

CENTRAL BANK OF THE REPUBLIC OF ARMENIA

2015

2015

2015

2015

2015

2015

2015

2015

2015

2015

2015

**Financial Stability
Report**

**2015
First Half**

CENTRAL BANK OF THE REPUBLIC OF ARMENIA

FINANCIAL STABILITY REPORT

2015

First half

2015

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 Status Report on Monetary Policy Implementation and Armenian Financial System: Development, Regulation, Supervision.

The data published in this report are as of 30.09.2015

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 the Global Economy	8
1.1. Macroeconomic Environment	8
1.2. International Financial Markets	12
2. Macroeconomic Environment Developments in Armenia	14
2.1. Macroeconomic Developments	14
2.2. Foreign Trade	16
2.3. Household Income and Debt Burden	17
2.4. Net Primary (Factor) Incomes and Private Transfers	19
2.5. Real Estate Prices	20
3. Financial Market Stability of Armenia	23
3.1. Money and Capital Market	23
3.2. Foreign Exchange Market	27
4. Stability of Financial Institutions of Armenia	28
4.1. Commercial Banks	28
4.1.1. <i>Financial intermediation and concentration</i>	28
4.1.2. <i>Credit risk</i>	29
4.1.3. <i>Liquidity risk</i>	31
4.1.4. <i>Market risk</i>	33
4.1.5. <i>Capital adequacy and profitability</i>	35
4.2. Credit Organizations	36
4.3. Insurance Companies	37
4.4. Securities Market Participants	39
5. Financial Market Infrastructure Stability	41
5.1. Interbank Payments via Electronic Payment System of the Central Bank	41
5.2. Credit Registry and ACRA Credit Bureau	44
Charts	47
Tables	50
Glossary of terms	51
Abbreviations	53

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 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 involves efforts for identifying 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 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. Disruptions in the financial sector may create impediments to effective implementation of monetary policy and long-term and stable economic growth. At the same time, 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 growth 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:

- favorable developments in global economy and international financial markets,
- sound domestic macroeconomic environment whereby households and companies are creditworthy enough,
- effective financial system with risks that are prudent and manageable,
- financial infrastructures with operational continuity to the benefit of the financial system functioning.

Based on the abovementioned facts, risks that can potentially undermine financial stability of Armenia are presented in this report as follows:

- risks derived from developments in global economy,
- risks derived from developments in macroeconomic environment of Armenia,
- risks derived from developments in financial market of Armenia,
- risks derived from financial institutions of Armenia,
- risks derived from financial infrastructures of Armenia.

The report addresses the risks revealed in those areas and measures their possible impact on the developments in the economy overall and all parts of the financial sector. The report mainly focuses on the risks to the banking sector and development

trends: assets of commercial banks account for almost 90 percent of entire financial system assets. Therefore, the banking sector stance mainly determines overall financial stability and development trends.

ABSTRACT

In the first half of 2015, the financial system of Armenia faced a number of challenges transmitted from foreign economy.

In the first half of 2015, the financial system of Armenia faced a number of challenges transmitted from foreign economy. This has affected the volatility of financial markets. Due to mutually agreed actions of the Central bank of Armenia and Armenian government, the situation was quickly stabilized and measures were taken in order to subsequently mitigate risks.

In the first half of the year, the decline of base metals' prices in international markets, dollar value of the export from Armenia, as well as foreign investments continued. Given the geopolitical developments, the economic growth of Russia weakened, which in turn negatively affected the volumes of inflow of private remittances to Armenia and export to Russia.

Global economic growth rate declined, in the first half of 2015.

In the first half of 2015, the recovery of global economic growth was slower than assessed before, resulting in continuous downturns of economic growth overviews. Though high economic growth was registered in the US, the economic growth in the euro area countries was lower-than-expected, while the declining trend of economic growth rate in emerging market economies was maintained. The abovementioned changes resulted in a cut of world trade and lower prices of some stock commodities.

Monetary authorities kept on implementing accommodative policies to stimulate economic growth.

Monetary authorities of developing and developed countries carried out expansionary monetary policy to support economic growth. The capital outflow from developing countries continued causing domestic currency depreciations. During the first half of the year, interest rates of monetary instruments remained at low levels, while international market participants expect increase in Federal Reserve interest rates no sooner than in the fourth quarter of 2015.

Economic developments in Armenia's main trade partners, some countries of the European Union and Russia (for details, please see box "Economic developments in Russian Federation"), have been unfavorable, and their negative impact on the domestic economy persists (for details, please see section "Developments in the global economy").

In the first half of 2015, economic growth in Armenia was 4.0% (2.6% in 2014). The main contributors to the growth were increases of agriculture and industry, which were higher than forecasted (for details, please see section "Macroeconomic environment developments in Armenia"). The relatively expansionary fiscal policy by the Armenian government and considerable easing of monetary conditions by the Central bank of Armenia contributed to economic activity, thus mitigating the negative effect of the decline of private spending and private investments.

The lending by banking sector reduced caused by persistent risks to economic growth stabilization and fall in private remittances. In the period under review, the regulatory requirement of total capital adequacy has grown, due to decline of risk weighted assets and growth of capital.

Though on an upside track, risks in the financial system remain manageable in terms of financial stability (for details please see sections “Stability of financial institutions of Armenia” and “Financial market infrastructures stability”).

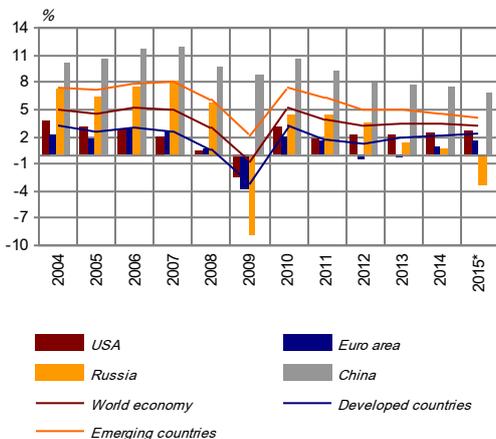
The banking lending is mostly conditioned by cautious credit policy of commercial banks and uncertain economic developments.

1. DEVELOPMENTS IN THE GLOBAL ECONOMY¹

1.1. MACROECONOMIC ENVIRONMENT

Positive trends and expectations inherent to the previous year did not persist in the first half of 2015.

Regional economic growth rates

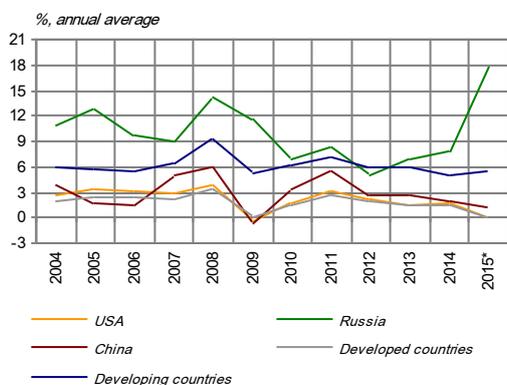


*Indicators marked by asterisk in this chart and the ones following thereafter are the IMF estimates (October 2015).

Source: IMF.

The pace of global economic recovery slowed down, while the main risks remained alarming during the first half.

Inflation in selected countries



Source: IMF.

The economic and political challenges faced in the previous year were forwarded to the first half of 2015. During the first six months, the economic slowdown in developed countries, especially in North America, created grounds for a downward revision of world economic growth expectations for the future.

The expectations of international organizations and market participants on the economic growth of 2015 are mainly edging down. Meanwhile, the underlying drivers for economic growth acceleration in developed countries, such as easy financial conditions in the euro area, more neutral fiscal policy, lower prices of energy and fuel, and improving confidence in labor market remain intact.

The global instability factors sustain, and the implemented economic policy tools are not enough to overcome the current key issues. The near-term risks include high volatility in financial markets and disruptive financial asset price shifts. The medium-term risks comprise the lower potential output growth in both developed and developing countries. The drop in stock commodity prices pose risks to the further economic growth in low-income emerging economies.

The boost of US economic activity, the slowing of economic growth recovery in the euro area, the decline of economic growth in developing countries, which occurred in the context of growth of investment risks and depreciations of national currencies, as well as low level of main stock commodity prices are some of forecasted trends for 2015.

The global economic growth forecasted for 2015 was 3.1 percent, according to the IMF (3.4% in 2014). The economic growth in advanced economies is expected to gain momentum by 0.2 pp. to 2.0% as compared to the previous year, while the economic growth in developing countries is projected to slow from 4.6% of the previous year to 4.0%². The economic growth in both developed and developing countries has declined and stands at a lower than the pre-crisis levels, due to demographic and economic factors. In this context, the priority of economic policymakers remains the potential economic pickup in global growth through economic reforms. The low potential economic growth will hamper the decrease in debt burden, the implementation of effective monetary and fiscal policies in the medium-term.

In the context of the current economic activity, a low inflationary environment was formed in the global economy. Consequently, the IMF has estimated the inflation to be 0.3% in developed countries and 5.6% in developing countries. Moreover, no inflationary pressures are expected to occur in the following year.

¹ International developments and predictions were based on information taken from IMF, World Bank, Economist Intelligence unit, Financial times, Bloomberg, RBC, the Institute of International Finance and other sources.

² All the forecasts and assessments of IMF were taken from "World Economic Outlook, October 2015"

**IMF Overview of the World Economic Growth Projections,
2014-2015, in percent**

Indicator (economic growth)	2014 forecasts as of 30.07.14	2014 forecasts as of 31.10.14	2014 assessment as of 31.01.15	2015 forecasts as of 31.01.15	2014 assessment as of 15.04.15	2015 forecasts as of 15.04.15	2014 assessment as of 15.07.15	2015 forecasts as of 15.07.15	2014 assessment as of 06.10.15	2015 forecasts as of 06.10.15
World economy	3.4	3.3	3.3	3.5	3.4	3.5	3.4	3.3	3.4	3.1
Developed countries	1.8	1.8	1.8	2.4	1.8	2.4	1.8	2.1	1.8	2.0
USA	1.7	2.2	2.4	3.6	2.4	3.1	2.4	2.5	2.4	2.6
Euro area	1.1	0.8	0.8	1.2	0.9	1.5	0.8	1.5	0.9	1.5
Developing countries	4.6	4.4	4.4	4.3	4.6	4.3	4.6	4.2	4.6	4.0
CIS	0.9	0.8	0.9	-1.4	1.0	-2.6	1.0	-2.2	1.0	-2.7
Russia	0.2	0.2	0.6	-3.0	0.6	-3.8	0.6	-3.4	0.6	-3.8
China	7.4	7.4	7.4	6.8	7.4	6.8	7.4	6.8	7.3	6.8

The revision of the economic growth of developed countries was mainly due to unexpected decline of economic growth rate in North America in the first quarter. During this period, an output contraction was recorded in the US due to harsh weather conditions. In the second quarter, the yearly growth of the US economy raised to 3.7%. No further decline in the US economic growth is expected, due to such favorable drivers as wage growth, satisfactory labor market conditions, lower fuel prices and a strengthening in real estate market.

The raise of interest rates by the Federal Reserve System (FRS) will occur no sooner than in the fourth quarter of 2015, according to the expectations of financial market participants. This will befall in case if the US economy and labor market persistently maintain their favorable trends.

According to the IMF assessments, a 2.6% economic growth will be recorded in the US in 2015, while the forecast for 2016 is 2.8%.

Economic growth in Europe due to high consumption in the first quarter was not maintained in the second quarter. The investment shrinkage in Germany and France also contributed to lower economic output.

The economic growth shown in the beginning of the year displayed a declining trend partly due to slowdown of lending. In spite of low interests, a weak investment environment reflected unsteady confidence level of financial markets.

In mid-July, the Greek government and euro area lenders reached an agreement, which has somehow loosened the tension in the economy and financial markets. The near-term risk of Greece leaving the euro area has considerably diminished owing to the agreements between German, French and Greek governments.

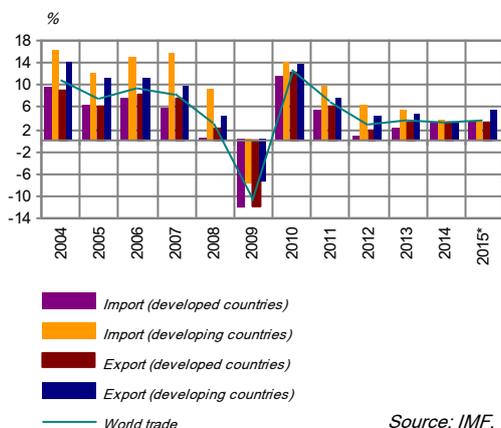
It is anticipated that stable recovery of domestic demand, some growth of inflation, lower oil prices, easy monetary conditions and

The economic growth slowdown of the first quarter was temporary in the USA.

The debt crisis of Greece created tense atmosphere in the euro area, and the weak investment environment hindered the economic growth.

The decline of economic growth rates persisted in developing countries.

Annual growth rate of world trade

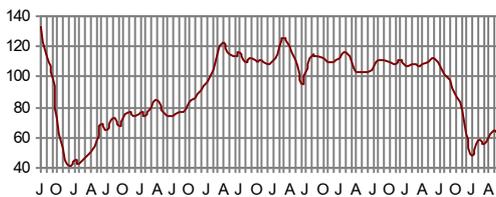


The decline of world trade is conditioned by lower output in main advanced and emerging countries.

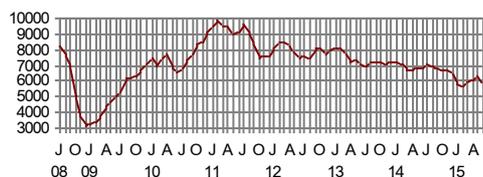
A continuous drop in prices was recorded in commodity markets.

The fluctuations of prices of base metals were largely in line with economic and political developments.

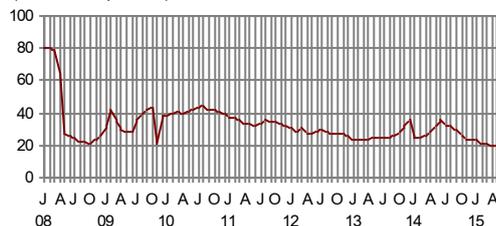
Brent oil prices
(USD per barrel)



Copper prices
(USD per ton)



Molybdenum prices
(1000 USD per ton)



Source: Bloomberg Data Warehouse.

more neutral fiscal policy will support further economic activity of the euro area. Meanwhile, these positive factors may be offset by weaker investment prospects, due to low economic growth of emerging markets – main partner countries of the euro area.

The economic growth in the euro area is assessed 1.5% and 1.6% forecasted for 2016 by the IMF.

In 2015, the economic growth of emerging market economies, being the main contributor to the global economic growth, continues to decline. This deterioration occurred due to low prices of stock commodities, harsh financial conditions (especially in Latin America and oil-producing countries), as well as geopolitically-driven economic difficulties (especially in CIS, Middle East and North African countries). The economic slowdown in developing countries will persist in the near-term, conditioned by low prices of exported products, monetary policy tightening trends worldwide, weak export, as well as inevitability of economic reforms.

In 2015, the economic growth in China is expected to reach 6.8%, the lowest since the global financial crisis. The slowdown of economic growth in China will have its impact in the region.

The IMF assessed 4.0% economic growth in developing countries in 2015 and forecasted 4.5% growth in 2016.

In 2015, no significant growth of world trade has been recorded after the low economic growth of 2014. Weak economic growth in China, which is the main contributor to the world trade, as well as a shift from export-oriented economic model to one driven by domestic demand affected considerably the slowdown of world trade growth. Simultaneously, the ongoing conflicts between Russia and Europe hindered considerably the expansion of trade volumes (for details, please see box “Economic developments in Russian Federation”). Given the IMF data, the annual growth rate of world trade is expected to be 3.2% in 2015 and 4.1% in 2016.

In the first half of 2015, a decline in the international prices of main commodities was recorded, conditioned by worldwide trends and distinctive developments in certain commodity markets.

Brent crude oil semi-annual average price was USD 58.0 a barrel, maintaining the declining trend of the last quarter of the previous year. As compared to the same period of the previous year, the price drop made 46.7% because of oil oversupply (a considerable expansion of shale gas production in the US, Iran entering oil market, as well as keeping the oil pumping volumes unchanged by OPEC in an effort to maintain its market share³). The current low prices and main factors hindering their future sharp rise are Iran returning to the oil market and the concerns that China’s economic growth decline will persist.

In the first half of 2015, the declining trend of copper and molybdenum prices persisted; the average semi-annual price of copper declined by 13.8% as compared to the same period of the previous year to 5930.0 US dollars/tonne. The average semi-annual price of molybdenum dropped by 28.8% to 18.2 thousand US dollars/tonne compared to the same period of the previous year.

³ <http://www.nytimes.com/2015/06/06/business/international/opec-oil-prices.html>

International stock prices of base metals will not change dramatically in the short-term, ceteris paribus, subject to development trends of emerging market economies.

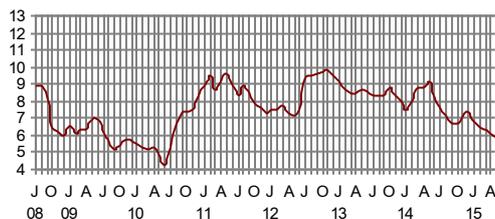
Wheat international prices have assumed a declining trend during the first half of the year. The average semi-annual price was 6.2 US dollars per bushel in the first half of 2015, declining by 26.6% as compared to the previous year. In the short-term, expectations for wheat prices are on a downward trend, conditioned by the oversupply, though a stabilization of prices is expected in the medium term.

Average semi-annual international gold price amounted to USD 1207 per troy ounce in 2015, declining by 6.6% against the same period of the previous year.

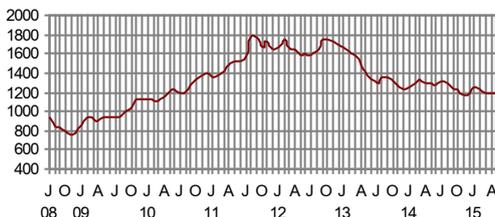
No significant change in gold prices is assumed in the short-term, owing to expected recovery rate of the global economy.

Wheat prices recorded a decline as compared to the previous year.

Wheat prices
(USD per bushel)



Gold prices
(USD per troy oz)



Source: Bloomberg Data Warehouse.

Box 1

Economic developments in Russian Federation

In the first half of 2015, the economic stance of Russia did not improve as compared to the previous year. During this period, a continuous decline in the economic growth rates has been displayed, which reflects the negative effects of geopolitical tensions associated with Ukraine and previous structural problems in the economy. The drop in oil prices, the growth of debt payments and the downgrade of sovereign rating has significantly increased market fluctuations, such as sharp depreciation of Russian ruble and fall of stock indices.

Given the negative withdrawals of Russian economy, the Moody's rating company has downgraded Russia's sovereign rating to Ba1 with a "negative" perspective¹ in the beginning of the year. The grounds for the downgrade were the conflict with Ukraine, lower oil prices, depreciation of Russian ruble, which have deteriorated Russia's economic perspective. Given the assessment of the corporation, an economic downturn is expected in 2015, which will persist in 2016¹.

The decline of construction and investment volumes have contributed to the economic downturn. A non-competitive business environment and weak development of infrastructures remain major impediments to Russia's economic growth. The Russian economy is still highly reliant on the energy sector. The positive developments in manufacturing and extraction of minerals have somehow mitigated the economic downturn.

According to the Russian Federal State Statistics Service data, a y-o-y 3.6% fall in economy was recorded in January-July 2015². Construction growth, investment, as well as households' real disposable income growth indicators are still negative.

Capital investment plunged by 5.9% semi-annually and construction fell by 7.7%³. The tension of geopolitical factors and the expansion of economic sanctions⁴ enlarged the uncertainty level towards the business environment. The limited access of Russian companies to international financial resources resulted in an increase of credit funds prices. This had a negative effect on investment demand and consumption, leading to capital outflows and inflation.

The fall in oil prices and worsening of external economic situation aggravated the existing problems. According to the Russian Federal State Statistics Service data, the export in January-July amounted to USD 210.7 billion, representing a 30.1% decrease in relation to 2014. Imports are an estimated USD 110.9 billion, which is a 39.1% year-on-year reduction. Thus, the trade balance surplus amounted to USD 99.8 billion⁵.

As of July 2015, the 12-month inflation was 9.4%, 4.1 pp. more than reported last year. According to preliminary data provided by the Russian Ministry of Economic Development, the unemployment rate remains low, which, ignoring the seasonal factor, is an estimated 5.5%.

In 2015, in the face of rising geopolitical tensions and growing demand over supply for foreign currency, the Russian currency continually weakened against other currencies. The deflation of national currency, high inflation and pessimistic expectations created severe problems to financial stability. To ease the situation, the Central bank of Russia has continuously diverged the refinancing rate, to an 11.5% rate lastly⁶. It is noteworthy, that the Central bank of Russia has used foreign currency repo tool in order to keep the smooth functioning of the banking sector. Starting from May, the Central bank of Russia has decided to buy foreign currency from the domestic market in order to replenish its foreign currency reserves. This has considerably affected the Russian ruble depreciation. Based on semi-annual data, the Russian ruble official exchange rate has depreciated versus U.S. dollar by 3.7% compared to December 2014. During the first seven months of the reported year, Russia's international reserves decreased by 7.2%.

During the first seven months of 2015, loans to economy by the banking system of Russia grew merely by 0.4%. Simultaneously, the share of non-performing loans in total loans rose to 7.4%.

¹ https://www.moodys.com/research/Moodys-downgrades-Russias-sovereign-rating-to-Ba1-from-Baa3-outlook-PR_318857

² http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/trade/

³ Information on the Russian economic developments, as well as estimates and projections are taken from the periodical "Мониторинг .О текущей ситуации в экономике Российской Федерации по итогам первого полугодия 2015 года" (Monitoring of the current economic situation of the Russian Federation in the first half of 2015) issued by the Russian Ministry of Economic Development.

⁴ As for geopolitical tensions associated with Ukraine, starting from March 2014, the United States and the European Union launched series of trading and economic sanctions against Russia. This has negatively affected the capital flows, foreign investment and domestic economic growth overall. The announced sanctions apply to the financial, energy and military industry sectors. In particular, restrictions were imposed on ammunition, some articles of dual-use purpose, as well as on export of a number of oil industry equipment and technology to Russia. Any financial assistance that would be for trading of items included in the list of restrictions has been prohibited. Furthermore, restrictions were imposed on individual companies and organizations active in financial, defense and fuel/energy sectors, with the main stipulation that transactions with financial instruments with 30-day and more maturity issued after September 12, 2014 is prohibited.

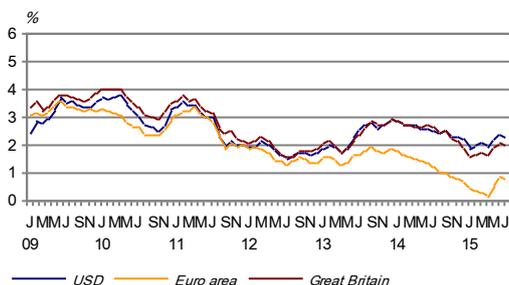
⁵ http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/trade/

⁶ Starting from August 2015, the Central Bank of Russia has reduced the refinancing rate by 0.5 pp. to 11.0%.

1.2. INTERNATIONAL FINANCIAL MARKETS

The yields of government bonds grew in both the US and the EU.

10-year government bond yield



Source: Bloomberg Data Warehouse.

Central banks of key developed and emerging market countries carried on accommodative monetary policy.

During first half of 2015, no significant fluctuations in international financial markets were observed: though the main set of risks remains unchanged. The governments worldwide continued to implement accommodative monetary policy in order to stimulate global economic growth. The capital outflow from developing countries continued leading to national currency depreciations.

In the first half of 2015, the long-term government bond yields both in the US and the EU grew by 30 and 80 base points, respectively (except for Greece). However, the loan market stance was favorable for the real sector borrowers. The growth of profitability was somehow related to recovery of economic activity and above-zero inflation. In the EU, the yield growth has also reflected the adjustment from the extremely low-level inflation due to asset purchase project by the ECB.

In 2015, given the main economic challenges and instable growth of global economy, the key developed countries carried on low interest rate policy.

The ECB maintained the main monetary rates unchanged during the half of the year, in order to promote growth of bank credits and fight against low inflation. In the beginning of the year, the ECB declared about the asset purchase project, which started in March, with a monthly volume of 60 billion euros. This project will continue until September 2016.

The Bank of England kept monetary policy rate at a low level, the revision of which would not only depend on the rate of

unemployment but also on how indicators of economic activity would perform further, as the Bank had announced.

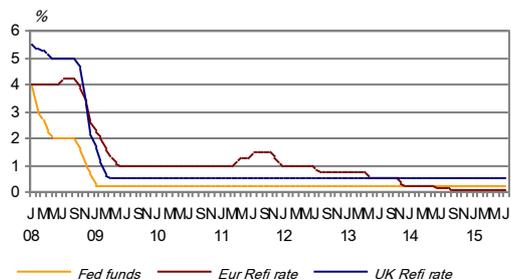
The U.S. Fed kept the policy rate at its lowest. According to the Fed announcements, the decision of the rate hiking will be based on domestic and international economic developments. The participants of the market anticipate probable increases of rates no sooner than in the fourth quarter of 2015.

Given the capital inflows to the US due to expectations of rate growth, a number of developing countries have seen substantial capital outflows, which resulted in a significant depreciation of currencies. Countries that have current account deficit, i.e. Brazil, India, Indonesia, South Africa and Turkey were more sensitive to these outflows.

During the reporting period, major currencies assumed volatile trends. The U.S. dollar has mainly appreciated versus euro, driven by economic policies conducted by the United States and European countries as well as in response to the expectations. The depreciation trend of currencies of developing countries started in 2013 was maintained during the year. The currency patterns were attributable to both the Fed's policy and domestic developments across countries, such as need of external financing, domestic monetary policy, political stability, price patterns of commodities and sensitivity against the fluctuations of the US dollar.

Low base rates and global economic imbalances determined the maintenance of low-level interbank interest rates.

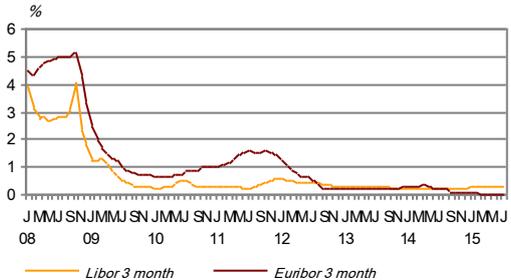
Interest rate policies of central banks



Source: Bloomberg Data Warehouse.

Favorable macroeconomic developments encouraged the FRS to terminate the quantitative easing program.

Interbank interest rates



Source: Bloomberg Data Warehouse.

Dynamics of USD exchange rate versus RUB and EUR



Source: Bloomberg Data Warehouse.

SUMMARY

In the first half of 2015, the global economy continued recovering, though slower-than-expected because of the presence of downward risks.

In developed countries, except the USA, issues like economic growth slowdown, low inflation remain on the agenda. Under such conditions, developed countries kept on implementing low interest rate policy. Developing countries encountered capital outflows, which led to domestic currency depreciation pressures. Apart the economic risks hampering growth in developing countries, geopolitical risks associated with the crisis in Ukraine, as well as relations between Russia and West got a particular emphasis.

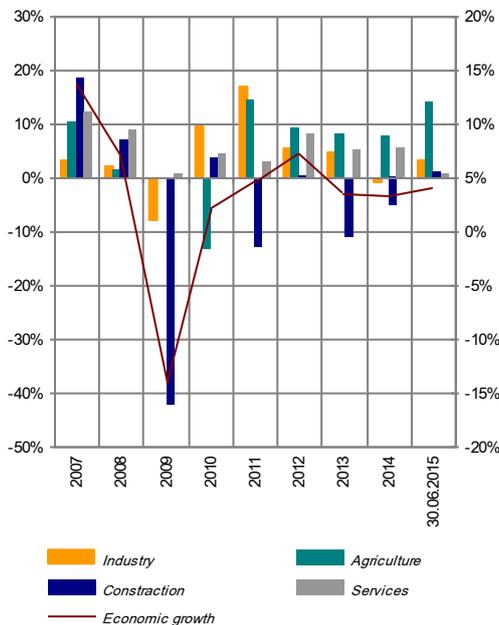
Russia's economic growth slowdown, the depreciation of Russian ruble and the decline in private consumption somewhat decelerated the inflow of non-commercial remittances from this country and growth rates of export to Russia.

Uneven world economic growth and current economic challenges in Russia negatively affected Armenia's investment environment, economic growth, export and private transfers' growth.

2. MACROECONOMIC ENVIRONMENT DEVELOPMENTS IN ARMENIA

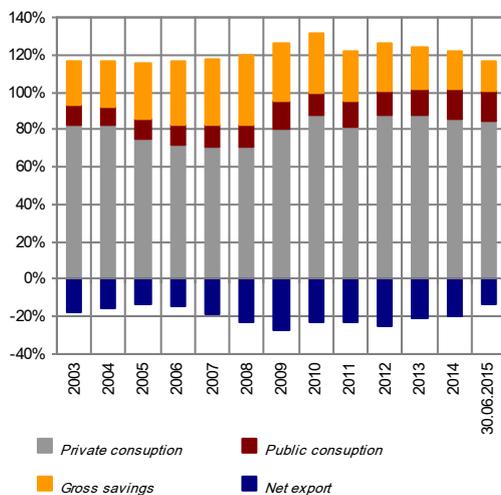
2.1. MACROECONOMIC DEVELOPMENTS ⁴

The real growth of GDP and main sectors of economy



Source: National Statistics Service of Armenia.

GDP expenditure components (share in GDP)



Source: National Statistics Service of Armenia.

In the midst of low growth rates of world economy and negative developments of Russia- Armenia's main partner country- a higher-than-expected economic growth was registered in Armenia in the first quarter of 2015. These positive developments were due to higher volumes of production in agriculture and industry sectors, on the one hand, and expansionary fiscal policy of Armenian government and easing of monetary policy conditions by the Central bank of Armenia, on the other.

The risks of capital outflow and further currency fluctuations caused by main partner countries' monetary policies, as well as the risks of lower private remittances, domestic and foreign demand fall due to unfavorable developments in Russia maintain their significant importance from the financial stability viewpoint.

In the first half of 2015, the economic growth in Armenia was 4.0%, according to the National Statistical Service of Armenia. The contribution to the relatively high economic growth came mainly from the higher-than-expected production volumes in agriculture and industry.

Given the NSSA data, the value added in industry sector was 5.4% y-o-y in the period under review. Moreover, a growth was registered in almost all sectors, except in manufacturing. Thus, due to exploitation of Teghut mine the production volumes of metal ores grew significantly, which considerably contributed to the growth of the sector.

The positive developments of agriculture were due to favorable weather conditions. The growth of value added in agriculture was 15.5% for the half of the year. As compared to the average ratio for the post-crisis years, this sector registered relatively high growth due to growth in production volumes of such sub-sectors as animal production, plant propagation and fishing production by 4.5%, 38.7% and 29.6%, respectively.

In the first half of the year, construction sector did not report any increase of value added. The sector decreased by 2.8% year-on-year driven mainly by shortened volumes of construction funded by companies and communities.

At the same time, the volumes of construction funded by households, government budget, international loans and humanitarian aid have increased by 15.0%, 4.1%, 7.1% and 53.6%, respectively.

The growth of value added in services sector was 2.3% in the first half of the year, which has been fueled by an increase in the volumes of services rendered, particularly art, entertainment and recreation services. At the same time, as the remittances

⁴ For details on the developments of macroeconomic environment in Armenia, see the quarterly publication "Inflation Report 2015, 2nd quarter".

diminished drastically, the national disposable income has shortened and the volumes of wholesale and retail trade, as well as car trade have fallen.

The private consumption, which forms the aggregate demand, has fallen by 4.1%, according to the NSSA data. The fall of private consumption is attributable to continuous decrease in money transfers from Russia. The shortening of private sector spending has been mitigated due to the expansionary fiscal policy carried out by the Armenian government, thus, the public consumption has grown by 15.3% as compared to the same period of the previous year.

The private investment dropped by 6.7% during the first half of the year. The low investment activity could be explained by developments in the construction sector, on the one hand, and less lending to the companies, on the other. Though private investment reported a decline, the public investment grew by 16.2% during the first half of the year.

In the first half of 2015, relative to the end of the previous year, loans to economy have fallen by 5.0%. The lending decline was caused by the decrease of loan demand and loans' terms and procedures tightening, which happened because of the year-end currency pressures. The lending to industry and trade sectors underwent the most significant decrease. At the same time, lending to agriculture, public catering and transport grew by 16.7%, 9.7% and 6.4%, respectively. The share of non-performing loans and receivables in total loans and receivables was 8.5% at the end of the first half of the year. The shares of non-performing loans in construction, public catering and trade sectors remain high.

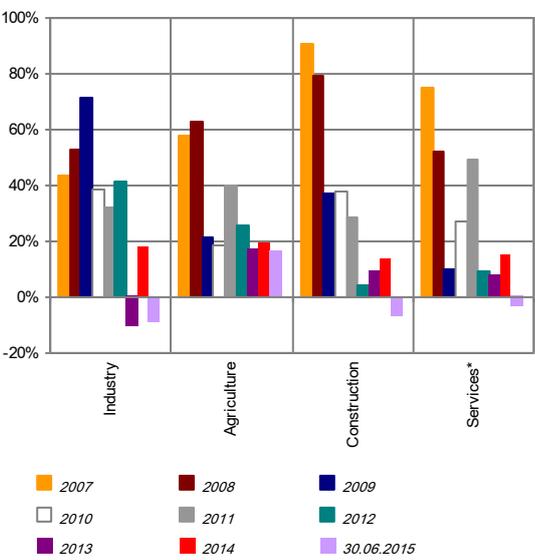
As mentioned above, the loans' terms and procedures tightening by Armenia's banks and credit organizations continued in the first half of 2015. As a result, the total lending demand has fallen in the economy. Nevertheless, positive expectations of loans' terms and procedures and demand growth were formed with the banks and credit organizations for the third quarter of the year.

According to surveys conducted by the Central Bank of Armenia, Business Climate Indicator⁵ was 50.7 in the second quarter of 2015, which is within the stability range. Moreover, the indicator has grown by 3.3% compared to the previous quarter, which points to the optimism of businesses for the business environment.

According to the Republic of Armenia Ministry of Finance data, foreign debt of Armenia has grown by 5.3%, in the first half of 2015, which is 35.9% of GDP. The growth of foreign debt is a result of the relocation of the second trench of Eurobonds with a total value of USD 500 million in March 2015. At the same time, the first issue of foreign currency government bonds with a total value of USD 200 million was repurchased. From the effective debt management viewpoint, it is important to mention that the share of loans with a floating rate in the structure of loans is low, which lessens the interest rate risks.

In the first half of 2015, lending to public catering and other services, as well as agriculture increased.

Growth of lending to main sectors of economy



* In chart the sector of services includes trade and other service sectors' aggregate values.

Source: Central Bank of Armenia.

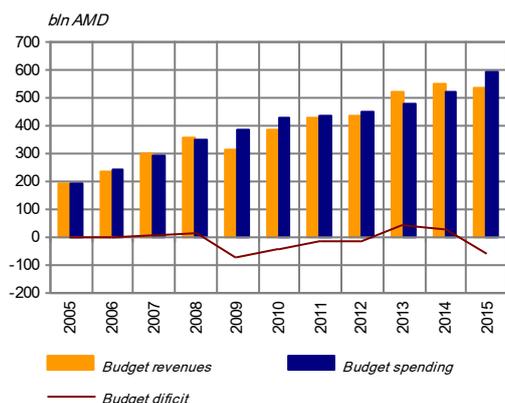
According to the qualitative indicators of Armenia's public debt Armenia remains a less indebted country.

⁵ A composite economic index of business climate that the Central Bank builds based on quarterly survey data obtained from different sectors of the economy.

Qualitative public debt indicators of the Republic of Armenia

Indicator	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015 1 st half
Debt/GDP (limit 50%)	22.4%	18.9%	15.7%	13.4%	34.3%	35.6%	35.2%	35.2%	35.1%	32.5%	35.9%
Debt/Export	75.3% (less indebted)	73.2% (less indebted)	73.6% (less indebted)	81.1% (less indebted)	190.3% (moderately indebted)	149.3% (moderately indebted)	130.2% (less indebted)	128.1% (less indebted)	123.6% (less indebted)	114.1% (less indebted)	121.3% (less indebted)
Debt service/ Export	4.2% (less indebted)	3.5% (less indebted)	2.6% (less indebted)	2.8% (less indebted)	4.6% (less indebted)	4.1% (less indebted)	3.7% (less indebted)	8.2% (less indebted)	14.4% ⁶ (less indebted)	8.0% (less indebted)	8.8% (less indebted)
Interest/Export	0.8% (less indebted)	0.6% (less indebted)	0.5% (less indebted)	0.6% (less indebted)	1.8% (less indebted)	2.0% (less indebted)	1.8% (less indebted)	1.9% (less indebted)	1.6% (less indebted)	2.3% (less indebted)	1.3% (less indebted)

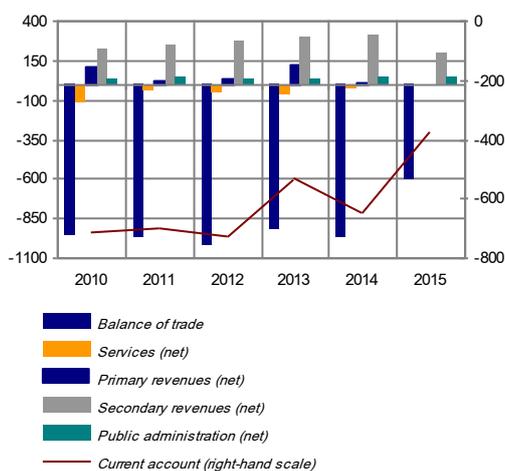
Government budget main indicators (semi-annual)



Source: National Statistics Service of Armenia.

In June 2015, the 12-month inflation was 5.5%, being the highest limit of acceptable fluctuations for target inflation.

Main indicators of the balance of payments. (semiannual) (mln USD)



Source: Central Bank of Armenia.

In the first half of 2015, Armenia remains a less indebted country, according to the qualitative indicators of Armenia's public debt.

Though lower figures of the Republic of Armenia state budget were reported against expected performance values in the first half of 2015, the fiscal policy had expansionary effect (3.7) on the economy, conditioned by income (1.3) and expenditures (2.5) expansionary policies⁷.

According to the NSSA data, budget revenues⁸ have not recorded a noticeable change in the first half of 2015, a mere 0.3% growth. The growth was attributable to 7.4% growth of income tax sub-item. Public expenditures⁹ grew by 15.7% compared to the same period of the previous year, thus preserving nearly a full cost performance over government budget quarterly proportions. Moreover, almost all expenditure figures grew.

As a result, the accelerated growth of expenditures over revenues has resulted in a state budget deficit of 2.8% of GDP in the first half of 2015.

In June 2015, the 12-month inflation was 5.5%, being the highest limit of acceptable fluctuations for target inflation. The inflation was mainly caused by the increase of food and non-food product prices by 5.2% and 7.0%, respectively, hence contributing to the inflation by 3.98 pp. overall.

2.2. FOREIGN TRADE

In the first half of 2015, current account deficit of the Republic of Armenia has improved by USD 436 million as compared to the same period of the previous year. Hence, the Current Account Deficit/GDP ratio was 3.7%, which is 5.0 percentage points lower than the same ratio in the same period of the previous year.

⁶ The debt service/export indicator does not include the early repayment of Russian loan. In case of taking into account the repayment, the debt service/export will reach 27.3%.

⁷ Estimates of the impact of the fiscal policy are done by the Central bank of Armenia.

⁸ This includes extra-budgetary funds.

⁹ This includes working funds of project implementation units.

The shortening of the current account deficit, amidst the decrease of money transfers of individuals, was mainly due to significant amelioration of account deficits of goods and services. The improvement of trade deficit resulted by growth of good exports and considerable decrease of imports.

Given the Central bank of Armenia assessment, the net imports of goods and services decreased by 5.8%, according to the balance of payments, while the net exports grew by 12.2%. The dollar value of imports of goods and services has decreased by 19.5%, while the export has fallen by 2.2%.

By structure of imports, a decrease in import volumes was recorded in all goods' items except in products of plant origin. Moreover, the most declines of imports were reported in the following items: "precious and semi-precious stones, precious metals and articles thereof" and "mining products".

By structure of exports, the main increases were in "mining products", "textile products" and "products of plant origin" for 26.9%, 16.2% and 97.9%, respectively.

In the first half of 2015, Armenia's external trade concentration level by countries has decreased, because of nearly twice less share of trade partner Russia in the structure of exports. The latter has diminished the sensitivity of Armenia's economy to unfavorable developments in Russia. Taking into account the continuous low level of external demand, the export volumes to Russia and the Euro Union have declined by 47.1% and 3.9%, respectively. At the same time, export volumes to China, Canada, Iraq and Switzerland have grown.

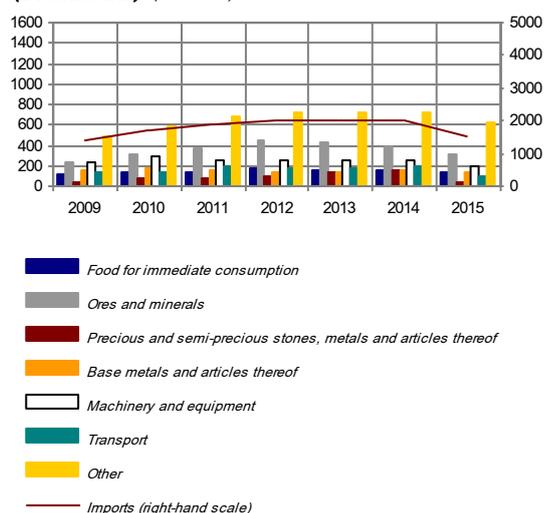
In the first half of 2015, the Herfindahl-Hirschman index has grown compared to the previous year-end to 0.202, which means that Armenia's export by goods is moderately concentrated. Such value of the index is mainly due to great share of mining and food sectors, which makes export more vulnerable to the developments in these sectors.

As for the structure of export of goods, increases were reported in such items as "mining products", while "food for immediate consumption", "precious and semi-precious stones, precious metals and articles made thereof" and "non-precious metals and articles made thereof" posted decreases.

2.3. HOUSEHOLD INCOME AND DEBT BURDEN

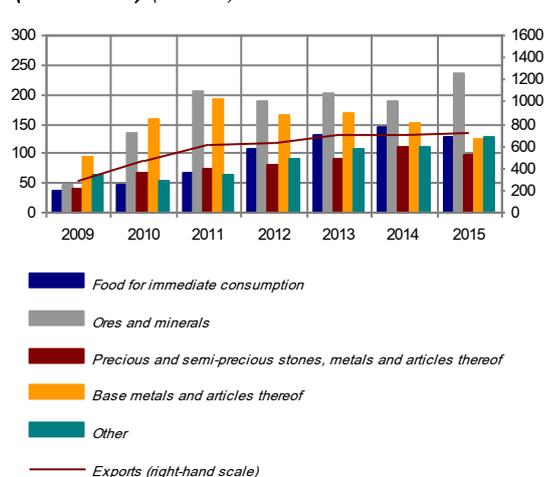
In the first half of 2015, the trends of the previous year were maintained in the labor market of Armenia; both wages and unemployment rate grew. In the period under review, a year-on-year 10.7% growth was registered in average nominal wages compared to the same period of the previous year. This increase is due to a rise in nominal wages in both public sector (y-o-y 13.8%) and private sector (y-o-y 7.3%). A growth of wages is also expected in the second half of the year, partly due to an upsurge of minimum wages threshold to AMD 55000 in July 2015. As a result, an average growth of 9.4% of nominal wages is expected for 2015¹⁰.

Armenia's imports by commodity groups (semiannual) (mln USD)



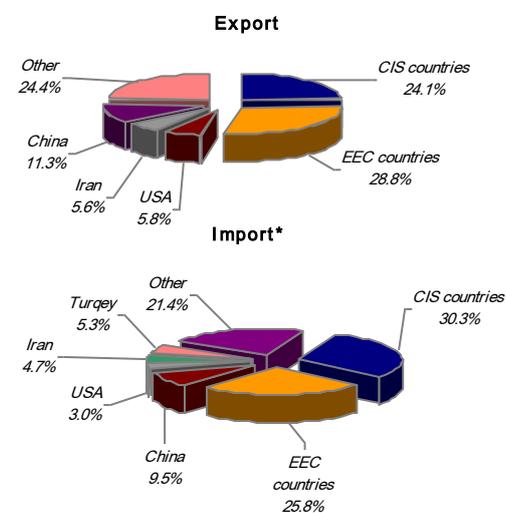
Source: National Statistics Service of Armenia.

Armenia's exports by commodity groups (semiannual) (mln USD)



Source: National Statistics Service of Armenia.

Armenia's foreign trade, by country, as of 30.06.2015



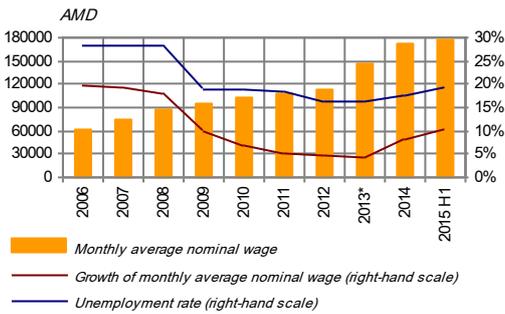
* The structure of imports is represented according to the countries of origin.

Source: Central Bank of Armenia.

¹⁰ Source: "Inflation Report, 2nd quarter, 2015" by the CBA.

Both wages and unemployment rate grew during the first half of the year.

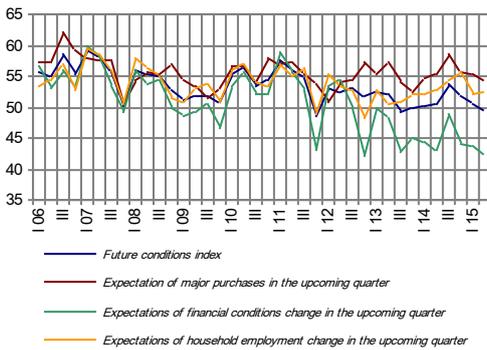
Nominal average wage and unemployment



* The indicator is calculated according to the Republic of Armenia Law on Income Tax, effective from 01.01.2013, which stipulates that mandatory social charges payable by the employer have been also included in salaries and salary equivalents since January 1, 2013.

Source: National Statistics Service of Armenia.

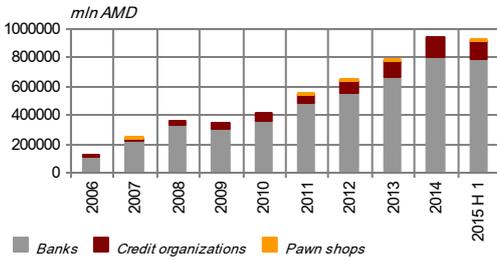
Future conditions index and its components



Source: Central Bank of Armenia.

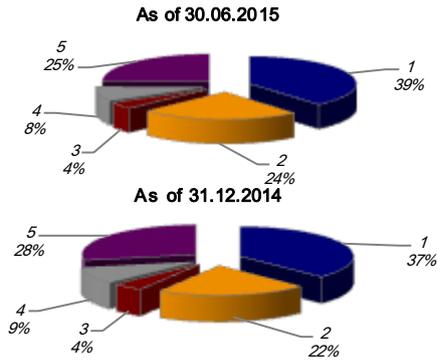
In the period under review, the liabilities of households to financial institutions have declined.

The structure of household liabilities to financial institutions



Source: Central Bank of Armenia.

Consumer loan portfolio structure of banks and credit organizations of Armenia



1. Card loans 2. Gold-backed loans 3. Car loans 4. Home appliance loans 5. Other consumer loans

Source: Central Bank of Armenia.

In the first half of 2015, the unemployment rate grew by 1.0 pp. to 18.7%. According to the assessments of the Central bank of Armenia, the unemployment rate may fall to 18.3% taking into account the expectations of economic growth in the second half of the year. The growth of the unemployment rate, as well as the decrease of transfers from abroad has affected negatively the income level of households.

These developments have had their impact on the components of Consumer confidence index¹¹. In the first two quarters of 2015, such current conditions sub-indexes as changes in financial conditions and households assessments of overall financial stance remain lower than 45-55 range of stability. The index of future conditions was maintained in the stability range, though have decreased during the half of the year as expectations of major spending in the coming quarter and expectations for changes in financial conditions sub-indexes have declined. Some growth was registered in the sub-index of expectations for employment in the coming quarter.

The change of income levels of Armenia's resident households have affected their credibility, existing debt burden, therefore the volume of lending to households. Households' total liabilities to financial institutions have fallen by 2.2% to AMD 927.2 billion. The decrease was largely attributable to fall in consumer loans in Armenian drams and in part mortgage loans in foreign currency. The volume of credit liabilities to banks has decreased by 3.2% in the period under review, while credit liabilities to credit organizations and pawnshops have grown by 3.0% and 8.7%, respectively. This proves that in case of relatively tightened policy of lending by banks the demand for services by credit organizations and pawnshops grows in the consumer credit market.

As for the consumer loans, all the loan types reported a decrease of 5.8%, except the gold-backed loans. The most significant decreases were recorded in car loans, loans for purchase of computer and household appliances. Under such conditions, the shares of gold-backed loans and credit card loans in total consumer loans grew to 38.9% and 24.1%, respectively. Though the consumer loan procedures were tightened during the first half of the year, starting from the second quarter some shortening of the number of companies that tightened the procedures was noted¹². Besides, the banks revised the loan repayment schedules and provided consulting to their customers, which limited the risks to financial stability arising from this sector.

Mortgage loans declined by 0.5%, given the decrease of mortgage loans for real estate renovation and partly real estate construction. Moreover, a fall was recorded in not only mortgage loans demand, but also mortgage loans offer. Unlike the consumer loan market, both banks and credit organizations were

¹¹ Source: quarterly survey on "Consumer confidence index" by the CBA, 1st and 2nd quarter, 2015.

¹² Source: quarterly survey on "Lending conditions by RA banks and credit organizations" by the CBA, 1st and 2nd quarter, 2015.

comparatively not so active in mortgage loan market. Foreign currency loans constitute 55.8% of mortgage loans, which makes the households receiving income in Armenian drams more vulnerable to foreign currency risk.

Undertakings such as Housing for Youth and the National Mortgage Company continue to contribute to the development of mortgage market. Their refinanced mortgage loans constituted nearly 31.0% of total mortgage lending portfolio in the end of the first half of the year. The National Mortgage Company intends to issue mortgage-backed bonds to enlarge the mortgage lending accessibility. A number of legislative changes should be made and regulations should be developed in order to organize the issue.

In the first half of 2015, due to GDP rise and decrease of resident household lending, the share of household loans in the GDP has reduced to 18.6%. A decrease was also registered in debt to deposits ratio, another indicator for households' debt burden, which stands at 97.2% level in the end of the first half of 2015, against 106.1% in 2014. This means that households have become net creditors for credit institutions. The 6.7% increase of deposits was due to increases in both dram-denominated and foreign currency deposits.

During the first half of the year, the share of FX deposits in total deposits remains high (70.3%). From the commercial banks' perspective, this limits their possibility of financial assets' relocation in Armenian dram assets, especially AMD lending to households.

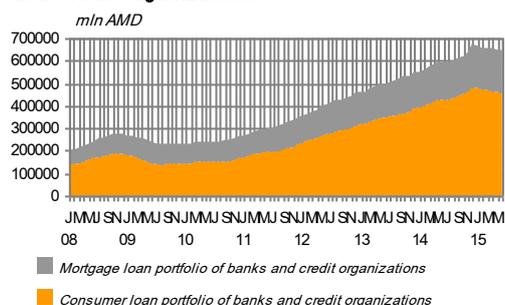
Given the unfavorable economic changes and an accelerated growth of loan portfolio during the previous years, the credit risk losses of commercial banks have grown in the first half of 2015. This, meanwhile, have not affected the solvency of banks. The share of non-performing loans grew both in consumer and mortgage loans, both for AMD and FX loans to 11.0% and 8.4%, respectively.

2.4. NET PRIMARY (FACTOR) INCOMES AND PRIVATE TRANSFERS

In the first half of 2015, the ascending trend of private transfers (36.8%) and outbound workers' compensation (34.1%) was maintained. While GDP grew, the ratio of private transfers and workers' compensation to GDP has fallen drastically to 12.4% against 16.8% in the same period of the previous year. During the reported period, the non-commercial transfers via the banking system have shrunk by 30.5%. In case of accelerated decrease of transfers' inflow over the outflow the net non-commercial transfers' inflow declined by 36.2% to USD 387 million. The shortage of transfers has affected the households' disposable income and current spending, which, in its turn, had its impact on the volumes of lending by banks and loan portfolio quality¹³.

¹³ "Banks in Commonwealth of Independent States Feel Pinch as Russian Workers' Remittances Decline», Feb. 2015, Moody's .

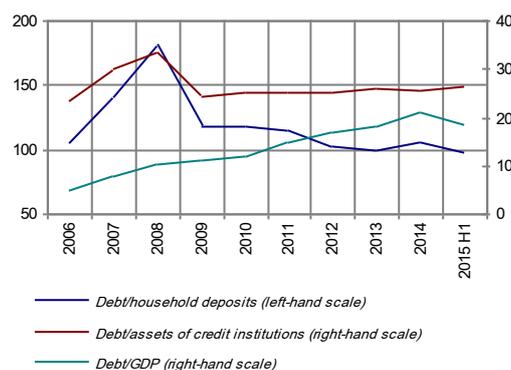
Consumer and mortgage loan portfolio of banks and credit organizations



Source: Central Bank of Armenia.

The debt burden of Armenian households has reduced.

Households' debt and income indicators, %

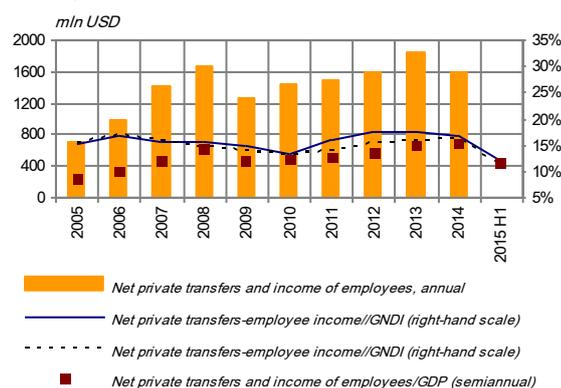


Source: Central Bank of Armenia.

The risks arising from loan portfolio quality of households had an arising trend.

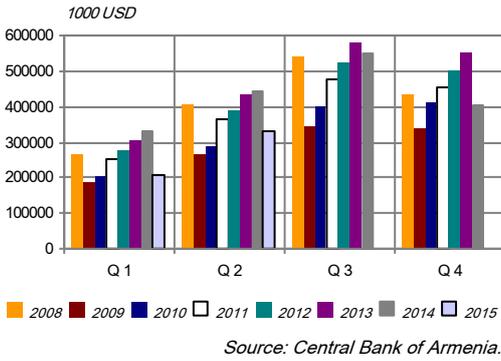
In the first half of 2015, the declining pace of non-commercial remittances was maintained.

Net private transfers and income of seasonal employees



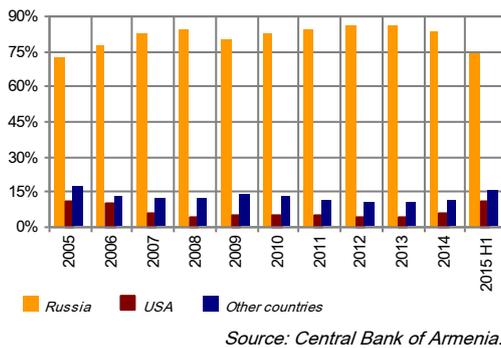
Source: Central Bank of Armenia.

Net non-commercial remittances of individuals by banking system



The decrease of private remittances has somehow affected loan portfolio quality.

Remittances by countries of origin



The share of non-commercial remittances from Russia has fallen considerably.

The decrease of non-commercial transfers is primarily attributable to the decrease of dollar value of money transfers from Russia, which primarily occurred because of the depreciation of Russian ruble versus the US dollar (for details, please see the box “Economic Developments in Russian Federation”). Considering remittances by each currency separately, it is obvious that a decrease in volume has been recorded in remittances in US dollars and euros from Russia, by 46.5% and 4.0%, respectively. Meanwhile, remittances in Russian ruble, which make up the prevailing part of non-commercial transfers, have grown by 6.0% in terms of volume, in the first half of 2015.

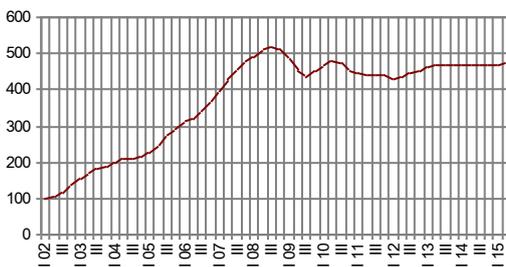
This decrease was also driven by the limited possibilities of Armenia’s outbound workers to find jobs in Russia. According to the CBA surveys, in the first half of 2015, the share of town households receiving non-commercial remittances from abroad in total town households has diminished as compared to the same period of the previous year to 12.0% on average¹⁴. No significant amendments were made in management of workforce inflow to Russia by migration authorities. A noteworthy change was made related to the agreement regarding “The status of Armenian citizens in Russian Federation and Russian citizens in the Republic of Armenia” ratified in March 2015.

Under the conditions of the abovementioned developments, the share of inflows from Russia narrowed to 74.4%, in total remittances. Remittances from the USA grew considerably to 24.8%, and their share in total remittances increased from 6.0% in the same period of the previous year to 10.8%.

Overall, the forecasts for inflow of outbound workers’ compensation and private transfers for 2015 are subject to developments in Russian economy, as the share of remittances from Russia remains rather high in total remittances. Given the unfavorable changes in Russian economy, a downside forecast of about 25.0%¹⁵ of value of non-commercial remittances in US dollars is expected.

In the first half of 2015, the apartment prices remained merely unchanged.

Average apartment price index in Yerevan (sq m)



2.5. REAL ESTATE PRICES

In the first half of 2015, no stirring of activity was noticed in the real estate market amidst the expansion of foreign and domestic uncertainties. The prices of apartments in multi-apartment homes¹⁶ both in Yerevan and in other towns of Armenia remained approximately at the same level compared to the both halves of the previous year. In this perspective, risks to real estate price fluctuations were insignificant for financial stability. The conservative policy of Armenian commercial banks to keep the loan-to-value ratio mostly in the 60-80% range for property-backed

¹⁴ Source: “Consumer confidence Index” survey by the CBA, 1st and 2nd quarter, 2015.

¹⁵ Source: “Inflation Report, 2nd quarter, 2015” by the CBA.

¹⁶ As there is no single index of Armenia’s real estate average price, the criterion for real estate price developments is considered the average price index of apartments in Yerevan

loans affected positively the management of the above-mentioned risks (for details, please see the sub-section “Market risk of commercial banks”).

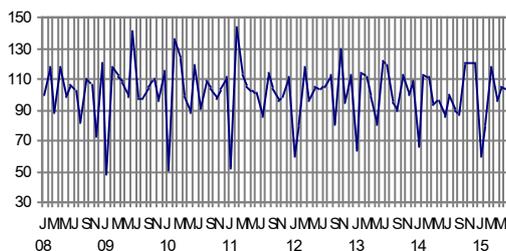
Real estate market activity was lower than in the same period of the previous year, given the decrease in real estate demand¹⁷. In the first half of 2015, the number of real estate transactions in Yerevan has decreased by 26.7% as compared to the first half of the previous year and by 34.2% as compared to the second half of 2015. In midst of low activity of real estate market, risks associated with the sale of collateral are persisting for the commercial banks, as the volumes of real estate got as collateral and real estate not in use and held for sale have grown. As for collateral realization, industrial real estate is the less liquid¹⁶.

The demand is hampered because of a decrease in gross national disposable income, low rate of growth of mortgage loans, as well as deepening of economic uncertainties. Under such circumstances, as to financial institutions, no further rise of activity is expected in real estate market¹⁶. According to quarterly surveys conducted by the Central bank of Armenia, a certain drop of activity is expected in the secondary market of real estate. In the past there were more transactions made in the secondary market than in the primary. Meanwhile, in order to stimulate the demand of real estate, amendments to the law on “Income tax” of the Republic of Armenia entered into force in January 2015. The survey participants anticipate that the stirring in the primary market of real estate may occur in accordance with mortgage lending policy of banks which in its turn depends on solvent demand.

The growth rate of volumes of residential houses commissioned to operate was low due to minor activity in real estate market, a year-on-year 2.0%. The registered growth was mainly due to an increase by y-o-y 13.1% of volumes of construction financed by organizations. This growth rate resulted by a drastic fall that was registered in the first half of 2014. Overall, the share of residential houses commissioned to operate by organizations is significantly lower than in the same period of 2010-2013, constituting 12.6% in the first half of 2015. The majority of construction companies, who participated in the quarterly survey conducted by the CBA, consider that low demand is the main hindering factor for real estate construction¹⁸. The low demand will remain on the agenda in next quarter as well.

The developments of the real estate market affected the lending volumes for real estate. Thus, credit provided for construction of residential and non-residential buildings has fallen by 20.8%. The share of real estate loans in total loans to residents was 3.2% in the end of the first half of the year against 3.9% in the year-end (for details, please see the sub-section “Market risk of commercial banks”). Though the share of non-performing loans in real estate construction loans has been high, their share in total loan portfolio is still low, so the risks associated with these activities cannot leave a significant impact on the financial stability of the Republic of Armenia.

Real estate sale and purchase transactions index



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

Compared to the previous year, the number of real estate transactions was lower.

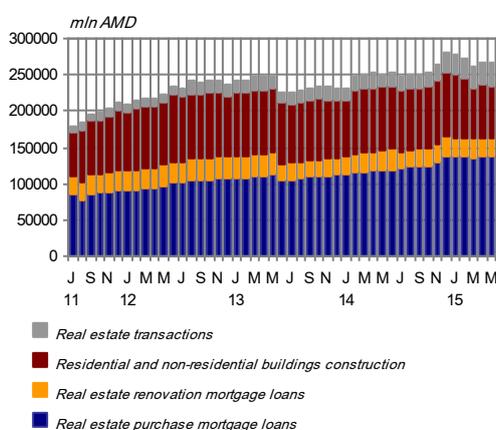
Key risks are the risks associated with the sale of collateral.

The volumes of real estate out of operation held for sale and got as collateral (mln AMD)



Source: Central Bank of Armenia.

Volume of loans to real estate market



Source: Central Bank of Armenia.

¹⁷ Source: the Central Bank Quarterly Survey of Terms and Conditions of Bank and Credit Organization Loans, 1st and 2nd quarter, 2015.

¹⁸ Source: survey on the “Business environment index” conducted by the CBA in the 2nd quarter, 2015.

Residential buildings completion by sources of financing

Sources of financing	1 st half 2015 exploited residential buildings (sq. m)	Share in total	Percentage change as to the 1 st half of 2014
Total, of which :	60 975	100%	2.0%
State budget	0	0	0
Corporations' funds	7 691	12.6 %	13.1%
Household funds	53 284	87.4%	0.6%

Source: the National Statistics service of Armenia.

SUMMARY

Notwithstanding the slow growth rate of global economy and Armenia's main partner country Russia's negative economic developments, a higher-than-expected economic growth was registered in Armenia in the first half of 2015. Agriculture and industry sectors were the main contributors to the economic growth. The decrease of non-commercial remittances, which negatively affected the creditworthiness of households and private consumption, remains a significant risk arising from the foreign sector to the financial stability of Armenia.

Some trade balance amelioration was noted in the period under review, thus contributing to the reduction of the current account balance deficit, despite the decrease of money transfers.

3. FINANCIAL MARKET STABILITY OF ARMENIA

3.1. MONEY AND CAPITAL MARKET

During the first half of the year, due to its actions the Central bank of Armenia defused tense situation in financial markets, transferred from foreign economy in the end of 2014. Thus, the short-term interest rates decreased and AMD displayed relatively steady trend in the foreign exchange market.

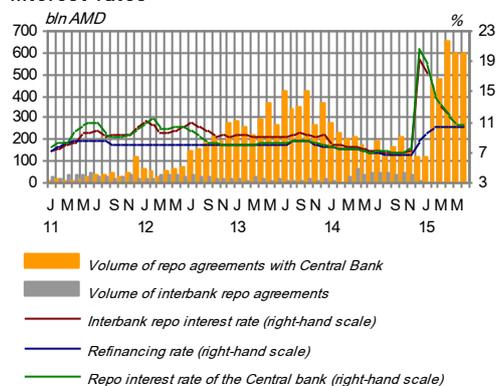
Due to the drastic actions of the Central bank of Armenia in the end of 2014, the tension created in financial markets in the first half of 2015 was chiefly neutralized. Accordingly, the CBA eased significantly the monetary conditions. In particular, the marginal lending rate has been gradually reduced to 12.0% from 20.0%.

In the first quarter of 2015, the zero-level or easy mechanism of reserve requirements for long-term funds entered into force. The regulation of the amount of reserve requirements for foreign currency funds was changed from reserving mechanism based on daily balances to average weekly balances in the end of June and entered into force in July 2015¹⁹.

These amendments will make it possible to lower the effective rate of reserve requirements in the near term and create real incentives for banks to attract long-term funds. This action will broaden the credit opportunities together with different social and other sector credit projects for affordable financing of the Central bank of Armenia, Armenian government and a number of international financial organizations. Subsequently, this will create favorable conditions for upsurge of economic activity.

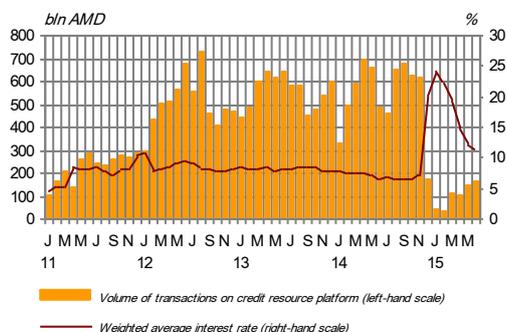
The tense stance of financial market of the previous year-end mitigated somehow in the first half of 2015.

Monthly volume of repo transactions and repo interest rates



Source: Central Bank of Armenia.

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



Source: Central Bank of Armenia.

Box 2

A chronological description of actions implemented by the Central bank of Armenia to stabilize the foreign exchange market situation in Armenia in December 2014

Since August 2014, the Central bank of Armenia has realized stricter stress tests in order to assess the probable impact of domestic and foreign unfavorable changes, in particular in commodity markets (including oil) and foreign exchange market, on the financial system of Armenia.

During the first week of November 2014, depreciation pressures were noted in the foreign exchange market. In order to flatten sharp fluctuations, the Central bank of Armenia intervened to the foreign exchange market. Parallel to the worsening economic stance in Russia, exchange rate adjustment being conditioned by economic fundamentals and its necessity for bringing the economy to a new balance became apparent.

On November 24, 2014, the pace of AMD depreciation accelerated, and the Central bank started to cooperate with commercial banks intensively. Meetings and consultations with banks became more frequent in the Central bank. The Central bank's ongoing monitoring and supervision of commercial banks were more thorough.

¹⁹ Further, in August 2015, it was defined that the abovementioned amount will be set based on the two-week average.

A special working group for analyzing and assessing the situation was formed in the Central bank. On November 24, a council meeting with top management of commercial banks of Armenia was organized in the Central bank. Talks were held on foreign exchange market stance, potential developments and risks fashioned in macro and microenvironments. The board of the Central bank of Armenia decided to raise the short-term dram liquidity tool (marginal lending rate) from 8.25% to 10.25%, on November 24. This led to more expensive short-term dram liquidity in commercial banks, thus aiming to mitigate the pressures in foreign exchange market. On the same day, the Central bank of Armenia made an announcement on causes of the depreciation, its impact and results.

The Central bank of Armenia continued to sell some foreign currency thus contributing to revealing the real price in the market. As a result, AMD rate balanced out at level of 435, in the end of November 2014.

On November 28, 2014, the Chairman of the Central bank of Armenia met with the Chairman of the Central Bank of Russia in order to discuss international and regional developments and their impact on domestic economies.

On December 1, the drastic deepening of instability of Russia's foreign exchange market formed new expectations and pressures for dram depreciation in the foreign exchange market of Armenia.

On December 2, 2014, the Central bank made a new announcement urging to avoid unnecessary conversions, so that people could be protected from various financial risks and speculative losses. Starting from the beginning of December, the Central bank supplied the commercial banks with unlimited foreign currency cash in order to assist the economy and ongoing activities. Simultaneously, in order to mitigate these pressures on the participants of financial markets, the Central bank augmented short-term dram liquidity rate to 21.0%, on December 2.

At the beginning of December 2014, the Central bank offered long-term currency swap (3 to 6 months) to the commercial banks in order to fulfil the demand for US dollar. A new auction mechanism of foreign currency trade was formed, that would ***give the possibility to the market participants to assess the equilibrium level of exchange rate in new economic stance.***

On December 8, 2014, new meetings were gathered with the managers and employees of commercial banks in the Central bank. The nature, purpose and application mechanism of the foreign exchange trades' new tool were introduced. On December 9, the latest developments in the financial market, their causes and the CBA actions were presented during the press conference of the Chairman of the Central bank. Once more, it was publicly announced to refrain from speculative behavior, mentioning the risks related to the latest.

The further developments displayed that the market participants had rather tangible depreciation expectations that were unreasoned. These expectations were connected with the changes in Russia and led to further sharp AMD depreciations. According to the CBA assessments, the situation formed rather big risks to the price and financial stability in Armenia.

On December 12, 2014, a conference on "Dedollarization policy and challenges" was held. The current geopolitical developments and their impact on the region were discussed. The Central bank of Armenia, the National bank of Georgia, regional representatives of the World Bank and the IMF, including renowned experts from abroad joined the conference. In order to discuss regional developments and policy responses the Chairman and the Deputy Chairman of the National bank of Georgia were also invited.

On December 17, 2014, the Central bank applied a more strict action by doubling the regulatory reserve requirement in foreign currency from 12.0% to 24.0%. At the same time, ***in order to satisfy aggregate money demand,*** the Central bank started providing liquidity to commercial banks ***through short-term currency swaps.*** On the same day, December 17, during the second press conference of the Chairman of the Central bank of Armenia the assessments of dram over-depreciation, its main reasons and risks were presented. They also announced the actions that the CBA has taken. The CBA board members gave many interviews to the leading media, thus particularizing the CBA Chairman's message and the CBA approach. Due to the abovementioned actions of the Central bank, some stabilization trend of the foreign exchange market was noted, starting from December 18.

On December 19 during their regular session, the executive board of the IMF approved the revision of the long-term financing program, thus allowing Armenia to obtain the next tranche of the loan.

On December 23, 2014, during a regular session of the Central bank, the CBA board raised the refinancing rate from 6.75% to 8.5%, in order to restrain inflationary pressures. Simultaneously, the regulatory reserve requirement was lowered from 24.0% to 20.0% and the rate of near-term dram liquidity tool was reduced from 21.0% to 20.0%. For price monitoring and appropriate supervision the CBA cooperated with Armenian government. During this whole period, the Central bank and Armenian government continued to implement coordinated monetary and fiscal policy to stabilize the situation.

Source: Central Bank of Armenia.

The money market situation has had its impact on the developments of the government bonds' market. The dynamics of the yield curve shows that the yields for bonds have risen at the end of the first half of the year as compared to the previous year-end²⁰.

The short-term yields²¹ have increased more significantly than the medium-term and long-term ones. In the end of the previous year, the spread between 10-year and 6-months bonds narrowed, which was adjusted parallel to decrease of uncertainty in financial markets and stood at 3.1% in the end of the first half of the year.

For summarized illustration of what are the current trends in the government securities market, the Central Bank calculates indices of government bonds²², which are presented in the table below.

Indices of government bonds, as of 30.06.2015

INDEX	TBI	G03	G05	G5I	GMI
Modified duration	0.36	1.28	1.57	5.35	2.85
Risk weighted yield	12.84	13.14	13.26	14.40	13.98
Average maturity (year)	0.39	1.53	1.95	12.24	5.60
Average weighted coupon %	-	10.64	10.38	11.94	10.93
Market Price of government bonds (bln AMD)	24339	130361	160481	82239	242720
Market value index change in case of +/-1% yield change (mln AMD)	+/-87	+/-1672	+/-2518	+/-4396	+/- 6909
Market value index change in case of yield change by the standard deviation ²³ (mln AMD)	67	714	745	451	699

As of the end of the first half of the year, modified duration of government coupon bonds outstanding was 2.85, with an average maturity of 5.60 years. These indicators for discount bonds were 0.36 and 0.39, respectively.

In case of a 1% change (increase or decrease) in the yield of government securities, investors' likely loss or gain could be about AMD 6.9 billion or 2.9% of the market value of government bonds.

²⁰ The yield curve involves dependence between the yields and maturities of government bonds. Starting from July 2013, the Central Bank is using a new approach in building the yield curve by applying the Nelson and Siegel Model; this is a parametric statistical model and it approximates the yield curve of all periods as a function.

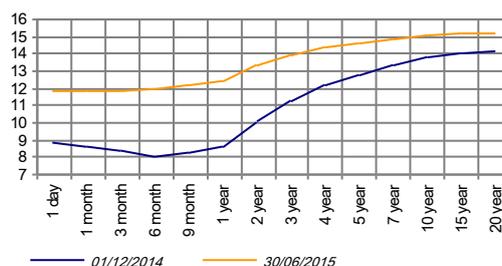
²¹ Short - term treasury bills are considered to be 6-month bills and long - term treasury notes, 10 - year notes.

²² There are 5 indices calculated for government bonds, of which 4 for coupon bonds and 1 for discount bonds. The coupon bond indices are G03, G05, G5I, which cover bonds with maturities, respectively, from 0 to 3 years, 0 to 5 years and 5 years and more; and GMI, which is a coupon bond index. Indices include the bonds issued in AMD by the Ministry of Finance, with semi - annual fixed coupons and AMD 1 billion and higher turnover. Discount government bonds TBI include bonds with maturity of one week and more, with AMD 400 million and higher turnover. For details, please see the CBA website: www.cba.am

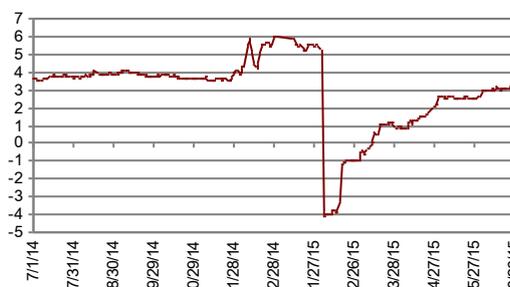
²³ Standard deviation of risk weighted yield during 01/12/14 and 30/06/2015.

The yield curve displays that the yields of government bonds have increased.

Yield curve change

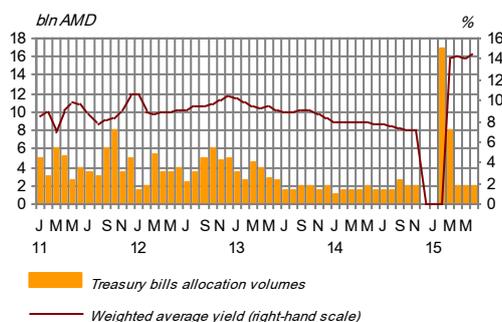


Spread of 6-month and 10-year bonds



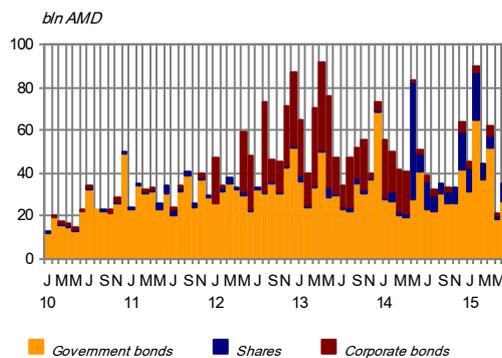
Source: Central Bank of Armenia.

Treasury bills allocation volumes and weighted average yield



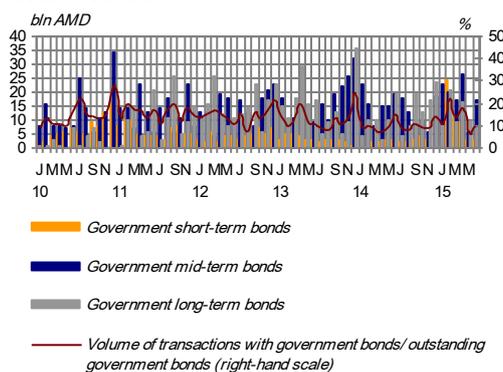
Source: Central Bank of Armenia.

Security trades by investment service providers



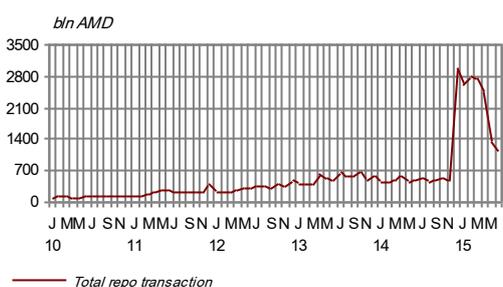
Source: Central Bank of Armenia.

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



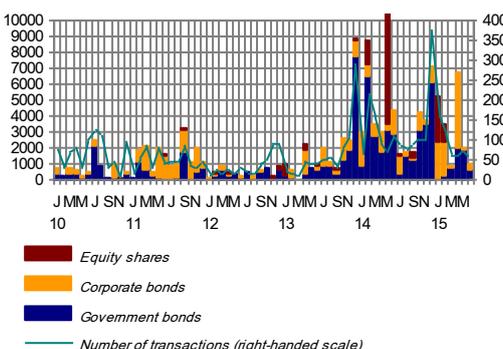
Source: Central Bank of Armenia.

Repo transactions by investment service providers



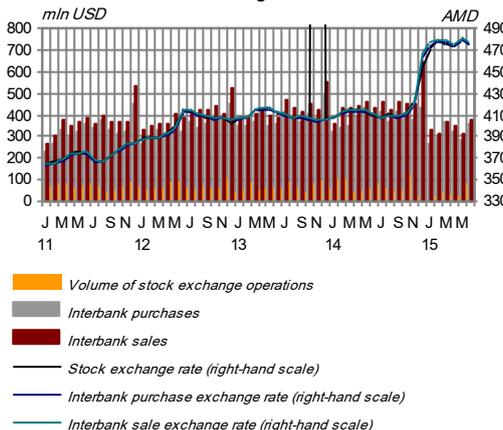
Source: Central Bank of Armenia.

Securities trades and repo transactions at regulated market of securities (mln AMD)



Source: Central Bank of Armenia.

Volume of operations in exchange market of Armenia and the exchange rates



Source: Central Bank of Armenia.

Moreover, a notable portion of the change might come from long-term bonds, as they have greater sensitivity to the interest rate change.

Operations in securities markets (including repo and reverse repo transactions but excluding operations with the Central Bank) carried out by investment service providers²⁴ decreased by 17.6% compared to the same period of the previous year and amounted to AMD 1 trillion 260 billion. Transactions involving securities trades constituted 23.8% of the operations mentioned above.

In the first half of 2015, the government securities market liquidity (according to the indicator describing the level of liquidity)²⁵ was more volatile compared to the same period of the previous year. In the first half of the year, the liquidity level was lower than average semi-annual liquidity.

Within the total trades of government securities the share of medium-term and long-term securities trades amounted to 47.5% and 30.3%, respectively. The share of short-term securities in total trades reached 22.2%.

The volume of repo and reverse repo transactions (excluding operations with the Central Bank) carried out by investment service providers has decreased by 45.6%, relative to the same period of the previous year, and amounted to AMD 959.7 billion. Again, almost all repo transactions involved government securities. Repo transactions with corporate bonds constituted a mere 0.3% in total.

In the first half of 2015, the total volume of securities trades and repo operations in regulated market amounted to AMD 19.4 billion, falling by 64.2% as compared to the same period of the previous year.

In the regulated market, transactions with corporate securities comprised the prevailing part, 50.8%. The trades with government securities and shares constituted, respectively, 28.8% and 20.4% in total.

The share of regulated market in the structure of securities trades by investment service providers has been 6.5% in the first half of the year.

The share of 3 and 5 largest issuers' by capitalization, 2010 – 2015 (%)

Period	Capitalization of the 3 largest companies (%)	Capitalization of the 5 largest companies (%)
31.12.2010	80.1	94.7
31.12.2011	83.8	96.6
31.12.2012	78.8	96.2
31.12.2013	79.8	96.7
31.12.2014	86.5	97.2
30.06.2015	83.1	98.1

²⁴ As of 30.06.2015, investment service providers included 21 commercial banks, 8 investment companies.

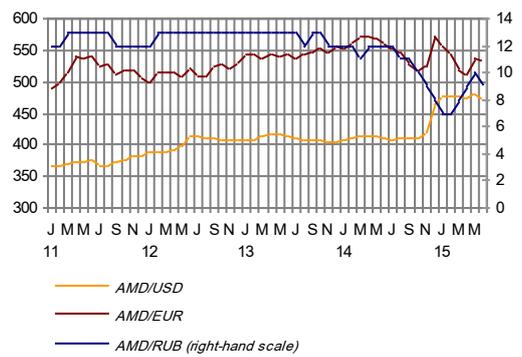
²⁵ The liquidity indicator of government securities market is calculated as a ratio between an amount of monthly trade transactions executed by investment service providers in the secondary market of government bonds and an amount of government bonds outstanding.

3.2. FOREIGN EXCHANGE MARKET

During the first half of 2015, the Armenian dram/ U.S. dollar exchange rate has depreciated by 13.6% as compared to the same reference period of the previous year to AMD 476.8. The average semi-annual AMD exchange rate appreciated versus Euro by 6.0% reaching AMD 532.6 and versus the Russian ruble by 41.0% to AMD 8.34.

The real effective exchange rate of Armenian dram was appreciated, due to main partner countries' currency depreciation against the US dollar. In the first half of 2015, compared to the same reference period of the last year, the real effective exchange rate appreciated by 9.2%. The nominal effective exchange rate of Armenian dram appreciated by 12.0%.

Exchange rates in exchange market of Armenia (AMD)



Source: Central Bank of Armenia.

SUMMARY

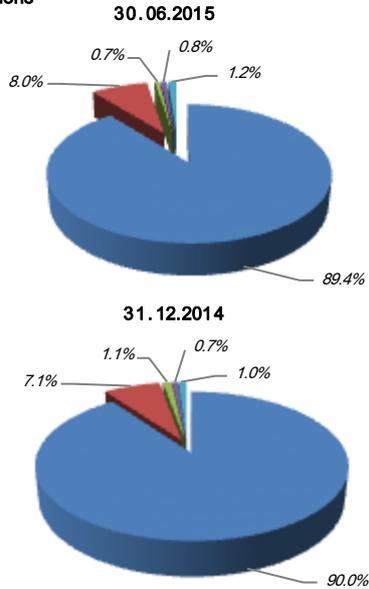
Taking into account the developments of the previous year-end, the Central bank of Armenia continuously lowered the marginal lending rate, along with defusing the tense financial markets and further stabilization of the situation. In midst of investment risks and growth of interest rates in emerging market economies, in order to maintain the monetary position in long-term the Central bank increased the refinancing rate to 10.5% in the first half of 2015.

The actions implemented by the Central bank of Armenia contributed to the decrease of near-term rates and relatively steady trend of AMD in the foreign exchange market, thus easing the tension transferred from foreign economies during the previous year.

4. STABILITY OF FINANCIAL INSTITUTIONS OF ARMENIA

The financial system is still bank-dominated.

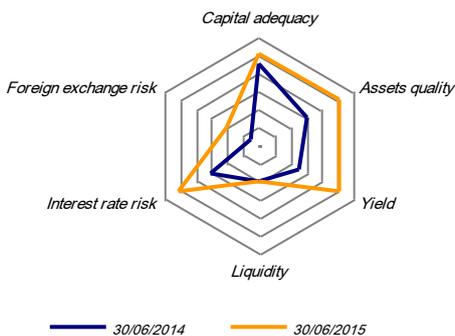
The structure of financial system assets, by financial institutions



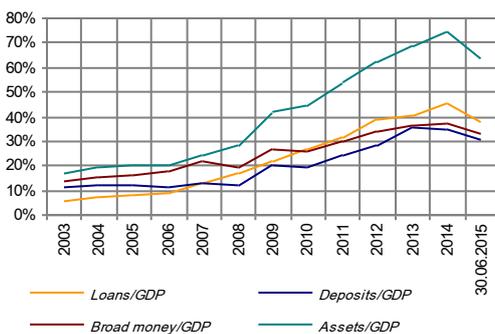
1. Banks, 2. Credit organizations, 3. Insurance companies, 4. Investment companies, 5. Other financial institutions

Source: Central Bank of Armenia.

Banking system stability map



Financial intermediation



Source: Central Bank of Armenia.

In the first half of 2015, the financial sector assets-to-GDP ratio has decreased by 13.8 percentage points to 73.0% while the credits-to-GDP ratio by 6.3 percentage points to 42.8%²⁶.

Armenia's banking sector accounts for 89.0% of the financial system assets and in this context identifying and evaluating banking system risks is essential for the assessment of the domestic financial stability. The shares of insurance and securities market participants and other players of the financial market remain small enough, so their impact on the financial stability is negligible.

4.1. COMMERCIAL BANKS

Banking system stability map

The banking system stability map provides a general understanding of the behavior of the banking system stability, reflecting the change of indicators of banking risks relative to the previous period.

In the second quarter of 2015, relative to the second quarter of 2014, the elements of the stability map²⁷ incurred some changes. Some negative deviations were registered in assets quality, earnings, interest rate and foreign currency risks. The capital adequacy also posted some decrease. The liquidity indicator remained unchanged in the period under review. The abovementioned deviations are mainly resulted by the financial market turbulences in the 4th quarter of 2014 (for details, please see subsections "Credit risk", "Liquidity risk", "Market risk", "Capital adequacy and Profitability").

4.1.1. Financial intermediation and concentration

In the first half of 2015, growth rate of nominal GDP surpassed the growth rates of main indicators of the banking sector. As a result, main indicators of banking intermediation have decreased. Compared to the beginning of the year, banking sector assets-to-GDP, credits-to-GDP, deposits-to-GDP and broad money-to-GDP ratios have fallen by 10.4, 6.3, 3.4 and 2.9 percentage points to 65.0%, 39.5%, 32.1% and 34.5%, respectively.

²⁶ The decrease of indicators describing financial intermediation is partially related to methodological changes in calculation of nominal GDP.

²⁷ The banking system stability map contains indicators denoting capital adequacy, assets quality, liquidity, profitability, interest rate risk and foreign exchange risk. These indicators were firstly measured on a 1 to 10-scale basis and then calculated in accordance with the IMF methodology. Note that the nearer the value to the center of the map, the lower the level of risks associated with the indicator, and vice versa. The banking sector stability map shall not be interpreted as an indication of the level of financial stability, rather it provides a picture whether the level of risks involved has increased or decreased.

During the first half of the year, total capital of the banking sector grew by 1.9% (AMD 9.1 billion) while total assets dropped by 5.0% (AMD 171.7 billion). As a result, the total capital to assets ratio (the leverage ratio) has increased by 1.0 percentage point to 14.8%. The growth of total capital was largely due to 3 banks, which replenished the statutory capital by a total of AMD 21.9 billion from external sources. As a result, non-resident participation in the statutory capital of the banking sector has increased by 0.9 percentage points to 67.4%.

The Herfindahl-Hirschman Concentration Index

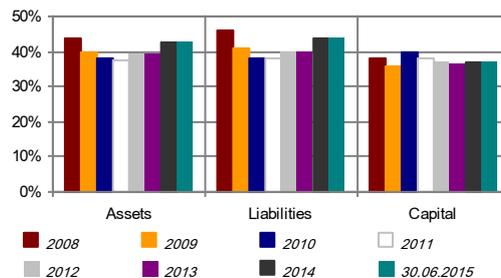
Indicators	31.12.12	31.12.13	31.12.14	30.06.15
Total assets	0.0787	0.0699	0.0727	0.0728
Total liabilities	0.0705	0.0727	0.0751	0.0757
Total capital	0.0637	0.0613	0.0627	0.0620

Source: Central bank of Armenia.

The Herfindahl-Hirschman Index of Concentration²⁸ for main balance sheet items (assets, liabilities, total capital, credits, deposits) denotes that concentration of the banking system remains low, which limits the likelihood of the impact of concentration risk on the financial stability.

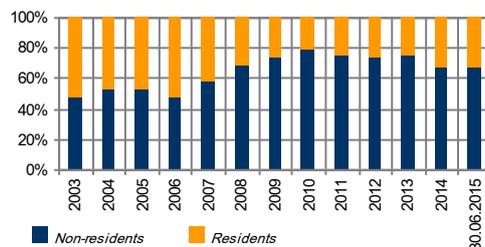
The share of assets and liabilities of 4 largest banks out of 22 banks²⁹ in Armenia has decreased by 0.4 and 0.1 percentage points to 42.3% and 43.7%, respectively, in the end of the first half of the year. The share of 4 largest banks in total capital remained unchanged at level of 37.1%.

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



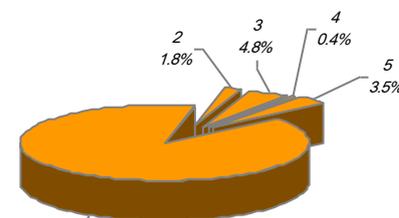
Source: Central Bank of Armenia.

Foreign investors' participation in banking system capital of Armenia



Source: Central Bank of Armenia.

The structure of risk weighted assets calculated in banking system capital adequacy index, as of 30.06.2015



1. Credit risk, 2. Interest rate risk, 3. Operational risk, 4. Foreign exchange risk, 5. Price risk of capital instruments

Source: Central Bank of Armenia.

Credit risk is considered as the most important risk to the financial stability

4.1.2. Credit risk

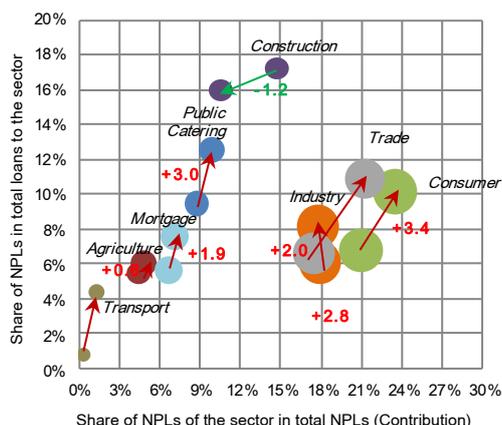
Credit risk remains the most important risk to the financial stability of Armenia's banking sector. The share of credit risk in risk-weighted assets of commercial banks accounts for 89.5% (as of 31.12.2014, it was at 89.9%). In this context, credit risk prudent management is extremely important.

During the first half of 2015, loans to economy decreased by 5.0%. At the end of the half of the year, the shares of consumer loans, industry and trade credits were large in total loan portfolio, making up 20.8%, 19.6% and 17.6%, respectively.

In terms of credit risk, relative to the beginning of the year, the share of non-performing loans and receivables (classified as

The change of the share of NPLs in the loans to different sectors of economy

(The end of the arrow shows data as of 30.06.2015 the beginning - as of 31.12.2014)

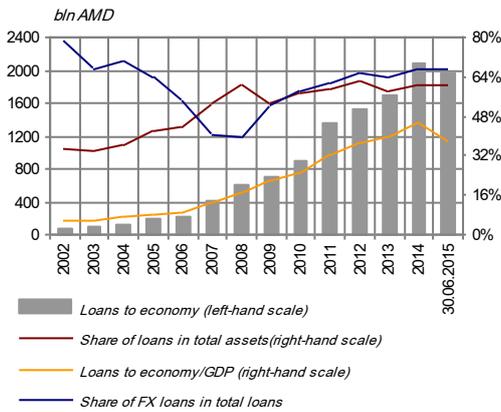


Source: Central Bank of Armenia.

²⁸ The Herfindahl - Hirschman Concentration Index varies between 0 and 1, characterizing the level of concentration (values near 0 denote lower concentration).

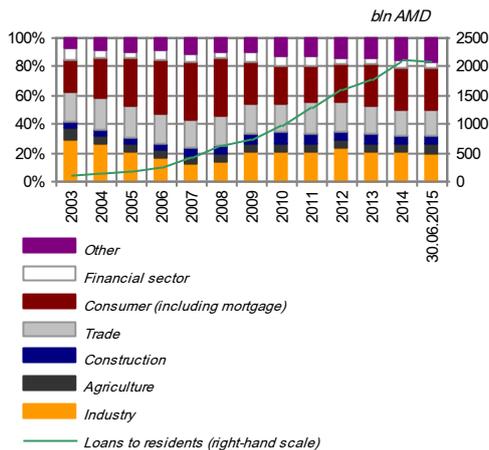
²⁹ There are 21 commercial banks and one development bank (Pan Armenian Bank JSC) functioning in the Republic of Armenia.

Loans to economy



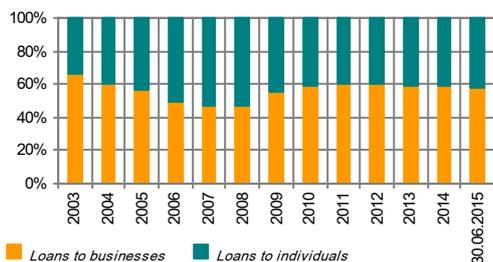
Source: Central Bank of Armenia.

Structure of bank loans to residents, by economy sectors



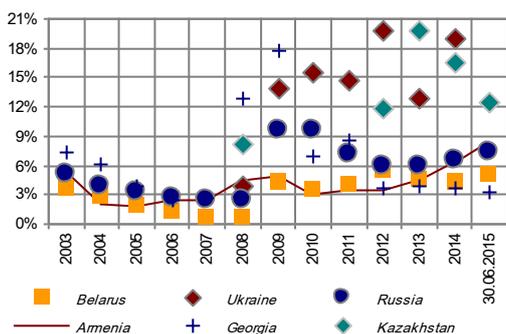
Source: Central Bank of Armenia.

Share of loans to the businesses and individuals in total loan portfolio



Source: Central Bank of Armenia.

Share of non-performing loans in total loan portfolio



Source: IMF.

“watched”, “substandard”, and “doubtful”) has grown by 2.1 percentage points to 8.5% of total loans and receivables. High credit growth reported in the previous 3 years has considerably contributed to the increase in the share of non-performing loans and receivables. The quality of foreign currency loans was also affected by the increase in debt burden, caused by depreciation of Armenian dram in the fourth quarter of 2014.

During the reported period, the shares of non-performing loans were somehow larger in consumer and trade loans that have an important share in credit portfolio. The non-performing loans of these sectors grew by 3.4 and 4.3 percentage points to 10.2% and 10.9%, respectively. The shares of non-performing loans in consumer loans and trade sector grew by 2.6 and 3.8 pp. and stood at 23.6% and 21.3%, respectively, in total non-performing loans.

As calculated according to the international standards³⁰, the share of non-performing loans and receivables in total loan portfolio and receivables has grown by 3.1 percentage points during the first half of the year and amounted to 13.1%. Relative to the first half of the previous year, the net loan loss provisions-to-assets ratio has increased by 0.9 percentage point to 1.6%.

The Herfindahl-Hirschman sectorial concentration index for banking lending to economy remained steady at 0.11, which points to some concentration of loans in the banking system. The same indicator calculated using the banks' average also remained unchanged and amounted to 0.18. The indicator of banks' average is higher in comparison with the banking system lending sectorial concentration index, which indicates relatively high sectorial concentration of loan portfolios in some banks. The share of loans made to large borrowers has increased by 0.3 percentage point to 26.2% of total loan portfolio as compared to the beginning of the year³¹.

Credit risk stress scenarios³²

30.06.2015	Stress scenarios		
	25 % of watched, substandard and doubtful loans classified into losses	75 % of doubtful loans classified into losses	30 % of standard loans classified into watching loans
Loss of the banking system	AMD 34.7 billion or 7.6% of regulatory capital of the banking system	AMD 12.9 billion or 2.8 % of regulatory capital of the banking system	AMD 57.6 billion or 12.6% of regulatory capital of the banking system
Total capital adequacy of the banking system in case of stress scenario	14.4%	15.1%	13.8%

³⁰ According to the international methodology, the share of non - performing loans and receivables in total loans and receivables portfolio is calculated as the ratio of loans and receivables classified “substandard”, “doubtful” and “loss” to total loans and receivables.

³¹ The bank's risk on large borrowers exceeds 5% of average monthly regulatory total capital, considering the interdependence.

³² This and further stress scenarios are not forecasting emergence of any risks, but rather are aimed to reveal the weaknesses of the financial system, as well as to assess its ability to absorb such risks.

In the first half of 2015, there was some worsening in the results of credit risk stress test compared to the beginning of the year, which was attributable to the loan portfolio quality. The worst scenario considered revealed cases of infringement of the total capital adequacy requirement at some banks. However, even with a possible loss arising from credit risk, capital adequacy of the banking system remains above the established threshold of 12.0%, and the probability of emergence of insolvency problems is estimated to be low.

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

30.06.2015	Stress scenarios
	When 50% of off-balance sheet contingent liabilities performed
Banking system capital adequacy ratio before stress scenario	15.4%
Banking system capital adequacy ratio in case of stress scenario	15.3%

The results of stress scenario of credit risk derived from off-balance sheet contingent liabilities³³ denote that the capital adequacy ratio at individual banks is not plunging more than 1.2 percentage point, and no infringement of the ratio by any bank is reported. In this context, the impact of credit risk arising from off-balance sheet contingent liabilities on financial stability is estimated to be insignificant.

4.1.3. Liquidity risk

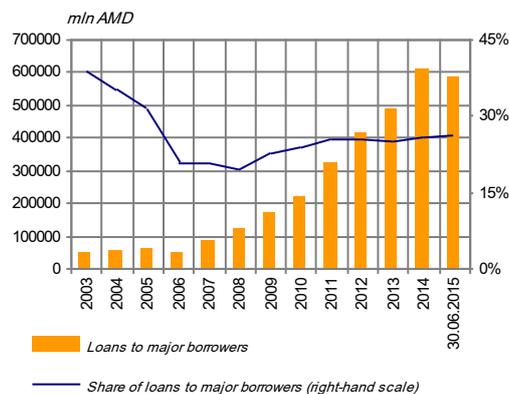
In the first half of 2015, the level of liquidity of commercial banks improved. Relative to the beginning of the year, prudential ratios of total liquidity and current liquidity have increased by 0.1 and 8.8 percentage points to 25.2% and 138.2%, respectively (with minimum thresholds of 15.0% and 60.0%). Prudential ratios of total liquidity and current liquidity for Group 1 foreign currencies have reduced by 1.4 and 2.9 percentage points to 16.4% and 94.4%, respectively (with minimum thresholds of 4.0% and 10.0%). Regarding each bank individually, total liquidity and current liquidity prudential ratios were in line with regulatory requirements, and no infringement of such liquidity indicators by any bank has been reported during the first half.

Assets and liabilities by maturity were structured as follows: for up to 30-day (including demand), up to 3-month and up to 1-year maturity baskets the assets to liabilities ratios were 94.8%, 91.4% and 78.6% (as of 31.12.2014, these were 92.3%, 89.3% and 81.5%), respectively³⁴. Considerable negative liquidity gap persists only in the up to 1-year cumulative time horizon, which is due to increased maturity of loans along with deepening of financial intermediation.

³³ Off - balance sheet contingent liabilities include unused part of credit lines, credit cards, overdrafts, L/Cs, guaranties and sureties.

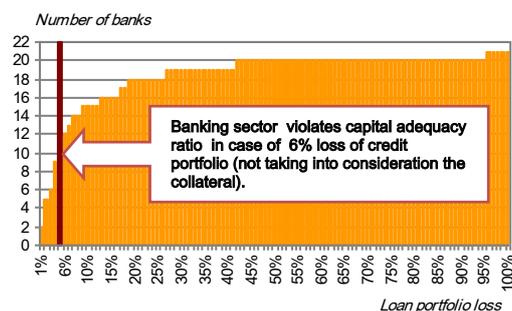
³⁴ The calculation of ratios of assets and liabilities includes off-balance sheet contingent liabilities by a 20% weight.

Loans to major borrowers/total loans



Source: Central Bank of Armenia.

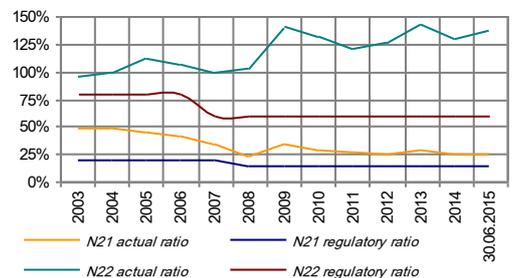
The number of banks violating capital adequacy regulatory ratio under dynamic growth of loan losses



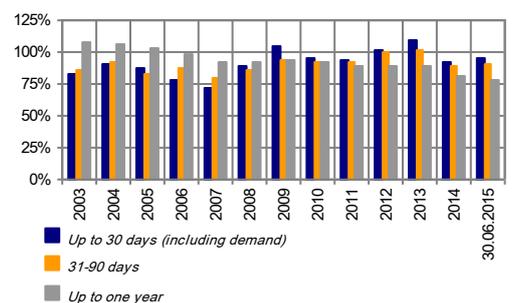
Source: Central Bank of Armenia.

The liquidity of commercial banks has improved.

The dynamics of actual and regulatory liquidity ratios of the banking system

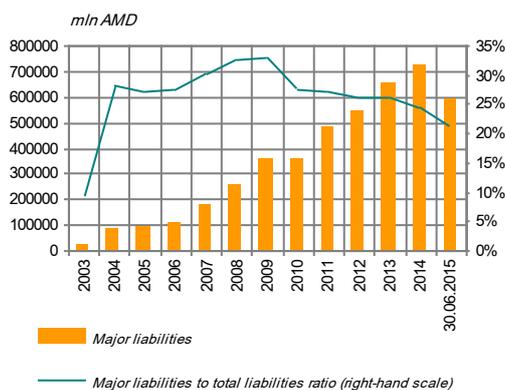


The ratio of banking system assets to liabilities by terms to maturity



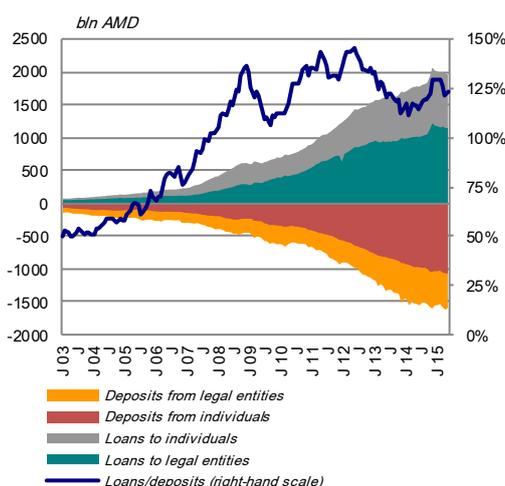
Source: Central Bank of Armenia.

The ratio of banking system major liabilities to total liabilities



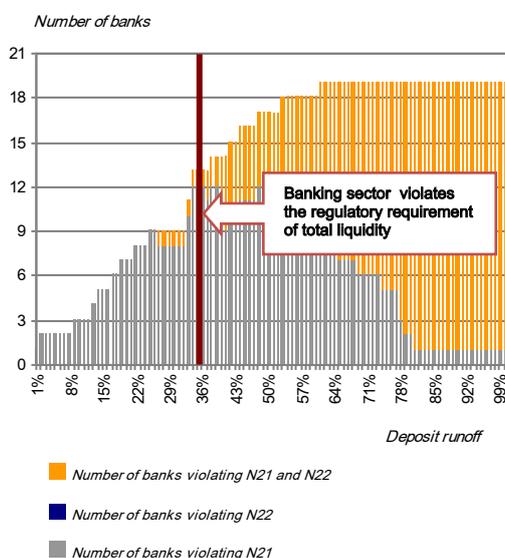
Source: Central Bank of Armenia.

The structure of funds financing loans of banking system of Armenia



Source: Central Bank of Armenia.

The number of commercial banks violating liquidity regulatory ratios in case of individuals' call and time deposits runoff



Source: Central Bank of Armenia.

The assets to liabilities ratio for up to 30-day (including demand) maturity baskets is particularly important for commercial banks in maintaining their current liquidity. In the last 5 years, the ratio has always been in the range of 90% to 110%, pointing to the banks' ability to provide current liquidity continually.

In the first half of 2015, risks to debt concentration of commercial banks have reduced: the share of large liabilities in total liabilities has contracted by 2.9 pp. to 21.6%.

Relative to the beginning of the year, foreign borrowings of commercial banks have decreased by 12.1%. Funds attracted from international financial institutions have reduced by 13.9% to 32.8% of total foreign borrowings. The main lender countries included Netherlands (12.8%), Russia (12.2%), the USA (11.5%) and Luxemburg (9.5%). The share of long-term loans amounted to 87.9%, increasing by 7.4 pp. This almost excludes risks related to refinancing of such liabilities in a near-term horizon.

From the loans' financing sources stability perspective, the loans to deposits ratio has decreased by 6.1 percentage points to 123.1% at the end of the first half of the year³⁵.

Liquidity risk stress scenarios

30.06.2015	Stress scenarios		
	Withdrawal of 25% of individuals' time deposits	Withdrawal of 25% of demand liabilities	Withdrawal of 25% of demand liabilities and of 25% of individuals' time deposits
Total liquidity ratio of banking system (minimum threshold is 15%)	19.3%	21.6%	15.1%
Current liquidity ratio of banking system (minimum threshold is 60%)	97.9%	150.5%	97.2%

Relative to the results of liquidity risk stress tests conducted at the beginning of the year, there has been some amelioration in the results of stress tests. Some banks reported breaches of total and current liquidity requirements in case of the worst stress scenario. However, high liquid assets in these banks are sufficient to cover the simulated outflow of liabilities. In this context, the emergence of liquidity problems undermining financial stability is estimated to be negligible.

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

30.06.2015	Stress scenarios
	When 50% of off-balance sheet contingent liabilities performed
Banking system total liquidity ratio (the minimum threshold is 15%)	22.1%
Banking system current liquidity ratio (the minimum threshold is 60%)	120.8%

According to the results of stress tests to assess liquidity risk arising from off-balance sheet contingent liabilities, some banks will report infringement of regulatory total and current liquidity

³⁵ In the calculation of this ratio, loans include loans (lease and factor operations inclusive) to real sector, while deposits include funds attracted from individuals and companies.

standards. However, high liquid assets in these banks are enough to cover contingent liabilities. In this context, the liquidity risk arising from off-balance sheet contingent liabilities is estimated insignificant in terms of leaving an impact on financial stability.

4.1.4. Market risk

Foreign exchange risk

In the first half of 2015, the Armenian dram exchange rate fluctuations against other currencies drove the domestic banking system to revaluation gains reaching AMD 1.8 billion or 0.4% of total regulatory capital. Because of foreign currency revaluation, 13 banks reported profit and 8 banks incurred losses. The banking system generated net revenue of AMD 8.1 billion from foreign exchange transactions.

During the half of the year, the share of foreign currency loans has decreased by 0.5 percentage point to 66.9% of total loan portfolio. The share of foreign currency deposits has decreased by 0.7 percentage point to 71.9% of total deposit portfolio. The banking sector's foreign currency net short position (including derivatives) amounted to AMD 13.1 billion or 2.8% of total regulatory capital (as of 31.12.2014, it was AMD 25.8 million or 5.7% of total regulatory capital)³⁶.

Foreign exchange risk stress scenarios

30.06.2015	Stress scenarios		
	Profit (loss) in case of 5% appreciation (depreciation) of AMD/USD	Profit (loss) in case of 5% appreciation (depreciation) of AMD/EUR	Possible maximum 10-days loss estimated through VaR Model
Banking system's profit/loss from foreign currency revaluation	AMD 629 million or 0.1% of regulatory capital	AMD 118 million or 0.03% of regulatory capital	AMD 331 million or 0.1% of regulatory capital

If the worst possible stress scenarios reviewed in the above stress test³⁷ unfold, bank losses resulting from an open FX position will be insignificant and the impact of such losses on the financial stability will be weak.

Interest rate risk

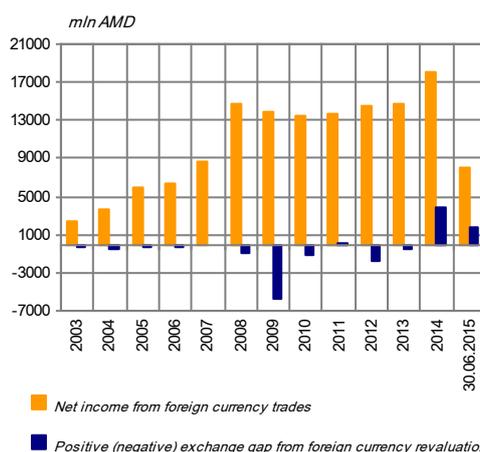
In the first half of 2015, a trend of rise in interest rates of deposits and loans was marked. By currency structure, average weighted interest rate of deposits in Armenian dram increased by

³⁶ Derivative instruments include the derivative contracts signed for long-term deposits with foreign governments, central (national) banks, financial organizations and international institutions that are rated A+ (A1) or higher than A+ (A1) by Standard & Poor's or Fitch (Moody's).

³⁷ 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 considers historical exchange rate series of currencies) is based on FX positions of commercial banks as of 30.06.2015.

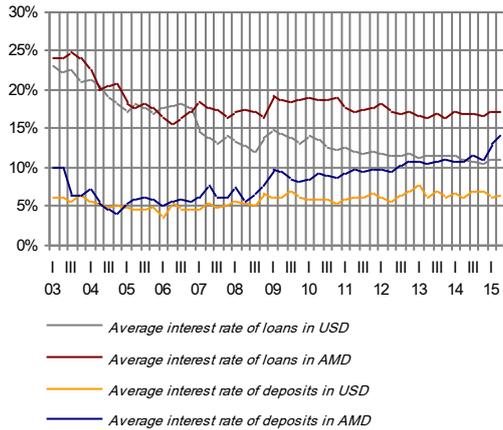
The probable influence of market risk on the financial stability is estimated to be low.

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



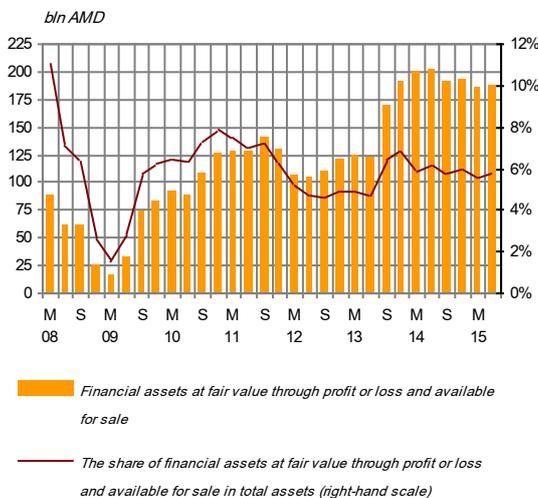
Source: Central Bank of Armenia.

Average interest rates of bank deposits and loans



Source: Central Bank of Armenia.

The share of financial assets at fair value through profit or loss and available for sale financial assets in total assets



Source: Central Bank of Armenia.

2.6 pp. whereas average weighted interest rate of deposits in U.S. dollar declined by 0.4 pp. The average weighted interest rate of loans in Armenian dram increased by 0.3 pp. whereas average weighted interest rate of loans in U.S. dollar grew by 0.1pp.

Overall, the spread of interest rates of deposits and loans in AMD have decreased by 2.3 pp. while the spread of interest rates of deposits and loans in USD increased by 0.5 percentage point.

The average weighted duration gap of present value of assets and liabilities of the banking sector varies in the region of half a year. This means that possible fluctuations in market rates will not lead to major losses in the banking system.

Interest rate risk stress scenarios

30.06.2015	Impact of 2 pp. increase (decrease) of market interest rates on the economic value of capital, estimated through the "Duration Method"	Deviation of net interest income from expected income of the three months ahead in case of 2 pp. increase (decrease) of market interest, estimated through the "Interest rate-sensitive assets and liabilities Gap Method"
Banking system's profit/loss	AMD -10.0 billion or 2.2% of banking system capital (AMD 10.0 billion or 2.2% of banking system capital)	AMD -1.0 billion or 0.2% of banking system capital (AMD 1.0 billion or 0.2% of banking system capital)

In case of worst possible stress scenarios, possible losses of banks resulting from interest rate fluctuations are in the region of 3.0% of the capital. This implies that losses of the banking system resulting from interest rate fluctuations will not be significant and the impact of such losses on the financial stability will be weak.

Price risk

In the first half of 2015, the price risk of the banking system remains very low. The share of financial assets available-for-sale and held at fair value through profit or loss has contracted by 0.2 percentage point to 5.8% of total assets.

Given the interest rate fluctuations, net income generated by the banking sector from revaluation of financial assets available-for-sale and held at fair value through profit or loss during the half of the year was AMD 272.0 million.

Risks associated with real estate price fluctuations remained manageable. Domestic commercial banks further provided mortgages with loan-to-value ratio mostly between 60-80%, while taking quite a strict approach in evaluating borrowers' creditworthiness. Such restrictions significantly lower the possibilities of loan losses from real estate price volatilities.

In case of stress scenario of 30% depreciation of real estate price, maximum potential losses of commercial banks associated with price risk and credit risk derived from the price risk tend to increase in the last 3-4 years. This is mainly attributable to the real estate secured lending growth rate increasing faster than the total regulatory capital and to the increase in the loan-to-value ratio.

Real estate price change stress scenarios

30% depreciation of real estate	30.06.2015
The banking system's loss due to revaluation of own real estate property (price risk)	AMD 13.1 billion (or 2.9% of banking system capital)
The banking system's loss due to a 30% loss of vulnerable credit portfolio ³⁸ (taking into consideration that the collateral involved has been sold at a depreciated cost), if a stress-scenario occurs (credit risk)	AMD 13.5 billion (or 2.9% of banking system capital)
The banking system's loss due to a 100% loss of vulnerable credit portfolio (taking into consideration that the collateral involved has been sold at a depreciated cost), if a stress-scenario occurs (credit risk)	AMD 45.0 billion (or 9.8% of banking system capital)

However, real estate price fluctuations are not high (taking into account the last 3-4 years' developments) and the impact of credit and price risks to financial stability is assessed non-vulnerable.

4.1.5. Capital adequacy and profitability

In the first half of 2015, commercial banks' total capital adequacy ratio rose by 0.9 percentage point to 15.4%, which was driven by the decrease of risk-weighted assets caused by reduction in loan portfolio. In the period under review, individual banks kept their total capital adequacy prudential indicators higher than the minimum prudential requirement of 12%, so no bank reported breaches of capital adequacy standards.

Total regulatory capital of commercial banks has grown by 1.3% to AMD 458.1 billion relative to the beginning of the year. The share of Tier 1 capital has decreased by 0.6 percentage point to 86.9% of total regulatory capital. This ratio points to a strong risk absorption capacity of regulatory capital in commercial banks.

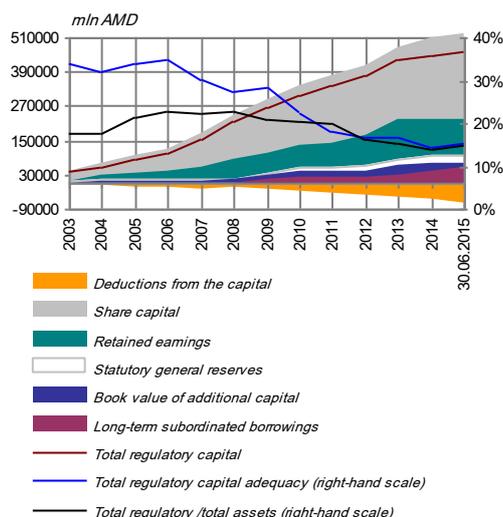
In the first half of 2015, banking system operated at a loss, calculated in accordance with the Central Bank supervisory reports³⁹, which amounted to AMD 7.1 billion, with 11 banks reporting net profit and 11 banks incurring losses. Compared with the first half of the previous year, return on assets (ROA) and return on equity (ROE) ratios of the banking system have fallen by 1.8 and 11.0 percentage points to -0.5% and -2.9%, respectively. The decrease in banking system ROE was driven largely by the decrease of ROA, while the leverage ratio did not affect ROE. The return on assets decreased mainly due to 0.9 pp. increase in net asset loss provisioning-to-assets ratio as a result of fall in loan portfolio quality, as well as 0.3 pp. decrease of net interest margin as a result of yield spread narrowing. The 0.2 pp. increase of net non-interest income/assets ratio influenced positively the return on assets.

The shares of interest income, non-interest income and non-interest expense decreased in the banking system income and expenditure structure, while the shares of recoveries from asset

³⁸ Vulnerable loan portfolio represents the sum of loans outstanding, the residual values of which exceed the 30% devaluated values of the real estate used as collateral.

³⁹ This differs from IFRS mainly on the part of loan loss provisioning for standard assets.

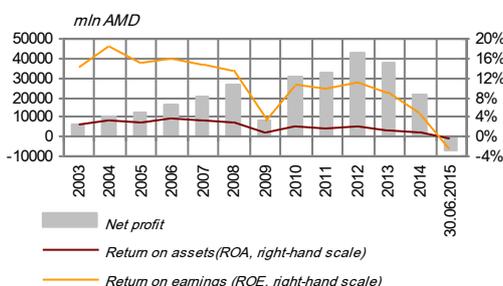
The structure of total regulatory capital



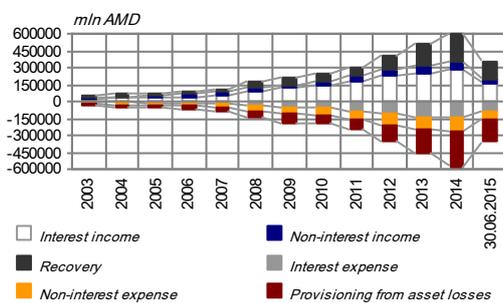
Source: Central Bank of Armenia.

The capital adequacy of commercial banks is sufficient.

Profitability ratios of the banking system

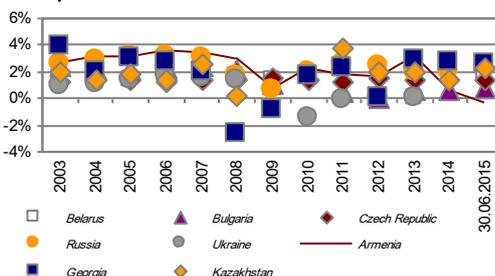


Incomes and expense of banking system



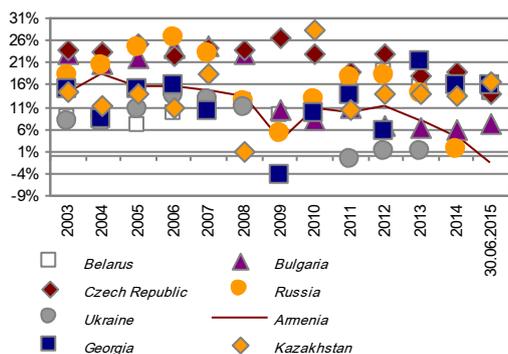
Source: Central Bank of Armenia.

Banking system ROA in selected East European and CIS countries



Source: IMF.

Banking system ROE in selected East European and CIS countries



Source: IMF.

loss provisions, interest expenditures and allocations for asset loss provisions increased. These structural changes are due to an increase of net asset loss provisioning occurred because of fall in loan portfolio quality, as well as relatively high volatility of non-performing loans ratio and yield spread narrowing.

The banking system net profit, calculated in accordance with International Financial Reporting Standards (IFRS), amounted to AMD 8.2 billion, while the return on assets (ROA) was 0.3 percent and return on equity (ROE) 1.8 percent, during the first half of 2015.

4.2. CREDIT ORGANIZATIONS

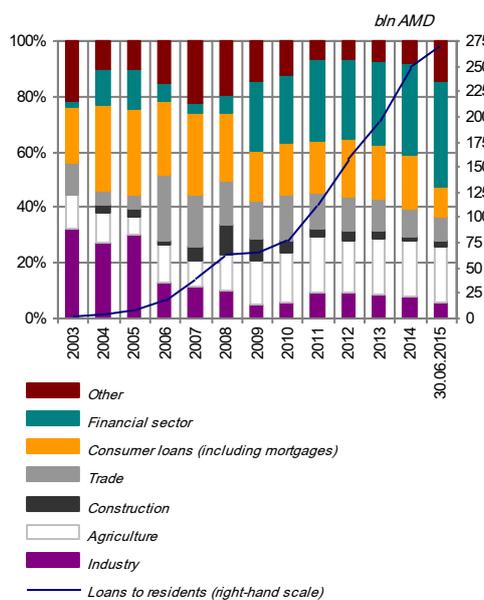
Credit organizations represent the second largest sector of Armenia's financial system, with their assets making up 8.0% of entire financial system. During the first half of the year, the key balance sheet indicators of credit organizations increased.

Assets, liabilities, capital and profit of credit organizations

(thousand AMD)

Indicator	31.12.2014	30.06.2015	Growth (%)
Assets	269,156,880	288,499,355	7.2
Liabilities	159,508,741	154,490,145	-3.1
Capital	109,648,139	134,009,209	22.2
Net profit	9,861,000	4,622,996	x

Balance of loans to residents by credit organizations, by sectors



Source: Central Bank of Armenia.

During the period under review, total capital of credit organizations demonstrated growth rate outpacing that of total assets by 15.0 percentage points. As a result, the total capital-to-assets ratio (leverage ratio) has increased by 5.7 percentage points to 46.5%.

Net profit of credit organizations, calculated in accordance with the Central Bank supervisory reports, amounted to AMD 4.6 billion. During the half of the year, 23 credit organizations posted profit, 9 reported losses. The return on assets (ROA) and return on equity (ROE) of credit organizations have decreased by 0.2 and 1.9 percentage points relative to the first half of the previous year to 3.2% and 7.0%, respectively.

Profit of credit organizations, calculated in accordance with International Financial Reporting Standards (IFRS), totaled AMD 5.0 billion, with return on assets (ROA) and return on equity (ROE) having reached 3.5% and 7.8%, respectively.

During the first half of 2015, the share of non-performing loans and receivables has grown by 1.9 percentage point to 7.0 % of total loan portfolio and receivables. The share of non-performing loans and receivables is relatively high in consumer loans, mortgage loans and loans to public catering and other service sectors, amounting to 19.6%, 14.1% and 11.4%, respectively.

The share of non-performing loans and receivables, classified as "substandard", "doubtful" and "loss" and calculated by international methodology, increased by 1.6 percentage point and

reached 7.0%. Relative to the first half of the previous year, the ratio of net asset loss provisions to total assets has grown by 0.8 pp. to 1.4%.

In all maturity time bands of assets and liabilities (up to 180-days (including demand instruments), from 180-days to 1-year, more than 1-year), the amount of assets was in excess of the amount of liabilities. This is a clear indication, ceteris paribus, that the level of liquidity risk of credit organizations is low.

Credit risk assessment stress scenarios⁴⁰

30.06.2015	Stress scenarios		
	25 % of loans in watched, substandard and doubtful categories classified into loss loans	75 % of loans in doubtful category classified into loss loans	30 % of loans in standard category classified into watched loans
Total loss of credit organizations	AMD 3.7 billion or 2.9% of regulatory capital	AMD 813.8 million or 0.6% of regulatory capital	AMD 6.1 billion or 4.7% of regulatory capital

Capitalization of credit organizations is stronger than that of banking sector, and according to various stress scenarios, credit organizations are fully capable to absorb potential risks.

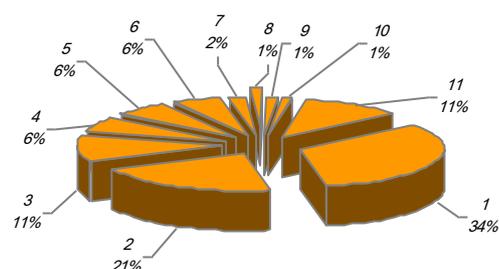
4.3. INSURANCE COMPANIES

At the end of the first half of 2015, there were eight insurance companies licensed to perform insurance business in the Republic of Armenia⁴¹.

In the first half of 2015, the amount of assets of insurance companies reduced by 4.9% to AMD 41.3 billion and the amount of liabilities decreased by 9.0% to AMD 25.2 billion. Total capital has increased by 2.2% to AMD 16.1 billion. During the half of the year, the share of insurance companies in the financial system has reduced by 0.3pp. to 1.1% of total assets of the financial system. The amount of premiums written, the main indicator of insurance activity, has increased by 11.2% as compared to the same reporting period of the previous year to AMD 16.0 billion (this indicator have fallen by 30.8% in the same period of the previous year).

The premiums to GDP ratio, another key indicator of insurance companies, was 0.61%, which has fallen by 0.06 percentage point in relation to the end of the previous year⁴². In June 2015, the premium per capita ratio was AMD 10,086 versus AMD 9,982 reported in December 2014.

Insurance sector assets, as of 30.06.2015



1. Deposits with banks, 2. Sums receivable on direct insurance, 3. Securities sold under repo agreements 4. Costs for future periods and prepayments on insurance, 5. Fixed assets, 6. Reinsurers' share in insurance reserves, 7. Government and non-government securities, 8. Borrowings, 9. Bank accounts, 10. Claims to reinsurers on compensation, 11. Other assets

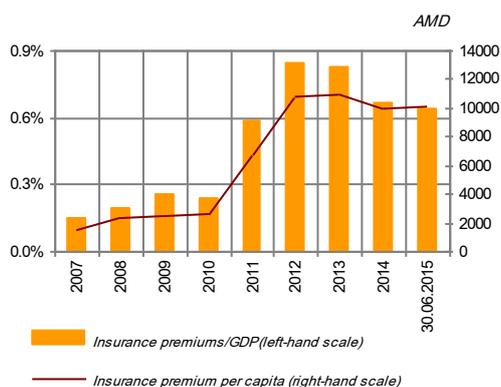
Source: Central Bank of Armenia.

⁴⁰ 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 when loans are classified as loss, a possible sale of the collateral is not considered).

⁴¹ As of 30.06.2015, this section collates indicators of 7 insurance companies active and reportable, since one company, although duly licensed, does not carry out insurance activities.

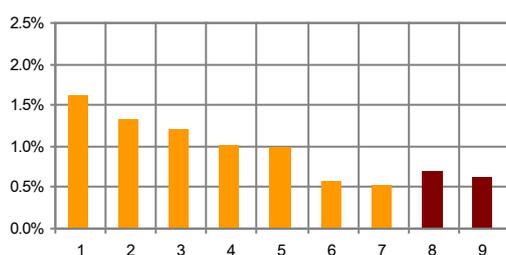
⁴² Based on the 2014 data, the premiums to GDP ratio on non-life insurance was 3.51% on average in developed industrial countries and 1.35% in emerging market countries (source: Swiss Re, Sigma No 4/2015, May 2015).

Main ratios of insurance sector of Armenia



Source: Central Bank of Armenia.

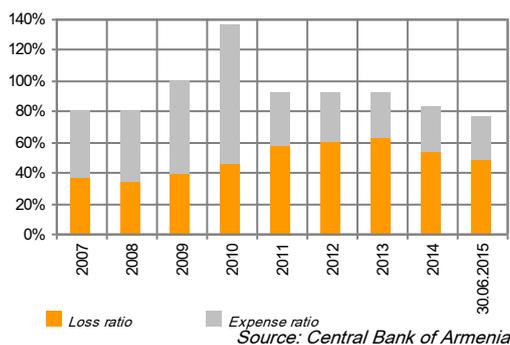
Insurance premium/ GDP in EEC and CIS (2014)



1. Georgia, 2. Ukraine, 3. Turkey, 4. Russia, 5. Romania, 6. Azerbaijan, 7. Kazakhstan, 8. Armenia 2014, 9. Armenia 30.06.2015

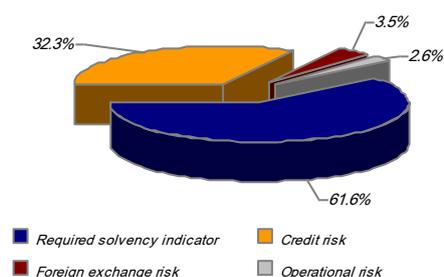
Source: Central bank of Armenia, Swiss Re, Sigma No 3/2013.

Loss and expense ratios of Insurance sector



Source: Central Bank of Armenia.

The share of risk weighted assets and required solvency in insurance sector capital adequacy ratio, as of 30.06.2015



Source: Central Bank of Armenia.

In the first half of 2015, the loss ratio of insurance companies has reduced by 6.2 percentage points to 47.5%⁴³. The insurance companies' expense ratio⁴⁴ has increased by 0.2 percentage point in relation to the previous year to 29.5%, in the first half of the year.

The shares of risk-weighted assets and required solvency in the insurance sector's capital adequacy ratio were 38.5 percent and 61.5 percent, respectively. The regulatory capital adequacy ratio of the insurance sector was 180.2% at the end of the reporting period (the marginal value of regulatory capital adequacy is 100%).

Solvency risk

As stress-scenarios shown below unfold (a 10% rise in the indemnification rate and a 5% growth of insurance payments), the change in solvency levels of insurance companies was assessed. Results suggest that the level of solvency will not incur notable changes, so the likelihood of risks undermining financial stability in the insurance sector is very low.

Solvency assessment stress scenarios

30.06.2015	Stress scenarios
	Growth of reimbursement rates, 10%, and insurance payments increase, 5 %
Required growth of UIPR of the insurance sector, if the stress scenario occurs	AMD 1.1 billion or 5.8 % of regulatory capital of the sector
Total capital adequacy ratio of the insurance sector, if the stress scenario occurs	169.8%

Source: Central Bank of Armenia.

Credit risk

Allocating funds of the insurance sector in low-risk assets allows to keep the 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

30.06.2015	Stress scenarios		
	Classifying 30% of "standard" assets into "watched" category	Classifying 5% of "standard" assets into "loss" category	Sharp increase of outstanding claims reserves, 25%
Loss of the insurance sector	AMD 0.7 billion or 3.8% of regulatory capital	AMD 1.3 billion or 7.0% of regulatory capital	AMD 0.4 billion or 2.0% of regulatory capital
The total capital adequacy ratio of the insurance sector, if the stress scenario occurs	174.8%	170.2%	176.6%

Source: Central Bank of Armenia.

⁴³ The loss ratio has been 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).

⁴⁴ The expense ratio has been calculated using the following formula: non - interest expense / (earned insurance premiums – sums refunded on the contracts terminated).

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

Foreign exchange risk

The results of foreign exchange stress scenario suggest that the loss of insurance companies resulting from foreign exchange risk is not considerable.

Foreign exchange risk assessment stress scenarios⁴⁵

30.06.2015	Stress scenarios		
	Gain (loss) in case of 1% AMD depreciation (appreciation) versus USD	Gain (loss) in case of 1% AMD depreciation (appreciation) versus EUR	Maximum potential 10-day loss valued through a VaR method
Insurance sector's gain/loss in case of foreign exchange revaluation	AMD 29.1 million or 0.2% of regulatory capital (AMD -29.1 million)	AMD 0.5 million or 0.003% of regulatory capital (AMD -0.5 million)	AMD 185.6 million or 1.0% of regulatory capital

Source: Central Bank of Armenia.

Liquidity risk

The level of liquidity risk in the insurance sector is low, which can be seen through the results of the stress scenario.

Liquidity risk assessment stress scenario

30.06.2015	Stress scenarios
	Sharp increase of outstanding claims reserves, 25%
Required growth of outstanding claims reserves when the stress scenario occurs	AMD 0.4 billion or 2.0% of regulatory capital
Liquidity of insurance companies when the stress scenario occurs	443.7%

Source: Central Bank of Armenia.

Overall, the share of insurance sector in the financial system remains small. Risks to insurance companies are controllable and non-vulnerable in the financial stability point of view.

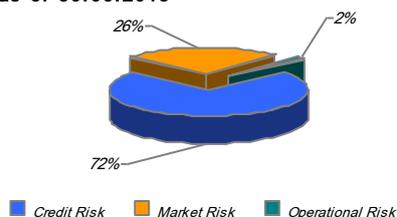
4.4. SECURITIES MARKET PARTICIPANTS

As of end of the first half of 2015, there were 21 banks providing investment services and 8 investment companies in the securities market of Armenia.

In the first half of 2015, relative to the previous year, total assets of investment companies have increased by 7.2% and amounted to AMD 27.2 billion, and total capital has reduced by 15.4% to

⁴⁵ 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 considers historical exchange rate series of currencies) makes an assumption that FX position of insurance companies would not change in a 10 - day time - span.

The structure of assets in the capital adequacy ratio of investment companies as of 30.06.2015



Source: Central Bank of Armenia.

AMD 4.2 billion. As of end of the first half of 2015, total profit of investment companies has been AMD 106 million. Moreover, five companies posted profit and three incurred losses.

As of end of the first half of the year, credit risk of investment companies accounted for 71.9% of risk-weighted assets, market risk constituted 26.1% and operational risk, 2.0%. Remarkably, interest rate risk had the largest share in market risk of investment companies (67.0%), while foreign exchange and share price risks constituted 28.5% and 4.5%, respectively. The capital adequacy of investment companies is much higher than the required minimum level, so the abovementioned risks are manageable.

As of end of the first half of the year, 27 classes of securities of 16 reporting issuers were admitted to trading in the regulated market. Two issuers were accountable on both shares and bonds. The share of equity securities issued by three commercial banks was 34.0% of total issuance of securities, while the share of bonds issued by four financial institutions was 77.0% of total issuance of bonds. Total amount of shares was AMD 39.1 billion and total amount of bonds, AMD 20.5 billion. Eight of these bonds were in foreign currency with their share making up 53.0%.

At the end of the first half of 2015, there were 2261 registries of nominal security holders and 105459 nominal security owners running registries at the Central Depository of Armenia.

SUMMARY

In the first half of 2015, the financial risks remained manageable in the banking sector. However, the dram depreciation occurred in the end of 2014 has contributed to the credit risk derived from the foreign currency risk. In the background of high dollarization of loan portfolio, the debt burden of foreign currency loans of legal entities and households that receive dram-income has increased, endangering the loan repayment. In this context, higher loan loss provisioning and lower interest margin have negatively affected the banking sector profitability.

Non-bank financial institutions also underwent business expansion, and the regulatory indicators remained within the required prudential limits.

5. FINANCIAL MARKET INFRASTRUCTURE STABILITY

Given the importance and the impact of payment and settlement system on the monetary policy and financial stability of Armenia, 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, over 99 percent of interbank settlements are made via the Central Bank systems⁴⁶.

5.1. INTERBANK PAYMENTS VIA ELECTRONIC PAYMENT SYSTEM OF THE CENTRAL BANK

In the first half of 2015, there were about 1.5 million payments, totaling AMD 8156.3 billion, executed via the Electronic Payment System (EPS) of the Central Bank of Armenia.

In the period under review, the value of payments kept on growing while the number of payment messages has plunged sharply, but resumed somehow in the second quarter.

In January, there was a sharp fall of both value and number of EPS payments because of decrease in interbank and budgetary payments. The further increase of the volume of EPS payments was due to operations with the Central bank, which decreased drastically in the end of the reported period. Thus, some activation was noted in the interbank market. The interbank payments have the most important impact on the number of EPS payments, as the majority of those payments is done by a single message type, while the number of operations with the Central bank is small and constitutes an insignificant part of total payments.

The risks in the system are reviewed separately for each area described below.

Credit risk

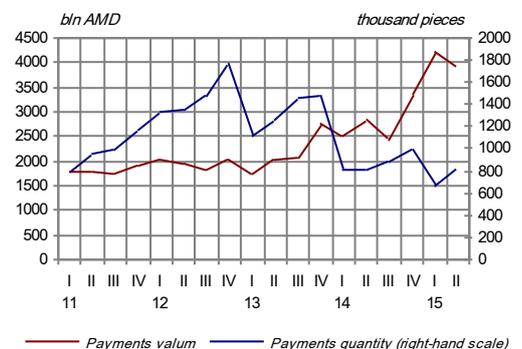
Credit risk to the settlement bank (i.e. the Central Bank of Armenia) in the system is non-existent since the participant can use an intraday repo instrument with their correspondent account, which is secured by government bonds of the Republic of Armenia, securities of the Central Bank of Armenia, and/or high-rated corporate bonds, in case of insufficient funds. The size of the attracted fund is calculated using the percentage subtracted from the market value of the bond (haircut). Nor is there credit risk to the recipient as it receives the notice of the payment only after the payment is made final and irrevocable⁴⁷.

⁴⁶ Payments via the Central Bank systems involve EPS payments without stock exchange trades, also transactions concerning the CBA indirect monetary instruments, the Central Bank's internal payments, as well as final settlements of ArCa cards system and the cash leg of the transactions of the Government Securities Accounting and Settlement System (GSASS). For details, please see the paper "Payments and Securities Settlement Systems in the Republic of Armenia", 2010.

⁴⁷ For details, please see the "Financial Stability Report", 2007, and the paper "Payments and Securities Clearance and Settlement Systems in the Republic of Armenia".

The results of monitoring of the EPS functioning suggest that the system is safe and does not create problems in terms of stability.

Payments by Electronic Payment System (without exchange market transactions)

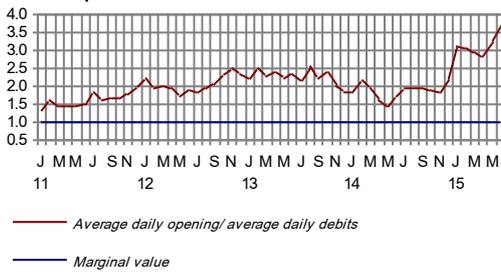


Source: Central Bank of Armenia.

There is no credit risk identified in the EPS.

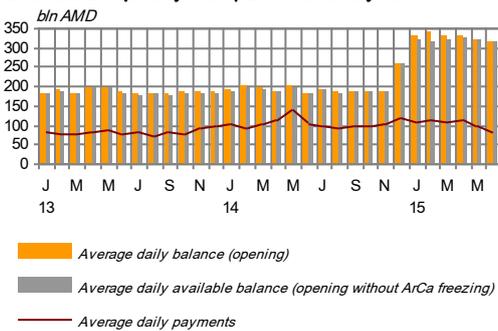
The likelihood of emergence of liquidity risk and systemic problems in the EPS is very low.

The dynamics of average daily payments on own expense



Source: Central Bank of Armenia.

Average daily payments, average daily opening balances, average daily opening available liquidity comparative analyses

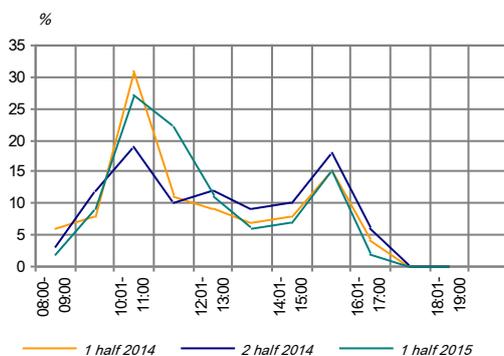


Source: Central Bank of Armenia.

The rejections due to insufficient liquidity are negligible, as well.

Some changes were observed in intraday distribution of payments.

Intraday distribution of the value of payments on an average semiannual basis



Source: Central Bank of Armenia.

Liquidity risk

In the period under review the daily average indicator of own liquidity used for assessment of liquidity risk⁴⁸ was 3.2 for the first half of the year. This unprecedented high indicator was due to sharp increase of liquidity at the beginning of the day and some decrease of the value of payments.⁴⁹

The increase of the liquidity at the beginning of the day was due to the amendments made in the regulatory reserves requirements in December of the previous year. As a result, the liquidity held in AMD correspondent accounts of banks with the Central bank notably increased. At the beginning of the reported period, the value of payments recorded a steady trend, though some decrease was noted during the last two months. The aforementioned resulted in a significant rise of own liquidity indicator, having a positive impact on the management of liquidity risk in the system.

In assessing the liquidity risk, it should be noted that the calculation of the abovementioned indicator does not include incoming payments (crediting of the account) and/or funds from other sources to increase liquidity.

The above indicator was monitored across individual banks as well, and the results of the monitoring suggest that the likelihood of liquidity risk is estimated to be minimal.

Reported rejections in the system and their share in total payments made through the system are important measures for the assessment of the liquidity risk.

The number of rejections due to insufficient liquidity as well as its share in the EPS payments remain negligible – a maximum of 0.6% by value and 0.01% by number in the first two quarters of the year.

These rejections are merely due to individual cases and may be a result of improper management of liquidity (payment flows) by the participants, so this could not affect the liquidity of the system.

Intraday distribution of payments

There were two peak hours (in terms of value and number) during an operational day for executing payments – at the beginning and closing of the day.

Some changes were recorded in patterns of intraday distribution of payments. The peak for payments by number at the closing of the day remained at the same level of 20.0% (from 3.00 p.m. to 4.00 p.m.). Meanwhile, the share of the peak for payments by number at the opening of the day increased significantly (a semi-annual indicator of 19.0%, from 10.00 a.m. to 11.00 a.m.), which is 4-5 percentage points higher than the indicator reported in the same period of the previous year. This has led to unequal distribution of payments by number at other hours of the day.

⁴⁸ The daily average indicator of own liquidity is calculated on the basis of a ratio of opening liquidity on dram 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 for a system level (aggregate for all banks), so indicators may vary across commercial banks.

⁴⁹ All debits of settlement (correspondent) accounts held in the CBA, including EPS payments and other transactions (i.e. via paper-based orders)

The peak for payments by value remained the same (from 10.00 a.m. to 11.00 a.m.), yet the share has increased compared to the previous half of the year by 8.0 percentage points to an average 27.0% of intraday payments. This indicator is still lower by 4.0 pp. compared to the same period of the previous year. The share of peak for payments by value at the closing of the day decreased by 3.0 pp. It is noteworthy that more than 70.0% of intraday payments by value were executed before 1.00 p.m. in the reported period (in the second half of 2014 this indicator was 57.0%, and in the first half of 2014, 66.0%). In spite of the reported unequal intraday distribution of payments, this significant decrease in share of payments by value at the closing of the day is leveling off the likelihood of failure by the system to execute the large value of payments due to operational problems emerged at the end of the operational day.

Despite the changes in the hourly distribution of payments, the system remained free of troubles while the risk was estimated to be minor. The peak of payments by value was recorded at the beginning of the day and the risk to liquidity and capacity of the system is estimated to be minor. Concentrations at the closing of the day (in terms of number of payments) did not cause problems due to sufficient capacity and optimization of message types in use (the latter resulted in a considerable reduction of total payment flows).

Given the positive performance of liquidity and operational availability indicators of the system, as well as negligible share of rejections in total payments (for details, please see the previous subsections), an uneven distribution and concentration of payments during certain hours of the day did not lead to problems in the first half of 2015. The likelihood of emergence of risk to the system is generally low.

System capacity

In the first half of 2015, the number of payments per hour in the system (the maximum amount of payments per hour by months) remained unchanged, overall. The maximum hourly rate grew to 5419 payments per hour against 4652 payments/hour in 2014. The peak hour was recorded in February, from 10.00 a.m. to 11.00 a.m., making up 27.0% of the number and 6.0% of the value of the day's payments.

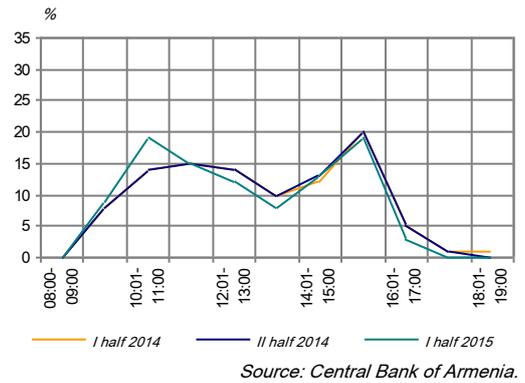
The maximum daily rate of payments decreased to 21962, against 26028 payments/day in 2014.

The shares of all marginal indicators (large number of payments per hour) have shrunk. Moreover, starting from October 2013, the 4300 and more payments per hour ratio was no longer observable whilst the 3500 and more payments per hour rate has become very rare.

The matching with total payments via EPS shows that an abrupt fall in the marginal indicators was due to the reduced number of total EPS payment messages. The above system capacity indicators and the results of the target study⁵⁰ denote that the hourly peaks were mainly determined by increased activity of a few commercial banks in certain days. Taking into account the

⁵⁰ The study was conducted in order to reveal the character of the maximum hourly rate of payments (by months) and the behavior of the participants.

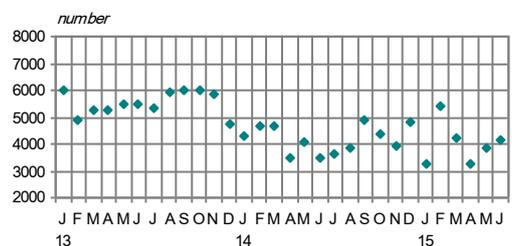
Intraday distribution of payments on an average semiannual basis



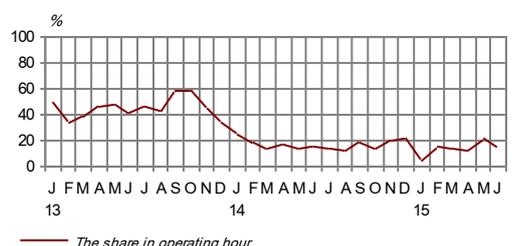
The concentrations during some hours of the day did not cause problems.

During the reported period, the payments per hour decreased and the probability of risk emergence to the system capacity is low, overall.

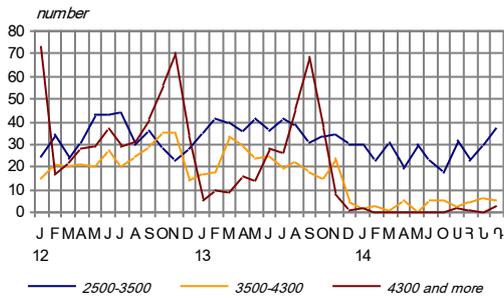
Maximum number of payments per hour, by month



Dynamics of 2500 and more payment and the share in operating hour in the given month



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



Source: Central Bank of Armenia.

optimization of message types applicable in the system as well as the lack of actual incidents in the meantime, the probability of emergence of capacity-related risks is estimated to be low.

Operational availability of the system

In the first half of 2015, no significant incidents affecting the operational availability of the EPS were reported. As a result, the operational availability of the EPS has been 99.7% for the period under review. This is quite a high indicator and is in line with the service level defined by the operator⁵¹.

Only one incident related to the failure of connection of BankMail component with the applications was somehow significant (with duration of one hour). Because of this incident the operational day was extended. The problem was quickly solved. A transition to the reserve option was implemented and the normal operation of the system was restored. This failure had some impact on the stock deponation transactions of some participants, but the operational day was closed on time.

5.2. CREDIT REGISTRY AND ACRA CREDIT BUREAU

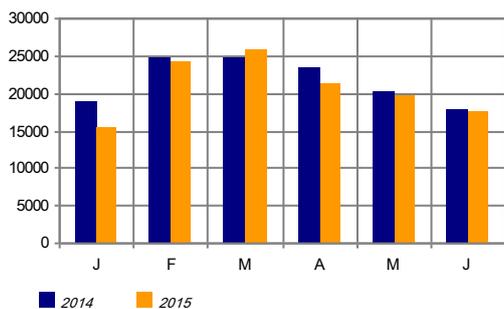
The Credit Registry

The Credit Registry has been functioning within the structure of the statistical department of the Central Bank of the Republic of Armenia since January 1, 2003. The Credit Registry is designed to collect reliable data for effective monitoring and analysis. The Credit Registry keeps record 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 the first half of 2015, the number of loans recorded in the Credit Registry was 2.2 million loans to individuals and 0.2 million loans to legal persons, totaling 2.4 loans.

The number of loans registered in the Credit Registry

Number of loans	Outstanding	Repaid	Total
Loans to individuals	585,917	1,636,546	222,2463
Loans to legal persons	17,092	127,234	144,326
Total	603,009	1,763,780	2,366,789

The number of loans in 2014-2015



Source: Central Bank of Armenia.

As compared to the same period of the previous year, the total number of loans registered in the Credit Registry augmented by 443,871 loans. At the end of the first half of the previous year, the Credit Registry possessed information on 129.170 loans outstanding, while in the first half of this year there was information on 123.886 loans.

A number of methodical and software updates were completed. In particular, the Credit Registry has discontinued providing data to banks and crediting organizations on the creditworthiness of the

⁵¹ According to the EPS participation agreement the operational availability of the system should be at least 98.0% yearly.

customers for their ongoing monitoring since January 1, 2014. Both natural and legal persons may obtain data from the Credit Registry about their credit history once a year, for free. The new software input processes are still developed, which will help banks and credit organizations to provide information to ARCA Credit Bureau and Credit Registry in one united report.

These amendments will provide for higher accuracy of information gathered by the Credit Registry, which may lead to a more efficient use of information for monitoring and analysis by other departments of the Central Bank.

The ACRA Credit Bureau

In the first half of 2015, the number of borrowers registered with the ACRA Credit Bureau has increased by 2.3%, relative to December 2014, and amounted to 1.5 million borrowers as of June 30. Of this number, 98.0 percent are individuals.

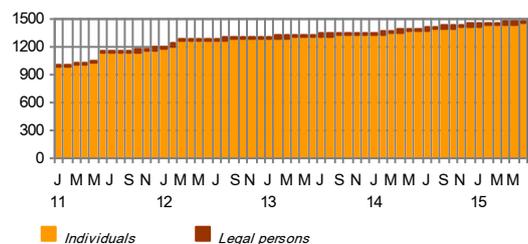
The number of loans available in the database has grown by 6.9% and reached 10.8 million, as of June 2015, compared to December 2014.

The Credit Bureau has started providing credit reports since April 2007. The number of credit reports provided in the first half of 2015 has grown by 23.0 percent compared to the same period of the previous year.

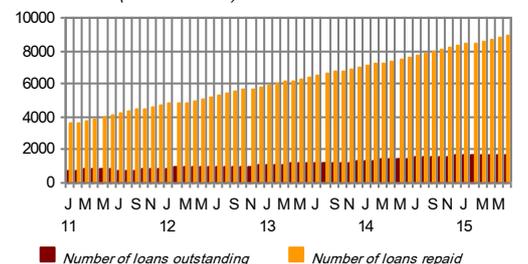
Starting from 2015, the Credit Bureau has been cooperating with “E-dram” LLC and “Moby-dram” CJSC. Thus, it is possible to execute online payments for Credit Bureau services via POS terminals of the abovementioned companies. Talks are being held with “ArmenTel” CJSC, a telecommunications service provider, in the field of organizing information circulation. The Credit Bureau receives information from such public databases as the Ministry of Labor and Social Issues and the Traffic Police Service of the Republic of Armenia Police on unpaid fines within 60 days (calculated from the next day after the last date specified to pay the penalty as prescribed by the legislation of Armenia). Negotiations between the Credit Bureau and the RA Ministry of Finance concerning obtaining information on tax liabilities non-performed in a duly established timeframe are underway.

A multi-level coding system has been developed to protect information owned by the Credit 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.

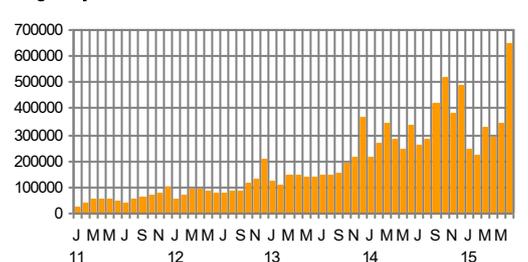
The number of borrowers registered in ACRA database (in thousands)



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



The number of reports provided by ACRA credit registry



Source: Central Bank of Armenia.

SUMMARY

The results of monitoring assure that credit and liquidity risks are minimized in the EPS. The system capacity is sufficient and ensures the continuity of payments during the day. No operational risks were recorded in the system; the operational availability of the system was maintained on an internationally accepted level.

Overall, the EPS functioning is assessed satisfactory enough; the developments in the payment and settlement system are

manageable in terms of financial stability and no risks exposed to the system arise.

During the first half of 2015, an increase of loans registered with the Credit Registry of the Central bank of Armenia and ARCA Credit Bureau was noted, along with development of united reporting form and increased efficiency of general performance.

CHARTS

<i>Regional economic growth rates</i>	8
<i>Inflation in selected countries</i>	8
<i>Annual growth rate of world trade</i>	10
<i>Brent oil prices</i>	10
<i>Copper prices</i>	10
<i>Molybdenum prices</i>	10
<i>Wheat prices</i>	11
<i>Gold prices</i>	11
<i>10-year government bond yield</i>	12
<i>Interest rate policies of central banks</i>	13
<i>Interbank interest rates</i>	13
<i>Dynamics of RUB and EUR versus USD exchange rate</i>	13
<i>The real growth of GDP and main sectors of economy</i>	14
<i>GDP expenditure components</i>	14
<i>Growth of lending to main sectors of economy</i>	15
<i>Government budget main indicators</i>	16
<i>Main indicators of the balance of payments</i>	16
<i>Armenia's imports by commodity groups</i>	17
<i>Armenia's exports by commodity groups</i>	17
<i>Armenia's foreign trade, by country, as of 30.06.2015</i>	17
<i>Nominal average wage and unemployment</i>	18
<i>Future conditions index and its components</i>	18
<i>The structure of household liabilities to financial institutions</i>	18
<i>Consumer loan portfolio structure of banks and credit organizations of Armenia</i>	18
<i>Consumer and mortgage loan portfolio of banks and credit organizations</i>	19
<i>Households' debt and income indicators</i>	19
<i>Net private transfers and income of seasonal employees</i>	19
<i>Net non-commercial remittances of individuals by banking system</i>	20
<i>Remittances by countries of origin</i>	21
<i>Average apartment price index in Yerevan</i>	20
<i>Real estate sale and purchase transactions index</i>	21
<i>The volumes of real estate out of operation held for sale and got as collateral</i>	21
<i>Volume of loans to real estate market</i>	21
<i>Monthly volume of repo transactions and repo interest rates</i>	23
<i>Volume of transactions on credit resource platform and weighted average interest rate</i>	23
<i>Yield curve change</i>	25
<i>Spread of 6-month and 10-year bonds</i>	25
<i>Treasury bills allocation volumes and weighted average yield</i>	25
<i>Security trades by investment service providers</i>	25
<i>Volume of transactions with government securities and volume of transactions with government securities/outstanding government securities ratio</i>	26
<i>Repo transactions by investment service providers</i>	26

<i>Securities trades and repo transactions at regulated market of securities</i>	26
<i>Volume of operations in exchange market of Armenia and the exchange rates</i>	26
<i>Exchange rates in exchange market of Armenia</i>	27
<i>The structure of financial system assets, by financial institutions</i>	28
<i>Banking system stability map</i>	28
<i>Financial intermediation</i>	28
<i>Share of 4 largest banks` assets, liabilities and capital in total banking system</i>	29
<i>Foreign investors' participation in banking system capital of Armenia</i>	29
<i>The structure of risk weighted assets calculated in banking system capital adequacy index, as of 30.06.2015</i>	29
<i>The change of the share of NPLs in the loans to different sectors of economy</i>	29
<i>Loans to economy</i>	30
<i>Structure of bank loans to residents, by economy sectors</i>	30
<i>Share of loans to the businesses and individuals in total loan portfolio</i>	30
<i>Share of non-performing loans in total loan portfolio</i>	30
<i>Loans to major borrowers/total loans</i>	31
<i>The number of banks violating capital adequacy regulatory ratio under dynamic growth of loan losses</i>	31
<i>The dynamics of actual and regulatory liquidity ratios of the banking system</i>	31
<i>The ratio of banking system assets to liabilities by terms to maturity</i>	31
<i>The ratio of banking system major liabilities to total liabilities</i>	32
<i>The structure of funds financing loans of banking system of Armenia</i>	32
<i>The number of commercial banks violating liquidity regulatory ratios in case of individuals' call and time deposits runoff</i>	32
<i>Net income of the banking system from foreign currency trades and revaluation</i>	33
<i>Average interest rates of bank deposits and loans</i>	34
<i>The share of financial assets at fair value through profit or loss and available for sale financial assets in total assets</i>	34
<i>The structure of total regulatory capital</i>	35
<i>Profitability ratios of the banking system</i>	35
<i>Incomes and expense of banking system</i>	35
<i>Banking system ROA in selected East European and CIS countries</i>	35
<i>Banking system ROE in selected East European and CIS countries</i>	36
<i>Balance of loans to residents by credit organizations, by sectors</i>	36
<i>Insurance sector assets, as of 30.06.2015</i>	37
<i>Main ratios of insurance sector of Armenia</i>	38
<i>Insurance premium/ GDP in EEC and CIS</i>	38
<i>Loss and expense ratios of Insurance sector</i>	38
<i>The share of risk weighted assets and required solvency in insurance sector capital adequacy ratio, as of 31.12.2014</i>	38
<i>The structure of assets in the capital adequacy ratio of investment companies as of 30.06.2015</i>	40
<i>Payments by Electronic Payment System</i>	41
<i>The dynamics of average daily payments on own expense</i>	42
<i>Average daily payments, average daily opening balances, average daily opening available liquidity comparative analyses</i>	42
<i>Intraday distribution of the value of payments on an average semiannual basis</i>	42

<i>Intraday distribution of payments on an average semiannual basis</i>	<i>43</i>
<i>Maximum number of payments per hour, by month</i>	<i>43</i>
<i>Dynamics of 2500 and more payment and the share in operating hour in the given month</i>	<i>43</i>
<i>The dynamics of payments exceeding the threshold of 2500, 3500 and 4300 payments per hour</i>	<i>44</i>
<i>The number of loans in 2014-2015</i>	<i>44</i>
<i>The number of borrowers registered in ACRA database</i>	<i>45</i>
<i>The number of loans registered in ACRA database</i>	<i>45</i>
<i>The number of reports provided by ACRA credit registry</i>	<i>45</i>

TABLES

<i>IMF Overview of the World Economic growth Projections, 2014-2015, in percent</i>	9
<i>Qualitative public debt indicators of the Republic of Armenia</i>	16
<i>Residential buildings completion by sources of financing</i>	22
<i>Indices of government bonds, as of 30.06.2015</i>	25
<i>The share of 3 and 5 largest issuers' by capitalization, 2010 – 2015</i>	26
<i>The Herfindahl-Hirschman Concentration Index</i>	29
<i>Credit risk stress scenarios</i>	30
<i>Stress scenario of credit risk derived from off-balance sheet contingent liabilities</i>	31
<i>Liquidity risk stress scenarios</i>	32
<i>Stress scenario of liquidity risk derived from off-balance sheet contingent liabilities</i>	32
<i>Foreign exchange risk stress scenarios</i>	33
<i>Interest rate risk stress scenarios</i>	34
<i>Real estate price change stress scenarios</i>	35
<i>Assets, liabilities, capital and profit of credit organizations</i>	36
<i>Credit risk assessment stress scenarios</i>	37
<i>Solvency assessment stress scenarios</i>	38
<i>Credit risk assessment stress scenarios</i>	38
<i>Foreign exchange risk assessment stress scenarios</i>	39
<i>Liquidity risk assessment stress scenario</i>	39
<i>The number of loans registered in the Credit Registry</i>	44

GLOSSARY OF TERMS

<i>Economic growth</i>	The growth of volume of goods and services produced in the economy during a certain period of time.
<i>Inflation</i>	An increase in the general level of prices of goods and services.
<i>Consumer price index</i>	An index of the variation in prices paid by typical consumers for retail goods and other items. The consumer price index measures the changes in the price of a market basket of consumer goods and services purchased by households.
<i>Balance of payments</i>	A system of recording of all economic transactions of Armenia (residents and non-residents) with the rest of the world over a reporting period (a quarter, a year).
<i>Foreign trade</i>	This involves an exchange of capital, goods and services across international borders or territories, in the form of exports and imports.
<i>Gross external debt</i>	Gross external debt, at any given time, is the outstanding amount of those actual current, and not contingent, liabilities that require payment(s) of principal and/or interest by the debtor at some point(s) in the future and that are owed to nonresidents by residents of an economy.
<i>Credit risk</i>	Credit risk refers to the risk that a borrower will default on any type of debt by failing to make payments which it is obligated to do. The risk is primarily that of the lender and includes the lost principal and interest, disruption to cash flows and increased collection costs.
<i>Liquidity risk</i>	Liquidity risk is the risk that a given security or asset cannot be traded by the financial institution quickly enough in the market to prevent a loss (or make the required profit).
<i>Foreign currency risk</i>	Foreign currency risk is the risk that a change in exchange rate in the market will adversely affect profits and/or capital of the financial institution.
<i>Interest rate risk</i>	Interest rate risk is the risk that interest rate volatilities in the market will adversely affect profits and/or capital of the financial institution.
<i>Price risk</i>	Price risk is the risk that a change in price of securities in the market or price of similar financial instruments on balance sheets will adversely affect profits and/or capital of the financial institution.
<i>Standard asset</i>	An asset which is serviced under a contract, and is not problematic.
<i>Watched asset</i>	An asset which is serviced under an original contract yet certain circumstances have emerged that may undermine the borrower's ability to serve that asset.
<i>Substandard asset</i>	An asset the contractual obligations towards which are not performed due to the borrower's fragile financial standing or inability to repay the debt.
<i>Doubtful asset</i>	An asset the contractual obligations towards which are not performed; it is more problematic, making its collection at the given time very difficult or impossible.
<i>Loss asset</i>	An asset non-collectable and fully impaired uncollectible, so that its recording on the balance sheet is no longer reasonable.
<i>Nonperforming asset</i>	An asset which has been classified by the bank as watched or substandard or doubtful or bad.
<i>Major borrower</i>	A party the risk on which exceeds 5 percent of total capital of the bank.
<i>Major liability</i>	A liability that amounts to 5 percent and more of total liabilities of the financial institution, without regard to affiliation.
<i>Return on assets (RoA)</i>	A ratio of net annual profit to average annual total assets.
<i>Return on equity (RoE)</i>	A ratio of net annual profit to average annual total capital.
<i>Total liquidity</i>	A ratio of high liquid assets to total assets.

<i>Current liquidity</i>	A ratio of high liquid assets to demand liabilities.
<i>Regulatory total capital</i>	The difference between total capital as shown in statement on financial standing and deductions as specified in Central Bank “Regulation 2 on Banks and Banking”.
<i>Capital adequacy</i>	A ratio of regulatory total capital to risk weighted assets.
<i>Leverage</i>	A ratio of total assets to total capital.
<i>Off-balance sheet contingent asset</i>	Off-balance sheet contingent assets include outstanding credit lines, credit cards and overdrafts as well as letters of credit, guarantees and warranties provided.
<i>Net provisioning</i>	The difference between provisions to and recoveries from assets loss reserve fund.
<i>Net foreign currency position</i>	The difference between assets and liabilities in FX assets and local currency assets containing FX risk.
<i>Gross foreign currency position</i>	This position measures the sum of absolute values of positions of various currencies.
<i>The Herfindahl-Hirschman index</i>	This index is defined as the sum of the squares of the market shares. It varies between 0 and 1, characterizing the level of concentration (values near to 0 denote lower concentration).
<i>Economic cost of capital</i>	The difference of the present value of total assets and present value of total liabilities.
<i>Spread</i>	The difference between deposit and credit interest rates

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
FRS	Federal Reserve System
NMC	National Mortgage Company
FDI	Foreign Direct Investment
RF	Russian Federation
IFRS	International Financial Reporting Standards
MTPL	Motor third party liability insurance
CDA	Central Depository of Armenia
TB	Treasury Bills
EPS	Electronic Payments System
GSASS	Government Securities Accounting and Settlement System
NMC	National Mortgage Company