CENTRAL BANK OF THE REPUBLIC OF ARMENIA

FINANCIAL STABILITY REPORT

2016

2017

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 analysis is available in the Central Bank's periodicals, such as Status Report on Monetary Policy Implementation and Armenian Financial System: Development, Regulation, and Supervision.

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Financial stability can be characterized as the concurrence of financial and macroeconomic conditions at a time when the financial system, i.e. financial institutions, markets and market infrastructures, is capable of withstanding probable shocks and instability, minimizing the probability of interruption of intermediation function.

In defining financial stability, it is taken into consideration that financial instability can emerge as a result of the 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 to identify main risk sources, poorly-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 the financial system as well as the capacity of the 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 the financial stability of the Republic of Armenia as well as provide an opportunity to debate on how to minimize such risks.

The Central Bank is tasked with maintaining 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, monetary and macroeconomic stability contributes to the minimization of risks threatening financial stability. The financial sector plays an important role in the overall economic system, and the financial sector needs to maintain continuity and sustainability of processes to contribute 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 the macro-environment and the financial sector and their influence on the developments in all sectors of the economy and financial system.

Risks affecting the 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 the 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 the global economy,
- risks derived from developments in the macroeconomic environment of Armenia,
- risks derived from developments in the 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 overall economy 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 2016, the financial system of Armenia bored losses from a number of materialized risks. However, the main economic indices signaled momentum and gains were recorded.

In 2016, the financial system of Armenia bored losses from the materialization of the previous years' risks. Owing to the actions taken by the Central Bank, the stability of the financial markets was maintained, lending and deposit-taking grew slightly, banking system reported profit and financial stability indicators improved.

The persistent low level of global economic growth may boost the likelihood of further materialization of risks.

Low prices of base metals, slow recovery of domestic consumption, as well as fall in foreign investments were maintained. Russia faced an economic downturn, which, negatively affected the inflow of private remittances to Armenia and the stirring of the economic activity.

The recovery of global growth was weaker than initially estimated. The geopolitical tensions skewed to the downside the global trade volumes and lower prices for some commodities persisted.

The monetary authorities of both developing and developed countries carried out expansionary monetary policy to support economic growth, while the long-awaited rise of the US Fed rate occurred only at the end of the year. In the emerging countries, the capital outflow continued in parallel with the slowdown of economic growth, and the monetary authorities favored low rates policies.

No significant improvement was registered in Armenia's main trade partners; European Union countries and Russia, and therefore the growth of external demand, capital investments and money transfers to Armenia were limited (for details, please see the box “Economic developments in Russian Federation” and the section “Developments in the global economy”).

In 2016, the economic growth reached only 0.2% in Armenia (3.0% in 2015), contributed by manufacturing and service sectors, while the construction and agricultural sectors reported a fall (for details, please see the section “Macroeconomic environment developments in Armenia”).

Given the recent deflationary environment, the Central Bank of Armenia significantly loosened the monetary conditions, which had a positive impact on the private consumption. The Central Bank's reduction of the refinancing rate has had its effect on the drop of the interbank, as well as credit and deposit markets' interest rates.

The banking capital and liquidity grew, creating an additional cushion to absorb potential risks.

The commercial banks have been profitable enough and increased their loan and deposit portfolios. The capital adequacy and liquidity ratios improved, mainly due to the inflow of own resources, which occurred due to the capital replenishments of the banks to comply with the new minimum total capital threshold set by the CBA.

A declining trend of financial system risks was observed. The risks remain manageable and do not entail any financial stability issues (for details please see the sections “Stability of financial institutions” and “Stability of financial market infrastructures”).

1. DEVELOPMENTS IN THE GLOBAL ECONOMY[1]

1.1. MACROECONOMIC ENVIRONMENT

The world economic growth outlook has weakened worldwide during the year. Poor economic growth in developed countries, enduring low commodity prices, as well as squat recovery of global trade and weak capital flows were the main preconditions for slowing world economic growth. However, some positive trends became tangible in the end of the year, providing grounds for positive expectations for economic growth in 2017.

The economic growth speed-up in the years to come may be mainly driven by high projected economic growth in the United States under a fiscal easing policy, as well as an expected expansion of world trade and a rise in oil prices.

However, downside risks may materialize along with the positive developments, among which are slower-than-projected economic recovery in the developed countries under tighter financial conditions, rising geopolitical tensions and a more-than-expected slowdown in China's economic activity.

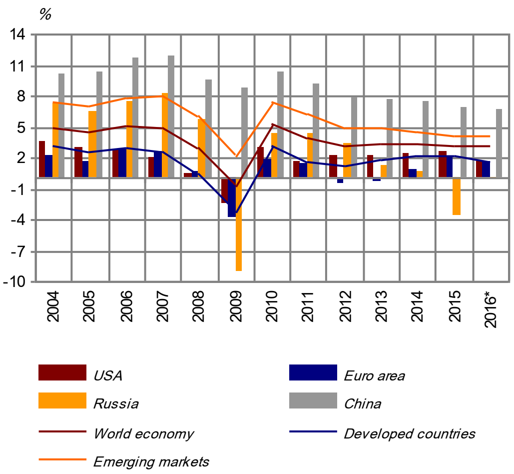
Risks hindering the economic growth in the previous year persisted.

The economic growth remained subdued during the year, while downside risks prevailed. The recovery in financial markets and fuel and energy resources started at the beginning of the year and endured throughout 2016, transmitting optimistic impulses to the world economy. The yearend was marked by positive expectations.

The main risks materialized this year were slower-than-expected economic recovery in many developed countries, emergent political instability, and low effectiveness of monetary policies and reluctance of policy makers to switch to expansionary fiscal policy.

The global economy will undergo a slow pace of growth in 2017. Both in developed and developing countries no significant changes in economic growth rates compared to the previous year will be recorded.

Economic growth by regions



*Indicators marked by asterisk in this chart and the ones following thereafter are the IMF estimates (April 2017).

Source: IMF.

The global economic growth was 3.1% in 2016, according to the IMF (3.2% in 2015).

During the year, the economic growth rate of developing and emerging countries did not accelerate, while a frail slowdown of economic growth was recorded in developed countries.

The economic growth in advanced economies was estimated 1.7% in 2016, falling by 0.4 pp. as compared to the previous year. In developing countries the economic growth remained at 4.1%[2].

In the context of the current economic activity and price changes in commodity markets, a low inflationary environment was maintained in the global economy. Consequently, the IMF has estimated the inflation to be 0.7% in advanced countries and 4.5% in developing countries. Moreover, no inflationary pressures are expected to occur in the following year.

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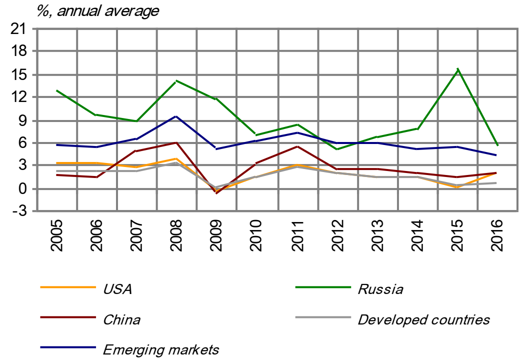
[1] *International developments and predictions were based on information taken from IMF, World Bank, Economist Intelligence unit, Financial times, Bloomberg, RBC, the Institute of International Finance and other sources.*
[2] *All the forecasts and assessments of IMF were taken from "World Economic Outlook update, April 2017"*

IMF Overview of the World Economic growth Projections, 2015-2017, in percent

Indicator (economic growth)	2015 assessments as of 31.12.2016	2016 assessments as of 01.04.2017	2017 forecasts as of 01.04.2017
World economy	3.2	3.1	3.5
Developed countries	2.1	1.7	2.0
USA	2.6	1.6	2.3
Euro area	2.0	1.7	1.7
Developing countries	4.1	4.1	4.5
CIS	-2.8	0.3	1.7
Russia	-3.7	-0.2	1.4
China	6.9	6.7	6.6

Inflation in a number of countries



Source: IMF.

The lackluster economic growth of developed countries persisted during the year.

During the year, the investments stood at a lower level, parallel to weak economic growth in developed countries. Moreover, the inflation stood below the inflation target mainly due to lower prices of basic commodities.

The economic growth in ***US*** was 1.7%, during the year. Unlike the low economic growth in the first half of the year, a number of macroeconomic positive developments were highlighted in the second half. The economic growth was fuelled by investments' recovery and regaining private consumption, due to a growth of real disposable income and almost full employment in the labour market. Simultaneously, the low level of oil prices affected negatively the energy sector, while low demand of developing countries reduced the export.

Apparently, the current level of US economic growth will continue in the coming years, contributed mainly by continuous increase of investments, households' revenue, unemployment reduction and stabilization of the real estate market, as well as the expansionary fiscal policy.

According to the IMF estimates, a 2.3% economic growth will be recorded in the US in 2017.

In the ***European countries*** a slight slowdown of economic growth was recorded in 2016, as compared to the previous year. According to the IMF assessments, the economic growth in the euro area was 1.7% in 2016 as compared to 2.0% in the previous year. The economic growth was driven by increasing domestic demand, low raw material prices and some revival in the credit market due to an unprecedented volume of the ECB's quantitative expansion actions. Weak investment climate, low external demand and a number of geopolitically driven uncertainties hampered the economic growth. The UK's decision to leave the EU in June[3] has

[3] On June 23, 2016, a referendum to leave or to stay within the EU took place in the UK, which resulted in an overall vote to leave the EU, by 51.9% . The referendum was followed by sharp fluctuations in the financial markets and the UK's national currency depreciated sharply. The latter lost its AAA rating. A month later, however, the international financial situation calmed down and the major indexes returned to the pre-Brexit level. Overall, the Brexit increased the economic uncertainties around the world, and according to estimates it will have negative contribution to the economic growth of both the European Union and the Great Britain.

caused significant ambiguity regarding the future economic development and influenced the further macroeconomic stance.

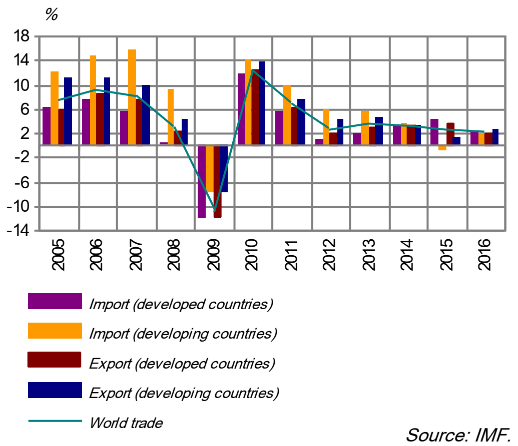
A 1.7% economic growth is forecasted in the euro area in 2017. The stable recovery of domestic demand, the quantitative easing, as well as lower oil prices and easy monetary conditions will support further economic activity of the euro area. Meanwhile, these positive factors may be offset by weaker investment prospects and minor exports, due to low economic growth of emerging markets – the main partner countries of the euro area.

The low economic growth rates in emerging markets persisted.

In 2016, the economic shifts took various directions in ***emerging markets and developing countries,*** which still account for over 70 percent of global growth. The economic growth pace remained unchanged compared to the previous year and no significant acceleration is estimated for the future.

The main reasons of slowing of economic growth rates in emerging countries are the low domestic demand and weak investment climate in China, as well as low prices of stock commodities and strict financial conditions (especially in Latin America and oil-producing countries) and geopolitically driven economic difficulties (especially in the CIS, Middle East and North African countries).

Annual growth rate of world trade



Source: IMF.

The weak economic growth in developing countries will persist in the near-term, conditioned by low prices of exported products, monetary policy tightening trends worldwide, weak exports, as well as inevitability of economic reforms.

The Chinese government pursued its efforts in navigating the economic momentum by transitioning towards private-consumption rather than state-investment economy. During the year, the capital outflow was also problematic, which, although at a slower pace, but continued exerting additional pressure on the currency.

The economic growth in ***China*** was assessed 6.7% in 2016, which is lower from the previous year's level by 0.2 pp. and is the lowest since the global financial crisis. No evident recovery of economic growth rates is expected for the coming years, while 6.6% is forecasted for 2017.

The IMF assessed a 4.1% economic growth in developing countries in 2016 and forecasted 4.5% for 2017.

The decline of global trade was conditioned by slow growth of both developing and developed countries.

The global trade growth slowed further in 2016 to its weakest pace since the global financial crisis.

Low-level prices were maintained in the commodity markets.

The stalling global trade was conditioned mainly by weak economic growth, low raw material commodity prices, as well as declining share of developing countries' contribution to the world trade. Simultaneously, the ongoing conflicts between Russia and the EU hindered considerably the expansion of trade volumes (for details, please see the box "Economic developments in Russian Federation").

For the first time in the last 15 years, the ratio between world trade growth and world GDP has fallen below 1:1[4], which also proves the impossibility of rapid pace of global economic recovery, as low trading volumes suggest weak economic activity.

[4] *https://www.wto.org/english/news_e/pres16_e/pr779_e.htm*

Given the IMF data, the annual growth rate of global trade was 2.2% in 2016, as compared to 2.6% of the previous year. The forecast for 2017 is 3.8%.

In 2016, the low level of international prices of main commodities was maintained, conditioned by worldwide trends and distinctive developments in certain commodity markets.

Brent crude oil average annual price was USD 44.1 a barrel. The declining trend of the previous year changed its path somehow this year. However, the oil price is still at its low and the price drop made 15.9% as compared to the same period of the previous year. The oil prices remain low, with main contributing factors such as the significant increase in the volume of world oil supply and reserves.

The oil prices will have a fluctuating course in the short term, given the volatile US dollar because of the expected change in the Fed rate, as well as economic development worldwide.

In 2016, the low level of copper and molybdenum prices persisted, though climbing at the end of the year. The average annual price of copper declined by 11.5%, as compared to the same period of the previous year, to 4870.8 US dollars/tone. The average annual price of molybdenum dropped by 4.9% to 16.3 thousand US dollars/tone compared to the same period of the previous year.

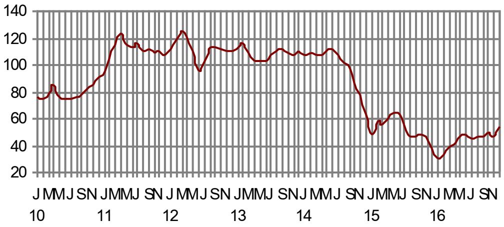
International stock prices of base metals will continue to recover and remain subject to demand development trends of emerging market economies, in the short-term.

Wheat international prices have assumed a declining trend during the year. The average annual price was 4.5 US dollars per bushel in 2016, declining by 19.1% as compared to the same period of 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.

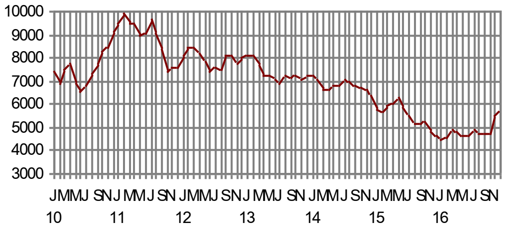
The average annual gold price amounted to USD 1274.6 per troy ounce in 2016, increasing by 7.5% against the previous year.

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

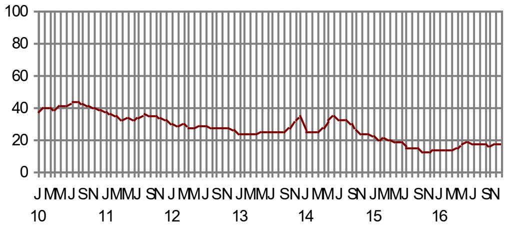
Brent oil prices
(USD per barel)



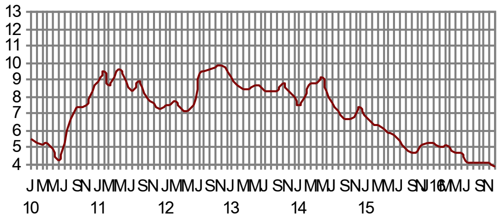
Copper prices
(USD per ton)



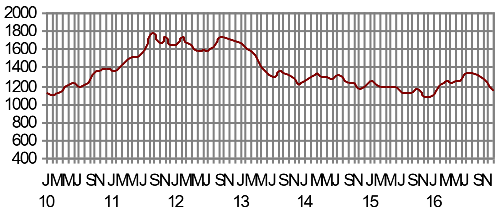
Molybdenum prices
(1000 USD per ton)



Wheat prices
(USD per bushel)



Gold prices
(USD per troy oz)



Source: Bloomberg Data Warehouse.

Box 1

Economic developments in Russian Federation

In 2016, a slowing pace of economic downturn was recorded in Russia. This change is explained by positive developments in investment and foreign demand. Meanwhile, private demand recorded negative changes. From the supply side, the growth in manufacturing and agriculture, as well as smaller fall in construction contributed to the positive drifts of the GDP. The negative impact of low oil prices on the economic growth was maintained, while the sanctions limited the entry to foreign financial markets. The main contributors to the ongoing recession are low energy prices, the geopolitical stance and applied sanctions[1], as well as volatility of the national currency.

A non-competitive business environment and weak development of infrastructures remain major impediments to Russian economic growth. Nonetheless, in the midst of increasing oil prices expectations in the near term, the economic growth is expected to return to a positive territory.

According to the Russian Federal State Statistics Service data, a 0.2% economic downturn was recorded in 2016, as opposed to 2.8% fall in 2015[2]. Processing industry, agriculture and construction contributed positively. The decreased indicators of households' real disposable income have had negative input to the private consumption and thus the economic growth overall.

The highest rates of per annum growths were recorded in agriculture (by 3.5%) and manufacturing (by 1.4%). The decay pace of construction sector slowed down, 4.3% against 4.9% in the previous year. The negative dynamics of the GDP was conditioned by the decline in consumer demand (YOY fall in private consumption was 6.2%), as well as limited demand for tire fitting works, which was in turn conditioned by low investment activity.

The main factors hindering the investment were the decline of consumer demand in midst of falling real disposable income, as well as limited entry to financial markets. The ongoing low-level of oil prices and foreign economic uncertainties aggravated the existing problems.

According to the Russian Federal State Statistics Service data, the export in January-November amounted to USD 254.1 billion, representing a YoY 19.2% decrease in relation to the same period of 2015.

Imports amounted to USD 163.9 billion, declining by YoY 1.4%. Thus, the trade balance surplus amounted to USD 90.2 billion, deteriorating by 39.2% as compared to the same period of the previous year.

As of December 2016, the 12-month inflation was 5.4%, considerably lower than 12.9% reported last year. According to the 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 2016.

In 2016, the Russian currency strengthened as compared to the previous year, on account of some growth of international oil prices and relatively strict monetary policy of the Russian Central bank. The real appreciation of the Russian ruble against the US dollar amounted to 8.2%, against the euro to 6.2%. The international foreign currency reserves of Russia increased during the reporting year to USD 392.8 million.

Taking into account the macroeconomic situation and the need to ensure financial stability, the Central Bank of Russia has implemented a moderately strict monetary policy to reduce inflation to the target level of 4.0%, during the year. The Central bank of Russia revised the refinancing rate twice during the year, reducing it by 0.5 pp. each time to a 10.0% rate lastly. 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. During the year, however, the demand for such operations has reduced significantly, and stopped since September.

During 2016, the contraction of assets of the banking sector continued, parallel to the improvement of their structure. The quality of both domestic-denominated and foreign-denominated currency credits improved. The share of non-performing loans in total loans was 6.3% against 6.7% in the previous year. Loans to non-financial corporations and households have fallen by 6.9% (2.4%, if not counting the exchange rate factor).

The profitability of the banking system increased significantly during the year. The gross profit increased by 5 times as compared to the previous year, totaling 930 billion rubles.

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[1] *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.*

[2] *Information on the Russian economic developments, as well as estimates and projections are taken from the periodical "О текущей ситуации в экономике Российской Федерации по итогам 2016 годà" ("About the current economic stance of the Russian Federation in 2016) issued by the Russian Ministry of Economic Development.http://economy.gov.ru/minec/resources/9056bb04-390c-47f9-b47f-8e3b061bc7b8/monitor1-12.pdf*

1.2. INTERNATIONAL FINANCIAL MARKETS

In 2016, no significant fluctuations in international financial markets were observed: except for sharp ups and downs following the Brexit, which, however, practically levelled up during the first following month. The main set of risks remained unchanged.

A number of countries worldwide continued to implement accommodative monetary policy in order to stimulate global economic growth. Furthermore, the US Federal Reserve increased the rates at the end of the reporting year.

The capital outflow from emerging countries continued leading to national currency fluctuations.

The long-term US government bond yields grew in the second half of the year, given the hike of Fed rates. Those of EU decreased continuously during the year, owing to the quantitative easing program of the euro area. The loan market stance was favourable for the real sector borrowers: some improvement in lending conditions and higher demand for credit by households and companies were recorded.

In 2016, given the instable growth of global economy and the new economic challenges, the key developed countries, except the US, carried on low interest rate policy.

The ECB continued to conduct its asset purchase program with a monthly volume of 80 billion euros in 2016[5]. In March 2016, the ECB lowered the refinancing rate from 0.5% to 0.0% and maintained the deposit facility rate at -0.4%. Given the low economic growth and lower-than-targeted unemployment rate, it is anticipated that the ECB will remain devoted to its accommodative monetary policy in the future.

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 changes of a number of economic activity indicators.

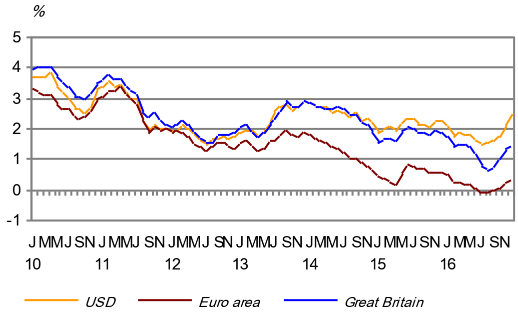
In December 2015, the US Fed hiked its benchmark interest rate for the first time since the global financial crisis to new target between 0.25 percent and 0.50 percent, owing to the stable recovery of the economy. The competent authorities have emphasized a gradual adjustment and solely under the conditions of sustainable economic growth. As a result, the next increase of the policy rate was conducted only in December 2016, by 0.25 pp.

Given the contracting unemployment and inflation recovery, the US Fed will continue to tighten its monetary policy. The market participants expect that the rates will grow by 1 pp. during the following 3 years.

Given the capital inflows to the US due to the rate growth prospects and low prices of commodities, a number of developing countries have faced substantial capital outflows, which resulted in a low level of investments and slow economic growth.

During the year, major currencies assumed volatile trends. The US dollar has slightly appreciated versus euro, driven by expectations and the economic policies conducted by the United States and the European countries.

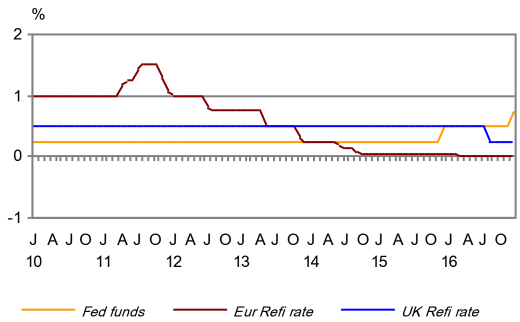
10-year government bond yield



Source: Bloomberg Data Warehouse.

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

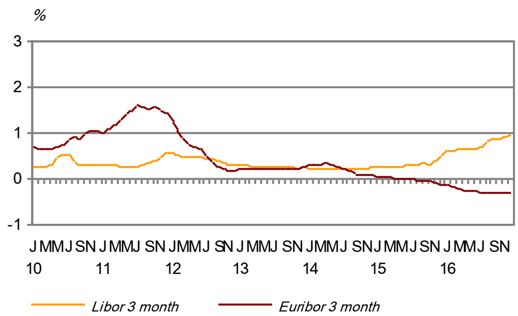
Interest rate policies of Central banks



Source: Bloomberg Data Warehouse.

The long-expected hike of Fed rates took place in December 2016.

Interbank interest rates



Source: Bloomberg Data Warehouse.

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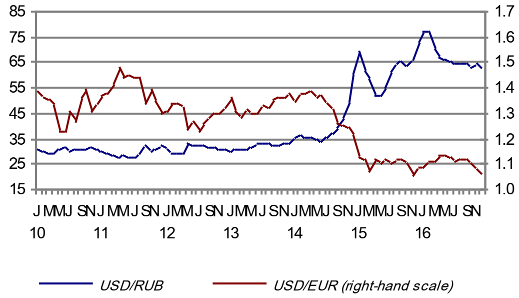
[5] The ECB intends to carry out this project until March 2017. https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html

Dynamics of USD exchange rate versus RUB and EUR



Source: Bloomberg Data Warehouse.

The depreciation trend of emerging markets' currencies, started in 2013, changed its direction to appreciation during the year. The latter, however, cannot be explained by domestic economic trends, as the economic developments were not that positive during the year. The currency appreciation patterns were attributable to the delay of the gradual increase of the Fed's policy rates. In future, the currency patterns will be conditioned by the Fed's policy and domestic developments across countries, such as need for external financing, domestic monetary policies, 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.

SUMMARY

The global economy continued recovering in 2016, though slower-than-expected because of the materialization of downward risks.

In developed countries, excluding the USA, issues like slow pace of economic growth, low inflation and risks to financial system remain on the agenda. Under such conditions, developed countries kept on implementing low interest rate policy, while the US changed the direction of its policy rates at the end of the previous year and continued the gradual tightening of monetary conditions this year.

Developing countries encountered capital outflows amidst low economic growth. However, the latter changed to inflows at the year-end. Simultaneously, the private debt burden volumes have been risky in the financial stability viewpoint. Apart from the economic risks hampering growth in emerging markets, geopolitical risks associated with the crisis in Ukraine, as well as relations between Russia and West got a particular emphasis.

Russia's economic recession and the decline in private consumption considerably decelerated the inflow of non-commercial remittances from this country.

Uneven global growth, low economic growth of emerging market countries and current economic challenges in Russia negatively affected Armenia's investment environment, economic growth and private transfers, as well as exports.

2. MACROECONOMIC ENVIRONMENT DEVELOPMENTS IN ARMENIA

2.1. MACROECONOMIC DEVELOPMENTS[6]

The lower-than-expected economic recovery of the main partner countries of Armenia, the geopolitical tensions and the ongoing low-level of commodity prices continue to negatively impact the domestic economic activity. Meanwhile, these macroeconomic risks were mitigated due to both the continuous improvement of external demand and the easing of monetary policy by the CBA and accommodative fiscal policy of the Armenian Government. As a result, risks hindering the financial system stability were partly offset.

During the year the economic activity grew at a slower pace, resulting in a 0.2% economic growth, given the National Statistical Service of Armenia data.

The weak economic growth was mainly caused by the slowing of mining in the second half, declining production volumes of agriculture (-5.8%), as well as ongoing fall in construction.

The increase of the value added in the manufacturing was 5.1% in 2016. This was due to growing demand of partner countries and structural changes in domestic economy. At the end of 2016, high economic activity was reported in the processing industry. The production output was high in manufacturing of tobacco products, beverages and food products, making up 23.5%, 7.4% and 2.6%, respectively.

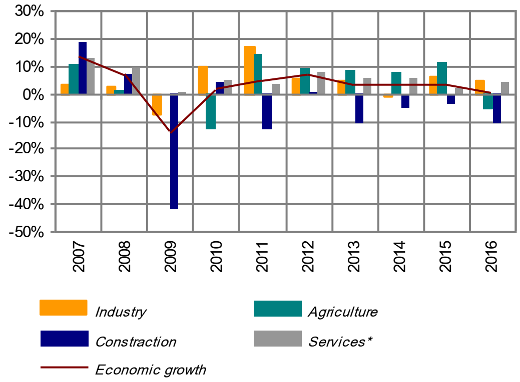
The growth of value added in services was 4.0%, owing to 7.1% growth in services and 1.0% growth in trade. The service sector growth was due to increase in production volumes of such sub-sectors as arts, entertainment and recreation, transport and financial services by 22.2%, 17.9% and 3.9%, respectively.

Adverse developments persisted in construction sector in 2016 as well, conditioned by low domestic demand. The construction sector value added decreased by 11.3%, according to the NSSA data. The volumes of construction funded by nearly all means shortened, except for construction funded by international loans.

The negative economic consequences of aggregate demand were somewhat mitigated due to the Central Bank's easing of monetary policy and expansionary fiscal policy of the Armenian Government, as well as the deflationary environment. Given these facts, the domestic demand grew slightly. In 2016, the private consumption growth was 1.0%, according to the NSSA data. The public consumption growth was 3.9%. Although the domestic demand recovered slightly, the low activity in private investments persisted. The private investments dropped by 10.4%. Meanwhile, public investments increased by 5.7%.

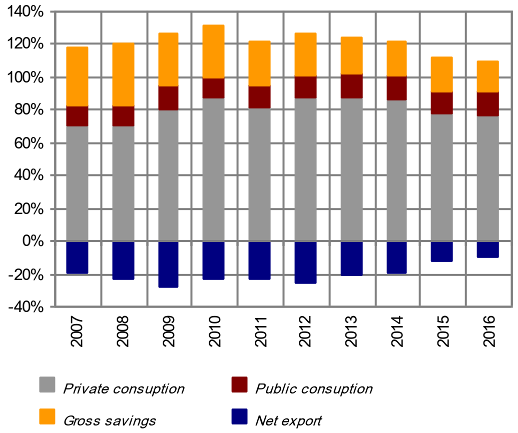
The results of survey on the business climate indicator (BCI) conducted by the Central Bank reveal sluggish developments in investment environment[7]. In particular, in the fourth quarter of 2016, the BCI amounted 52.1, increasing by 1.8 compared to the

Real GDP growth and main sectors of economy



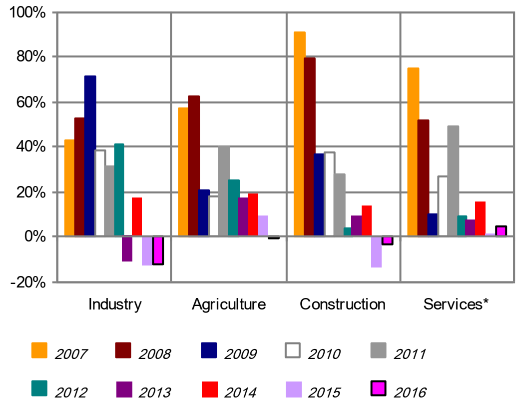
* In chart the sector of services includes trade and other service sectors' aggregate values.

GDP expenditure components
(share in GDP)



Source: National Statistics Service of Armenia.

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.

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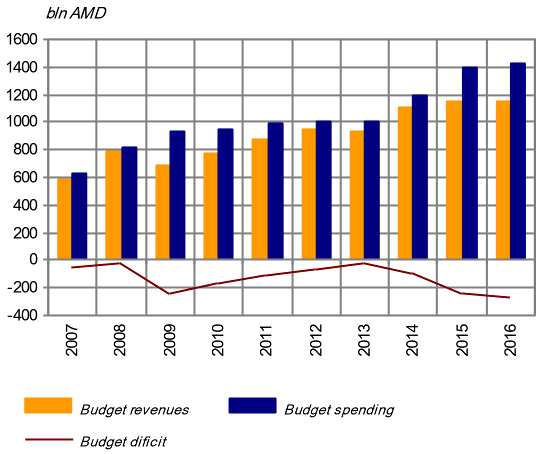
[6] *For details on the developments of macroeconomic environment in Armenia, please see the quarterly publication "Inflation Report 2017, 1st quarter".*
[7] *Source: Summaries on the quarterly surveys on "Business climate indicator", conducted by the CBA in 2016.*

In 2016, lending to public catering and other services, as well as manufacturing sectors increased.

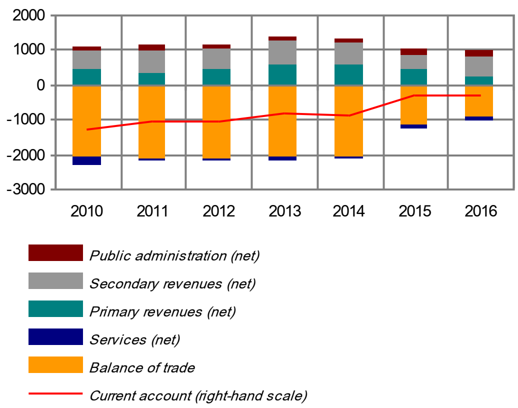
Main indicators of government budget



Source: National Statistics Service of Armenia.

In December 2016, the 12-month inflation was -1.1%, falling below the target range.

Main indicators of balance of payments
(mln USD)



Source: Central Bank of Armenia.

same quarter of the last year. Although the BCI has grown in all subsectors of the economy, the business environment indicators of the construction and service remain lower than the stability level, witnessing a lower investment activity in the non-tradable sectors compared to the exportable sector.

In 2016, the loans to economy rose by 15.4%. This increase in lending was due to the growth in lending supply, which was fueled by high liquidity after the capital replenishments by banks and a sharpened competition between them.

The lending to manufacturing, event catering and other sectors grew by 12.0% and 21.3%, respectively. Both banks and credit organizations carried out flexible credit policies, especially for medium and large businesses. The share of non-performing loans and receivables in total loans and receivables declined by 1.2 pp. to 6.2% at the year-end. Parallel to increasing lending, NPLs in manufacturing and public catering and other sectors grew as well.

The expansionary fiscal policy in 2016 resulted in some increases in both budget revenues and expenditures compared to the previous year by 0.7% and 2.5%, respectively. The sluggish growth of revenues was attributable to a 1.1% growth of tax revenues. Public expenditures[8] grew due to a 3.3% increase in current expenditures.

The fiscal policy had a 1.1 expansionary impact on the aggregate demand, mainly due to a 0.9 expansionary impact of the expenditures.

Resulted by the above mentioned shifts in expenditures and revenues, the state budget deficit amounted AMD 272.5 bln or 5.4% of the GDP, according to the preliminary data.

Though the deflationary pressures were mitigated in the yearend, the 12-month deflation constitutes -1.1% in December 2016. The deflation was mainly caused by a decline in the prices of services and non-food products. Amidst the ongoing developments, the impact of low inflation is estimated to be positive on curbing the weak domestic demand, preserving the purchasing power of incomes and contributing to increasing competitiveness in international markets.

2.2. FOREIGN TRADE

Given the continuing recovery in external demand and better terms of trade, the improving trend of the current account deficit of Armenia persisted in the second half of 2016. Thus, the current account to GDP ratio was 2.7% in 2016, as compared to 2.6% of the previous year. The slowing pace of decline in remittances had a positive impact on the improvement of the current account.

[8] *This includes working funds of project implementation units.*

The dollar value of exports of goods and services increased by 11.6%, while the dollar value of imports grew by 3.4%. Due to accelerated growth of exports over imports, the trade deficit decreased by 20.4% as opposed to the last year to USD 944.4 million.

According to the CBA estimations, the real exports of goods and services grew by 14.4% in 2016, while real imports increase was 3.8%.

By structure of exports, the main increases were registered in “precious and semi-precious stones, precious metals and articles thereof”, “preparation of food for immediate consumption”, “processing and preserving of fruit and vegetables” and “textile products” by 73.9%, 28.6%, 83.2% and 36.7%, respectively.

By structure of imports, the main increases were recorded in “precious and semi-precious stones, precious metals and articles thereof”, “textile products”, “manufacture of machinery and equipment”, “manufacture of chemicals and chemical products” and “preparation of food for immediate consumption” by 36.8%, 37.1%, 13.9%, 8.7% and 5.4%, respectively.

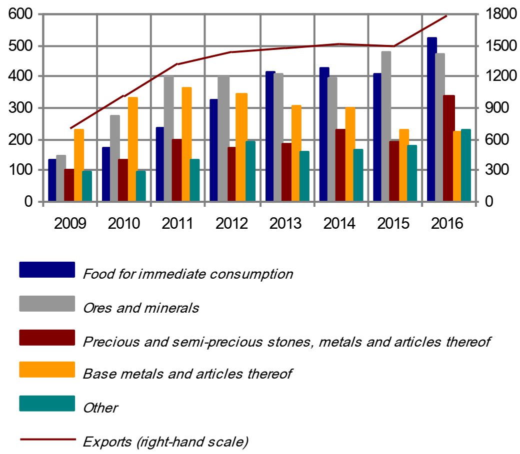
The shares of “manufacture of mining products” and “non-precious metals and articles thereof” decreased.

The positive shifts in concentration level of commodity exports of the beginning of the year persisted in the second half of the year as well. As a result, the Herfindahl-Hirschman index[9] declined compared to the previous year by 0.015 to 0.182.

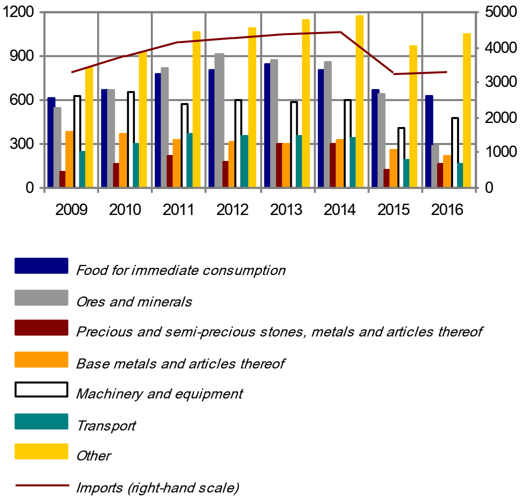
In 2016, Armenia’s external trade concentration level by countries increased somehow, because of bigger share of its trade partner Russia in the structure of exports.

Given the recovery of external demand, the export volumes to CIS and EU grew by 43.5% and 15.9%, respectively. Exports to Switzerland, Canada and Georgia grew, while exports to China deceased almost twice.

Armenia's exports by commodity groups
(mln USD)

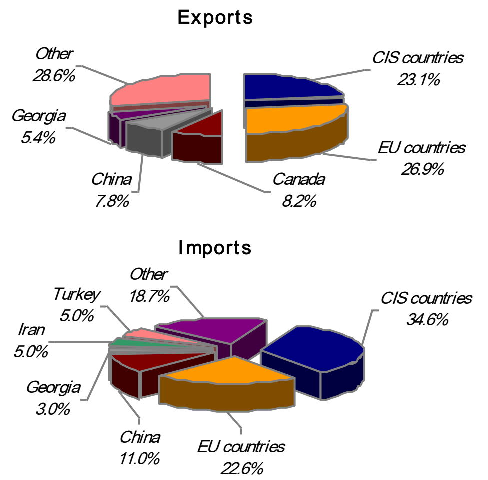


Armenia's imports by commodity groups
(mln USD)



Source: Central Bank of Armenia.

Armenia’s foreign trade, by country, as of 2016



Source: Central Bank of Armenia.

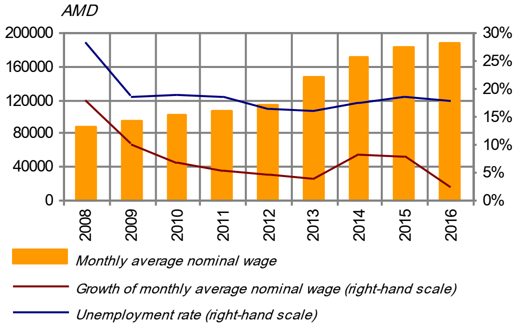
2.3. HOUSEHOLD INCOME AND DEBT BURDEN[10]

During the year economic slowdown and decreased remittances from abroad had a negative impact on the household income level. In 2016, the growth rate of the monthly average nominal wages was lower as compared to the previous years, 2.3%. The wages grew due to a rise in the private sector wages (5.0%). A 1.2% fall in the public sector wages was related to the public sector optimization policy amendments. The unemployment rate fell to 18.0%. Given the CBA assessments, the low growth pace of wages will likely be sustained during 2017, amounting 1.5%. However, it will accelerate in 2018-2019 and will vary

[9] The Herfindahl - Hirschman Concentration Index varies between 0 and 1, characterizing the level of concentration (values near 0 denote lower concentration)
[10] Source: “Inflation Report” by the CBA, 1st quarter, 2017.

The wages grew, though slower than in the previous years.

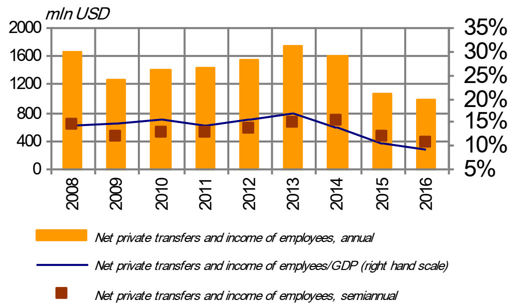
Nominal average wage and unemployment



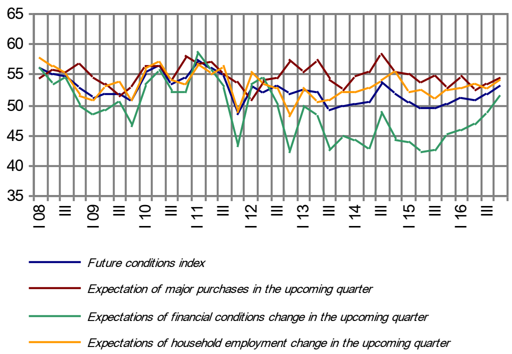
Source: National Statistics Service of Armenia.

The declining pace of non-commercial remittances and net compensation of outbound workers slowed down.

Net private transfers and wages of seasonal employees

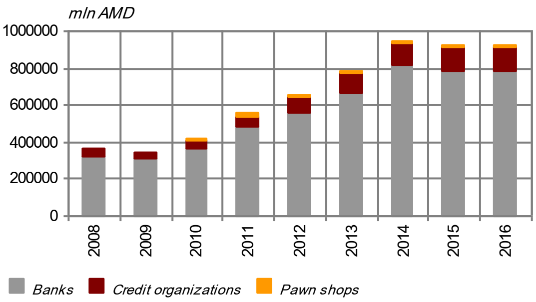


Future conditions index and its components



During the year, the liabilities of households to financial institutions grew.

The structure of household liabilities to financial institutions



Source: Central Bank of Armenia.

between 4.8 and 5.2% at the end of the period. The unemployment rate will reach 18.5% in 2017, according to the CBA forecasts, further declining by 0.3-0.4 pp. in 2018-2019 parallel to an economic activity impetus.

During the reported period, the declining rates of remittances to individuals slowed down, even gaining momentum in the fourth quarter of 2016. According to the CBA assessments, this increase will be maintained in the future years as well. In particular, a rise in outbound workers compensation and private transfers in range of 4.0-6.0% is anticipated in 2017. In 2016, the net current private remittances and outbound workers' compensation declined by 6.8% and 9.7%, respectively. According to the CBA surveys, in 2016, the share of households receiving non-commercial remittances[11] decreased by 0.4 percentage point and stood at 11.7% on average[12]. During the reported period, the ratio of the net current transfers and outbound workers' compensation to GDP declined, reaching 9.4% from 10.3% in the last year.

The expansionary fiscal policy and monetary easing, as well as deflationary environment positively affected the households' income during the year.

According to the households surveyed by the CBA[13], the Consumer confidence index grew during the year to 44.7 in the fourth quarter of 2016. Both the current and the future conditions indexes have increased. Such current conditions sub-indexes as changes in the financial conditions and households assessments of the overall economic situation grew considerably. All the sub-indexes of the future conditions improved, including the expectations for changes in financial situation.

During the year, the household savings in bank deposits rose by 14.9% and amounted to AMD 1,155 bln. Moreover, dram-denominated deposits grew significantly amounting 32.2% of total deposits, against 28.7% of the previous year. However, the high share of foreign currency deposits continues to limit the ability of banks to allocate their funds in dram denominated assets, such as AMD lending. The deposit growth was accompanied by a decrease in interest rates on AMD and USD deposits from households.

The expected increase in remittances from Russia in 2017 and accelerated economic growth compared to 2016, as well as low inflationary environment in Armenia will have a positive impact on households' real income.

In 2016, the lower remittances from abroad, slow growth rate of wages, as well as high debt burden compared to the previous years affected the credibility of households, therefore the volume of

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[11] *Source: summaries of quarterly surveys on "Consumer confidence Index" by the CBA, 2016. The survey was conducted among urban households and comprises their data only*

[12] *The migration authorities have not been any significant changes to the management of manpower.*

[13] *Source: Summary of quarterly surveys on "Consumer confidence index" by the CBA, 2016.*

lending to households[14]. Resident households' total liabilities to the financial institutions have risen by 0.6% to AMD 925.5 billion during the year, given a 4.5% growth in lending by financial institutions. The volume of borrowings from banks remained merely the same, while those from pawnshops fell by 1.7%. Amidst low growth of lending and GDP, the share of household loans in GDP remained 18.2%. A decrease was registered in debt to deposit ratio, which amounted 80.0%, declining by 11.5 pp. This means that households remain net creditors for credit institutions.

The most attractive type of lending to households remains the consumer lending. In 2016, the volume of consumer loans increased by 4.3%, due to a 28.7% growth in loans for purchase of household and computer appliances and 4.6% increase in gold collateralized loans. Both car and card loans declined by 38.8% and 2.2%, respectively.

The shares of card loans (36.1%) and gold collateralized loans (23.8%) in total consumer loans prevail. The trend of credit terms mitigation observed from the third quarter of the previous year was maintained in 2016, due to growing competition between banks and other financial institutions, as well as complementary liquidity in banks due to the capital replenishments. These improvements include revision of loan repayment schedules, creditworthiness assessment, as well as application of non-interest charges and loan-to-value ratios.

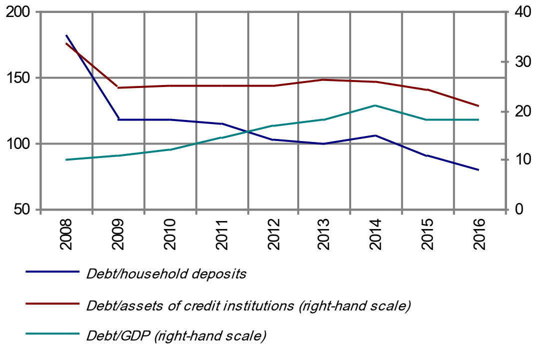
In the period under review, mortgage lending by both banks and credit organizations improved by 4.2%, contributed mainly by a 4.7% increase in mortgage loans for real estate purchase.

The amendments in the RA Law on Income Tax[15] and the refinancing projects of the National Mortgage Company, as well as the government program "Housing for Youth" continue to contribute to the stirring of the mortgage market. In March 2016, amendments were made in the government program "Affordable housing for young families" in order to comprise a greater number of young families[16]. Due to the above-mentioned programs, the share of dram-denominated mortgage loans in total mortgage loans continued to grow and amounted 53.3%, positively impacting the credit risk management of this type of loans.

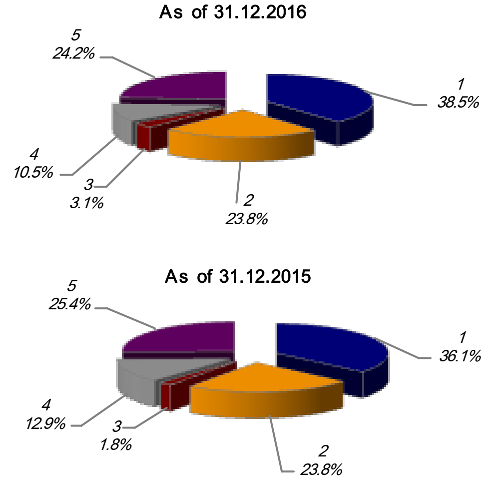
In the first quarter of 2017, banks and credit organizations expect that the volume of consumer and mortgage lending will grow, due to easier lending conditions and increased demand for loans[17].

The debt burden of Armenian households has reduced.

Household debt burden indicators, %



Consumer loan portfolio structure of banks and credit organizations

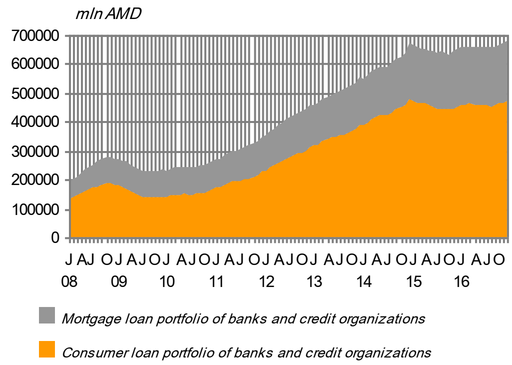


1. Card loans, 2. Gold collateralized loans, 3. Car loans, 4. Household and computer appliances loans, 5. Othre

Source: Central Bank of Armenia.

The risks arising from loan portfolio quality of households recorded a descending trend.

Consumer and mortgage loan portfolio of banks and credit organizations



Source: Central Bank of Armenia.

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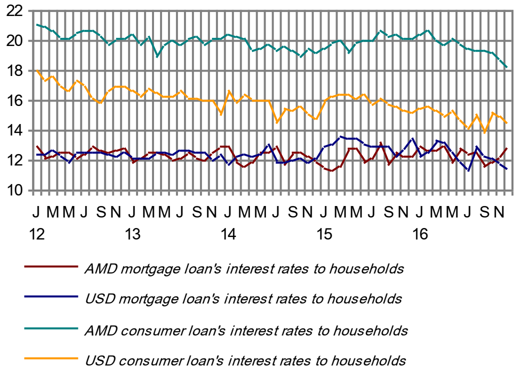
[14] *Source: summary of quarterly surveys on "Lending conditions by banks and credit organizations of Armenia" by the CBA, 2016.*
[15] *No. 205-N decision of the RA Government on "Establishing the procedure of employees, individual entrepreneurs and notaries equal to amount of the interests paid for mortgage loans" February 19, 2015.*
[16] *According to these changes income tax paid by the borrower is being refunded by the government proportionally to the amount of interests for mortgage loans.*
[17] *Source: quarterly survey on "Lending conditions by banks and credit organizations of Armenia" by the CBA, 2016.*

Lending interest rates to households



Source: Central Bank of Armenia.

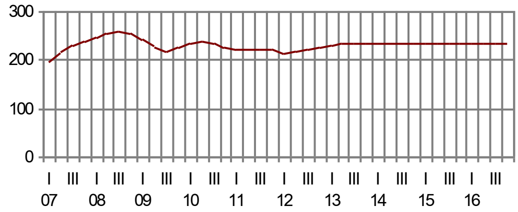
In 2016, the loan portfolio quality of the households registered some improvements. The share of non-performing consumer loans with banks and credit organizations decreased by 1.0 percentage point to 8.4%. The share of non-performing mortgage loans in total mortgage loans decreased by 0.4 percentage point to 6.1%.

Overall, the risks arising from the household sector are manageable and no significant threat to the overall stability of the financial system arose.

2.4. REAL ESTATE PRICES

In 2016, the apartment prices remained merely unchanged compared to 2015.

Average apartment price index in Yerevan (sq m)



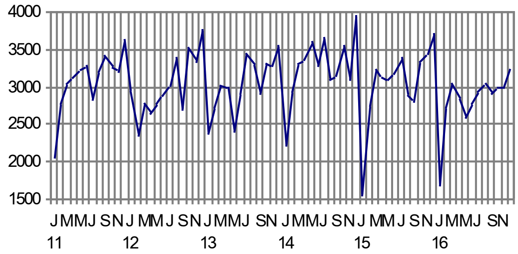
Source: State Committee of Real Estate Cadaster at the Government of Armenia.

Starting from 2014, the prices in real estate market of Armenia remained merely the same, while the number of real estate transactions declined[18]. In 2016, as compared to 2015, the average market prices of apartments in residential apartment buildings in Yerevan and other towns increased by 0.3%, on 1m^2 surface basis. Simultaneously, the commercial banks kept on the loan-to-value ratio for property-backed loans in the range of 60-80%. In such case the credit risk derived from possible fluctuations in the real estate prices is significantly restrained (for details, please see the subsection "Market risk of commercial banks").

The main risk arising from the real estate market remains the liquidity risk of collateral, given the high volume of real estate collaterals at banks and the decrease in real estate and apartments' transactions.

The real estate sale and purchase transactions declined, in comparison with the previous year.

Number of real estate sale and purchase transactions



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

In particular, the number of real estate and apartment sale and purchase transactions in Yerevan, which comprises the biggest share of real estate transactions, decreased by 7.3% and 4.0%. In January 2015 amendments to the law on Income tax came into force, which contributed to the stirring of the real estate primary market[19]. According to the quarterly surveys conducted by the Central bank of Armenia, the collateral realization risk is relatively high for commercial real estate, as well as apartments in the suburbs of Yerevan and other towns of Armenia.

Risks associated with the sale of collateral remain key risks.

Mortgage lending gained momentum during the year.

In 2016, compared to 2015, both the volume and number of real estate purchase loans in banks and credit organizations grew by 4.7% and 7.5%, respectively (for details, please see the subsection "Household income and debt burden"). Simultaneously, the real estate loan portfolio quality improved and a 0.2 pp. decline in non-performing real estate loans was registered, which amounted 5.7% of total real estate purchase loans.

Loans provided for construction of residential and non-residential buildings increased by 20.8% during the year. The share of non-performing loans in real estate construction loans decreased by 3.4 pp. to 6.7%.

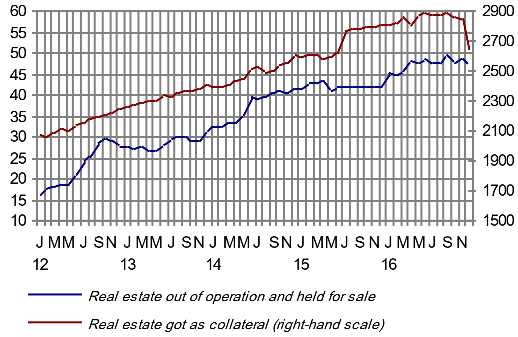
[18] As there is no single index of real estate average price in Armenia, the criterion for real estate price developments is considered the average price index of apartments in Yerevan
[19] Source: summery of quarterly surveys on "Lending conditions by RA banks and credit organizations" by the CBA, 2016.

Residential buildings completion by sources of financing

Sources of financing	Exploited residential buildings (sq. m) in 2016	Share in total	Percentage change as to 2015
Total, of which:	183,370	100%	-19.4%
State budget	0	0	0
Corporations' funds	77,064	42.0%	-5.3%
Households' funds	106,306	58.0%	-27.2%

Source: the National Statistics service of Armenia.

Volume of real estate out of operation held for sale and got as colleateral with the commercial banks *(bln AMD)*



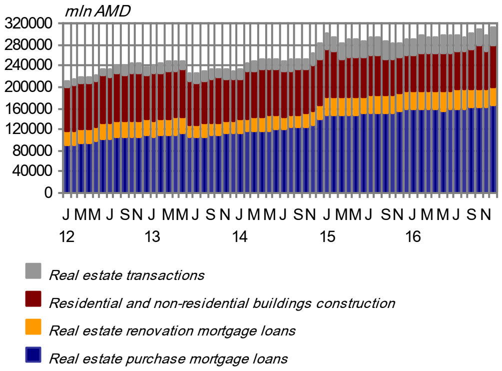
The volume of residential houses commissioned to operate decreased by 19.4% in 2016 compared to 2015, conditioned by minor activity in the real estate market.

Volumes of residential houses commissioned to operate financed both by companies and households decreased by 5.3% and 27.2%, respectively. The share of residential houses commissioned to operate financed by households has fallen to 58.0% in 2016, as compared to 64.2% in 2015. The majority of construction companies consider the low demand as the main hindering factor for real estate construction[20].

In midst of low activity of the real estate market, liquidity risks associated with the sale of collateral are persisting for the financial institutions. However, the fluctuations in the real estate market are insignificant from the financial stability viewpoint.

The volume of residential buildings commissioned to operate and funded by the means of companies decreased.

Real estate lending



Source: Central Bank of Armenia.

SUMMARY

The lackluster world economic growth in Armenia's partner countries and shortening of remittances remain the key endogenous risks, negatively affecting the business climate and disposable income of Armenian population. Under such conditions, the economic activity slowed down to 0.2% in 2016, while a -1.1% deflation was registered.

Despite the shortening of private transfers and outbound workers' compensation, the current account deficit-to-GDP ratio improved continually to 2.7%. However, amidst declining macroeconomic uncertainties in the region and strengthening external sector income levels, all macroeconomic risks were absorbed by the financial system due to the easing of monetary policy by the CBA and the imposed macroprudential instruments.

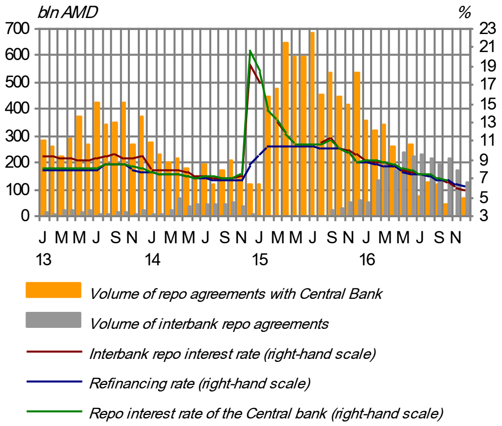
[20] *Source: summaries of quarterly surveys on "Business environment index" conducted by the CBA, 2016.*

3. FINANCIAL MARKETS STABILITY

3.1. MONEY AND CAPITAL MARKETS

In 2016, the financial market interest rates declined parallel to monetary conditions easing.

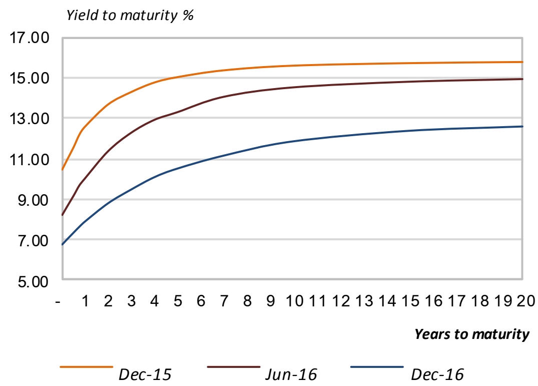
Monthly volume of repo transactions and repo interest rates (interbank and with the CBA)



Source: Central Bank of Armenia.

The government bond yields declined all over the yield curve.

Yield curves of Armenian government bonds



Source: Central Bank of Armenia.

In 2016, the Central bank adopted accommodative monetary policy and gradually lowered the refinancing rate. In December, the latter was set at 6.25%, declining by 2.5 pp. as compared to December of the previous year.

Parallel to the gradual easing of monetary conditions, the rates of other financial instruments declined, reflecting the efficiency of the monetary transmission mechanism.

Apart from the Central Bank's policy, the decrease in the reserve requirement rate[21] and the strong liquidity of banks owing to capital replenishments also led to the overall decrease of the financial market rates.

At the end of the year, the short term rates of the financial market fell considerably. The average monthly interbank repo rate was 5.80% in December 2016, reflecting 3.95 pp. decline as compared to December of the previous year. In the fourth quarter, the interbank repo rate fell lower than the refinancing rate.

The yields of government bonds followed a downshift all along the curve[22], by 2.2 pp. on average. The most pronounced decline was registered for the medium-term interest rates, by 2.5 percentage points. The interest rates on long-term bonds decreased by 2.4 percentage points, while the decrease in short-term interest rates have been relatively weak, 1.7 percentage points. As a result, the spread between 10-year and 6-month bonds stood at 4.5% in December 2016.

For summarized illustration of what are the current trends in the government securities market, the Central Bank calculates indices of government securities[23], which are presented in the table below.

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[21] *According to the No. 146-N Decree of the Central bank's Board dated September 20 2016, the reserve requirement rate on funds in foreign currency was reduced from 20% to 18%.*

[22] *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.*

[23] *There are 5 indices calculated for government securities, 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*

Indices of government securities in 2016

	TBI	G03	G05	G5I	GMI
Modified duration	0.32	1.38	1.97	6.02	3.46
Risk weighted yield	7.78	9.25	10.11	13.07	11.98
Average maturity (year)	0.34	1.58	2.42	14.01	6.76
Average weighted coupon %		9.42	9.78	12.08	10.64
Market Price of government securities (bln AMD)	48482	160771	242202	140543	382745
Market value index change in case of +/-1% yield change (mln AMD)	± 157	± 2213	± 4773	± 8462	± 13231
Market value index change in case of yield change by the standard deviation [24] (mln AMD)	17.21	212.68	556.41	692.61	994.33

As of December 2016, the modified duration[25] of government coupon bonds outstanding increased by 0.64 and stood at 3.46, indicating a greater sensitivity of bond prices to interest rate changes. The average maturity also grew to 6.76 years (5.76 in the previous yearend). These indicators for discount bonds were 0.32 and 0.34, respectively, registering a slight decrease.

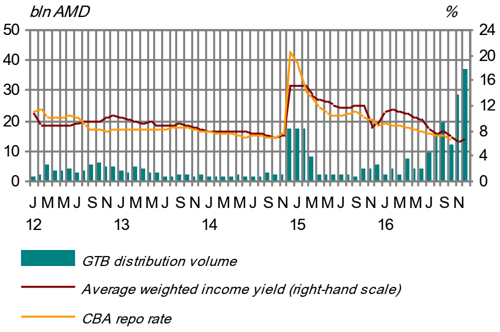
The results of a stress test of 1% change in the government bonds' yields indicate that in case of increase/decrease in the yield of government securities, investors' likely loss/gain could be about AMD 13.2 billion or 3.6% of the market value of government securities. Moreover, a notable portion of the change might come from the long-term securities, 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 providers[26] increased by 2.4 times compared to the same period of the previous year and amounted to AMD 7 trillion 634 billion. This upsurge was due to the sharp rise of repo transactions during the year, as well as large-scale operations in securities trading in October and November. The transactions involving securities' trades constituted 9.4% of the operations mentioned above.

In 2016, the liquidity of government securities market (according to the indicator describing the level of liquidity)[27] decreased as compared to the previous year. However, the liquidity level picked up in October. The volatility of the liquidity of the government securities market was lower compared to the previous year, while the standard deviation of liquidity indicator was 3.8, against 5.0 in the previous year.

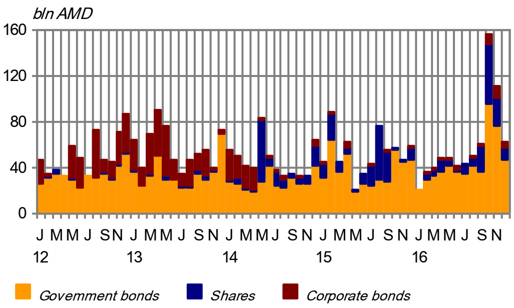
Within the total trades of government securities the share of short-term securities grew considerably to 14.0%.The shares of medium-term and long-term securities trades amounted to 40.4% and 45.6%, respectively.

Short-term treasury bond allocation volumes and weighted average yields



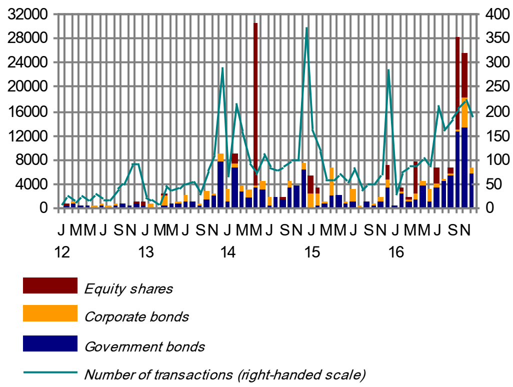
Source: Central Bank of Armenia.

Security trades by investment service providers



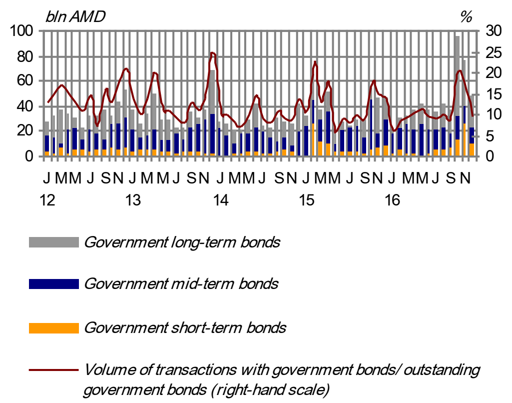
Source: Central Bank of Armenia.

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



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.

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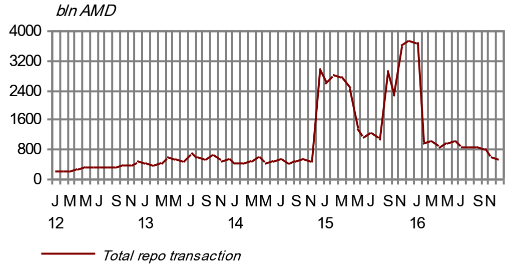
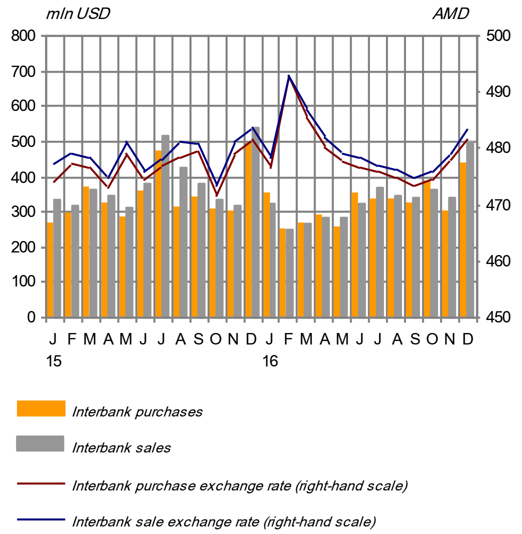
[24] *Standard deviation of risk weighted yield during 01/07/15 and 30/12/2015.*
[25] *Modified duration indicates the price change of a bond in case of its percentage change in the yield to maturity.*
[26] *As of 31.12.2016, investment service providers included 17 commercial banks and 8 investment companies.*
[27] *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.*

Repo transactions by investment service providers (including repo transaction with the CBA)



Source: Central Bank of Armenia.

Exchange market operations and exchange rates



Source: Central Bank of Armenia.

The volume of repo and reverse repo transactions (excluding operations with the Central Bank) carried out by investment service providers has doubled as compared to the previous year, and amounted to AMD 6 trillion 914 billion. Again, almost all repo transactions involved government securities.

In 2016, the total volume of securities trades in regulated market amounted to AMD 97.2 billion. In the regulated market, transactions with government securities comprised the prevailing part, 55.4%. The trades with corporate securities and shares constituted 11.8% and 32.8%, respectively.

The share of regulated market in the structure of securities trades by investment service providers has been 13.5% since the beginning of the year.

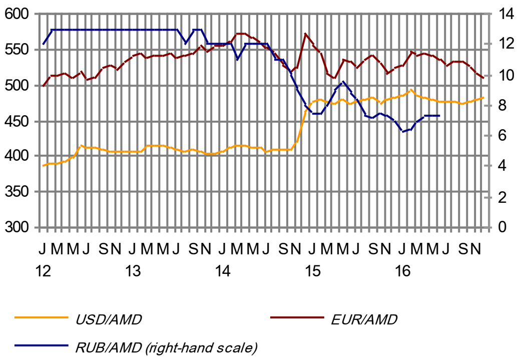
The capitalization of securities market was AMD 134.3 billion, increasing by AMD 30.5 billion or 29.5% as compared to the previous year-end. The concentration of capitalization by issuers has declined compared to the previous year; the share of first three issuers was 80.4%, while the share for first five issuers was 95.2%.

Share of 3 and 5 largest issuers' by capitalization, 2010 – 2016 (%)

Date	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
31.12.2015	83.0	98.0
31.12.2016	80.4	95.2

3.2. FOREIGN EXCHANGE MARKET

Exchange rates in exchange market of Armenia *(AMD)*



Source: Central Bank of Armenia.

In 2016, there were no significant fluctuations in the foreign exchange market of Armenia. Specifically, the AMD / USD exchange rate has appreciated over the year, but recorded a depreciation trend at the year-end, approaching the same level as in the previous year. As a result, at the end of December 2016 the Armenian dram/ U.S. dollar exchange rate remained merely unchanged as compared to the same period of the previous year (a 0.04% depreciation).

On December 31st 2016, the AMD/RUB exchange rate depreciated by 16.0%, while AMD/EUR exchange rate appreciated by 3.2%, compared to the previous year.

At the end of 2016, the real effective exchange rate of Armenian dram appreciated by 1.6% as compared to the previous year-end. The nominal effective exchange rate of Armenian dram depreciated by 2.5%[28].

[28] *For the exchange rate behavior and the foreign competitiveness, the nominal and real effective exchange rates are also considered, which are calculated based on the respective weights of foreign trade with twelve main partner countries (Euro area, Russia, Ukraine, South Korea, Bulgaria, Switzerland, Iran, the USA, Turkey, Georgia, Japan, China).*

SUMMARY

In 2016, the loosing of monetary policy by the Central bank was directly reflected in the interest rates of the financial market.

The decline of the government securities yields has led to a decrease all along the yield curve.

The fluctuations in the financial markets did not cause substantial risks in 2016, thus the financial stability remained intact.

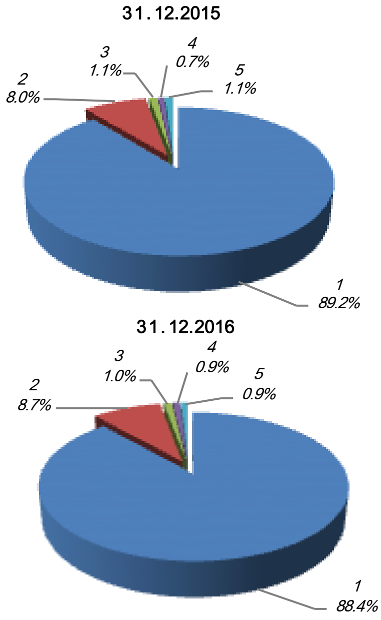
4. STABILITY OF FINANCIAL INSTITUTIONS

The risk management of banks is highly important in terms of financial stability

The 2016 was highlighted with gradually restoring activity of the financial market participants in loan and deposit market. This was due to fewer macroeconomic uncertainties arising from regional developments and a stabilization outlook of income inflows from abroad. Under such conditions, the financial intermediation expanded significantly. The financial sector ratios of assets-to-GDP and credits-to-GDP rose by 12.3 and 6.6 percentage points, to 89.1% and 50.0%, respectively.

Armenia's financial system remains bank-dominated; banks account for 88.4% of the financial system assets. In this context, identifying and evaluating banking sector 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.

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.

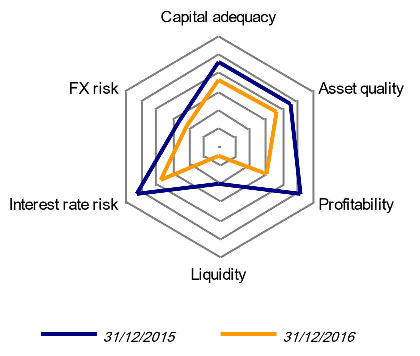
4.1. COMMERCIAL BANKS

Banking sector stability map

In the fourth quarter of 2016, relative to the fourth quarter of 2015, the elements of the stability map[29] incurred some positive changes (for details, please see subsections “Credit risk” , “Liquidity risk” , “Market risk”, “Capital adequacy and Profitability”).

All components of the map registered improvements. In particular, a significant positive shift in liquidity and profitability components was registered. As the map shows, the liquidity indicator is near the midpoint of the map (this means it is close to the historical highest liquidity indicator), which indicates the high liquidity of the banking sector.

Banking sector stability map



Source: Central Bank of Armenia.

[29] The banking sector 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.

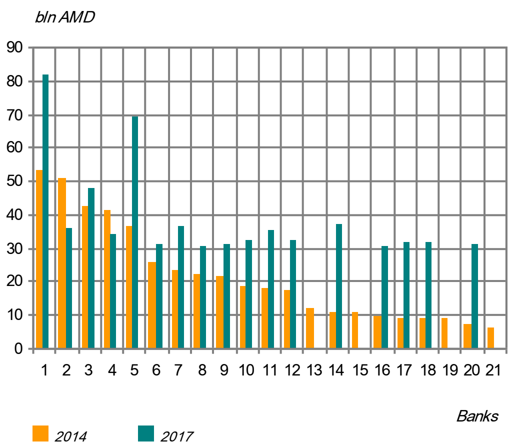
The impact of the change in the minimum threshold of the total capital of banks on the financial system of Armenia.

According to the Central Bank's Board decision dated 30.12.2014, the minimum total regulatory capital of banks was raised to AMD 30 billion from AMD 5 billion, which came into force in January 1, 2017. This decision was aimed at deepening financial intermediation and strengthening financial stability of the banking system in the long-term. Also, it targets to improve the resilience to shocks and flexibility of the banking system during various economic situations, as well as to contribute to better efficiency of the banking system. Owing to high level of capital, banks will be able to undertake greater risks, which means that higher capital level assumes an expansion of lending by banks, particularly in terms of long-term and large loans.

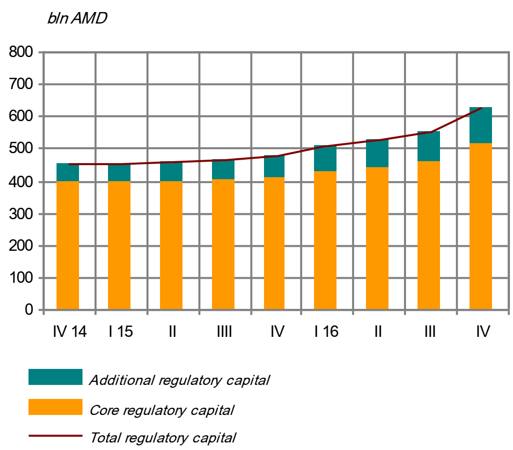
As of end of 2014, 5 out of 21 banks functioning in Armenia already met the new requirement of the Central Bank. The total regulatory capital of 4 banks was within the range of AMD 20-30 billion, that of six banks was between AMD 10 and 20 billion, while the regulatory capital of remaining 6 banks was less than AMD 10 billion.

During 2015 and 2016, some banks have replenished their total regulatory capital due to investments of new or existing shareholders, as well as issue and placement of shares. In 2015 and 2016, the total regulatory capital of commercial banks increased by 38.6 percent (AMD 175 billion) and amounted to AMD 627.1 billion at the end of 2016. At the same time, the proportion of core capital to total capital was 82.3%, maintaining the high quality structure of the total regulatory capital. There were also four cases of banks mergers and acquisitions. As a result of these changes there are 17 commercial banks in the banking system as of 01.01.2017.

Regulatory capital of banks



The structure of regulatory capital of banks

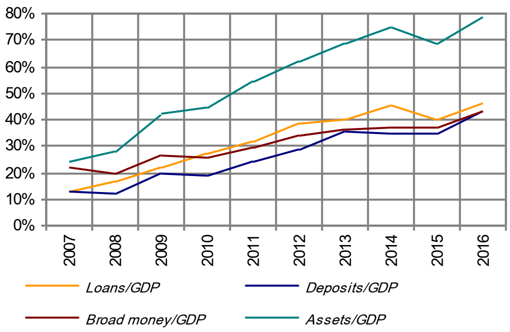


Source: Central Bank of Armenia.

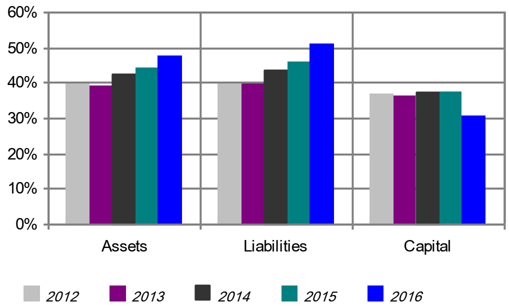
The share of non-resident participation in total statutory capital of the banking sector decreased by 5.8 pp. to 62.0% compared to 2014 data.

The decision to increase the minimum regulatory capital of banks, all other conditions being equal, contributed to the improvement of financial stability indicators, an increase in lending and a decline in loan interest rates. In 2016, the total regulatory capital adequacy ratio increased by 3.8 percentage points to 20.0%, the total and current liquidity ratios of banks grew respectively by 4.5 and 28.4 percentage points to 32.5% and 170.8%, as of end of the year. Lending volumes increased by around 16.0%, while loan interest rates fell by 1-2 percentage points.

Financial intermediation



The shares of assets, liabilities and capital of 4 largest banks in the banking sector

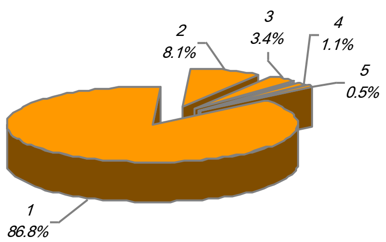


Foreign investors' participation in statutory capital of Armenian banking sector

Source: Central Bank of Armenia.

The share of non-performing loans and receivables in total loans and receivables decreased.

Structure of risk weighted assets calculated in banking sector capital adequacy index



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.

4.1.1. Financial intermediation and concentration

In 2016, parallel to better activity of commercial banks in the credit market, the banking intermediation grew considerably. The banking sector assets-to-GDP and credits-to-GDP ratios grew by 10.3 and 6.0 pp. to 78.8% and 45.8%, respectively. The deposits-to-GDP and broad money-to-GDP ratios grew by 8.3 and 6.2 pp. to 43.0% and 43.3%, respectively.

Total capital of the banking sector grew by 27.5% while total assets, by 15.6%. As a result, the total capital-to-assets ratio (the leverage ratio) has increased by 1.5 percentage point to 16.2%. The increase of total capital was due to statutory capital replenishments and net profit. 10 banks replenished their statutory capital by a total of AMD 115 billion, of which 86 billion were from non-resident sources. During the year, a number of mergers and acquisitions occurred, which led to some shareholder shifts and the share of non-resident participation in the statutory capital of the banking sector decreased by 5.6 percentage points to 62.0%.

The Herfindahl-Hirschman Concentration Index

Indicators	31/12/13	31/12/14	31/12/15	31/12/16
Total assets	0.0699	0.0728	0.0764	0.0859
Total liabilities	0.0727	0.0751	0.0800	0.0953
Total capital	0.0613	0.0627	0.0630	0.0580

Source: Central bank of Armenia.

Compared to the beginning of the year, the shares of assets and liabilities of 4 largest banks[30] increased by 3.5 and 4.9 percentage points to 47.5% and 50.8% respectively, while the share of total capital decreased by 6.5 pp. to 30.8%.

The summary indicators of the Herfindahl-Hirschman Index (assets, liabilities, and total capital)[31] grew somehow during the year. However, the risk of concentration of the banking sector to the financial stability remains low.

4.1.2. Credit risk

The credit risk remains the most important risk to the financial stability in terms of ensuring the solvency of the banking sector. The share of credit risk in risk-weighted assets of commercial banks accounts for 86.8% (89.1% in the previous year). In this context, the prudent management of credit risk is extremely important.

[30] At the moment of the publication of this report, 17 commercial banks and one development bank (Pan Armenian Bank JSC) were functioning in Armenia. The number of banks decreased as a result of bank mergers.
[31] The Herfindahl - Hirschman Concentration Index varies between 0 and 1, characterizing the level of concentration (values near 0 denote lower concentration).

During 2016, loans to economy increased by 15.4%, mainly due to corporate lending. As compared to the beginning of the year, lending to legal entities increased by 20.7%, while lending to individuals remained merely the same.

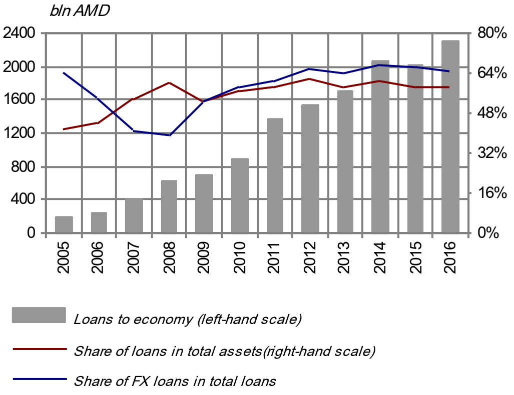
The consumer loans, manufacturing and trade loans had large shares in total lending to residents, making up 20.3%, 19.6% and 15.7%, respectively (20.7%, 18.4% and 16.9% in the previous year).

An improving trend of loan portfolio quality was recorded during the year. The share of non-performing loans and receivables (classified as "watched", "substandard", and "doubtful") decreased by 1.2 percentage point to 6.2% of total loans and receivables. The shares of "watched", "substandard", and "doubtful" loans and receivables were 1.9%, 1.7% and 2.5%, respectively. (3.3%, 2.2% and 1.9% in the previous year). The share of non-performing loans and receivables is relatively high in public catering and other services, as well as manufacturing and agricultural sectors, constituting 13.5%, 10.2% and 9.2%, respectively.

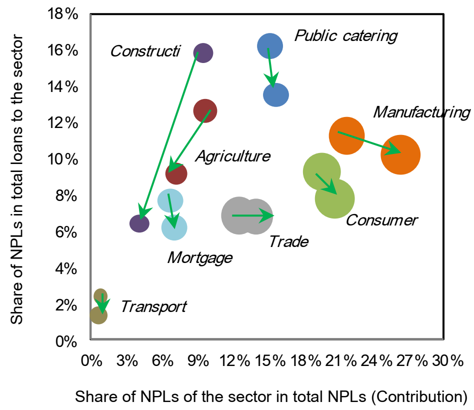
The Herfindahl-Hirschman sectorial concentration index for lending was 0.11 at the end of the year, pointing to a moderate concentration of loans in the banking sector. The same indicator calculated using the banks' average amounted to 0.2. The higher value of indicator of sectorial concentration according to the banks' average in comparison with the banking sector indicates relatively high sectorial concentration of loan portfolios in some banks.

The share of loans to large borrowers has decreased by 4.6 percentage points to 20.4% of total loan portfolio as compared to the beginning of the year[32].

Lending to economy



Change of NPLs share in lending to economy sectors
(The end of the arrow shows data as of 31.12.2016, the beginning, as of 31.12.2015)

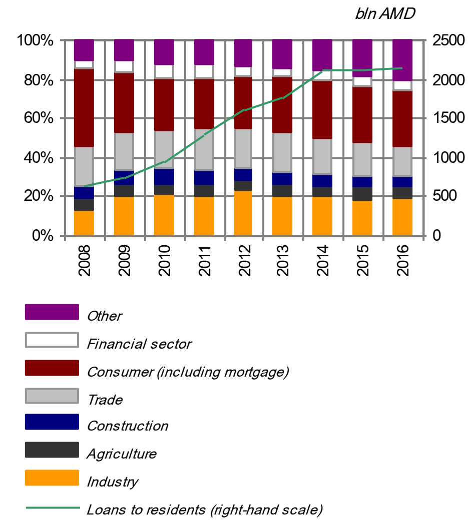


Credit risk stress scenarios[33]

31.12.2016	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 sector	AMD 26.7 billion or 4.3% of regulatory capital of the banking sector	AMD 20.4 billion or 3.3 % of regulatory capital of the banking sector	AMD 67.7 billion or 10.8% of regulatory capital of the banking sector
Total capital adequacy of the banking sector in case of stress scenario	19.3%	19.4%	18.2%

Source: Central bank of Armenia.

Structure of bank loans to residents, by economy sectors



Source: Central Bank of Armenia.

The results of credit risk stress tests improved at the end of 2016 as compared to the beginning of the year. This was attributable to the of banks' capital adequacy and loan quality improvement. The strictest stress scenario revealed cases of infringement of the capital adequacy requirement at some banks. However, these banks have sufficient capital to absorb plausible

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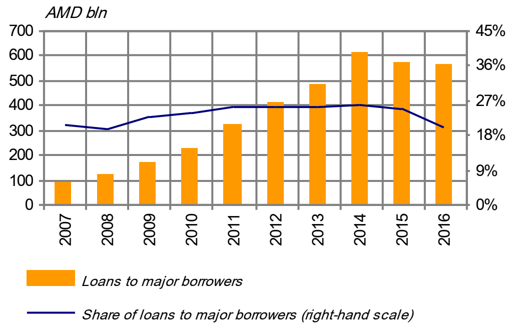
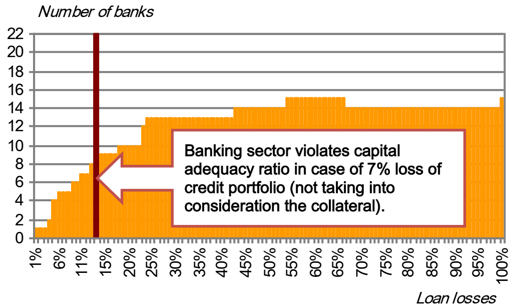
[32] The bank's risk on large borrowers exceeds 5% of average monthly regulatory total capital, considering the interdependence.
[33] This and further stress scenarios are not forecasting emergence of any risks, but rather are aimed to reveal the weaknesses of the financial system, as well as to assess its ability to absorb such risks.

Loans to major borrowers to total loans



Source: Central Bank of Armenia.

Number of banks violating total capital adequacy in case of dynamic growth of loan losses



Source: Central Bank of Armenia.

losses arising from credit risk. In this context, the probability of emergence of insolvency problems in the banking sector is estimated to be low.

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

31.12.2016	Stress scenarios
	When 50% of off-balance sheet contingent liabilities performed
Banking sector capital adequacy ratio before the stress	20.0%
Banking sector capital adequacy ratio after the stress	19.8%

Source: Central bank of Armenia.

The results of stress scenario of credit risk derived from off-balance sheet contingent liabilities denote that 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 the financial stability is estimated to be insignificant.

4.1.3. Liquidity risk

The liquidity of commercial banks improved.

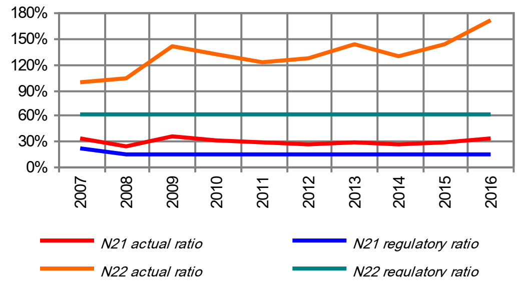
The overall level of liquidity of commercial banks displayed a growing trend owing to regulatory total capital replenishments. Prudential ratios of total and current liquidity grew by 4.5 and 28.4 pp. to 32.5% and 170.8%, respectively, at the end of the year (with minimum thresholds of 15.0% and 60.0%). Prudential ratios of total liquidity and current liquidity for Group 1 foreign currencies increased by 1.5 and 2.3 percentage points to 21.0% and 102.9%, respectively (with minimum thresholds of 4.0% and 10.0%). Regarding each bank individually, total and current liquidity prudential ratios were in line with regulatory requirements, and no infringement of such indicators by any bank was reported.

In 2016, the liquidity of banks regarding the assets and liabilities by maturity baskets improved compared to the previous year. The ratios of assets to liabilities for up to 30-day, up to 3-month and up to 1-year maturity baskets amounted to 109.4%, 98.6% and 84.7%, respectively (103.5%, 95.2% and 80.5%, in the previous year).

In terms of maintaining the current liquidity, it is particularly important to consider the aligned cash flows of assets and liabilities for up to 30-day maturity basket. In the post-crisis period, the ratio of assets-to-liabilities of the above-mentioned maturity basket has always been in the range of 90% to 110%, pointing to the banks' ability to assure current liquidity on a continuous basis.

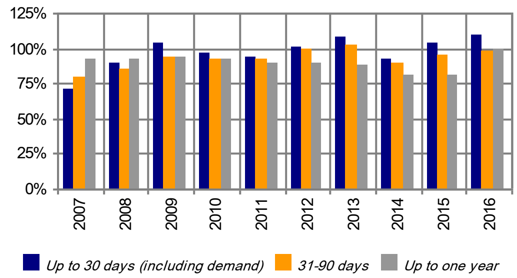
The concentration of the funds attracted by banks declined sharply, which also affected the improvement of the liquidity risk profile.

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



Source: Central Bank of Armenia.

The ratio of the banking sector assets to liabilities by terms to maturity



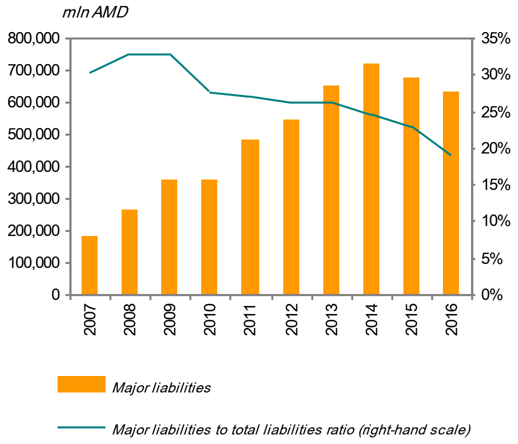
Source: Central Bank of Armenia.

As compared to the beginning of the year, the share of large liabilities in total liabilities dropped by 4.1 pp. to 18.9%[34]. The foreign borrowings of commercial banks have decreased by 3.0%. The funds attracted from international financial institutions have fallen by 25.7% to 24.3% of total foreign borrowings. The main lender countries include Netherlands (22.6%), Luxembourg (14.7%), the USA (13.2%) and Great Britain (5.5%).

The share of long-term loans amounted to 91.2%, falling by 2.0 pp. as compared to the beginning of the year.

From the perspective of the stability of loans financing sources, some risk narrowing was recorded during the year. The loans to deposits ratio decreased by 5.8 percentage points relative to the beginning of the year and stood at 106.4%[35].

The ratio of the banking sector major liabilities to total liabilities



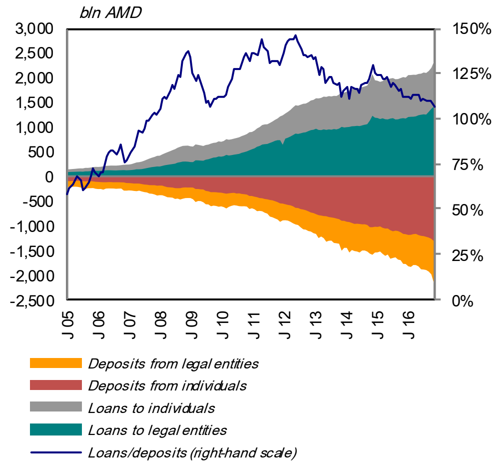
Source: Central Bank of Armenia.

Liquidity risk stress scenarios

31.12.2016	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 sector	26.8%	29.1%	22.8%
Current liquidity ratio of banking sector	129.8%	194.0%	139.8%

Source: Central Bank of Armenia.

The structure of loans and deposit funds of the banking sector



Source: Central Bank of Armenia.

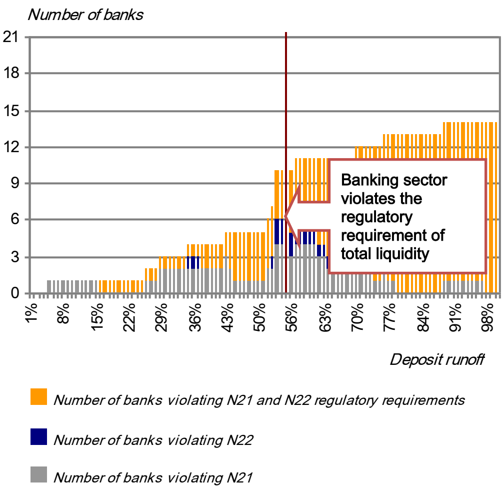
Relative to the results of liquidity risk stress tests conducted at the beginning of the year, there has been significant amelioration in the stress tests results. All banks have sufficient level of high liquid assets to absorb the simulated liability outflow, even in case of the worst stress scenario. 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

31.12.2016 թ.	Stress scenarios
	When 50% of off-balance sheet contingent liabilities performed
Banking sector total liquidity ratio	29.6%
Banking sector current liquidity ratio	156.2%

Source: Central bank of Armenia.

Number of banks violating liquidity regulatory ratios in case of individuals' call and time deposits runoff



Source: Central Bank of Armenia.

According to the results of the stress tests to assess liquidity risk arising from off-balance sheet contingent liabilities, all banks have sufficient high liquid assets 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 the financial stability.

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[34] *Bank's liabilities for major creditors exceed 5% of total liabilities without considering the interconnectedness.*
[35] *In the calculation of this ratio, loans include loans to real sector, while deposits include funds attracted from individuals and companies.*

4.1.4. Market risk

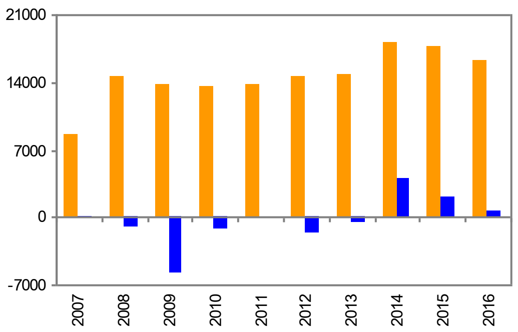
Foreign exchange risk

The probable impact of market risk on the financial stability is estimated to be insignificant.

The Armenian dram exchange rate fluctuations against other currencies drove the domestic banking sector to revaluation gains reaching AMD 649 million or 0.1% of total regulatory capital. Because of foreign currency revaluation, 8 banks reported profit and 9 banks incurred losses. The banking sector generated net revenue of AMD 16.2 billion from foreign exchange transactions and derivatives.

During the year, a significant reduction of dollarization of the banking system's balance sheet was registered. The share of foreign currency loans has decreased by 2.1 percentage points to 64.6% of the total loan portfolio. The share of foreign currency deposits has declined by 5.3 percentage points to 54.7% of total deposit portfolio. The banking sector's foreign currency net short position (including derivatives) amounted to AMD 21.8 billion or 3.5% of total regulatory capital (as of 31.12.2015, it was AMD 25.4 billion or 5.4% of total regulatory capital)[36].

The net income of the banking sector from foreign currency trades and revaluation



Source: Central Bank of Armenia.

Foreign exchange risk stress scenarios

31.12.2016	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 sector's profit/loss from foreign currency revaluation	AMD 1.1 billion or 0.18% of regulatory capital (AMD 1.1 billion)	AMD 218 million or 0.03% of regulatory capital (AMD 218 million)	AMD 423 million or 0.07 % of regulatory capital

Source: Central Bank of Armenia.

If the worst possible stress scenarios reviewed in the above stress test[37] 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.

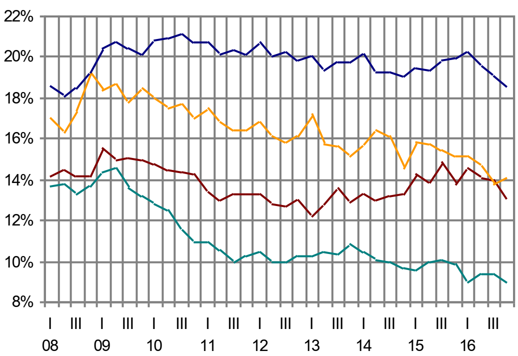
Interest rate risk

In a low inflation environment of 2016, the Central Bank gradually reduced the refinancing rate by a total of 2.5 percentage points, which had its corresponding effect on the interest rates of the financial sector.

Interest rates on loans and deposits of the banking system showed a downward trend during the year.

In 2016, the interest rate risk remained low. In the context of asset and liability management, the commercial banks use strict limits for maturity time baskets. Thus, the average weighted duration gap of present value of assets and liabilities of the

Loan rates for individuals and legal entities



Source: Central Bank of Armenia.

[36] *The derivative instruments include the derivative contracts signed with foreign governments, central (national) banks, financial organizations and international institutions that are rated A + (A1) or higher than A+ (A1) for long-term deposits 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 31.12.2016.*

banking sector varies in the region of half-to-one year. This means that possible fluctuations in market rates will not lead to major losses in the banking sector.

Interest rate risk stress scenarios

31.12.2016	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 sector's profit/loss	AMD -13.9 billion or 2.2% of banking sector capital (AMD 13.9 billion or 2.2% of banking sector capital)	AMD -926.0 million or 0.2% of banking sector capital (AMD 926.0 billion or 0.2% of banking sector capital)

Source: Central Bank of Armenia.

In case of the worst possible stress scenarios, possible losses of banks resulting from interest rate vary in the region of 3% of the total capital. This implies that losses of the banking sector resulting from interest rate fluctuations are insignificant and the impact of such losses on the financial stability will be weak.

Price risk

The price risk of the banking sector remains low, owing to small amount of financial assets available-for-sale and held at fair value through profit or loss in the balances of banks. The share of the abovementioned assets was 8.7% in total assets as of 31.12.2016 (6.3%, as of 31.12.2015).

The net income generated by the banking sector from revaluation of financial assets available-for-sale and held at fair value through profit or loss was AMD 3.2 billion during the year.

Risks associated with the 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.

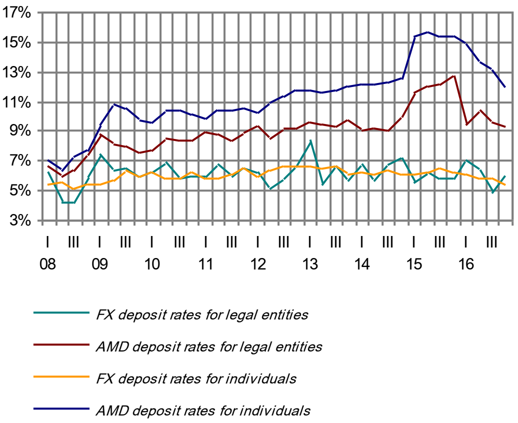
Real estate price change stress scenarios

30% depreciation of real estate	31.12.2016
The banking sector's loss due to revaluation of own real estate property (price risk)	AMD 13.0 billion (or 2.1% of banking sector capital)
The banking sector'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 20.9 billion (or 3.3% of banking sector capital)
The banking sector'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 69.8 billion (or 11.1% of banking sector capital)

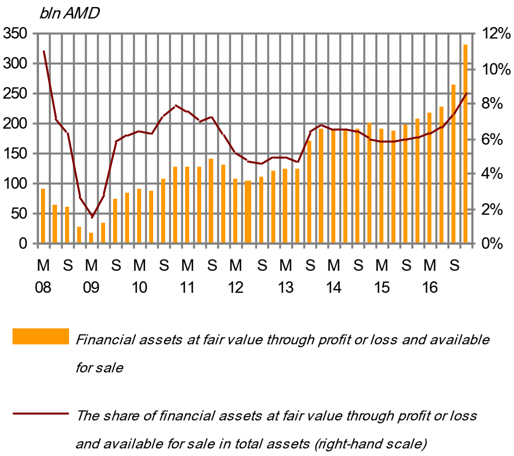
Source: Central Bank of Armenia.

[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.*

Deposit rates for individuals and legal entities

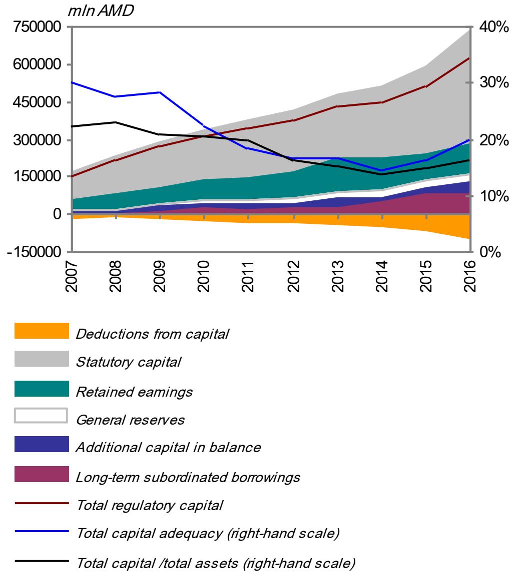


Share of financial assets at fair value through profit or loss and available for sale in total assets



Source: Central Bank of Armenia.

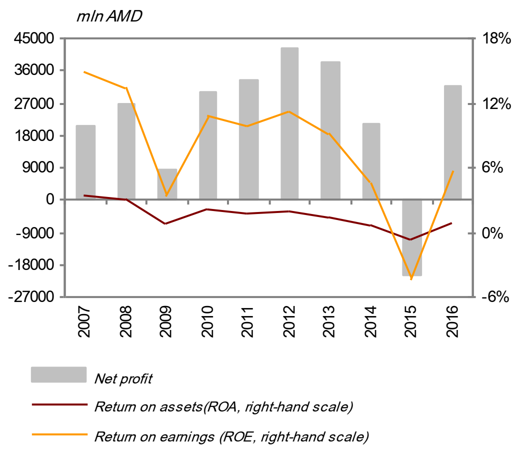
The structure of total regulatory capital



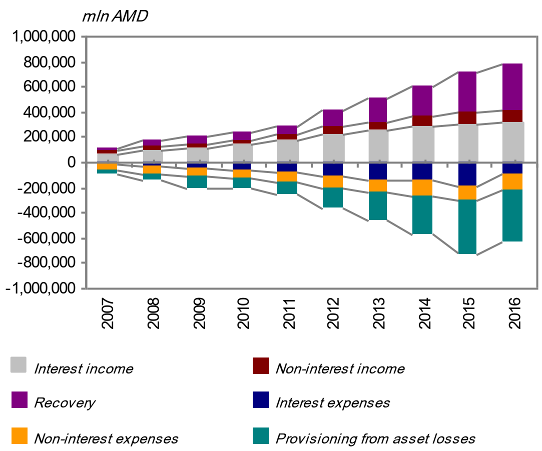
Source: Central Bank of Armenia.

The capital adequacy of commercial banks is improving.

Profitability ratios of banking sector



Income and expenses of the banking sector



Source: Central Bank of Armenia.

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 decreased compared to the beginning of the year. In view of the moderate fluctuations of the real estate price and the last years' developments, the financial stability is assessed not vulnerable to the impact of credit and price risks.

4.1.5. Capital adequacy and profitability

In 2016, commercial banks' total capital adequacy ratio rose by 3.8 percentage points to 20.0%. Individual banks kept their total capital adequacy ratios higher than the minimum requirement of 12.0%, so no bank reported breaches of capital adequacy requirement. The improvement of total capital adequacy at banks was driven by replenishments of statutory capital, attraction of long-term subordinated loans and generated net income.

Total regulatory capital of commercial banks increased by 32.2% to AMD 627.1 billion compared to the beginning of the year. The structure of total regulatory capital has high quality in terms of its risk absorption capacity. The share of CET1 capital is 82.3% of total regulatory capital.

The banking sector's net profit, calculated in accordance with the Central Bank supervisory reports[39], amounted to AMD 31.7 billion, with 15 banks reporting profit and 3 banks incurring losses. The ROA and ROE profitability ratios of the banking sector were 0.9% and 5.8%, respectively (-0.5% and -4.3% in the previous year).

The return on equity improved due to the increase of the return on every unit of assets, while the decreased leverage ratio left its negative impact on it. The ROA grew due to a 1.6 pp. decrease of net provisioning to total assets ratio compared to the previous year, which was attributable to the improvement of loan portfolio.

The shares of interest and non-interest income, interest expenses decreased in the banking sector income and expenditure structure, while the shares of recoveries from asset loss provisions and allocations for asset loss provisions increased. These structural changes are due to some improvement of loan repayments.

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[39] *This differs from IFRS mainly on the part of contributions to assets loss provisioning.*

4.2. CREDIT ORGANIZATIONS

Credit organizations represent the second largest sector of Armenian financial system, with their assets making up 8.7% of the financial system. During the reporting year, assets, liabilities and total capital of credit organizations increased considerably.

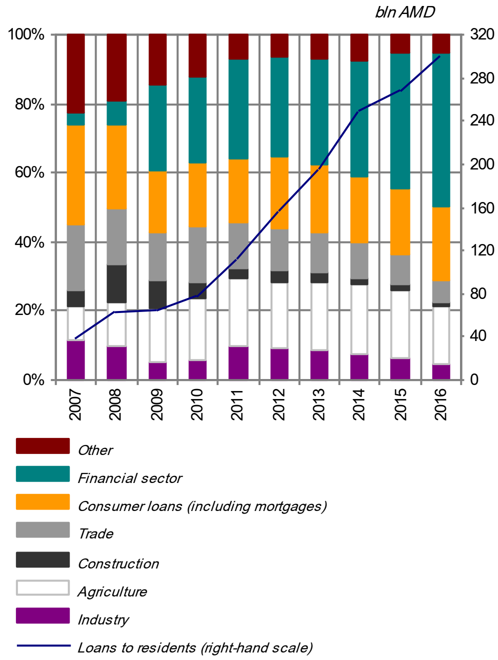
Assets, liabilities, capital and profit of credit organizations

(thousand AMD)

Indicator	31.12.2015	31.12.2016	Growth (%)
Assets	308,627,870	391,978,700	27.0%
Liabilities	176,420,773	209,939,988	19.0%
Capital	132,207,097	182,038,712	37.7%
Net profit	10,331,546	19,231,554	86.1%

Source: Central Bank of Armenia.

Balance of loans to residents by credit organizations, by sectors



Source: Central Bank of Armenia.

In 2016, the total capital of credit organizations demonstrated a growth rate outpacing that of the total assets by 10.7 percentage points. As a result, the total capital-to-assets ratio (leverage ratio) has increased by 3.6 percentage points to 46.4%.

The profit of credit organizations, calculated in accordance with the IFRS, totaled AMD 19.7 billion, with return on assets (ROA) and return on equity (ROE) having reached 5.7% and 12.4%, respectively.

During the year, 23 credit organizations posted profit and 11 reported losses, calculated in accordance with the Central Bank supervisory reports. The ROA and ROE of credit organizations have grown by 2.0 and 1.9 percentage points relative to the previous year to 5.6% and 12.2%, respectively.

The share of non-performing loans and receivables fell by 1.6 percentage point to 4.6%. The share of non-performing loans and receivables is relatively high in consumer loans, loans to trade and agricultural sectors, amounting to 15.6%, 8.3% and 8.1%, respectively.

Relative to the previous year, the ratio of net asset loss provisioning to total assets has decreased by 0.5 pp. to 2.0%.

In all maturity time bands of assets and liabilities (up to 180-day (including demand instruments), from 180-day 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 scenarios[40]

31.12.2016	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 3.0 billion or 1.8% of regulatory capital	AMD 888 million or 0.5% of regulatory capital	AMD 7.1 billion or 4.3% of regulatory capital

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).*

As compared to the banking sector, the credit organizations are much more capitalized. According to various stress scenarios, credit organizations are fully capable to absorb potential risks.

4.3. INSURANCE COMPANIES

During the year, the assets of insurance companies increased by 13.5% to AMD 46.7 billion and the amount of liabilities, by 11.8% to AMD 27.2 billion. Total capital has increased by 16.0% to AMD 19.5 billion. As of December 2016, the share of insurance companies in the financial system reduced by 0.1 pp. to 1.0% of total assets of the financial system. The amount of premiums written, the main indicator of insurance activity, increased by 5.5% as compared to the same period of the previous year to AMD 33.1 billion (this indicator increased by 1.5% in 2015).

The premium to GDP ratio, another key indicator of insurance companies, was 0.65% as of 31.12.2016[41] (increasing by 0.3pp. YoY). In December 2016, the premium per capita ratio was AMD 11,070 versus AMD 10,457 reported in 2015.

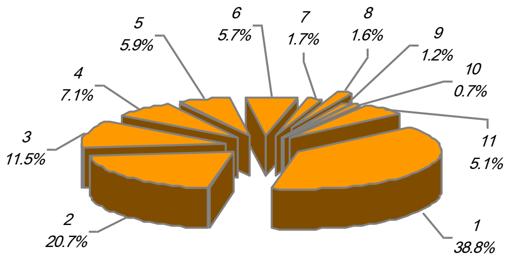
The insurance companies' expense ratio has increased by 2.0 percentage points in relation to the previous year to 50.9%[42]. The loss ratio of insurance companies remained unchanged at 29.8%[43].

The shares of risk-weighted assets and required solvency in the insurance sector's capital adequacy ratio were 36.8 percent and 63.2 percent, respectively. The regulatory capital adequacy ratio of the insurance sector was 206.5% as of 31.12.2016 (the marginal value of regulatory capital adequacy is 100%).

Solvency risk

The change in solvency level of insurance companies was assessed in case if stress-scenarios shown below unfold (a 10.0% rise in the indemnification rate and a 5.0% growth of insurance payments). 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.

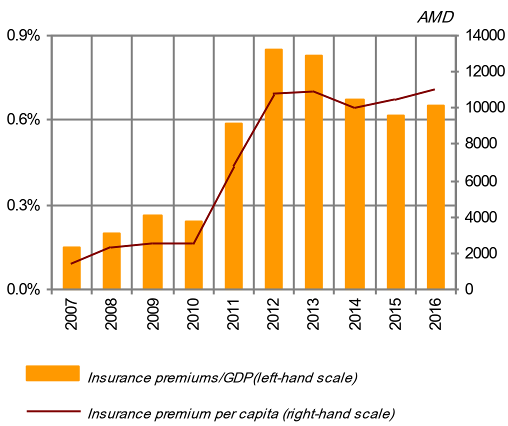
Insurance sector assets



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

Source: Central Bank of Armenia.

Main ratios of the insurance sector



Source: Central Bank of Armenia.

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[41] Based on the 2015 data, the premiums to GDP ratio on non-life insurance was 3.61% on average in developed industrial countries and 1.39% in emerging market countries (source: Swiss Re, Sigma No 3/2016, May 2016).

[42] The expense ratio has been calculated using the following formula: non - interest expense / (earned insurance premiums – sums refunded on the contracts terminated- change of UIPR).

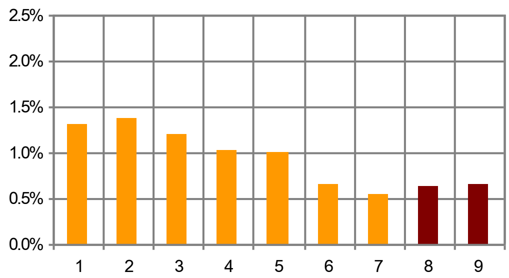
[43] The loss ratio has been calculated using the following formula: (net accrued indemnity + net provisions to technical reserves + other transaction costs on insurance) / (earned insurance premiums – sums refunded on the contracts terminated- change of UIPR).

Solvency assessment stress scenarios

31.12.2016	Stress scenarios	
	Growth of reimbursement rates, 10%, and insurance payments increase, 5 %	Shocking growth of outstanding claims reserves, 25%
Required growth of UIPR of the insurance sector, if the stress scenario occurs	AMD 0.9 billion or 4.7% of regulatory capital of the sector	AMD 0.4 billion or 2.1% of regulatory capital of the sector
Total capital adequacy ratio of the insurance sector, if the stress scenario occurs	198.6%	201.0%

Source: Central Bank of Armenia.

Insurance premiums/ GDP in EEC and CIS (2015)



1. Ukraine, 2. Turkey, 3. Russia, 4. Romania, 5. Georgia, 6. Kazakhstan, 7. Azerbaijan, 8. Armenia 2015, 9. Armenia 2016

Source: Central bank of Armenia, Swiss Re, Sigma No 3/2016.

Credit risk

Allocating funds of the insurance sector in low-risk assets allows keeping 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.

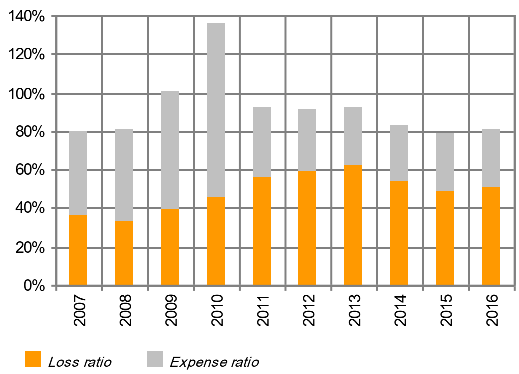
Credit risk assessment stress scenarios

31.12.2016	Stress scenarios	
	Classifying 30% of “standard” assets into “watched” category	Classifying 5% of “standard” assets into “loss” category
Loss of the insurance sector	AMD 0.8 billion or 4.1% of regulatory capital	AMD 1.5 billion or 7.6% of regulatory capital
The total capital adequacy ratio of the insurance sector, if the stress scenario occurs	200.0%	194.4%

Source: Central Bank of Armenia.

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

Loss and expense ratios of the insurance sector



Foreign exchange risk

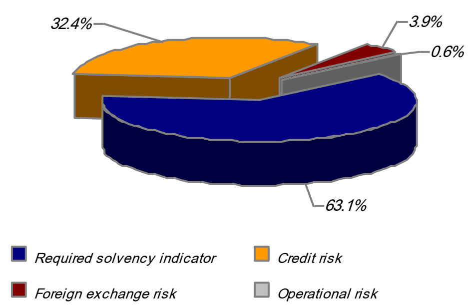
The results of the foreign exchange stress scenario suggest that the loss of insurance companies resulting from foreign exchange risk is not considerable.

Foreign exchange risk assessment stress scenarios[44]

31.12.2016	Stress scenarios		
	Gain (loss) in case of 5% AMD appreciation (depreciation) versus USD	Gain (loss) in case of 5% AMD appreciation (depreciation) versus EUR	Maximum potential 10-day loss valued through VaR method
Insurance sector's gain/loss in case of foreign exchange revaluation	AMD 12.2 million or 0.1% of regulatory capital (AMD -12.2 million)	AMD 0.5 million or 0.002% of regulatory capital (AMD -0.5 million)	AMD 2.4 million or 0.01% of regulatory capital

Source: Central Bank of Armenia.

The shares of risk weighted assets and required solvency in the capital adequacy ratio of the insurance sector



Source: Central Bank of Armenia.

[44] The calculation of losses estimated through stress - scenarios and the VaR Model (the VaR Model is not considered as a s tress - 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.

Liquidity risk

The liquidity risk to the insurance sector is low, given the results of the stress scenario.

Liquidity risk assessment stress scenario

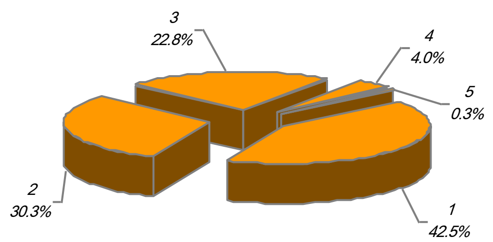
31.12.2016	Stress scenarios
	Sharp increase of outstanding claims reserves, 25%
Required growth of outstanding claims reserves when the stress scenario occurs	AMD 0.5 billion or 2.6% of regulatory capital
Liquidity of insurance companies when the stress scenario occurs	559.4%

Source: Central Bank of Armenia.

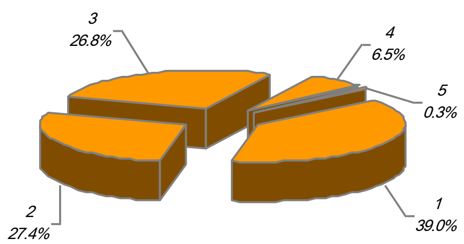
The share of insurance sector in the financial system remains small. Risks to the insurance companies are controllable and non-vulnerable in the financial stability point of view.

4.4. MANDATORY PENSION FUNDS

Pension fund investments, as of 31.12.2015



Pension fund investments, as of 31.12.2016



1. RA Government bonds, 2. Equity securities, 3. Cash and deposits 4. Other bonds, 5. Other assets,

Source: Central Bank of Armenia.

As of 31.12.2016, there were 2 investment fund managers with permission to operate as mandatory pension fund managers in Armenia. Each of the two manages three mandatory pension funds.

Net Asset Value - NAV of Mandatory pension funds as of 31.12.2016

Name of the manager	Name of the pension fund	Net asset value *(NAV)*
AMUNDI-ACBA Asset Management Armenia CJSC	*Balanced fund*	AMD 921 million
	Conservative fund	AMD 31 billion
	Fixed income fund	AMD 520 million
C-QUADRAT AMPEGA Asset Management Armenia LLC	*Balanced fund*	AMD 341 million
	Conservative fund	AMD 30 billion
	Fixed income fund	AMD 219 million

The net asset value of the pension funds was AMD 63.2 billion, while net assets-to-GDP ratio was 1.24%, increasing by 0.62 pp. compared to the end of 2015.

As of the end of 2016, there were 170,000 active participants in pension funds.

The Herfindahl-Hirschman concentration index for pension fund investments decreased as compared to 2015 to 0.30.

In 2016, the share of non-government bonds increased by 3.0 pp. to 6.5% of total assets, which shows increased activity of the asset managers in the non-government bond markets. The investments in cash and deposits increased by 4.0 to 26.8% of total assets each. At the same time, the shares of investments in government bonds and in foreign investment fund securities decreased by 4.0 and 6.3 pp, respectively.

The share of foreign exchange assets of the funds is 33.9% or AMD 21.4 billion, the majority of which (AMD 17.4 billion) were foreign investment fund securities.

The return of funds amounted to 13.8% during 2016 (5.3% in 2015). The cumulative return since 2014 has been 25.9 percent (The initial unit price was AMD 1000, which later increased by AMD 259 and was AMD 1259, as of 31.12.2016).

The 39.0% or AMD 24.7 billion of the fund's assets are invested in government bonds. The investments in Eurobonds amounted to AMD 385 million. The weighted average maturity of the fund invested government bonds is 6.5 years and the weighted average yield (before maturity) is 11.0%.

4.5. SECURITIES MARKET PARTICIPANTS[45]

As of 2016, 33 classes of securities of 15 reporting issuers were admitted to trading in the regulated market. Two issuers were accountable on both shares and bonds.

As of end of the year, the total amount of shares issued was AMD 44.8 billon, while that of bonds was AMD 28.6 billion. The share of equity securities issued by three commercial banks was 60.0% of total issuance of securities, while the share of bonds issued by three commercial banks was 64.0% of total issuance of bonds. 13 of these 23 bonds were in foreign currency, with their share making up 66.5%.

There were 17 banks providing investment services and 8 investment companies in the securities market of Armenia.

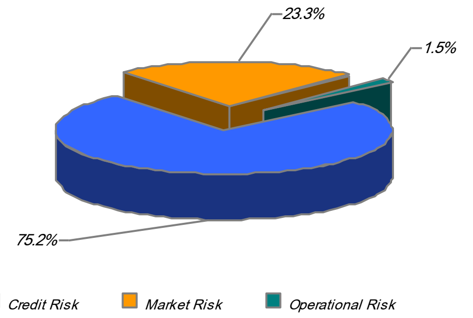
The total assets and total capital of investment companies increased by 45.1% each and amounted to AMD 41.6 and 6.5 billion, respectively. Total profit of investment companies was AMD 1.5 billion. Moreover, all companies posted profit.

The regulatory capital adequacy of investment companies grew by 4.6 pp to 28.9% in December. The credit risk of investment companies accounted for 75.2% of risk-weighted assets, the market risk constituted 23.3% and the operational risk, 1.5%. Remarkably, the interest rate risk had the largest share in market risk of investment companies (82.8%), while foreign exchange and share price risks constituted 16.7% and 0.5%, respectively. The capital adequacy of investment companies is higher than the required minimum level, and the abovementioned risks are manageable.

As of 31.12.2016, there were 2301 security registers and 108121 owners in the Central Depository of Armenia.

The investment companies have low-risk level activity in terms of financial stability vulnerability.

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



Source: Central Bank of Armenia.

[45] *The participants of the securities' market of Armenia involve the issuers of securities and investors in securities, investment service providers, investment funds' managers, the Central Depository and the regulated market operator.*

SUMMARY

In 2016, the financial intermediation intensified. The commercial banks have significantly increased the volumes of lending to economy, which was also accompanied by a better loan quality. The capital adequacy and liquidity of the banking sector improved due to inflows of statutory capital replenishments. This has contributed to the financial stability.

Non-bank financial institutions underwent volumetric expansion, while the risks to financial stability remained low.

5. FINANCIAL MARKET INFRASTRUCTURES STABILITY

Given the importance and the impact of payment and settlement systems on the monetary policy and the financial stability of Armenia, the Central Bank further pays due attention to the systemically important payment and securities settlement systems and the telecommunication networks supporting their activity.

In Armenia, over 99 percent of interbank settlements are made via the Central Bank systems[46].

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

In 2016, there were about 3.8 million payments (payment messages), totaling AMD 15169.8 billion, executed via the Electronic Payment System (EPS) of the Central Bank of Armenia.

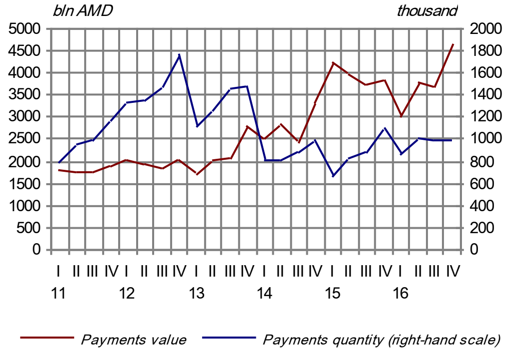
After a sharp seasonal decrease in the beginning of the year, the recovery pace of growth of the value of EPS payments was flatter as compared to the previous year, which resulted in a yearly 3.6% decline of the value of payments. The main reason of this decline was the yearly 27.2% decrease of operations with the Central bank (mainly repo transactions) amidst a considerable growth of interbank payments (22.1%).

The number of payments increased by 10.5% in 2016 compared to the previous year, due to 7.0% growth of interbank payments. The majority of those payments is executed using a single message type.

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

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

Payments by Electronic Payment System (without stock exchange market transactions)



Source: Central Bank of Armenia.

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 in case of insufficient funds on 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. 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 irrevocable[47].

There is no credit risk identified in the EPS.

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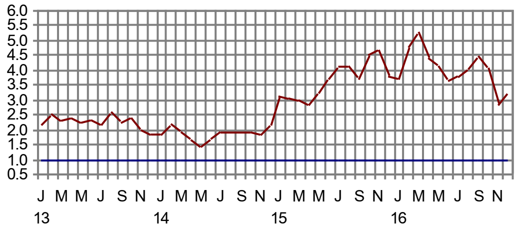
[46] Payments via the Central Bank systems involve Electronic Payment System (EPS) payments without stock exchange trades, also transactions concerning the CBA indirect monetary instruments, as well as final settlements of ArCa cards system and the cash leg of the transactions of the Government Securities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

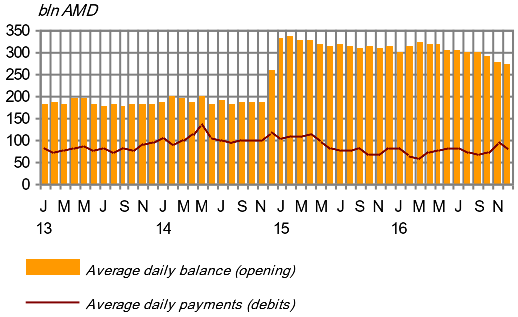
[47] For details, please see the "Financial Stability Report", 2007, and the paper "Payments and Securities Clearance and Settlement Systems in the Republic of Armenia", 2010.

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

The dynamics of the own liquidity indicator



Average daily payments and average daily opening balances (by all banks)



Source: Central Bank of Armenia.

The rejections due to insufficient liquidity are negligible.

Some concentrations during certain hours of the operational day did not pose problems.

Liquidity risk

In the period under review the daily average indicator of own liquidity used for assessment of liquidity risk[48] was 4.0 (3.7 in 2015), reaching 5.3 in March (in the previous year the maximum was 4.7). This unprecedented high level was due to amendments in the regulatory framework of reserve requirements implemented in December 2014. As a result, the liquidity held in AMD correspondent accounts of banks with the Central bank notably increased.

The peak registered in March was due to a rise in average daily balance parallel to a decrease in average daily payments. The sharp fall of the indicator in the fourth quarter was caused by an increase in average daily payments and a decrease in the average daily liquidity at the beginning of the day, which still is on a high level (2.85).

During the reporting period the average daily payments by value declined by 27.7% as compared to 2015. The average daily balance at the beginning of the day remained nearly the same (a mere 6.2% decline of the yearly indicator, which occurred mainly in the fourth quarter).

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 the individual banks as well, and the results of the monitoring suggest that the likelihood of liquidity risk is estimated to be minimal.

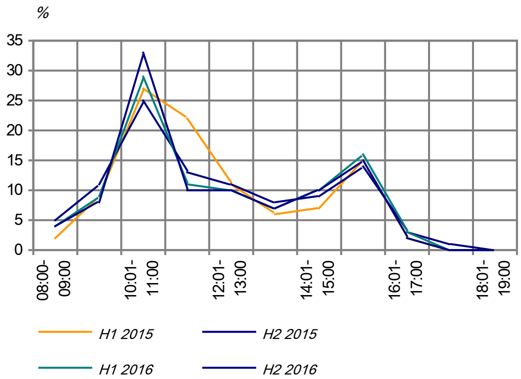
Reported rejections in the system and their share in total payments made through the system are also important measures for the assessment of the liquidity risk.

The number of rejections due to insufficient liquidity as well as its share in the EPS payments remain negligible – a maximum of 0.1% by value and 0.002% by number.

These rejections are 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

Intraday distribution of value of payments on an average semiannual basis



Source: Central Bank of Armenia.

In the reported period, 31.1% of the value and 17.1% of the number of payments were settled during the peak hours (10:00-11:00 and 15:00-16:00, respectively).

2 peak hours for value of payments were registered in the system (at the beginning and end of the operational day), resembling to the previous years' trend. However, obvious smoothening of daily distribution of the number of payments was noticed.

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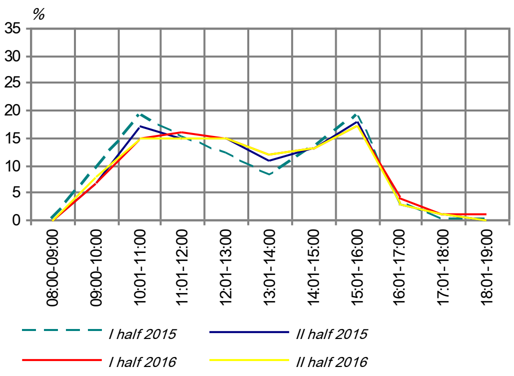
[48] The daily average indicator of own liquidity is calculated on the basis of a ratio of opening liquidity on dram correspondent accounts of commercial banks to debits (payments) through the account. Incoming payments are not included in the indicator so that a stress-scenario can assess the likelihood 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.

The smoothening of distribution of the number of payments was significant from 10:00 to 13:00, when 14.7%, 15.6% and 15.3% of the total payments were made during each hour (18.0%, 14.9% and 13.3%, respectively, for each hour in 2015). The peak hour ratio of the end of the day also declined by 1.6 percentage point.

A sharp increase of peak hour of the beginning of the day for value of payments was registered (5pp.). The share of payments from 11:00 to 12:00 declined considerably, being 10.5% instead of 17.5% in 2015. This is an evidence of acute unequal distribution of payments and their concentration at certain hours during the day.

Taking into consideration the sufficient level of system capacity, positive outcomes of liquidity and operational availability indicators and negligible share of rejections in total payments (for details, please see the previous subsections), the uneven distribution and concentration of payments during certain hours of the day did not lead to problems in 2016 and the likelihood of emergence of risk to the system is generally low.

Intraday distribution of number of payments on an average semiannual basis



Source: Central Bank of Armenia.

During the reported period, 31.1% of the value and 17.1% of the number of payments were settled during the peak hours (10:00-11:00 and 15:00-16:00).

System capacity

In 2016, the hourly maximum of payment flows (the maximum number of payments per hour for each month) remained at the same level in general, being a positive indicator in terms of system overload.

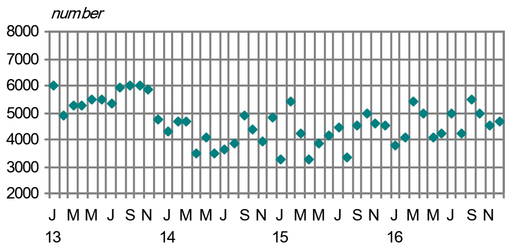
The maximum hourly indicator was 5500 payments per hour in 2016, against 5419 payments/hour in 2015. The peak hour was recorded in September, from 10:00 to 11:00, making up 26.8% of the number and 6.8% of the value of the day's payments.

The maximum daily indicator (number of payments per day) grew slightly to 27,450, against 26,245 payments/day in 2015.

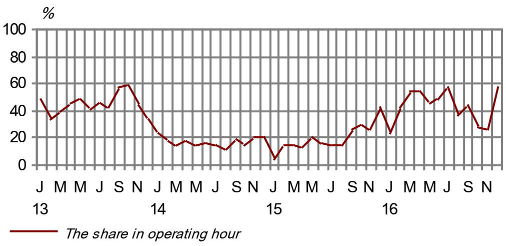
The shares of all marginal indicators (showing the significant flow of payments per hour) have increased.

Taking into account that the minimum potential capacity indicator estimated in the system is higher than 6000 payments per hour, and that the cases of the abovementioned levels have a small share in total payments flow[49], the increase of payments per hour have had no negative effect and the probability of emergence of capacity-related risks is estimated to be low.

The maximum number of payments per hour, by month



The dynamics of 2500 and more payments per hour and their share in the operating hour in the given month

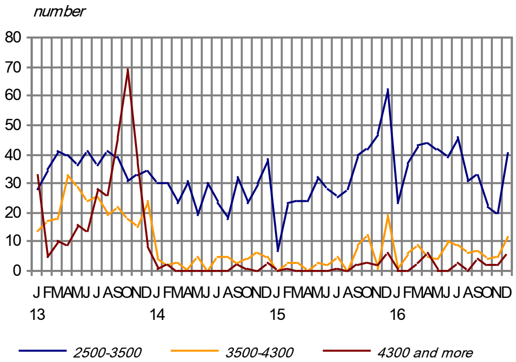


Operational availability of the system

In 2016, only one significant incident affecting the operational availability of the EPS was reported. Due to this incident, the operational availability of the EPS has been 99.6%. This is quite a high indicator and is in line with the service level defined by the operator[50].

The above-mentioned incident was caused by a technical and operational software problem in the component of the Operational day, which is responsible for system settlement. It was decided to restore the data of the beginning of the day and the operational day was restarted at 15:00. As a result, the operational day was extended, but all the operations were carried out in the given day and no participant incurred problems.

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



Source: Central Bank of Armenia.

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[49] For example, the share of more than 3,500 payments per hour was 4.6% per annum.

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

5.2. SECURITIES SETTLEMENT SYSTEMS

In Armenia, the settlement of securities is done through two systems: Securities Accounting and Settlement System of the Central Depositary of Armenia (hereinafter CDA's SSS) and Government Securities Accounting and Settlement System of the CBA (hereinafter GSASS).

In 2016, secondary market transactions totaling more than AMD 8099.4 billion of nominal value were carried out through GSASS (AMD 6,299.3 billion in 2015), which represent an increase by 28.6% in relation to the previous year. Such increase was mainly due to increased "delivery versus payment" transactions. Meanwhile, secondary market transactions, totaling more than AMD 531.7 billion of nominal value, were carried out through CDA's SSS, which represented a 2.2 times decrease in relation to the previous year. This fall was due to decrease of OTC transactions with corporate bonds and Eurobonds issued on behalf of the RA.

In 2016, the transactions executed through GSASS accounted for 93.8 percent of secondary market transactions executed totally via securities settlement systems. Thus, in the financial stability point of view, GSASS is of crucial importance and remains a systemically important system.

Transfers of securities through the Government Securities Accounting and Settlement System of the Central Bank pertaining to the operations with securities in the secondary market [51]

	2014	2015	2016
Value of OTC transactions (trades, repo and reverse repo) in nominal value, AMD billion	5656.7	6285.5	8045.0
Number of OTC transactions (trades, repo and reverse repo)	26509	32154	31651
Value of stock exchange transactions in nominal value, AMD billion	32.2	13.7	54.4
Number of Stock exchange transaction	920	325	911
Total transfers of securities in nominal value, AMD billion	5688.9	6299.3	8099.4
Total number of transfers of securities	27429	32479	32562

Source: Central Bank of Armenia.

In both GSASS and CDA's SSS, the settlement of OTC transactions is subject to the principle "delivery versus payment" (DVP), while stock exchange transactions are executed through a procedure of pre-depositing of securities and cash, thereby excluding counterparty risk. No credit risk may emerge due to the usage of gross settlement and irrevocability principles in the system.

[51] *The statistical information provided includes the GSASS-executed payments and excludes transfers via CDA investors accounts and internal transfers made by sub-custodians for their clients.*

Transfers of securities through the Securities Accounting and Settlement System of the Central Depositary of Armenia pertaining to the operations with securities in the secondary market [52]

	2014	2015	2016
Value of OTC transactions (trades and repo) in nominal value, AMD billion	272.1	1179.3	511.1
Number of OTC transactions (trades and repo)	1234	2682	1355
Value of stock exchange transactions (trades and repo) in nominal value, AMD billion	7.0	3.3	20.6
Number of stock exchange transactions o (trades and repo)	570	366	597
Total transfers of securities in nominal value, AMD billion	279.1	1182.6	531.7
Total number of transfers of securities	1804	3048	1952

Source: Central Bank of Armenia.

In 2016 there were 2 significant (with duration of more than 1 hour) incidents which influenced the uninterrupted functioning of GSASS.

The first incident was because of a technical failure in OD system database server (see the EPS incidents), which resulted in a more than 1 hour delay of part of infrastructure DVP transactions of the secondary market. The second incident was caused by a software problem. The result was a delay of the settlement of the GSASS primary market's infrastructure buyback auction for about 1 hour.

The causes of the abovementioned incidents were eliminated and they had no significant impact on the operation of the system and the participants. The operational availability of primary and secondary market infrastructure of GSASS were 99.7%.

Given the abovementioned, the GSASS is assessed as reliable and safe.

5.3. CREDIT REGISTRY AND ACRA CREDIT BUREAU

The Credit Registry

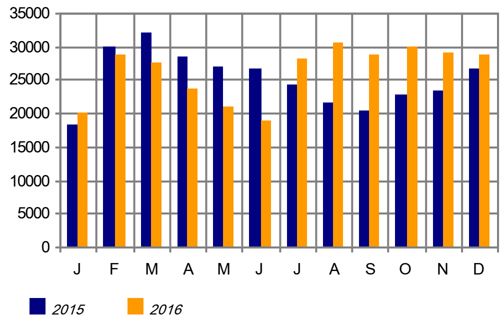
The Credit Registry is functioning within the Statistical department of the CBA and is designed to collect reliable data for effective monitoring and analysis. As of the end of 2016, the number of loans recorded in the Credit Registry was 2,922,629 loans to individuals and 172,330 loans to legal entities, totaling 3,094,959 loans.

Number of loans registered in the Credit Registry, as of end of 2016

Number of loans	Outstanding	Repaid	Total
Loans to individuals	659316	2263313	2922629
Loans to legal entities	20935	151395	172330
Total	**680251**	**2414708**	**3094959**

Source: Central Bank of Armenia.

Number of loans in 2015-2016



Source: Central Bank of Armenia.

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[52] *The statistical information provided includes the CDA's SSS-executed payments both with corporate bonds and Eurobonds issued by the RA and government bonds held as sub-custodian.*

As compared to the previous year, the total number of loans registered in the Credit Registry increased by 488,056 loans. The Credit Registry possessed information on 300,735 loans outstanding, in the previous year, and 314,798 loans outstanding, in this year.

Number of loans registered in the Credit Registry

Month	2015	2016
January	18235	20192
February	29935	28651
March	32000	27427
April	28293	23778
May	26778	20887
June	26548	18932
July	24204	27986
August	21639	30483
September	20326	28765
October	22618	29940
November	23463	29039
December	26696	28718
Total	**300735**	**314798**

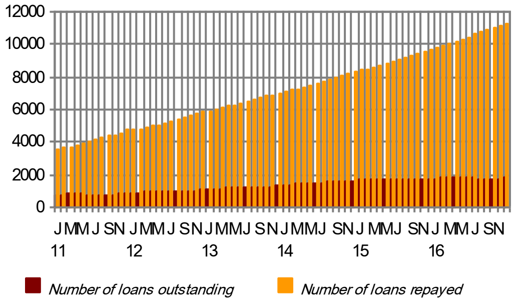
Source: Central Bank of Armenia.

A new software system will be launched in 2017, which will significantly ease the burden of banks and credit organizations by allowing them to provide information to the Credit Registry and ACRA Credit Bureau in one united report.

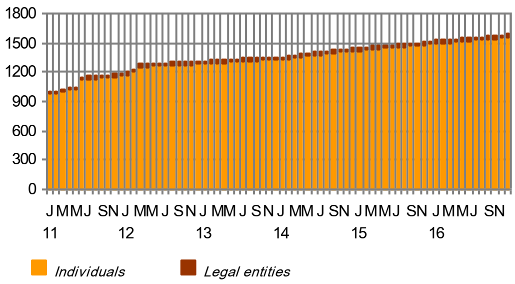
The new software system includes new methods for identification of natural and legal entities. Moreover, the restriction on the information to the Credit Registry was renegotiated, so that the banks and the credit organisations will provide information on their total loan portfolio.

These amendments may lead to a more efficient use of information provided by the Credit Registry for monitoring and analysis.

Number of loans registered in ACRA database (in thousands)



Number of borrowers registered in ACRA database (in thousands)



Source: ACRA Credit Bureau.

The ACRA Credit Bureau

In 2016, the number of customers registered with the ACRA Credit bureau increased by 4.6%, relative to 2015, and amounted to 1,588,316 borrowers, as of December 31. Of this number, 98.0 percent are individuals.

The number of loans available in the database grew by 14.5% and reached 13,133,320, as of December 31, 2016.

Each natural or legal entity may obtain information on their credit history from the Credit bureau. In order to get information on the credit history of one's customer or partner, the legal entity must sign a contract with the Credit bureau and obtain the written consent of the owner of the credit history.

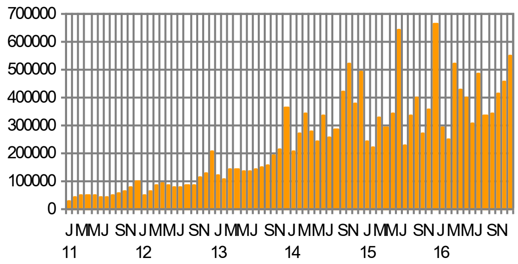
The ACRA credit bureau provided 3,535,350 credit reports and 1,261,768 score records in 2016. This number grew by 10.9 percent compared to 2015.

Since 2016, every natural and legal person has had the opportunity to order and receive their credit report by submitting an application in any of the post offices functioning in the RA, owing to the cooperation of the Credit Bureau and Haypost CJSC.

Also, during the year, due to the strategic partnership between the Credit bureau and Fair Isaac Corporation, a “FICO score” scoring system was implemented in Armenia.

A multi-level coding system has been developed to protect the information owned by the Credit bureau and to prevent its illegal usage by third parties whatever. The system traces all actions and an ongoing monitoring of the system is in place to prevent suspicious and unauthorized actions.

Number of reports provided by ACRA credit registry



Source: ACRA Credit Bureau.

5.4. DEPOSIT GUARANTY SCHEME

As of end of 2016, both the number of individual depositors and the total volume of their deposits[53] grew.

Compared to the previous year-end, the sum of guaranteed deposits (excluding the unguaranteed loans as defined in the 3rd sub-point of the Article 2 of the RA law on Guarantee of bank deposits of individuals) grew by 13% to AMD 1,310 million.

The volume of guaranteed deposits grew by 15.0% to AMD 522 million, while the number of depositors which have guaranteed deposits increased by 4.6% to 1.9 million.

The share of guaranteed deposits in the total deposits grew by 0.7% compared to the previous year, and amounted to 39.8%.

The shares of depositors holding dram-denominated deposits in total deposits grew by 3.5% to 29.5%.

As of end of 2016, the share of depositors who hold deposits not exceeding guaranteed amount in the total depositors holding guaranteed deposits was 98.2%.

During the same period, the average amount of a deposit grew by 8.0% to AMD 683,921.

SUMMARY

The results of monitoring assure that the 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 functioning of both the EPS and GSASS are assessed satisfactory enough; the developments in the payment and settlement system are manageable in terms of the financial stability and no risks exposed to the system arise.

During 2016, an increase of loans with both the Credit Registry of the CBA and ACRA Credit bureau was observed, along with the development of united reporting form and the increased efficiency of the general performance.

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[53] The term deposit meets the definition referred to in the Article 2 of the law on Guarantee of bank deposits of individuals.

CHARTS

TABLES

GLOSSARY OF TERMS

Economic growth	The growth of volume of goods and services produced in the economy during a certain period of time.
Inflation	An increase in the general level of prices of goods and services.
Consumer price index	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.
Balance of payments	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).
Foreign trade	This involves an exchange of capital, goods and services across international borders or territories, in the form of exports and imports.
Gross external debt	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.
Credit risk	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.
Liquidity risk	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).
Foreign currency risk	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.
Interest rate risk	Interest rate risk is the risk that interest rate volatilities in the market will adversely affect profits and/or capital of the financial institution.
Price risk	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.
Standard asset	An asset which is serviced under a contract, and is not problematic.
Watched asset	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.
Substandard asset	An asset the contractual obligations towards which are not performed due to the borrower’s fragile financial standing or inability to repay the debt.
Doubtful asset	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.
Loss asset	An asset non-collectable and fully impaired uncollectible, so that its recording on the balance sheet is no longer reasonable.
Nonperforming asset	An asset which has been classified by the bank as watched or substandard or doubtful or bad.
Return on assets (RoA)	A ratio of net annual profit to average annual total assets.
Return on equity (RoE)	A ratio of net annual profit to average annual total capital.
Total liquidity	A ratio of high liquid assets to total assets.
Current liquidity	A ratio of high liquid assets to demand liabilities.
Regulatory total capital	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”.
Capital adequacy	A ratio of regulatory total capital to risk weighted assets.

Leverage	A ratio of total assets to total capital.
Off-balance sheet contingent asset	Off-balance sheet contingent assets include outstanding credit lines, credit cards and overdrafts as well as letters of credit, guarantees and warranties provided.
Net provisioning	The difference between provisions to and recoveries from assets loss reserve fund.
Net foreign currency position	The difference between assets and liabilities in FX assets and local currency assets containing FX risk.
Gross foreign currency position	This position measures the sum of absolute values of positions of various currencies.
The Herfindahl-Hirschman index	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.
Economic cost of capital	The difference of the present value of total assets and present value of total liabilities.
Spread	The difference between deposit and credit interest rates
Current liquidity	A ratio of high liquid assets to demand liabilities.

ABBREVIATIONS

AMD	Armenian Dram
BCI	Business Climate Index
CBA	Central Bank of the Republic of Armenia
CDA SSS	Securities Accounting and Settlement System of the Central Depositary of Armenia
CIS	Commonwealth of Independent States
CJSC	Close Joint Stock Company
DVP	Delivery versus Payment
ECB	European Central Bank
EPS	Electronic Payments System
EU	Euro Union
FRS	Federal Reserve System
GDP	Gross Domestic Product
GSASS	Government Securities Accounting and Settlement System
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LLC	Limited Liability Company
NPL	Non-performing Loans
NSSA	National Statistics Service of Armenia
OD	Operational Day
OTC	Over-the-counter
RA	Republic of Armenia
RoA	Return on assets
RoE	Return on equity
UIPR	Unearned insurance premium reserves
UK	United Kingdom
USA	United States of America
YOY	Year on Year