and real effective exchange rate are also considered and shall be computed using the weights the main 11 trade partners to Armenia (Eurozone, Russia, Ukraine, England, Switzerland, Iran, U.S.A., Turkey, Georgia, Japan, and China) have in foreign trade turnover.

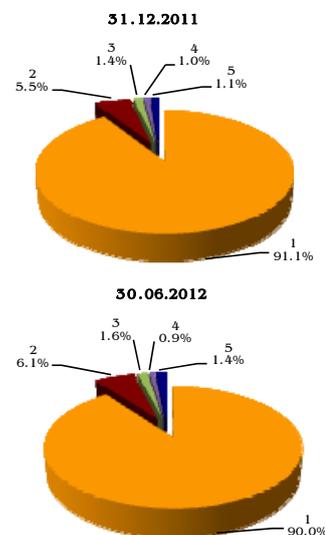
4. FINANCIAL INSTITUTION STABILITY IN ARMENIA

The Armenian banking system¹⁹ holds 90.0 percent of the financial system assets. Therefore, from the financial stability point of view, assessing and disclosing risks pertaining to the banking activities is rather important. Insurance companies, securities market participants and other financial organizations are small enough in comparison with the banking system, so their potential impact on financial stability in Armenian financial system is estimated to be minor.

In the first half of 2012 banks were highly active in the lending market owing to continued recovery in the real sector of the economy and increased transfers. Banks further stimulating lending to legal persons as well as loan programs under international loan disbursement projects all contributed to the active lending.

In the reporting period banks further branched out, broadened the spectrum of services by providing more quality services. These developments helped to increase access to banking products and improving banking culture.

Financial system assets, by financial institutions



1. Banks, 2. Credit organizations, 3. Insurance companies, 4. Investment service providers, 5. Other financial institutions

Source: Central Bank of Armenia.

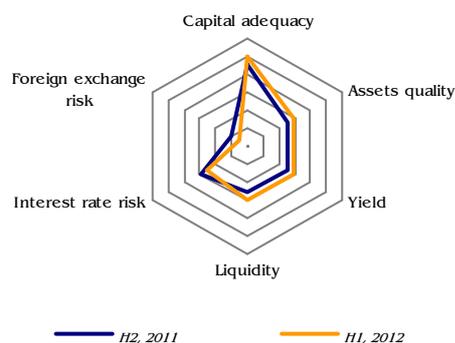
4.1. COMMERCIAL BANKS

Banking System Stability Map

A banking system stability map²⁰ has been designed to illustrate the behavior of the banking system stability. It denotes how values in the set of indicators of banking risks have changed relative to previous periods.

In the stability map in the first six months of 2012, relative to the previous year's first half, no significant shifts have taken place: there has been some positive movement in foreign exchange risk and interest rate risk and some negative movement in capital adequacy, assets quality, earnings and liquidity ratios (please, see details in subsections *Credit risk*, *Liquidity risk*, and *Market risk*). The negative movements are mainly a result of expanded lending during the first half of 2012.

Banking system stability map, H1, 2012
Average to H2 2011 average



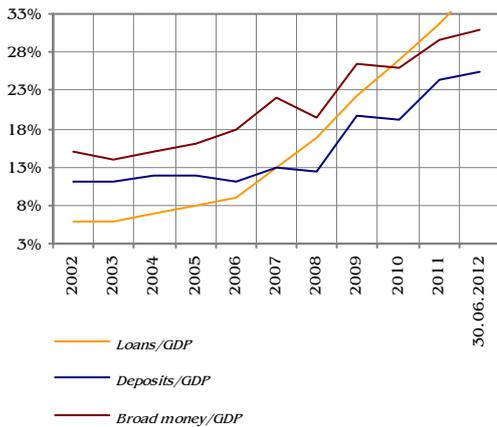
Source: Central Bank of Armenia.

¹⁹ This refers to the 21 commercial banks functioning in Armenia.

²⁰ The banking system stability map contains indicators denoting capital adequacy, assets quality, liquidity, profitability, interest rate risk and foreign exchange risk. Before usage, these indicators were measured on a 1 to 10 scale basis and calculated in accordance with the IMF methodology. On the map, note that away from the center signifies higher risks, and nearer to the center signifies lower risks. The banking system stability map shall not be interpreted as an eventual reflection of the level of financial stability, rather it provides a picture whether the level of risks involved has increased or decreased.

4.1.1. Financial intermediation; concentration

Financial intermediation



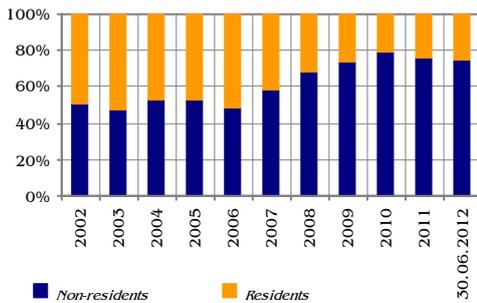
Source: Central Bank of Armenia.

Over the first half of 2012 a rapid growth of the banking system assets compared to the nominal GDP growth has been reported, which pushed the banking system assets to GDP ratio up by 3.8 pp to have reached 57.9 percent at the end of June. Similarly, the banking system loans to GDP ratio has increased by 5.5 pp and amounted to 37.1 percent.

The bank-attracted deposits to GDP ratio has also increased, by 1.0 pp, and reached 25.5 percent at the end of semi-annum, and the broad money to GDP ratio has grown by 1.4 percent and made up 30.9 percent at the end of semi-annum.

Relative to the start of the year, the share of non-resident participation in the statutory capital of the banking sector has reduced by 1.3 pp to 74.8 percent at the end of June 2012, due to the change in equity structure in one bank.

Foreign participation in Armenia's banking capital



Source: Central Bank of Armenia.

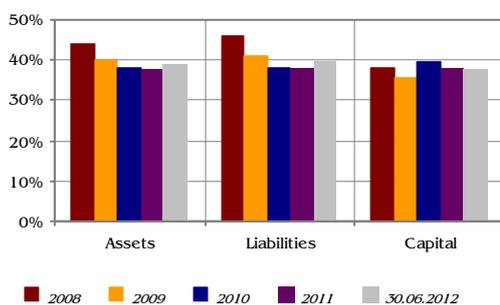
Over the first half of the year total capital of the banking sector has grown by 3.9 percent (AMD 13.8 billion); and total assets, by 8.4 percent (AMD 174.3 billion). The capital to assets ratio (the leverage ratio) has dropped by 0.7 pp to 16.5 percent.

The Herfindahl-Hirschman Concentration Index

	31.12.09	31.12.10	31.12.11	30.06.12
Total assets	0.07	0.07	0.07	0.07
Total liabilities	0.07	0.07	0.07	0.07
Total capital	0.06	0.06	0.06	0.06

Source: Central Bank of Armenia.

Share of 4 largest bank assets, liabilities and capital in total banking system



Source: Central Bank of Armenia.

The Herfindahl-Hirschman Index of Concentration²¹ for some balance sheet items (assets, liabilities, capital, loans, and deposits) of the banking system signifies a low level of system concentration, which limits the likelihood of the impact of risk concentration on the financial stability.

Relative to the beginning of the year, the share of assets and liabilities of 4 largest banks out of 21 in Armenia has increased by 1.5 pp and 1.7 pp to have reached 39.3 percent and 39.8 percent, respectively, at the end of the reporting period. Contrariwise, the share of capital of these 4 largest banks has contracted by 0.5 pp to 37.8 percent.

4.1.2. Credit risk

In the first half of 2012 lending has grown by 18.7 percent and amounted to AMD 1 trillion 437.4 billion at the end of

²¹ The Herfindahl-Hirschman Concentration Index varies between 0 and 1, characterizing the level of concentration (values near to 0 denote lower concentration).

the reporting period. Notwithstanding a notable increase in the banking sector loans to GDP ratio reported in the period under review, the current level of financial intermediation (the loans to GDP ratio) stands behind the ratio in banking sectors of East European countries. What this can mean is that lending could expand and financial intermediation could grow stronger on the back of economic growth, continued increase in household incomes and further easing of terms of lending.

During the first six months under review the growth rate of lending outpaced the growth rate of total assets by 10.3 pp. As a result, the share of loans in total assets has increased by 5.6 pp to 64.1 percent at the end of semi-annum.

Relative to the beginning of the year, the share of non-performing loans (classified as “watched”, “substandard”, and “doubtful”) has grown by 0.9 pp and constituted 4.3 percent of total loan portfolio. The share of non-performing loans has been higher in loan portfolio for agriculture, trade and public catering, making up 5.9 percent, 5.8 percent and 5.5 percent, respectively.

As calculated by the IMF methodology²², the share of non-performing loans in total has grown by 1.4 pp and amounted to 6.8 percent at the end of the reporting period.

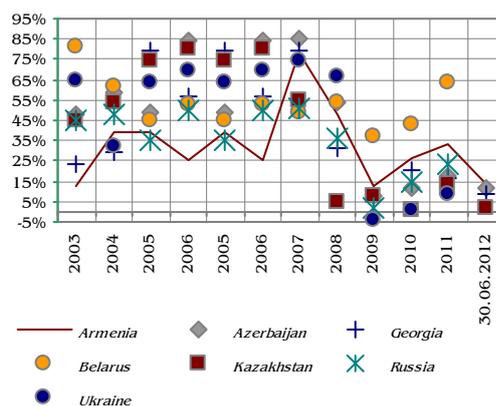
In the first half of 2012 the share of loans to legal persons again prevailed and averaged around 60 percent. This is largely explained by the fact that faster growing lending to legal persons persisted from trends in the 2009 crisis when banks re-defined lending policies by giving priority to providing loans to legal persons so as to ensure economic growth.

In the reporting period the economy saw loan investment growing in all sectors, except for loans provided to *financial services* sub-sector. Largest increases were reported in agriculture, industry, and consumer loan portfolios, by 27.4 percent, 26.0 percent and 18.7 percent, respectively. As of June 2012, *industry, trade* and *consumer* loans constituted large shares in total portfolio, making up 22.7 percent, 21.9 percent and 17.4 percent, respectively.

As of end-June 2012, as loan investments by the sectors of economy demonstrate, the Herfindahl-Hirschman Concentration Index remained the same, 0.11, which points to the moderate concentration of loans. That indicator based on banks' average was again 0.17 which is an evidence of high sectoral concentration of loans provided by some banks.

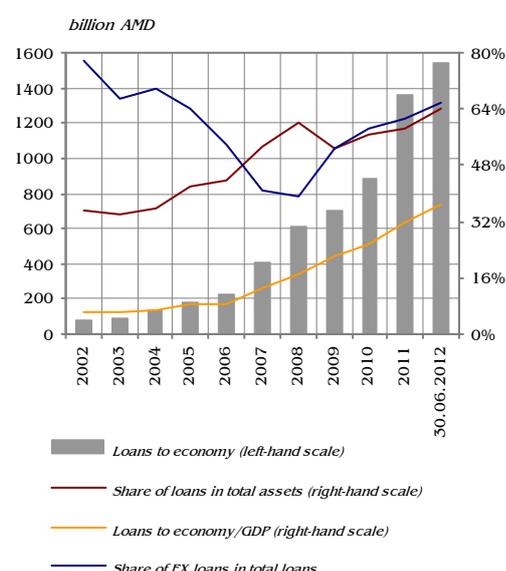
²² According to the IMF methodology, the share of non-performing loans in total loan portfolio is calculated as the ratio of loans classified as “watched”, “substandard”, and “doubtful” to total loans.

Annual growth of loan portfolio



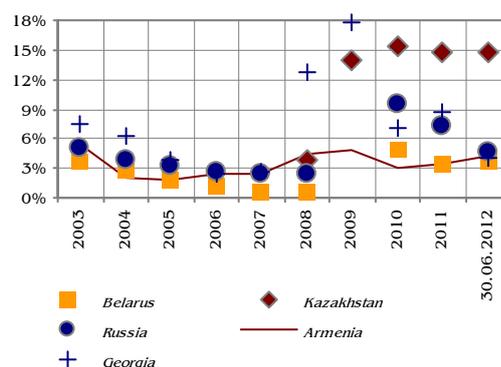
Source: IMF.

Volume of loans to the economy



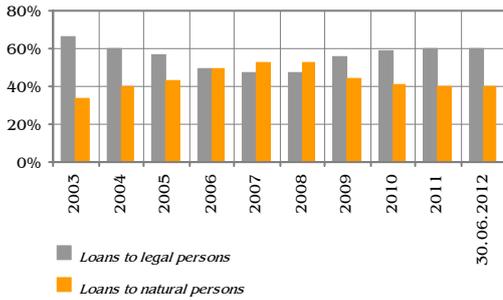
Source: Central Bank of Armenia.

Share of non-performing loans in total loan portfolio



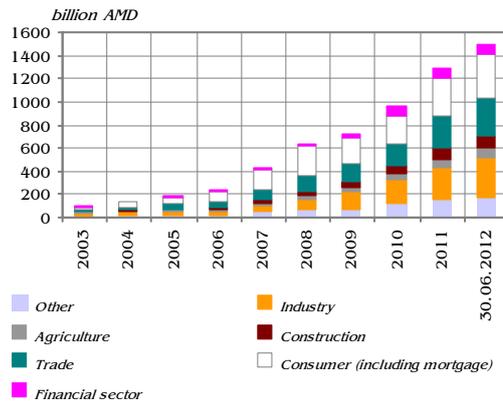
Source: IMF.

Share of loans to natural persons and legal persons in total loan portfolio



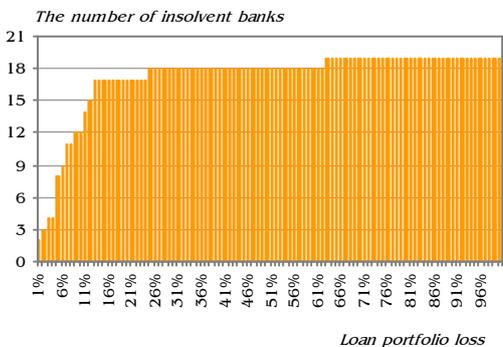
Source: Central Bank of Armenia.

Balance of bank loans to residents, by sector



Source: Central Bank of Armenia.

Change in the number of banks infringed capital adequacy ratio under dynamic growth of loan losses



Source: Central Bank of Armenia.

Risk weighted assets in bank capital adequacy ratio, as of 30.06.2012



Source: Central Bank of Armenia.

In the first half of 2012, relative to the same period of the previous year, the ratio of net provisioning against assets losses to total assets has risen by 0.5 pp to make up 0.8 percent at the end of semi-annum.

The results of credit risk stress-scenarios²³ show that potential loss of the banking sector has increased to a certain extent compared to the results of the same scenarios at the start of the year, which is mainly determined by faster growing credit portfolio over regulatory total capital of the banking sector.

Credit risk stress-scenarios²⁴

30.06.2012	Stress scenarios		
	25 percent of loans in watching, substandard and doubtful categories classified into loss loans	75 percent of loans in doubtful category classified into loss loans	30 percent of loans in standard category classified into watching loans
Loss of the banking system	AMD 12.7 billion or 3.6 percent of regulatory capital of the banking system	AMD 3.5 billion or 0.9 percent of regulatory capital of the banking system	AMD 45.4 billion or 12.9 percent of regulatory capital of the banking system
Total capital adequacy of the banking system in case of stress scenario	16.3%	16.7%	15.0%

Source: Central Bank of Armenia.

The results of worst scenarios show that even when the capital adequacy ratio of the banking sector is 15.0 percent, some banks will report infringed capital adequacy ratio. Yet, even in case of worst possible stress-scenarios, these ratios are close to their minimum thresholds, putting no stressed negative impact on Armenia's financial stability.

Stress-scenario of credit risk derived from off-balance sheet contingent liabilities

30.06.2012	When 50 percent of off-balance sheet contingent liabilities performed (result of a stress test)
Banking system total capital adequacy before the shock	16.81%
Banking system total capital adequacy after the shock	16.6%

As the results of this scenario²⁵ show no bank will be in breach of the capital adequacy requirement, meaning that the credit risk deriving from realization of off balance sheet contingent liabilities is manageable.

²³ Stress-scenarios are built on an assumption of unchanged bank loan volumes and ignoring of property pledges, whereby loans categorized as 'loss' will not lead to the possibility to sell off the real property pledged.

²⁴ This stress-scenario and the other ones following are not prepared to forecast emergence of any risks, but rather aim to reveal the weaknesses of the financial system, as well as assess its ability to absorb such risks.

²⁵ Post balance sheet contingent liabilities include unused part of lines of credit, credit cards, overdrafts, L/Cs, guaranties and sureties.

4.1.3. Liquidity risk

In the first half of 2012 the banking system liquidity trended down in spite of fast growing rate of loans provided by the banking sector. During this semiannual period, however, the level of liquidity has been well above the minimum prudential requirement. The prudential standards of total liquidity and current liquidity have fallen by 3.6 pp and 2.6 pp and amounted to 24.4 percent and 118.1 percent, respectively, at the end of semi-annum²⁶.

In terms of duration gaps in assets and liabilities by maturity, there has been some negative gap reported only in regard to the 181-365-day segment, which made up 75.1 percent. In other segments (up to 180 days (demand), 1-3-year and 3-year and over) the duration gap amounted to 92.2 percent, 170.1 percent and 169.7 percent, respectively.

Considering that in the up to 180-day (including demand resources) segment the assets and liabilities maturity has been historically in the region 90-95 percent, banks will be able to rectify slightly negative gap by entering into new contracts, as assets and liabilities reach their respective maturity. In this context, the further impact of the negative gap in the 181-365-day segment on financial stability is estimated to be minor.

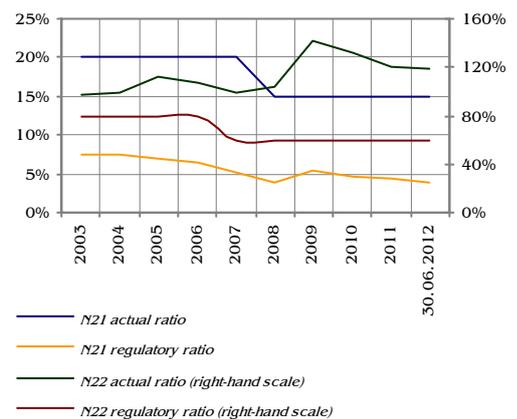
Foreign borrowings of commercial banks have grown by 22.1 percent. Funds attracted from international financial institutions have increased by 21.6 percent and accounted for 31.8 percent of total foreign borrowings.

The main lender countries to commercial banks included Russia (21.9 percent), Luxemburg (9.1 percent), Germany (6.3 percent), U.S.A. (4.0 percent), France (4.0 percent), and Netherlands (4.0 percent). The share of long-term loans amounted to 89.7 percent, which makes the likelihood of refinancing of those liabilities to almost zero.

There has been a reported increase of exposure to the concentration of banking system liabilities: the share of major debt²⁷ in total debt has risen by 0.2 pp and reached 27.4 percent at the end of semi-annum.

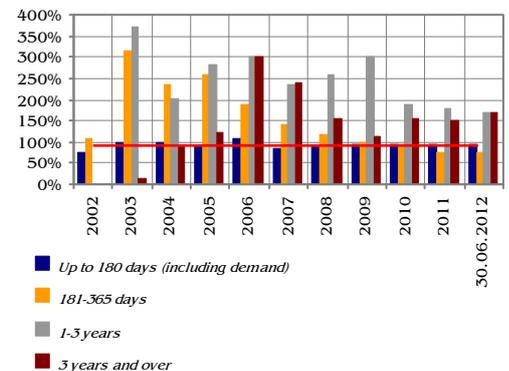
In case of worst possible stress-scenarios when total and current liquidity ratios of the banking sector make up, respectively, 16.8 percent (versus the required minimum of 15 percent) and 92.5 percent (versus the required minimum of 60 percent), some banks will report infringed total and current liquidity prudentials. However, high liquid assets of

Actual and regulatory banking system liquidity ratio dynamics



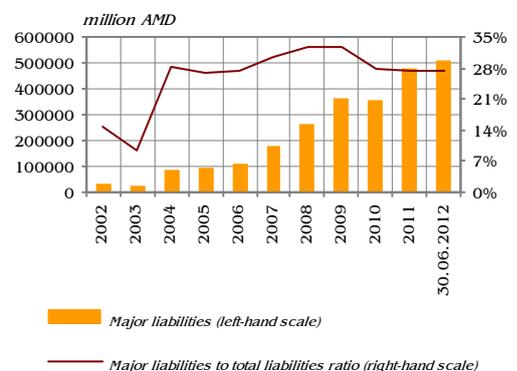
Source: Central Bank of Armenia.

Assets to liabilities ratio by maturity baskets



Source: Central Bank of Armenia.

Major liabilities to total liabilities ratio in the banking system



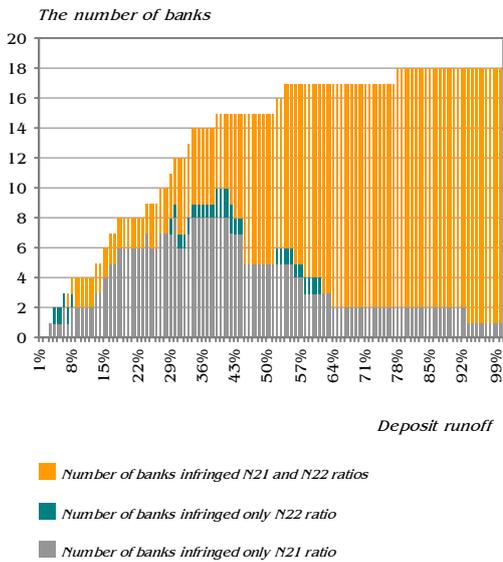
Source: Central Bank of Armenia.

²⁶ The prudential standard of total liquidity is calculated as a ratio of high liquid assets to total assets while the prudential standard of current liquidity, as a ratio of high liquid assets to demand liabilities; the minimum prudential requirement of these standards are, respectively, 15 percent and 60 percent.

²⁷ This represents the sum of all liabilities to one person, which individually exceed the 5 percent margin of total liabilities of a bank, without taking affiliation into account.

such banks are well sufficient to cover outflow of liabilities. In this context, the likelihood of emergence of risks undermining the financial stability remains low.

The number of banks infringing liquidity requirements in case of household demand and term deposits runoff



Source: Central Bank of Armenia.

Liquidity risk stress-scenarios

30.06.2012	Stress scenarios		
	Repayment of 20 percent of time deposits of natural persons	Repayment of 20 percent of demand liabilities	Repayment of 20 percent of demand liabilities and repayment of 20 percent of time deposits of natural persons
Ratio of high liquid assets to total assets of the banking system	20.4%	21.1%	16.8%
Ratio of high liquid assets to demand liabilities of the banking system	94.0%	122.3%	92.5%

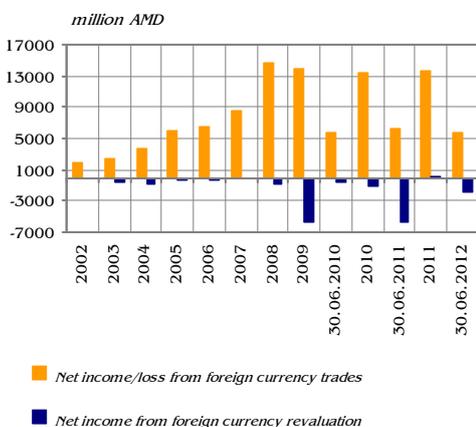
Source: Central Bank of Armenia.

Stress-scenario of liquidity risk derived from off-balance sheet contingent liabilities

31.12.2011	When 50 percent of off-balance sheet contingent liabilities performed (as a result of stress test)
Banking system high liquid assets to total assets ratio	21.7%
Banking system high liquid assets to total demand liabilities ratio	105.3%

The results of the above stress scenario show that total and current liquidity prudentials remain well above the minimum prudential requirement.

Net income of the banking system from foreign currency trades and revaluation



Source: Central Bank of Armenia.

4.1.4. Market risks

Foreign exchange risk

In the first half of 2012 the Dram fluctuations against other currencies led to a situation where the banking system incurred revaluation losses amounting to AMD 1.9 billion. As a result of foreign currency revaluation, 11 banks incurred losses and 10 banks reported profit. The banking system generated net revenue of AMD 5.9 billion from foreign exchange transactions.

Relative to the start of the year, the share of foreign currency loans in total loans and the share of foreign currency deposits in total deposits have grown by 2.8 percent and 1.2 percent to have constituted 65.6 percent and 69.9 percent, respectively, at the end of semi-annum.

At the end of the reporting period commercial banks' net position (inclusive of derivative instruments) of foreign currencies has been a negative value of AMD 531.2 million

or 0.2 percent of regulatory capital (as of 31.12.2011 it has been a negative value of AMD 3.1 billion or 0.9 percent of regulatory capital).

Foreign exchange risk stress-scenarios

30.06.2012	Stress scenarios		Possible maximum annual loss estimated through VaR Model
	AMD/USD appreciation (depreciation) by 1%	AMD/EUR appreciation (depreciation) by 1%	
Banking system's profit/loss from foreign currency revaluation	AMD 15.3 million or 0.004% of regulatory capital (AMD -15.3 million)	AMD -1.8 million or 0.001% of regulatory capital (AMD -1.8 million)	AMD 59.7 million or 0.02% of regulatory capital

In case of worst possible stress scenarios reviewed in this stress-test²⁸, bank losses incurred as a result of foreign exchange risk are estimated to be insignificant, so the impact of such losses on the financial stability is weak.

Interest rate risk

There has been a reported decline in interest rates of both dram and foreign currency loans. Especially pronounced was the drop in interest rates of foreign currency loans, reflecting commercial banks' intention to spur up demand for such loans, since foreign currency resources prevailed in the structure of liabilities. Such interest rate falls were also fuelled by an increased competition among bigger banks, leading to the narrowing of the interest rate spread.

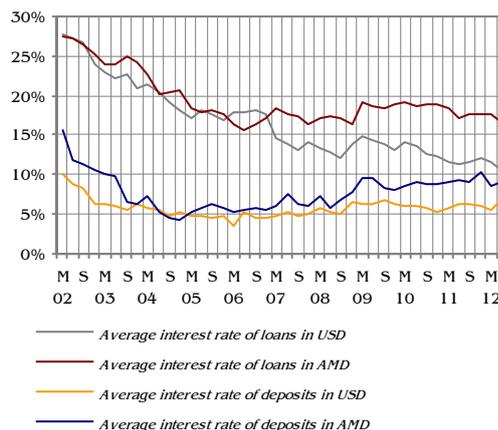
The gap of average weighted duration of present value of assets and liabilities is nearly filled, reaching merely one month. This means that possible fluctuations in market rates will not entail major losses in the banking system during 2012.

Interest rate risk stress-scenarios

30.06.2012	Impact of 2 pp increase (decrease) of market interest rates on total portfolio, estimated through the "Duration Method"	Where market interest rates decrease (increase) by 2 pp, there will be deviation of net interest income from expected income of the three months ahead, estimated through the "Gap Method" (a method of interest rate-sensitive assets and liabilities gap)
Banking sector's profit/loss	AMD 1.8 billion or 0.5 percent of banking system capital (AMD -1.8 billion or 0.5 percent of banking system capital)	AMD 95.8 million or 0.03 percent of banking system capital (AMD -95.8 million or 0.03 percent of banking system capital)

Source: Central Bank of Armenia.

Average interest rates of bank deposits and loans



Source: Central Bank of Armenia.

²⁸ The calculation of losses estimated through stress-scenarios and the VaR Model (the VaR Model is not considered as a stress-scenario since the calculation of the model takes historical exchange rate series of currencies) is based on FX positions of commercial banks as of 30.06.2012.

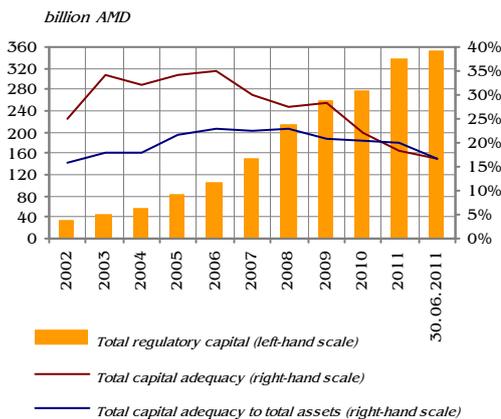
In case of worst possible stress scenarios, possible losses of banks from interest rate fluctuation are in the region of 2.0 percent of capital. So, commercial banks' losses as a result of interest rate fluctuation will neither be significant nor leave the system vulnerable to financial stability.

Price risk

In the first six months under review the price risk of the banking system was estimated to have been rather low. The share of available-for-sale and trading securities in total assets has fallen by 1.5 pp to reach 4.7 percent at the end of semi-annum.

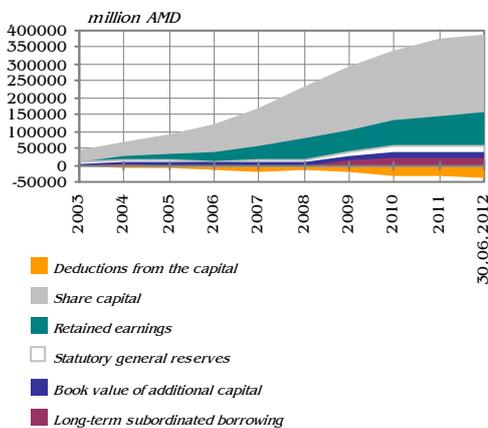
Risks associated with real estate price volatility remained within a comfortable territory of manageability. Armenian commercial banks further originated mortgages at no more than 60-80 percent of the loan to value ratio while taking quite a strict approach in evaluating borrower credibility. Such restrictions are very instrumental as they hold back potential risks from real estate price volatilities.

Banking system capital adequacy



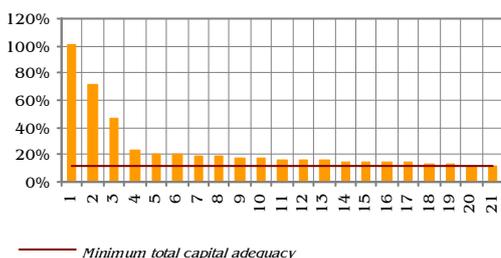
Source: Central Bank of Armenia.

The structure of total regulatory capital



Source: Central Bank of Armenia.

Total capital adequacy by banks, as of 30.06.2012



Source: Central Bank of Armenia.

Real estate price change stress-scenarios

30 percent depreciation of real estate	30.06.2012
The banking system's loss due to revaluation of own property (<i>price risk</i>)	AMD 9.2 billion (or 2.6 percent of banking system capital)
The banking system's loss due to a 30 percent loss of vulnerable credit portfolio ²⁹ (taking into consideration that the collateral involved has been sold at a depreciated cost), if a stress-scenario occurs (<i>credit risk</i>)	AMD 5.2 billion (or 1.5 percent of banking system capital)
The banking system's loss due to a 100 percent loss of vulnerable credit portfolio (taking into consideration that the collateral involved has been sold at a depreciated cost), if a stress-scenario occurs (<i>credit risk</i>)	AMD 17.4 billion (or 4.9 percent of banking system capital)

Source: Central Bank of Armenia.

In case possible stress scenarios for a 30 percent devaluation of real estate price emerge, potential maximum commercial bank losses will trend upward, which will be mainly attributable to mortgage lending rate growing faster over that of the regulatory capital. However, real estate price volatility is not high and credit risk and price risk exposures to financial stability non-vulnerable.

4.1.5. Capital adequacy and profitability

The capital adequacy and profitability indicators of the Armenian banking system are well above the respective indicators reported in a bunch of East European countries. High level of profitability and capital adequacy gives banks a

²⁹ A vulnerable credit portfolio involves the sum of loan residuals for which the residual value exceeds the 30 percent depreciated collateral value.

cushion for absorbing risks with their own resources. In the reporting period total regulatory capital of the banking sector has grown by 4.1 percent and reached AMD 352.9 billion at the end of June. The share of regulatory core capital in total regulatory capital has grown by 0.3 pp and constituted 91.4 percent as of 30.06.2012.

In the first half of 2012, as a result of brisker lending policy, the growth of risk weighted assets outpaced the growth of regulatory bank capital thus pushing the capital adequacy ratio of banking system down by 1.5 pp to 16.8 percent at the end of the reporting period (an established minimum requirement threshold is 12 percent).

During the first six months commercial banks remained strongly capitalized, so the capital adequacy ratio was above the established minimum requirement.

Profitability indicators of commercial banks have improved substantially thanks to proactive lending policy and maintaining a relatively high quality loan portfolio. In the reporting period, relative to the same period of the previous year, the banking system's profit, calculated in accordance with Central Bank requirements³⁰, has amounted to AMD 15.4 billion; 17 banks posted profit and 4 banks posted loss.

In the first half of the year the banking system's profitability was as follows: return on assets, 1.5 percent; return on equity, 8.4 percent.

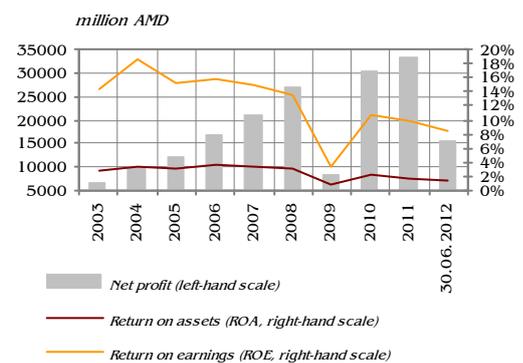
In the first six months of 2012, relative to the previous reporting period, gross revenues of the banking system have grown by 30.1 percent and reached AMD 175.5 billion and gross expenditures have grown by 40.5 percent and amounted to AMD 155.5 billion.

Overall, in the first half of the year, relative to the previous reporting period, the share of interest income and the share of return to/from assets loss provisioning have grown by 1.0 pp and 1.4 pp, respectively. The shares of interest expense and non-interest expense have contracted by 0.5 pp and 5.2 pp, respectively. The share of assets loss provisioning has grown by 5.7 pp.

In the first half of 2012 profit of the banking system calculated in accordance with IFRS amounted to AMD 17.0 billion, and in this event return on assets was 1.6 percent and return on equity, 9.3 percent.

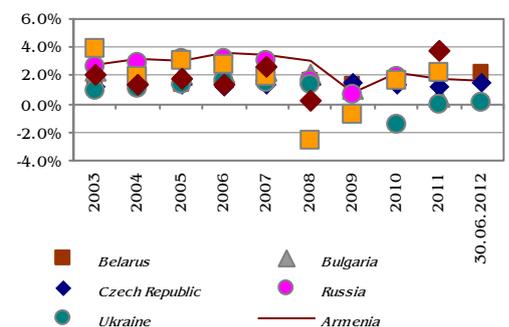
³⁰ The main difference between the Central Bank and IFRS reporting modules is pertinent to the provisioning of standard assets.

Profitability ratios in the banking system



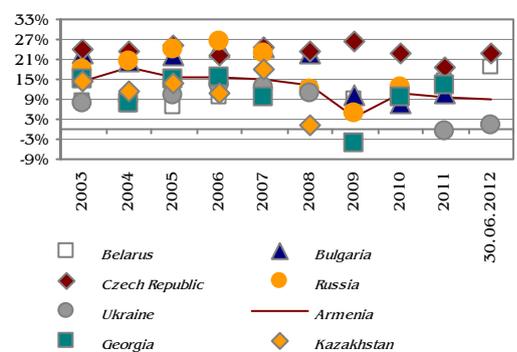
Source: Central Bank of Armenia.

Banking system RoA in selected East European and CIS countries



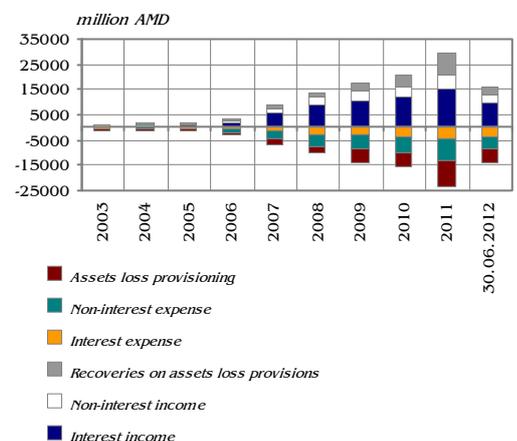
Source: IMF.

Banking system RoE in selected East European and CIS countries



Source: IMF.

Banking system income and expense account



Source: Central Bank of Armenia.

4.2. CREDIT ORGANIZATIONS

The second largest sector of Armenia's financial system is credit organizations, with their assets constituting about 6.1 percent of entire financial system. In the period under review, credit organizations generated growth of assets, liabilities and capital.

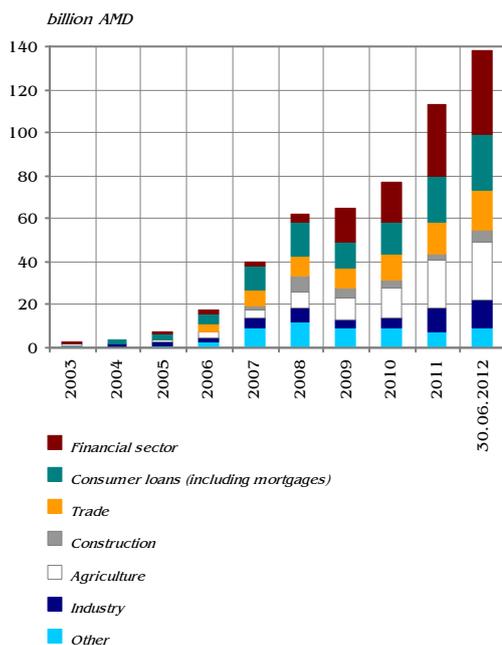
Assets, liabilities, capital and profit of credit organizations

(thousand AMD)

	31.12.2011	30.06.2012	Growth (%)
Assets	123,850,974	151,124,546	22.0
Liabilities	77,006,457	99,690,038	29.5
Capital	46,844,518	51,434,058	9.8
Net profit	4,930,540 (annual)	2,283,041 (semiannual)	X

Source: Central Bank of Armenia.

Balance of credit organization loans to residents, by sectors



Source: Central Bank of Armenia.

Compared to the commercial banks, capitalization and profitability of credit organizations is stronger, and according to various stress scenarios, they are fully capable to absorb possible risks. In the period under review the ratio of total capital to total assets of credit organizations has fallen by 3.8 pp to 34.0 percent at the end of semi-annum.

In the first half of the year 27 credit organizations posted profit and 5 posted loss. Such ratios as return on assets and return on equity of credit organizations calculated according to supervisory requirements of the Central Bank amounted to 3.4 percent and 9.5 percent, respectively.

In the first six months of 2012 profit of credit organizations calculated in accordance with IFRS has amounted to AMD 2.8 billion; in this event return on assets reached 4.2 percent and return on equity, 11.6 percent.

The share of non-performing loans (classified as "watched", "substandard", and "doubtful") of credit organizations has grown by 0.9 pp and reached 3.4 percent at the end of the reporting period. By sector lending, the share of non-performing loans is the highest in transport and communications (15.3 percent), public catering (14.6 percent) and mortgage loans (8.1 percent).

The share of non-performing loans (classified as "substandard", "doubtful" and "loss") calculated by the IMF methodology has grown by 1.3 pp relative to the start of the year and amounted to 5.2 percent at the end of semi-annum.

In the first half of 2012, relative to the previous period, the ratio of net provisioning against assets loss to total assets has fallen by 0.5 pp and amounted to 1.3 percent.

Credit risk assessment stress-scenarios⁵¹

30.06.2012	Stress scenarios		
	25 percent of loans in watched, substandard and doubtful categories classified into loss loans	75 percent of loans in doubtful category classified into loss loans	30 percent of loans in standard category classified into watched loans
Total loss of credit organizations	AMD 799.6 million or 1.9% of regulatory capital	AMD 371.3 million or 0.9% of regulatory capital	AMD 3.7 billion or 9.1% of regulatory capital

Source: Central Bank of Armenia.

In all maturity baskets of assets and liabilities (up to 180-day (including demand resources), from 180 days to one year, more than one year), the volumes of assets outstripped the volumes of liabilities, pointing out, other things being equal, to the low level of liquidity risk with credit organizations.

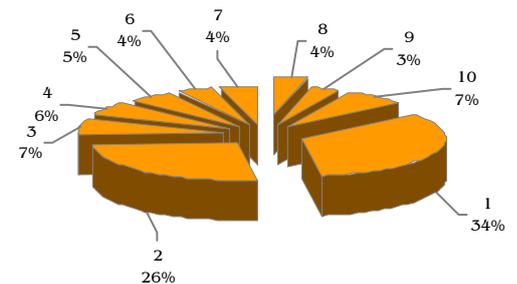
4.3. INSURANCE COMPANIES

At the end of June 2012 there were 9 insurance companies licensed to perform insurance business in the territory of the Republic of Armenia⁵².

In the first half of the year the share of insurance companies in the financial sector of Armenia has grown by 0.2 pp, amounting to 1.6 percent of total financial system assets. In the reporting period assets of insurance companies have grown by 24.5 percent to AMD 39.1 billion; liabilities have grown by 48.3 percent to AMD 25.9 billion; whereas total capital has reduced by 5.3 percent to AMD 13.2 billion, at the end of June 2012. In the first six months of the year, relative to the previous period, the main indicator that describes activity of the insurance market – the premiums accrued – has increased by 52.3 percent and reached AMD 23.8 billion owing to health insurance scheme introduced as part of the Government’s social security package which is designed for public servants (in the first half of 2011 the growth of the indicator was as much as 227.0 percent, mostly owing to the compulsory third party motor liability insurance scheme).

The premiums to GDP ratio⁵³, another key indicator for insurance companies, has increased by 0.2 pp⁵⁴ relative to

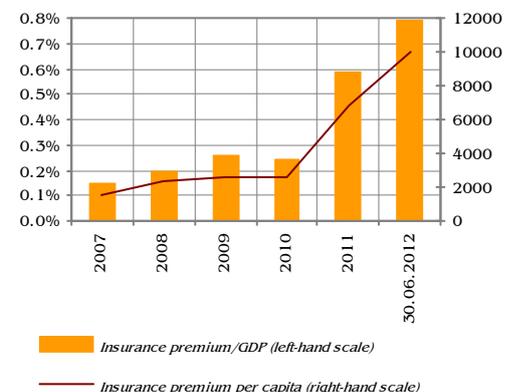
Insurance sector assets, as of 30.06.2012



1. Deposits with banks, 2. Sums receivable on direct insurance, 3. Costs for future periods and prepayments on insurance, 4. Securities sold under repo agreements, 5. Reinsurers’ share in insurance reserves, 6. Government and non-government securities, 7. Fixed assets, 8. Bank accounts, 9. Loans, 10. Other assets

Source: Central Bank of Armenia.

Main ratios of Armenian insurance sector



Source: Central Bank of Armenia.

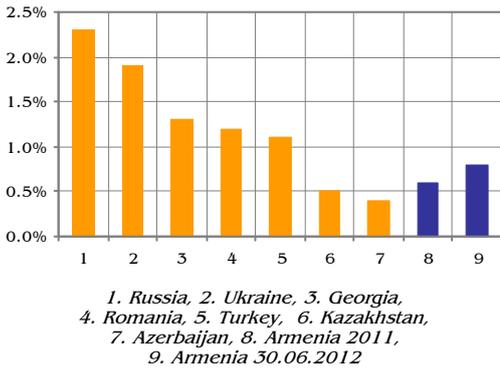
⁵¹ Stress-scenarios are built on an assumption that the amounts of loans of credit organizations are unchanged and the secured property is ignored (which means that where loans are classified as loss, a possible sale of the collateral is not considered).

⁵² Indicators of 7 insurance companies active and reportable have been summarized.

⁵³ The ratio has been calculated based on the previous 4 quarters’ data.

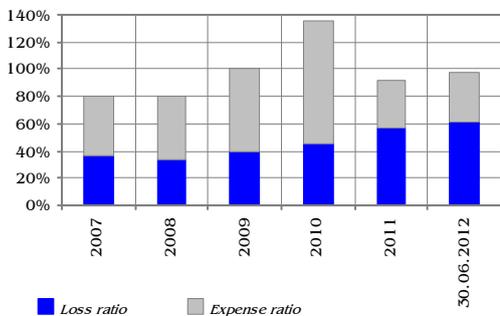
⁵⁴ Based on the 2011 results, the premiums to GDP ratio on non-life assurance was 3.57 percent on average in developed countries and 1.30 percent in emerging countries (source: Swiss Re, Sigma No 3/2012, May 2012).

Insurance premium/GDP in EEC and CIS (2011)



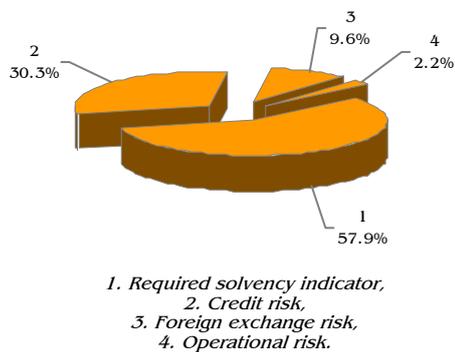
Source: Central Bank of Armenia, Swiss Re-Sigma No 3/2012, Supervisory Authorities.

Loss and expense ratios of insurance companies



Source: Central Bank of Armenia.

Risk weighted assets and required solvency in insurance sector capital adequacy ratio, as of 30.06.2012



Source: Central Bank of Armenia.

the end of 2011 and amounted to 0.79 pp at the end of June 2012. The premium per capita ratio was AMD 9950 as of June 2012 versus AMD 6834 as of December 2011 (the ratio lags behind the average ratio reported in developed and emerging countries)³⁵.

The introduction of compulsory motor third party liability insurance and health insurance schemes has fostered the insurance market. However, the share of overall insurance market in the financial sector remains low. Risks confronted by insurance companies are manageable and not vulnerable in the financial stability point of view.

Circumstances described below further point to the low level of risks to the activity of insurance companies, as follows:

- In the first half of 2012 the loss ratio³⁶ of insurance companies has increased to reach 61.9 percent, pointing out to an improved technical effectiveness of the insurance system. This has been concurrent with reducing costs ratio³⁷ of insurance companies as it had reached 36.1 percent as of end-June of 2012, marking an increased operational effectiveness of insurance companies.
- The shares of risk weighted assets and of the solvency requirement in insurance sector capital adequacy prudential constituted 42.1 percent and 57.9 percent, respectively. As of 30.06.2012, the capital adequacy ratio of the insurance sector has been 126.6 percent.

Solvency risk

Where stress-scenarios shown below unfold, the level of solvency of insurance companies is estimated to not incur notable changes, so the likelihood of emergence of risks to the financial stability of insurance sector is very low.

Solvency assessment stress-scenarios

30.06.2012	Stress scenarios
	Growth of indemnity rates, 20 %, and price increases, 5 %
Required growth of UIPR of the insurance sector, if the stress-scenario occurs	AMD 2.5 billion or 20.8 % of regulatory capital of the sector
Total capital adequacy ratio of the insurance sector, if the stress-scenario occurs	100.2%

Source: Central Bank of Armenia.

³⁵ Source: Swiss Re, Sigma No 3/2012, May 2012

³⁶ The loss ratio was calculated using the following formula: (net accrued indemnity + net provisions to technical reserves (except for unearned insurance premium reserves, UIPR) + other transaction costs on insurance) / (earned insurance premiums - sums refunded on the contracts terminated).

³⁷ The costs ratio was calculated using the following formula: non-interest expense / (earned insurance premiums - sums refunded on the contracts terminated).

Where possible stress-scenarios (20 percent growth of indemnity rates and 5 percent growth of indemnification price) unfold, there will be an estimated change in the level of solvency of insurance companies.

Credit risk

Allocating funds of the insurance sector in low-risk assets allows keeping investment risk at a low level. Assets equivalent to technical reserves are invested primarily in time and demand deposits with commercial banks as well as government and non-government bonds.

Credit risk assessment stress-scenarios

30.06.2012	Stress scenarios		
	Classifying 30 percent of "standard" assets into "watched" category	Classifying 5 percent of "standard" assets into "loss" category	Sharp increase of outstanding claims reserves, 50%
Loss of the insurance sector	AMD 713.5 million or 5.9% of regulatory capital	AMD 1.3 billion or 10.8% of regulatory capital	AMD 0.9 billion or 7.4% of regulatory capital
The total capital adequacy ratio of the insurance sector, if the stress-scenario occurs	120.3%	114.9%	117.3%

Source: Central Bank of Armenia.

The results of credit risk assessment stress-tests show that potential loss of the insurance sector is controllable.

Foreign exchange risk

In case of worst stress-scenario, the loss of insurance companies incurred from foreign exchange risk is estimated to be insignificant.

Foreign exchange risk assessment stress-scenarios³⁸

30.06.2012	Stress scenarios		
	AMD appreciation/depreciation versus USD by 1% for gain/loss	AMD appreciation/depreciation versus USD by 1% for gain/loss	Maximum potential 10-day loss valued through a VaR method
Insurance sector's gain/loss in case of foreign exchange revaluation	AMD 50.4 million or 0.4% of regulatory capital (AMD -50.4 million)	AMD 1.5 million or 0.01% of regulatory capital (AMD -1.5 million)	AMD 64.9 billion or 0.5% of regulatory capital

Source: Central Bank of Armenia.

³⁸ The calculation of losses estimated through stress-scenarios and the VaR Model (the VaR Model is not considered as a stress-scenario since the calculation of the model takes historical exchange rate series of currencies) is based on FX position of insurance companies as of 31.12.2011.

Liquidity risk

The level of liquidity risk in the insurance sector is low, and this is supported by the results in the stress-scenario.

Liquidity risk assessment stress-scenarios

30.06.2012	Stress-scenarios
	Sharp increase of outstanding claims reserves, 50%
Required growth of outstanding claims reserves when the stress-scenario occurs	AMD 0.9 billion or 7.4% of regulatory capital
Liquidity of insurance companies when the stress-scenario occurs	299.5%

Source: Central Bank of Armenia.

4.4. SECURITIES MARKET PARTICIPANTS

As of June 30 2012, there were 21 banks providing investment services and 8 investment companies in the Armenian securities market.

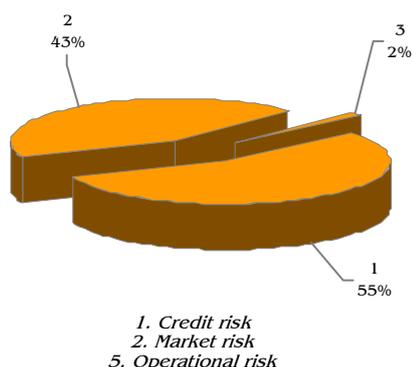
In the first half of 2012, relative to the end of 2011, total assets of investment companies have grown by 4.1 percent and amounted to AMD 22.7 billion, whereas total capital has reduced by 2.5 percent to AMD 3.1 billion. Profit of investment companies has totaled AMD 4 million; 4 investment companies reported profit and 4 reported loss.

As of end-June 2012, credit risk of investment companies accounted for 55 percent of risk weighted assets; market risk accounted for 43 percent; and operational risk, 2 percent. Remarkably, interest risk had the largest share in market risk (61 percent), while foreign exchange and share price risks of investment companies constituted, respectively, 39 percent and 1 percent.

As of the end of semi-annum 2012, a total of 17 classes of securities of 14 reporting issuers were admitted to trading in the regulated market. Of these issuers, 4 were banks accounting for 24 percent of equity shares. The total amount of shares admitted to trading in the regulated market was AMD 52.9 billion and the total amount of bonds, AMD 3.5 billion. One issuer is accountable on both shares and bonds.

As of the end of semi-annum 2012, there were 1641 companies running their shareholders' registries (92024 in number) at the Central Depository of Armenia. Further, in addition to Central Depository of Armenia, two investment service providers in the securities market run registries of 381 companies with a total of 29122 persons involved as owners of registers.

Structure of risks in risk weighted assets of investment companies, as of 30. 06. 2012



Source: Central Bank of Armenia.

4.5. OTHER FINANCIAL SYSTEM PARTICIPANTS

The participants of the Armenian financial system, other than those mentioned above, include 129 pawnshops (excluding branches), 225 foreign exchange offices (excluding branches), 3 insurance brokers, and 7 payment and settlement organizations. All these organizations' potential impact on the financial stability of Armenia is estimated to be very low as their share in the financial system assets is far too small.

SUMMARY

In the reporting period, banks continue to be a prevailing part of the entire financial system in Armenia, and the impact from other sectors on financial stability remains negligible. During the first six months of 2012 banks were active in their lending business amid positive developments in macroeconomic environment. This pushed the banking sector capital adequacy and liquidity ratios down. However the aforementioned ratios were well above their thresholds.

Overall, risks in the financial system have been manageable along with positive developments in the macroeconomic environment.

5. FINANCIAL MARKET INFRASTRUCTURES STABILITY

Given the importance and impact of the Armenia's payment and settlement system on its monetary policy and financial stability³⁹, the Central Bank further pays due attention to the country's systemically important payment and securities settlement systems and the telecommunication network supporting their activities.

In Armenia, most interbank settlements are made via the Central Bank systems⁴⁰. The largest value (over 99 percent) of interbank payments is made via the Central Bank systems.

5.1. INTERBANK PAYMENTS

The Central Bank Electronic Payment System

In the reporting period 24 percent of gross payments via the Central Bank systems have been made through the Electronic Payments System of the Central Bank. The share of the payments via EPS has reduced by 13 pp in relation to the previous reporting period. This was determined by as much as 50 percent increase of the value of payments via Paper-Based Gross Settlement System for indirect monetary instruments of the Central Bank (i.e. deposit facility and repo transactions).

The indicators derived from monitoring of the EPS performance suggest that the system is safe and trouble-free from the system stability point of view.

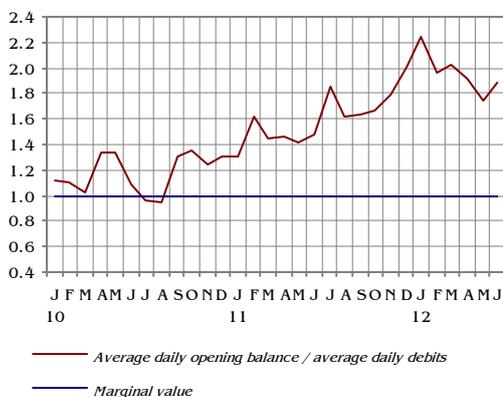
Credit risk

Credit risk of the settlement bank (the Central Bank) in the system lacks since there is no mechanism in place to lend to system participants in case of insufficient funds. Nor is there credit risk to the recipient as it receives the notice of the payment only after the payment is made final and irrevocable⁴¹.

Liquidity risk

In the first half of 2012 the indicator of average daily payments to the expense of own resources used for assessment of liquidity risk tended to improve⁴² (1.96 in H1, 2012 and 1.61 in 2011).

Average daily opening balance to average daily payments (debit)



Source: Central Bank of Armenia.

³⁹ For details, see the "Financial Stability Report", 2007, and the paper "Payments and Securities Clearance and Settlement Systems in the Republic of Armenia", 2007.

⁴⁰ Payments via the Central Bank systems involve the payments through: i) Electronic Payments System, EPS, excluding stock exchange trades, ii) Paper-based Gross Settlement System, PGSS, and iii) Government Securities Accounting and Settlement Systems, GSASS. For details, see the paper "Payments and Securities Clearance and Settlement Systems in the Republic of Armenia", 2010.

⁴¹ For details, see the "Financial Stability Report", 2007, and the paper "Payments and Securities Clearance and Settlement Systems in the Republic of Armenia", 2007.

⁴² The indicator of average daily payments to the expense of own resources was calculated on the basis of a ratio of opening liquidity on dram

During the first half of 2012 the banking sector had more opening liquidity on average than they needed for making payments within a day. Moreover, the growth rate of opening liquidity was faster than the average daily payments. A participant level target analysis conducted in the reporting period supported the aforementioned dynamics with opening liquidity.

It could be also taken into account that incoming payments (crediting with the account) and/or other sources of liquidity are not included in the calculation of the indicator.

Both the number and value of rejections and their share in total payments made through the system is an important measure in assessing the liquidity risk.

In the first half of 2012, relative to the previous six months, the value of rejections of payments through EPS because of insufficient liquidity has almost quadrupled. Yet the small share of such rejections in payments through EPS was negligible (0.005 percent in H1 2012 and 0.005 percent in 2011 in terms of number, and 1 percent in H1 2012 and 0.4 percent in 2011 in terms of value) which perhaps can be explained by mismanaged liquidity (payments flows) within a day or a couple of days by one or a few commercial banks.

The results of monitoring suggest that the liquidity risk to the system is negligible as well as the likelihood of emergence of systemic problems is estimated to be very low.

Intraday distribution of payments

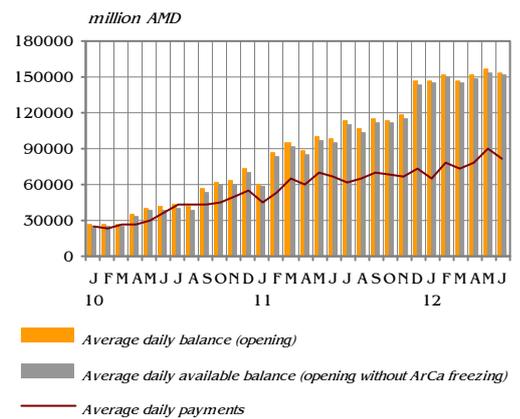
In the first half of 2012 the intraday distribution of payments by value and number has changed.

Unlike previous years when peak hour was recorded at the closing of the day, it now spans over 10:00 am - 11:00 am for value (35 percent) and for number (18 percent). Payments executed after 4:00 pm have reduced sharply. This is a positive trend since, when the system encounters insufficient liquidity or operational failures, the concentrations at the closing of the day may result in rejections or delays in most payments within a day, creating systemic risks.

The results of monitoring showed that the system has not encountered material problems owing to sufficient capacity of the system and the lack of operational problems. Considering the positive dynamics of the liquidity and

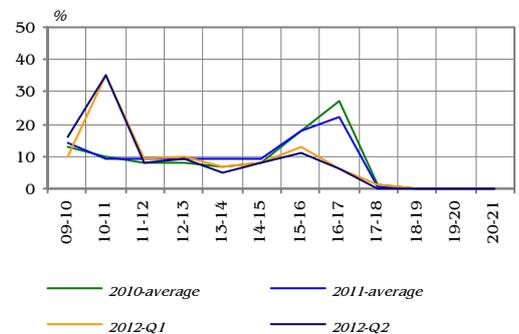
correspondent accounts of commercial banks to debits (payments) through the account. Incoming payments are not included in the indicator so that a stress-scenario can assess the likelihood of bank rejections if additional liquidity is not available within a day, namely to which extent would banks generate their payments using only opening balances of their own funds. The calculation does not include cash enhancements through their own accounts of commercial banks. The indicator is calculated by systemic breakdown, so indicators may vary across commercial banks.

Average daily payments, average daily opening balances, average daily opening available liquidity comparative analyses (all banks)

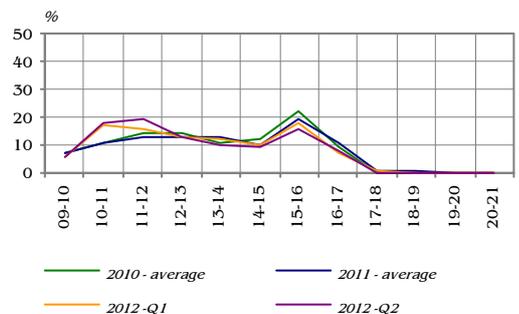


Source: Central Bank of Armenia.

Intraday distribution of the value of payments on an average quarterly 2012 and annual basis, 2010-2011

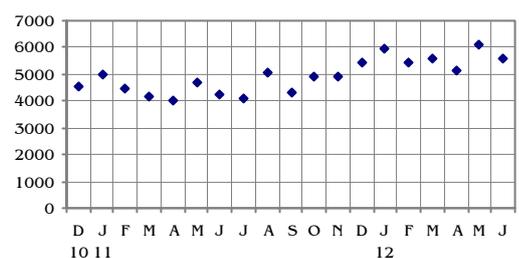


Intraday distribution of the number of payments on an average quarterly 2012 and annual basis, 2010-2011



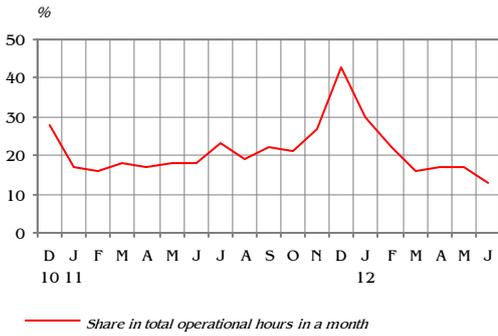
Source: Central Bank of Armenia.

Maximum number of payments per hour, by month



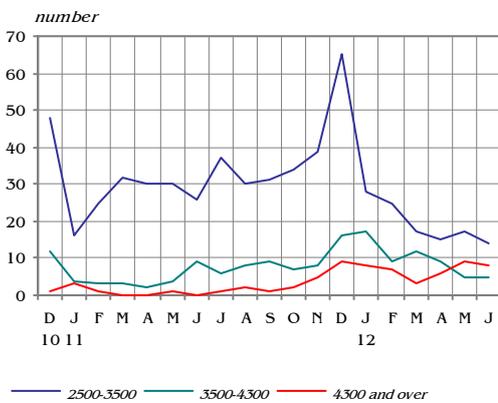
Source: Central Bank of Armenia.

Over 2500 payments per hour dynamics and share in total operational hours in a month



Source: Central Bank of Armenia.

Payments exceeding the threshold of 2500, 3500 and 4300 payments per hour



Source: Central Bank of Armenia.

Share of payments in peak hours in the intraday payments



Source: Central Bank of Armenia.

availability of the system, a sufficient capacity of the system as well as absence of material incidence and a negligible share of such rejections in payments, an uneven intraday distribution and concentration of payments at certain time intervals of the day have not brought in problems while the likelihood of the risk to the system is estimated to be low on the whole.

System capacity

In the first half of 2012 the maximum number of payments per hour reached 6097 (5420 payments in 2011).

In the reporting period the monthly peak-hour payments exceeded the 5000 payments threshold. There has been some rise in payments exceeding the 4300 payments per hour ratio. Starting from the second quarter peak hours were reported in the time span of 11:00 am up to noontime, which is a positive trend as it prevents concentration of payments at the closing of the day.

In the first six months of 2012 there were considerably less reports of payments exceeding the 2500 payments per hour ratio, making up 16.6 percent of operational hours (43 percent, in the course of December of 2011). There has been a plunge in the 3500 - 4300 payments per hour ratios as well.

The share of peak-hour payments has increased to a certain extent in the value of the same-day payments.

The above system capacity indicators and the results of special studies⁴³ denote that the hourly peaks were driven by increased activity of a few commercial banks in certain days. Because such incidents are still insignificant by share in total payments and no factual incidents have occurred during that period of time, the likelihood of emergence of capacity-related risks is estimated to be low.

Operational availability of the system

In the first six months 2012 there has been only 1 more or less significant incident (more than 30 minutes) that affected sound operation of EPS. The incident was caused by about 45-minute failure of the CBANet. The incident occurred in non-peak hours, so it did not result in systemic problems thanks to strong system capacity and had no impact on the system availability.

In the reporting period an estimated operational availability to EPS has been 99.8 percent, which is again a good indicator according to international criteria⁴⁴.

⁴³ Special studies were made to figure out the nature of utmost payments per hour (on a monthly basis) and identify the behavior of payers.

⁴⁴ The 2008 Financial Stability Report of the National Bank of Denmark states that operational availability for systemically important RTGS system, which is compliant to ESCB system requirements, should be very high, e.g.

So, the EPS risk assessment allows assuming that the structure and reserve facilities of the system are more than sufficient to prevent possible systemic risks.

CBANet availability

In the first half of 2012 no disruptions of the CBANet nodes have occurred, so all nodes of the network reported 100 percent operational availability and calendar availability. Disruptions were not reported in regions of Armenia and Yerevan, either.

In the reporting period there were no reported incidents of disruption at head office subscribers, so both operational and calendar availability has been 100 percent, determined by an on-line reserve network availability.

In general, the hardware and software environment and reserve capacities of CBANet are estimated to provide for a sustainable EPS operation.

5.2. GUARANTY OF DEPOSITS

The Deposit Guaranty Fund has been established to facilitate the maintenance of financial stability of Armenia and enhancement of public confidence in the banking system by guaranteeing compensation of deposits of individuals and sole proprietors.

In the first half of 2012 deposits of individuals kept on growing. As of the end of reporting period, relative to the end of the previous reporting period, the amount of deposits of natural persons has increased by around 16 percent and the amount of guaranteed deposits, by 11.6 percent. The number of individuals holding guaranteed deposit has grown by 7.16 percent to 1262630 persons (excluding former ArmSavings Bank depositors who are registered in VTB Armenia Bank CJSC). In the reporting period, the share of depositors who hold only deposits in dram again prevailed, making up 83.09 percent in total. The share of depositors only holding foreign currency deposits reached 6.95 percent. As estimated by the Deposit Guarantee Fund, the number of depositors who hold deposits not exceeding the amount to which the deposit is guaranteed accounted for more than 98 percent of the total number of depositors.

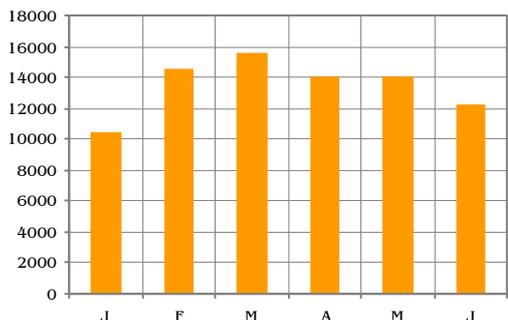
5.3. CREDIT REGISTRY AND ACRA CREDIT BUREAU

The Central Bank Credit Registry

The Credit Registry has been functioning since January 1, 2003. The Credit Registry is designed to collect data on credit history of borrowers, to process such information and

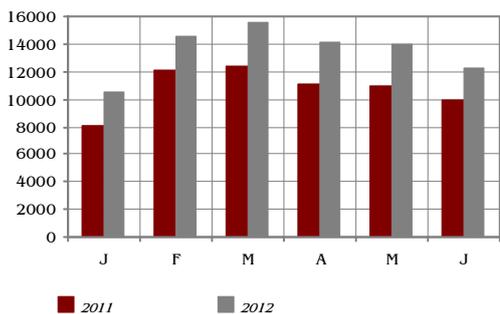
operational availability of TARGET was 99.65 percent, which is considered a good indicator.

The number of loans in H1, 2012



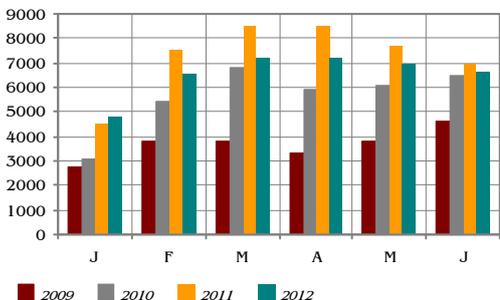
Source: Central Bank of Armenia.

The number of loans in H1, 2011 - 2012



Source: Central Bank of Armenia.

The number of requests received in H1, 2009-2012



Source: Central Bank of Armenia.

provide it to commercial banks, credit organizations, and borrowers. The Credit Registry keeps records of loans in excess of AMD 1.5 million and loans in the amount less than AMD 1.5 million that were overdue and were classified. At the end of June 2012 the number of loans recorded in the Credit Registry reached 1196117 from which 1099894 were loans to natural persons and 96223 were loans to legal persons. The total number of loans registered with Credit Registry has increased by 218700 in relation to the first half of the previous year.

Based on the first six months' data, the Credit Registry possessed information on 205708 loans in use and 990409 loans repaid.

In the first half of 2012 commercial banks originated 80824 loans in number against 65183 loans in the first six months of 2011. The increase points to the livelier lending practices. In the first six months of this year the average entry rate of information has grown as well – 9000 registrations per day – representing a 5.5 percent increase compared to the previous year. Continued growth of records makes information used to determine borrower creditworthiness even more integral and instrumental for supervision purposes, which in turn allows evaluating borrower credit risk more effectively and preventing from non-diligent borrowers.

Most commercial banks and credit organizations further made their reporting to the Credit Registry on an automated basis, allowing for an increased efficiency of the system. Improved *Credit Registry* software of the Central Bank made it possible to provide banks and credit organizations with information on credit history within one day utmost after receipt of such a request. The share of errors in data presented to the Credit Registry has reduced to a minimum.

As shown in the chart, in the first half of 2012 the number of requests has reduced in relation to the previous year, which is explained by the existence of ACRA credit bureau. Because credit history can be used to assess borrower credibility and hence reduce credit risks, commercial banks and credit organizations are increasingly receptive in using credit history, especially when it comes to making loans to new clients.

The Credit Registry's activity has pushed business discipline of borrowers upward and scaled down the delays in installments, which reflects the clients' understanding of the importance of their credit history.

The amount of registered information and utilization rate in the Credit Registry would most probably increase during the second half of 2012 as well. Work done by commercial banks and credit organizations suggest that provision of

information to the Credit Registry will be fully automated at the end of 2012.

More methodological change will come in to reduce weaknesses and raise efficiency of the Credit Registry.

The ACRA Credit Bureau

In the first half of 2012 the number of the borrowers registered with the ACRA Credit Bureau has increased by 7.9 percent against December of 2011 and amounted to 1289000 borrowers, as of June 30, 2012. Of this number, 97.2 percent are natural persons.

As of June of 2012, relative to December of 2011, the number of loans available with the database has grown by 10 percent and reached 6153000.

Any natural person or legal person is entitled to receive information from the Bureau concerning his personal credit history. For the legal persons to obtain credit history of its client or counterparty, it should enter into a service contract with the Bureau and receive consent in writing from the borrower.

The Bureau started providing credit reports since April of 2007. The number of credit reports provided during the first half of 2012 has grown by 74 percent compared to the number of reports provided during the first half of the previous year.

The Bureau cooperates with public utility companies as they provide information on non-payments (overdue payments). To this effect, negotiations are also held with providers of telecommunication services and the State Revenue Committee.

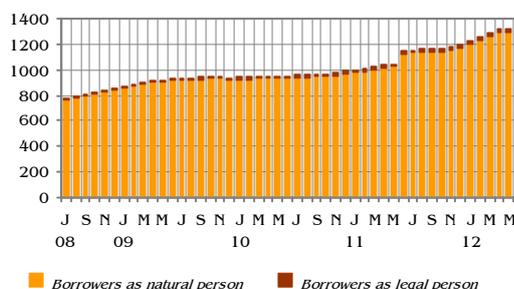
The Bureau receives information from such public databases as the Republic of Armenia Police and the Ministry of Labor and Social Issues.

In 2011 an ACRA Score service was introduced by the Bureau. This is a credit scoring service based on statistical and operational credit risk modeling, which generates a digitized assessment of credit risk of the borrower.

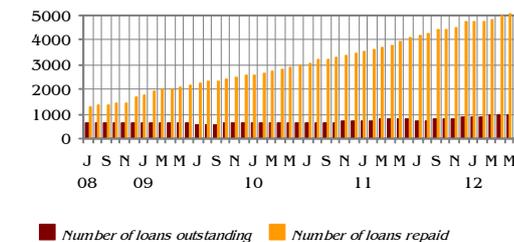
In 2011 a borrower monitoring component was introduced, which allows banks and credit organizations to know if the borrower has performed credit or financial liabilities to other financial institutions, or if the borrower has changed any data in credit history or any identification data.

An online self-inquiry service was introduced which allows to obtain credit reports online by logging in ACRA portal. This is a paid service, and the payment is made online, through a virtual card or MasterCard.

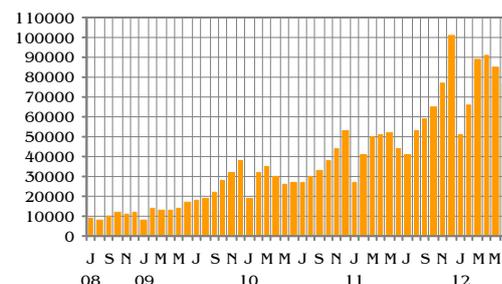
The number of borrowers registered in ACRA database (In thousands)



The number of loans registered in ACRA database (In thousands)



The number of reports provided by ACRA



Source: ACRA.

A multi-level coding system, supported by special firewall hardware, has been developed to protect information owned by the Bureau and to prevent its illegal usage by the third parties whatever. The system traces all actions as well as an ongoing monitoring of the system is in place to prevent suspicious and unauthorized action.

SUMMARY

The results of monitoring denote that credit and liquidity risks to the electronic payment system are minimized, the system capacity is satisfactory, and the intraday payments are made uninterruptedly. No operational risks were identified in the system, so the system's availability has been at an internationally accepted level. The system's peak hour moved to the opening of the operational day, which is a positive trend so as to prevent any payment concentration problems at the closing of the day.

EPS functionality is estimated to be satisfactory on the whole. The developments in payment and settlement system were manageable and free of risks that could be a threat to the financial stability.

CHARTS

<i>Regional growth rates</i>	9
<i>The unemployment in developed countries</i>	9
<i>Current accounts of USA, Russia, China and Euroarea countries</i>	10
<i>Annual growth rate of world trade</i>	10
<i>Brent oil prices</i>	11
<i>Copper prices</i>	11
<i>Molybdenum prices</i>	11
<i>Wheat prices</i>	11
<i>Gold prices</i>	11
<i>Inflation in selected countries</i>	12
<i>10-year government bond yield</i>	12
<i>Central bank policy rates</i>	12
<i>Interbank interest rates</i>	13
<i>USD exchange rate versus EUR and GBP</i>	13
<i>Stock exchange indices</i>	13
<i>Oil price and Russia export trends</i>	14
<i>Ruble average monthly exchange rate</i>	14
<i>Georgia GDP and FDI growth</i>	16
<i>Economic growth rates, by sector</i>	18
<i>Growth of lending to main sectors of economy</i>	19
<i>GDP expenditure components</i>	19
<i>Public debt and public debt to GDP ratio</i>	20
<i>Consumer price and imports price indices</i>	20
<i>Armenia's imports by commodity groups</i>	21
<i>Armenia's exports by commodity groups</i>	21
<i>Armenia's foreign trade, by country</i>	21
<i>Net remittances and compensation of employees</i>	22
<i>Net non-commercial transfers of banking system</i>	22
<i>Household debt burden</i>	22
<i>Average nominal wage</i>	23
<i>Future conditions index and its components</i>	23
<i>Households' financial liabilities</i>	23
<i>Consumer and Mortgage loan portfolio of banks and credit organizations</i>	23
<i>Bank and credit organization consumer loan portfolio</i>	24
<i>Average weighted interest rate of loans and deposits for natural persons</i>	24
<i>Average apartment price index</i>	24
<i>Real estate transactions index</i>	25
<i>Volume of Loans to Real estate market</i>	25
<i>The number of Multi-apartment home-sale and Real estate purchase mortgage loans by regions</i>	25
<i>Repo agreements and repo interest rates</i>	27
<i>Volume of transactions on credit resource platform and average weighted interest rate</i>	27

<i>Dram correspondent accounts of commercial banks with Central Bank and Dram reserve requirement</i>	<i>27</i>
<i>Government bond yield curves</i>	<i>28</i>
<i>Treasury bills allocation volumes and average weighted yield</i>	<i>28</i>
<i>Securities trades by investment service providers</i>	<i>28</i>
<i>Volume of transactions with government securities and volume of transactions with government securities / outstanding government securities ratio</i>	<i>29</i>
<i>Repo transactions by investment service providers, by types of security</i>	<i>29</i>
<i>Securities trades at regulated market of securities</i>	<i>29</i>
<i>Volumes of operations in Armenian foreign exchange market and exchange rates</i>	<i>30</i>
<i>Financial system assets, by financial institutions</i>	<i>31</i>
<i>Banking system stability map</i>	<i>31</i>
<i>Financial intermediation</i>	<i>32</i>
<i>Foreign participation in Armenia's banking capital</i>	<i>32</i>
<i>Share of 4 largest bank assets, liabilities and capital in total banking system</i>	<i>32</i>
<i>Annual growth of loan portfolio</i>	<i>33</i>
<i>Volume of loans to the economy</i>	<i>33</i>
<i>Share of non-performing loans in total loan portfolio</i>	<i>33</i>
<i>Share of loans to natural persons and legal persons in total loan portfolio</i>	<i>34</i>
<i>Balance of bank loans to residents, by sector</i>	<i>34</i>
<i>Change in the number of banks infringed capital adequacy ratio under dynamic growth of loan losses</i>	<i>34</i>
<i>Risk weighted assets in bank capital adequacy ratio, as of 30.06.2012</i>	<i>34</i>
<i>Actual and regulatory banking system liquidity ratio dynamics</i>	<i>35</i>
<i>Assets to liabilities ratio by maturity baskets</i>	<i>35</i>
<i>Major liabilities to total liabilities ratio in the banking system</i>	<i>35</i>
<i>The number of banks infringed liquidity requirements in case of household demand and term deposits run</i>	<i>36</i>
<i>Net income of the banking system from foreign currency trades and revaluation</i>	<i>36</i>
<i>Average interest rates of bank deposits and loans</i>	<i>37</i>
<i>Banking system capital adequacy</i>	<i>38</i>
<i>The structure of total regulatory capital</i>	<i>38</i>
<i>Total capital adequacy by banks, as of 30.06.2012</i>	<i>38</i>
<i>Profitability ratios in the banking system</i>	<i>39</i>
<i>Banking system RoA in selected East European and CIS countries</i>	<i>39</i>
<i>Banking system RoE in selected East European and CIS countries</i>	<i>39</i>
<i>Banking system income and expense account</i>	<i>39</i>
<i>Balance of credit organization loans to residents, by sectors</i>	<i>40</i>
<i>Insurance sector assets, as of 30.06.2012</i>	<i>41</i>
<i>Main ratios of Armenian insurance sector</i>	<i>41</i>
<i>Insurance premium/GDP in EEC and CIS (2011)</i>	<i>42</i>
<i>Loss and expense ratios of insurance companies</i>	<i>42</i>
<i>Risk weighted assets and required solvency in insurance sector capital adequacy ratio, as of 30.06.2012</i>	<i>42</i>
<i>Structure of risks in risk weighted assets of Investment companies, as of 30.06.2012</i>	<i>44</i>
<i>Average daily opening balance to average daily payments(debit)</i>	<i>46</i>
<i>Average daily payments, average daily opening balances, average daily available liquidity comparative analyses (all banks)</i>	<i>47</i>

<i>Intraday distribution of the value of payments on an average quarterly 2012 and annual basis, 2010-2011</i>	<i>47</i>
<i>Intraday distribution of the number of payments on an average quarterly 2012 and annual basis, 2010-2011 ...</i>	<i>47</i>
<i>Maximum number of payments per hour, by month</i>	<i>47</i>
<i>Over 2500 payments per hour dynamics and share in total operational hours in a month</i>	<i>48</i>
<i>Payments exceeding the threshold of 2500, 3500 and 4300 payments per hour</i>	<i>48</i>
<i>Share of payments in peak hours in the intraday payments</i>	<i>48</i>
<i>The number of loans in H1, 2012</i>	<i>50</i>
<i>The number of loans in H1, 2011 - 2012</i>	<i>50</i>
<i>The number of requests received in H1, 2009-2012</i>	<i>50</i>
<i>The number of borrowers registered in ACRA database</i>	<i>51</i>
<i>The number of loans registered in ACRA database</i>	<i>51</i>
<i>The number of reports provided by ACRA</i>	<i>51</i>

TABLES

<i>IMF revisions of the 2012 estimation of world economic growth outlook</i>	8
<i>Qualitative public debt indicators of the Republic of Armenia</i>	20
<i>Dwelling home operation by sources of financing</i>	25
<i>Modified Duration of Outstanding Government Securities as of 30.06.2012 for Different Maturity Groups</i>	28
<i>Modified Duration of Available-For-Sale and Trading Government Securities of Commercial Banks as of 30.06.2012 and Probable Profit/Loss in case of 1% Change in Yield for Different Maturity Groups</i>	28
<i>The Herfindahl-Hirschman Concentration Index</i>	32
<i>Credit risk stress-scenarios</i>	34
<i>Stress-scenario of credit risk derived from off-balance sheet contingent liabilities</i>	34
<i>Liquidity risk stress-scenarios</i>	36
<i>Stress-scenario of liquidity risk derived from off-balance sheet contingent liabilities</i>	36
<i>Foreign exchange risk stress-scenarios</i>	37
<i>Interest rate risk stress-scenarios</i>	37
<i>Real estate price change stress-scenarios</i>	38
<i>Assets, liabilities, capital and profit of credit organizations</i>	40
<i>Credit risk assessment stress-scenarios</i>	41
<i>Solvency assessment stress-scenarios</i>	42
<i>Credit risk assessment stress-scenarios</i>	43
<i>Foreign exchange risk assessment stress-scenarios</i>	43
<i>Liquidity risk assessment stress-scenarios</i>	44

ABBREVIATIONS

CBA	Central Bank of the Republic of Armenia
GDP	Gross Domestic Product
GNDI	Gross National Disposable Income
NSS	National Statistics Service
IMF	International Monetary Fund
UNO	United Nations Organization
CIS	Commonwealth of Independent States
ECB	European Central Bank
USA	United States of America
NMC	National Mortgage Company
FDI	Foreign Direct Investment
RF	Russian Federation
IFRS	International Financial Reporting Standards
CDA	Central Depository of Armenia
TB	Treasury Bills
EPS	Electronic Payments System
GSASS	Government Securities Accounting and Settlements System