

FINANCIAL STABILITY REPORT

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.

On April 9, 2018, the financial stability became the main objective of the Central bank, parallel with the price stability (in accordance with the amendments of the Constitution of the Republic of Armenia, implemented in 2015).

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 2017, given the rebounding economic activity and the outlook for more stable income from abroad, the financial system stability of Armenia was strengthened, while credit expansion policy was maintained.

Positive developments in both foreign and domestic sectors had their favorable impact on the financial system stability.

Maintaining the current rate of the global economic growth will continue to have a positive impact on the stability of the domestic economy and financial system.

The pickup of global growth was higher than expected and will remain on track, according to the IMF's forecasts¹. A speed-up of global trade and improvements in overall expectations and confidence were recorded, parallel to stronger industrial production levels.

In the near term, the trade protectionism by advanced countries may lead to a weaker trade worldwide and slower growth rates of the global economy. In the medium term, a slower-than-anticipated economic recovery of developing countries, abrupt fluctuations in the financial markets, as well as geopolitical stance will be highlighted.

The monetary authorities of some countries readjusted their expansionary monetary policy, given the positive macroeconomic trends, announcing a gradual pace of monetary policy tightening.

In emerging countries, the capital inflow grew, contributing to the economic recovery. Meanwhile, the monetary authorities maintained their low-rates policies.

The positive pace of economic activity was maintained in the European Union countries and Russia; Armenia's main trade partners. The latter contributed to the growth of external demand, capital investment and money transfers to Armenia (for details, see section "Developments in the global economy").

In 2017, the economic growth in Armenia was 7.5%. The latter was mainly contributed by manufacturing and service sectors, due to faster-than-expected recovery of domestic and foreign demand. A mere growth was observed in the construction sector, while agricultural sector reported a fall (for details, see section "Macroeconomic environment developments in Armenia").

In 2017, the Central Bank of Armenia continued to implement an accommodative monetary policy, aimed to recover the private demand and inflation. In the near term, the abovementioned

¹ IMF, WEO April 2018.

direction of the policy will be maintained, given the necessity to strengthen the domestic demand.

The Central Bank's reduction of the refinancing rate had its effect on the drop of the interbank, loan and deposit markets' interest rates.

The commercial banks have been profitable and increased their loan and deposit portfolios. Parallel to the more active lending, the credit risk stabilized, while the share of non-performing loans decreased. The capital adequacy and liquidity ratios declined slightly, in line with the expansion of loan market, still remaining higher than the minimum regulatory requirements.

The financial system risks had a declining trend and remained manageable, not entailing any financial stability issues (for details see section "Stability of financial institutions").

Given the accelerating economic growth and stabilization of income from abroad, banks have maintained active credit and investment policies.

1. DEVELOPMENTS IN THE GLOBAL ECONOMY²

1.1. MACROECONOMIC ENVIRONMENT

Macroeconomic positive trends of the previous year were mainly maintained and strengthened furthermore.

A broad based pickup in growth was observed in the global economy, with the global economic activity continuing to firm up and gradually strengthen during the whole year. The global economic recovery was supported by easier financial conditions in the international financial markets, accommodative monetary and fiscal policies in several key countries, strong sentiment and confidence, as well as a pickup in investment and world trade.

Economic growth outlook has been strengthened both in advanced countries, particularly in the EU countries and the U.S., and the key emerging markets, mainly driven by the rebound in commodity prices and improving exports.

In the short term, the economic growth speed-up may be mainly driven by a high projected economic growth in the United States, under a fiscal easing policy, as well as an end of some political developments in the euro area, an expected expansion of world trade and a rise in main commodity prices. While risks around the global growth appear broadly balanced in the near term, they remain skewed to the downside over the medium term.

The global economic growth gained momentum during the year, while downside risks diminished.

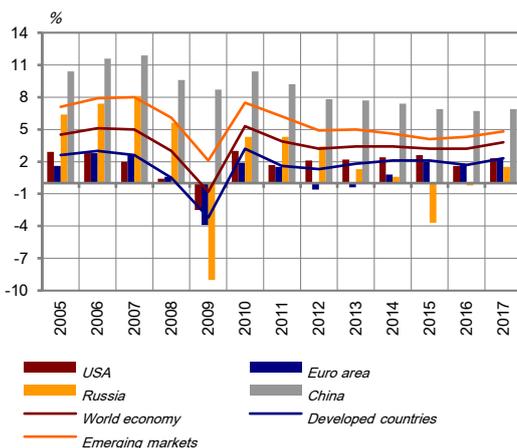
The stronger momentum of the global growth will carry into 2018, for both developed and developing countries, and will likely accelerate in the future.

The global growth forecast is estimated at 3.8% in 2017, according to the IMF (3.2% in 2016). It is noteworthy, that the growth rate accelerated in both emerging economies and developed countries.

The economic growth in advanced economies is assessed to be 2.3% in 2017, 0.6 pp. higher, as compared to the previous year. In developing countries the economic growth will be 4.8%, as opposed to 4.4% in the previous year³.

The pickup of economic activity and price hikes in commodity markets drew to a relatively high inflationary environment, as compared to the previous year. Accordingly, the IMF has estimated the inflation to be 1.7% in advanced countries and 4.0% in developing countries. Moreover, in 2018, the inflationary pressures will not change much compared to the previous year.

Economic growth by regions



*Indicators marked by asterisk in this chart and the ones following thereafter are the IMF estimates (April 2018).

Source: IMF.

² 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.

³ All the forecasts and assessments of IMF were taken from "World Economic Outlook April 2018"

*IMF Overview of the World Economic growth Projections,
2016-2018, in percent*

Indicator (economic growth)	2016 assessments as of 30.04.2018	2017 assessments as of 30.04.2018	2018 assessments as of 30.04.2018
World economy	3.2	3.8	3.9
Developed countries	1.7	2.3	2.5
USA	1.5	2.3	2.9
Euro area	1.8	2.3	2.4
Developing countries	4.4	4.8	4.9
CIS	-0.4	2.1	2.2
Russia	-0.2	1.5	1.7
China	6.7	6.9	6.6

During the reporting period, in line with the pickup in the economic growth, the advanced economies experienced more favourable sentiment and stronger inflationary environment, which, in their turn, positively impacted investment. The latter stood at low levels during the last years, mainly due to economic and political uncertainties.

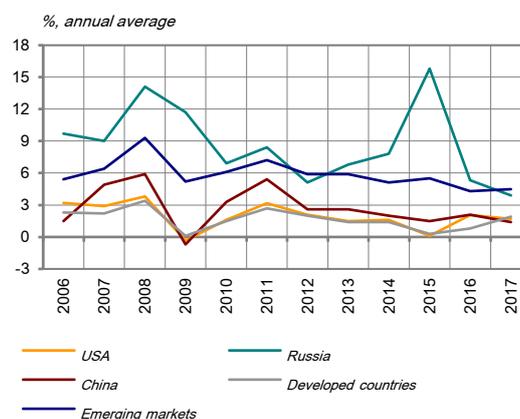
The **U.S.** growth forecast is estimated 2.3% in 2017. The economic activity recorded in the second half of the previous year was preserved and gained momentum during the current year. The economic growth strengthening was mainly conditioned by the growth of investment due to the government's policy to reduce taxes; the U.S. tax reform. Other important impulses to boost the economic growth were the increases in private consumption and in oil prices.

Apparently, the current level of the U.S. economic growth will continue in 2018, contributed mainly by increases of investment, households' revenue, as well as unemployment reduction and stabilization of the real estate market.

According to the IMF estimates, a 2.5% economic growth will be recorded in the U.S. in 2018.

In the **Euro area countries** a stable economic growth was observed in 2017, given the improved economic growth of the key member countries. The main driving force of sustainable economic growth was the increase in private consumption, driven by the positive developments in the labour market. According to the IMF forecasts, the yearly economic growth in the euro area will be 2.4% in 2017, as compared to 1.8% in the previous year. The economic growth will be driven by the accommodative monetary policy, the recovery of global economy, as well as favourable developments in the labour market. Some political uncertainties and concerns around weaker trade turnover with main partner countries may counterbalance the positive factors.

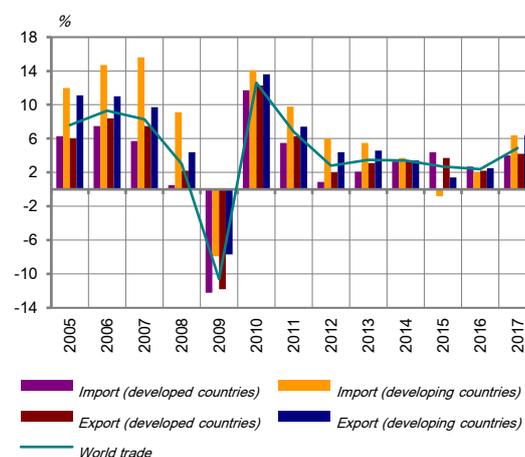
Inflation in a number of countries



Source: IMF.

The economic growth trend of developed countries was strengthened during the year

Annual growth rate of world trade



Source: IMF.

Some trends of economic growth speed-up were observed in emerging markets.

The increase of global trade was conditioned by growth of foreign demand in both developing and developed countries.

The trend of increasing prices of main commodities was mainly maintained.

In *emerging markets and developing countries*, the pace of the slowing economic growth was reversed and growth momentum was observed during the current year. The main triggers for the growth were the pickup in commodity prices, as well as the recovery of domestic and foreign demand. Private investment bottomed out after continuous low growth levels⁴.

In the near future, the monetary tightening worldwide and an inevitability of economic reforms are the key risks hindering the developing countries' economic growth.

According to the IMF, a 4.8% growth will be recorded in the emerging market countries in 2017, against 4.4% in the previous year.

In *China*, the economic growth rates have not substantially changed over the course of the year. The accommodative fiscal policy and the increase in commodity prices contributed positively to the economic growth.

In the near term, notable threats to the growth are the financial sector issues, that hinder the lending growth, as well as likely inward-looking policies by advanced countries and geopolitical tensions⁵.

The economic growth in China is estimated 6.9% in 2017. No evident recovery of economic growth rates is expected for the coming years, while 6.6% is forecasted for 2019.

In *Russia*⁶, a 1.5% economic growth is forecasted for 2018, according to the Ministry of economic development of Russian Federation, mainly contributed by the growth in domestic demand, the recovery of oil prices and positive developments in the labour market.

The highest growth rates were recorded in trade and manufacturing sectors. The construction deceleration rates continued to slow down.

The high growth rate of the private demand was conditioned by the increased real disposable income of households, as well as lower inflation. Meanwhile, the stirring of the investment environment of the first half of the year was not sustained throughout the year. The slowdown of investment was conditioned by the termination of a number of construction and infrastructure programs.

During 2017, the assets of the banking sector grew slightly, parallel to the improvement of their quality. Loans to non-financial corporations and households by the credit institutions increased by 14.1%. The quality of both domestic-denominated and foreign-denominated currency credits improved. The share of non-performing loans in total loans decreased during the year, by 1.5 pp. to 7.8 percent.

Brent oil prices
(USD per barrel)



Copper prices
(USD per ton)



Source: Bloomberg Data Warehouse.

⁴ <http://www.worldbank.org/en/publication/global-economic-prospects>

⁵ <https://www.imf.org/en/Publications/WEO/Issues/2018/01/11/world-economic-outlook-update-january-2018>

⁶ www.economy.gov.ru

The Russian Ministry of Economic Development anticipates that in the near term, the economic growth will remain within the existing positive territory, if the oil prices continue to increase with the current pace. The main factors hindering the economic growth will remain geopolitical uncertainty and tensions and the series of trading and economic sanctions against Russia.

A pickup in the *global trade* volumes was observed in 2017.

The increase in trade volumes was mainly conditioned by higher commodity prices and accelerated global economic growth, as well as the recovery of exports in both developed and emerging economies and bottomed up investment levels.

At the same time, current conservative foreign trade policies in many countries and sanctions imposed on some countries will hamper the notable increase in trade volumes in the future.

Given the IMF forecasts, the growth rate of the global trade will be 4.9% in 2017, as compared to 4.1% of the previous year. The forecast for 2018 is 5.1 percent.

In 2017, a continuous growth level of international prices of main commodities was observed, conditioned by the recovery of global economy and distinctive developments in certain commodity markets. In comparison with the industrial commodities, the inflationary pressures on food commodities were weaker.

Brent crude oil average price was 55.3 USD a barrel. The year-on-year growth constituted 23.4%. In the near term, the growing pace of crude oil prices will be maintained due to the extension of the OPEC+ agreement to limit oil production and geopolitical tensions in Iran.

The growing trend of copper and molybdenum prices persisted, driven by the increase in demand in China and the extraction cuts due to ecological considerations.

The average annual price of copper increased by 27.5%, as compared to the same period of the previous year, to 6303.5 U.S. dollars / tone.

The average annual price of molybdenum grew by 9.4%, as compared to the same period of the previous year.

International stock prices of base metals will be maintained at the current levels, in the short-term, all other factors being equal.

Wheat average international prices have not changed considerably this year, as compared to the previous year. The average annual price of wheat was 4.7 U.S. dollars per bushel, climbing by 5.1%, as compared to the same period of the previous year. In the short term, no expectations for wheat prices' volatilities are formed.

The average annual gold price amounted to USD 1267.3 per troy ounce in 2017, remaining merely at the same level as in the previous year.

No significant changes in gold prices are anticipated in the short term, owing to expected recovery rate of the global economy.

The prices for base metals have responded to the positive global economic developments.

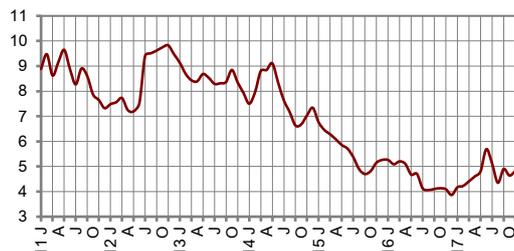
Molybdenum prices
(1000 USD per ton)



Source: Bloomberg Data Warehouse.

The wheat prices have not changed considerably, as compared to the same period of the previous year.

Wheat prices
(USD per bushel)



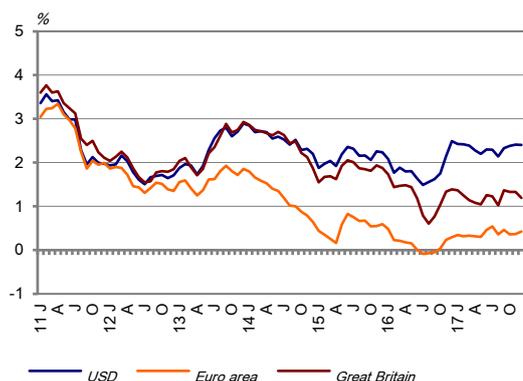
Gold prices
(USD per troy oz)



Source: Bloomberg Data Warehouse.

1.2. INTERNATIONAL FINANCIAL MARKETS

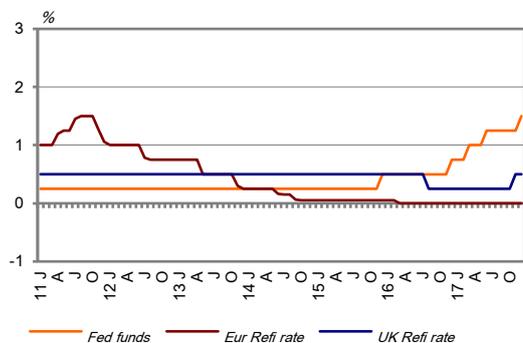
10-year government bond yield



Source: Bloomberg Data Warehouse.

Monetary authorities worldwide turn to policy tightenings.

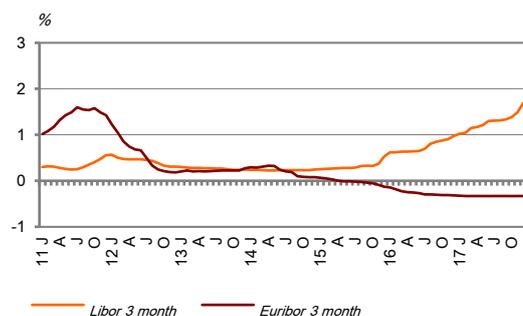
Interest rate policies of Central banks



Source: Bloomberg Data Warehouse.

The Fed continued to rise its rates.

Interbank interest rates



Source: Bloomberg Data Warehouse.

In 2017, no significant fluctuations in international financial markets were observed.

Global macroeconomic trends have had a favourable impact on financial markets. Eased financial conditions were maintained, in line with favourable pace of global economic growth and historically low interest rates. It is noteworthy, that the impact of the monetary policy tightening in the advanced countries is not yet perceptible in the financial markets.

Despite the tightening of monetary policies, the yields on government bonds remained historically low in the U.S. and EU countries.

In the medium term, the maintenance of eased financial conditions will rise the probability of adjustments in the financial markets.

In midst of favourable economic developments, the capital inflow to the emerging market countries was recovered, leading to national currency appreciations.

Despite the gradual tightening of monetary policies, the yields on long-term government bonds remained low in the U.S. and euro area, mainly conditioned by weak inflationary pressures and low-level of real interest rates.

The loan market stance was favourable for the borrowers. Some improvements in lending conditions and higher demand for credit by households and companies continued.

In 2017, given stabilization of the global economic growth and the optimistic expectations for the future, a number of key developed countries changed their monetary policy paces.

During the reported year, the U.S. Federal Reserve hiked its benchmark interest rate for 4 times, by 0.25 percentage point each, to reach a final 1.5%. Material expectations for further policy tightenings were formed in the financial markets.

The ECB continued to conduct its asset purchase program with a smaller monthly volume of 60 billion euros, in the current year, and announced about the probable reduction of these volumes. The ECB maintained the refinancing rate unchanged and has clearly signaled the low likelihood of its future hike.

The Bank of England⁷ raised the monetary policy rate by 0.25 percentage point, in the end of the year. According to the Bank's announcements, the revision of the policy rate would depend on the inflation rate, the rate of unemployment, as well as on changes of a number of economic activity indicators.

The Central bank of Russia⁸ have eased the monetary conditions during the year, given the macroeconomic stance and the inflationary expectations. The refinancing rate was changed from 10.0% in the beginning of the year to 7.75% in the end.

⁷ <https://www.bankofengland.co.uk/monetary-policy-summary-and-minutes/2017/november-2017>

⁸ <https://www.cbr.ru>

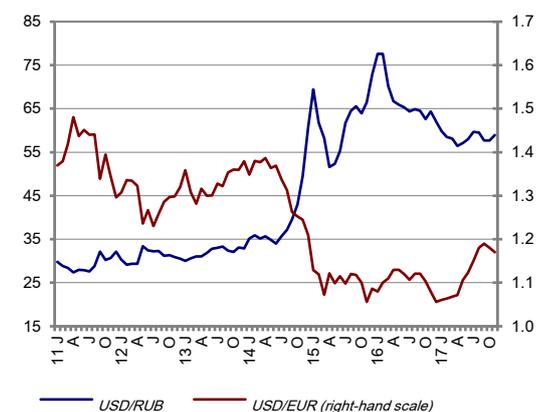
In view of the trend of increasing commodity prices and positive developments in the emerging markets, capital inflows were recorded in a number of emerging and developing countries. This, in turn, implied more investment and improved outlook for the economic growth. The capital inflows will be continuous, given the positive expectations for the economic growth, though the likely tightening of financial conditions may hinder the pace of the inflow.

During the reporting year, the major currencies assumed volatile trends. The U.S. dollar has depreciated versus euro, driven by higher-than-expected economic growth in the euro area and the monetary policy of the EU.

The appreciation trend of emerging markets' currencies continued during the year. The latter is explained by capital inflows and positive macroeconomic trends. In future, the currency patterns will be conditioned by the monetary policies implemented by developed countries, particularly the U.S. Fed's policy, as well as by domestic developments across countries, such as need for external financing, domestic monetary policies, political stability, price patterns of stock exchange commodities and sensitivity against the fluctuations of the U.S. dollar.

The interbank interest rates grew, responding to the increases in the policy rates in some countries, while remaining at low levels.

Dynamics of USD exchange rate versus RUB and EUR



Source: Bloomberg Data Warehouse.

SUMMARY

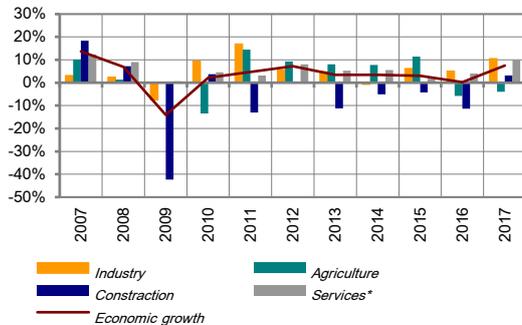
During 2017, the recovery of the world economy continued, conditioned by positive preconditions in both developed and emerging economies. Production and international trade grew, the investment gained momentum. At the same time, a continuous inflationary environment has been formed in almost all commodity markets.

Positive trends in the global economy, the recovery of economic growth in developing countries, and particularly favourable economic developments in Russia have positively affected the economic growth and export of Armenia by strengthening the creditworthiness of enterprises working in these sectors. Net current remittances and net remuneration of outbound workers have maintained the growth tendency, positively contributing to the household income and their creditworthiness.

2. MACROECONOMIC ENVIRONMENT DEVELOPMENTS IN ARMENIA

A higher-than-anticipated economic growth was observed, due to increases in both domestic and foreign demand.

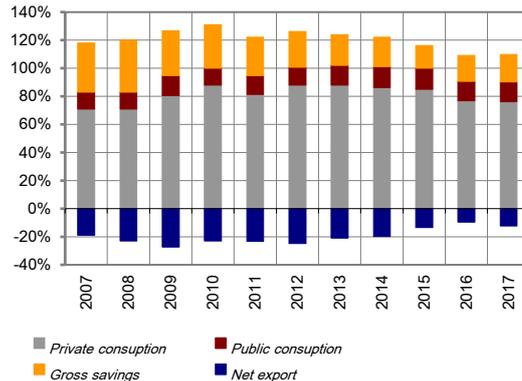
Real GDP growth and main sectors of economy



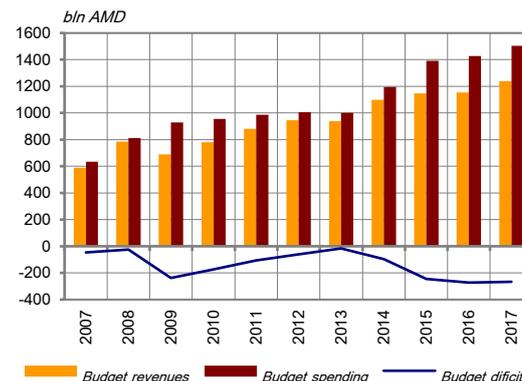
* In chart the sector of services includes trade and other service sectors' aggregate values.

Manufacturing and services had the highest contributions to the economic growth.

GDP expenditure components (share in GDP)



Main indicators of government budget



2.1. MACROECONOMIC DEVELOPMENTS⁹

A higher-than-forecasted economic growth was observed in Armenia, mainly contributed by the recovery of foreign and domestic demand. The growth of domestic demand was contributed by the expansionary monetary policy which also had an impact on lending growth.

The recovery of demand in the main partner countries, a tourism growth, as well as Armenian Government's policy aimed at promoting export and investment positively contributed to the economic growth. The current trend of the recovery of the economic growth will continue during the next year as well, given the income growth and foreign positive developments, according to the CBA forecasts.

The economic growth was 7.5% for the reporting year. The latter was mainly conditioned by the growth rates of manufacturing and services. These positive trends were due to faster-than-anticipated recovery of both domestic and foreign demand.

In particular, the faster-than-anticipated growth in manufacturing (10.6% YoY) was ensured by such sub-sectors that are being exported, the economic recovery of main trade partner countries of Armenia outpacing anticipations, as well as high prices of base metals in the international markets. The growth in services was 10.2% YoY, given the private consumption recovery and the tourism growth.

The mere economic activity in agricultural sector, that was observed starting from the end of 2016, continued and resulted in an overall 4.0% YoY decrease for 2017.

A growing trend was observed in the construction sector; the real YoY growth was 3.1%. The construction works of Amulsar mine exploitation contributed greatly to the growth in construction sector.

During the year, the recovery of the aggregate demand accelerated and outpaced the previous forecasts. The latter was mainly, contributed by the increase in domestic demand.

Private consumption and investment grew by 7.7% and 10.1%, respectively, which was conditioned by the recovery of the lending to economy, continuous growth trends of private money transfers and an increase in external demand.

⁹ For details on the developments of macroeconomic environment in Armenia, see "Inflation Report 2017, 4th quarter".

From the beginning of 2017, a tight fiscal policy has been implemented for the stabilization and more efficient management of Armenian public debt. Simultaneously, a moderate growth of government investments and spending was ensured.

The recovery of the domestic demand and the easing of lending conditions contributed to a 8.7% credit growth (YoY). The increase in the volume of consumer loans, loans to manufacturing and trade sectors have had the biggest share in the overall lending growth. It is noteworthy that the growth of lending was accompanied by a better loan portfolio quality. The share of non-performing loans and receivables in total loans and receivables of the banking sector was 5.1% YoY, in the year-end, posting a 1.7 pp. decrease compared to the previous year.

The share of non-performing loans in total loans was relatively high in public catering and other service sectors, construction and agriculture sectors.

Both demand and supply of lending expanded compared to the same period of the previous year¹⁰. The sharpened competition among banks and the positive expectations concerning the recovery of economic activity affected the expansion of the lending supply. Lending demand has increased in all sectors. The increase in demand for loans was conditioned by the competitive improvements of the supply conditions and the ongoing economic growth.

According to the expectations for the first quarter of 2018, a considerable easing of lending procedures and an expansion of lending supply and demand are projected.

The indicators of state budget show that a 5.6% increase in revenues and a 3.8% rise in expenditures were in line with the economic growth. It should be noted that the growth of tax revenues was ensured mainly by the increase in revenues from the value added tax, while the expenditures grew due to a growth in interest and capital spending.

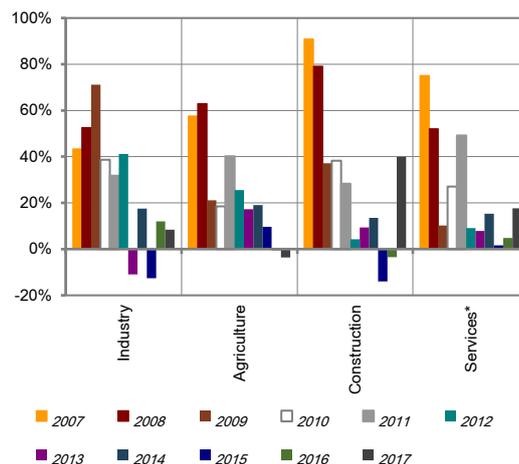
Resulted by the above mentioned shifts in expenditures and revenues, the state budget deficit declined by 4.0 percent and amounted AMD 267 billion in 2017. Moreover, the state budget deficit continued to be financed mainly from external sources.

The 12-month inflation constituted 2.6% in December 2017. Despite the growing demand, the inflation remained within its target range. The growth rate of inflation accelerated mainly closer to the end of the year, somehow contributed by the prospects of improving inflation expectations. Those expectations were forming rather quickly among the population, conditioned by price hikes in international markets of a number of food commodities, as well as by expected changes in tax and duty rates.

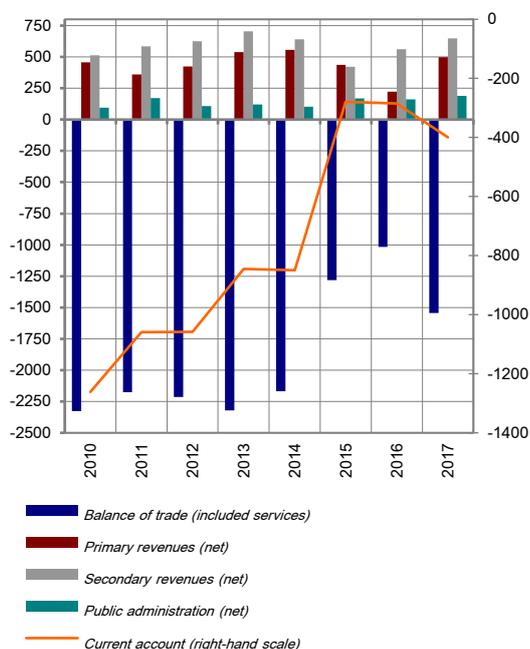
According to the monetary policy program of the Central bank, the inflation will maintain its rising trend during the coming months, fluctuating within the acceptable limit ranges, and will stabilize to reach its target level in the medium term.

In 2017, lending growth was observed.

Growth of lending to main sectors of economy



Main indicators of balance of payments (mln USD)



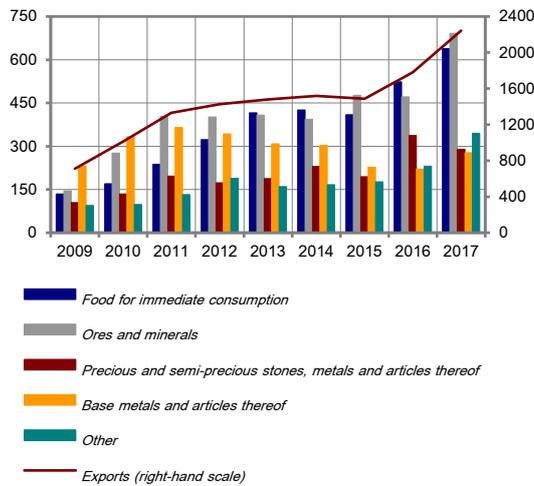
Source: Central Bank of Armenia.

¹⁰ According to the lending survey conducted in the fourth quarter of 2017.

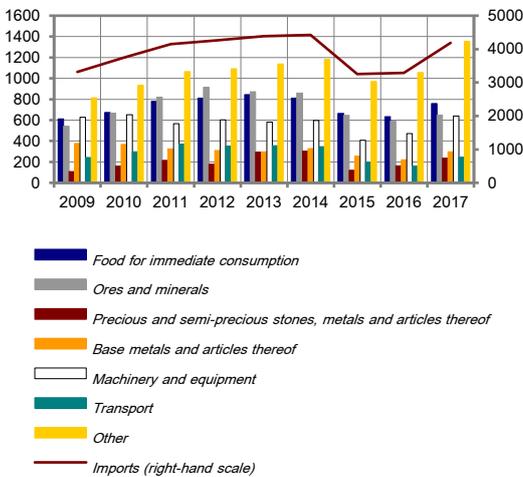
2.2. FOREIGN TRADE¹¹

In 2017 the current account deficit improved considerably.

Armenia's exports by commodity groups
(mln USD)



Armenia's imports by commodity groups
(mln USD)



Source: Central Bank of Armenia.

In January-December 2017, the foreign trade turnover increased by 26.9% over the same period of the previous year, while the real increase in exports constituted 19.7% and the real increase in imports, 26.8%.

The growth in exports was mainly conditioned by increases of income and demand in main trade partner countries, as well as a high level of international base metals' prices.

The growth of domestic demand in midst of increased money transfers contributed to higher import levels.

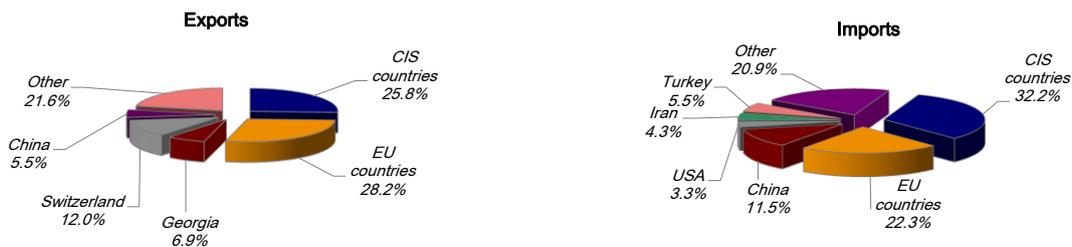
It is noteworthy that the biggest growth rates were observed for import commodities. This is an evidence for positive expectations in business environment and may be considered as a factor contributing to further economic growth. Given the accelerated growth of imports, the deficit of trade account grew to USD 1544.7 million, 13.4% of GDP (it was 9.5% in 2016).

Given the growth in the deficit of the trade account, the current account to GDP ratio increased and amounted nearly 3.5%, taking into account developments of the net balance of the current account revenues, as opposed to 2.2% in the previous year.

The concentration level of foreign trade of Armenia has not changed significantly. Trading partners with the largest share remain the CIS and EU member states with the following export and import weights: CIS, 25.8% and 32.2%, EU, 28.2% and 22.3%, respectively. At the same time, the volume of goods exported to China, UAE and the USA increased, while export to Georgia decreased.

The concentration of exports by goods decreased slightly, as compared to the end of the previous year. As a result, the Herfindahl-Hirschman index was 0.189.

Armenia's foreign trade, by country, 2017



Source: National Statistics Service of Armenia.

¹¹ The indicators mentioned in this section are CBA estimates.

2.3. HOUSEHOLD INCOME AND DEBT BURDEN

During the year, parallel to the economic growth of Armenia, the growth rate of the monthly average nominal wages accelerated. In 2017, the wages grew by 3.3 % (2.3% in the previous year). The nominal wages in the private sector grew by 4.1 % (5.0%, in 2016). The increase of wages in the public sector was 0.8 % (the wages in the public sector decreased by 1.2% in 2016). The unemployment rate decreased by 0.2 percentage point during the reporting period to 17.8%. Given the CBA assessments, the growth of wages and the decrease in the unemployment rate will be maintained during the coming years. In particular, the growth rate of nominal wages will vary between 6-7%, while the unemployment rate will fall by 0.3-0.5% yearly, during the next three years¹².

During 2017, the increasing rates of remittances to individuals have had a positive impact on the revenues of households, which was conditioned by growth of economic activity in Russia and strengthening of Russian ruble. Moreover, according to the Central bank's assessments, the growth trend of money transfers to Armenia will be maintained during 2018.

In 2017, the net current private remittances and outbound workers' compensations increased by 16.5 % and 14.3 %, respectively. The ratio of the net current transfers and outbound workers' compensation to GDP grew by 0.5 percentage points to 9.9 %.

Thus, the increasing remittances to individuals and the low inflationary environment during 2017 positively affected the households' real income and therefore their ability to repay loans on time.

Given the abovementioned developments, the resident households' savings in bank deposits rose by 16.9% and amounted to AMD 1,351 billion during the reported period. Moreover, dram-denominated deposits grew significantly and their share increased by 5.3 pp. amounting 37.5% of total deposits. However, the high share of foreign currency deposits continues to limit the ability of banks to allocate their funds in dram denominated assets, especially such as AMD lending to households. The deposit growth was accompanied by a fall in interest rates on AMD and USD deposits from households.

During the year, the households' demand for loans and the lending supply by the financial institutions grew¹³, therefore the volume of lending to resident households increased, leading to a heavier debt burden of households. In particular, resident households' total liabilities to the financial institutions rose by 13.1% to AMD 1047.2 billion during the reported period, conditioned by growth in lending by both banks and credit organizations. The liabilities to pawnshops decreased by 5.7%.

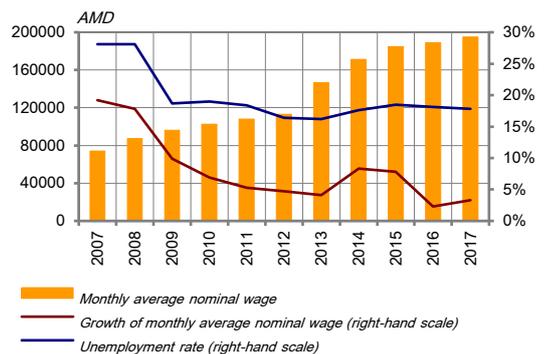
Amidst accelerated growth of lending over GDP, the share of household loans in GDP grew by 0.6 percentage point to 18.8%. The debt to deposit ratio declined by 2.5 percentage point to 77.5%. This means that households remain net creditors for credit institutions.

¹² Source: "Inflation Report" by the CBA, 1st quarter, 2018

¹³ Source: summary of quarterly surveys on "Lending conditions by banks and credit organizations of Armenia" by the CBA, 2017.

The nominal wages grew with a higher pace, compared to the previous year.

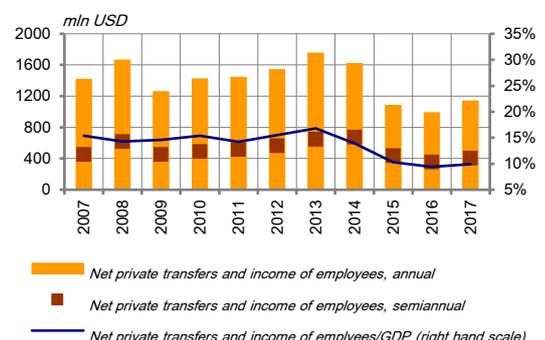
Nominal average wage and unemployment



Source: National Statistics Service of Armenia.

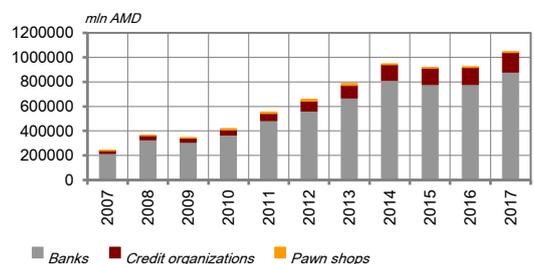
The volumes of net current private remittances and outbound workers' net compensation grew.

Net private transfers and wages of seasonal employees

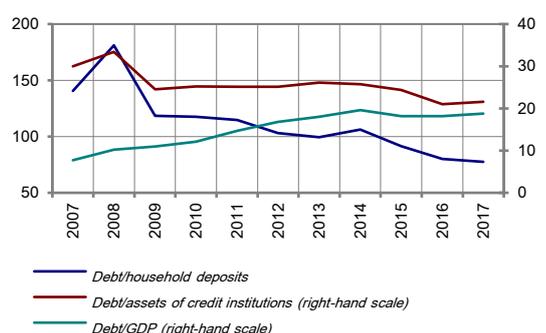


During the year, the liabilities of households to financial institutions grew, leading to an increased debt burden.

The structure of household liabilities to financial institutions

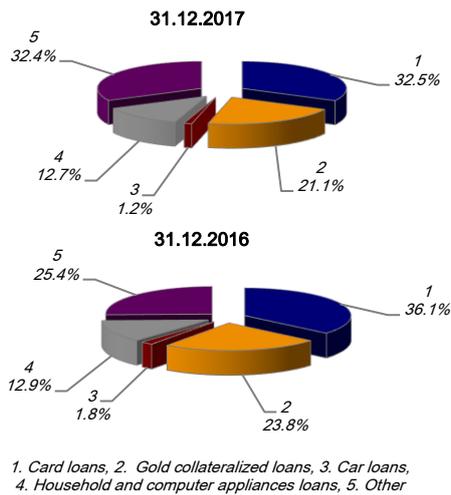


Household debt burden indicators, %

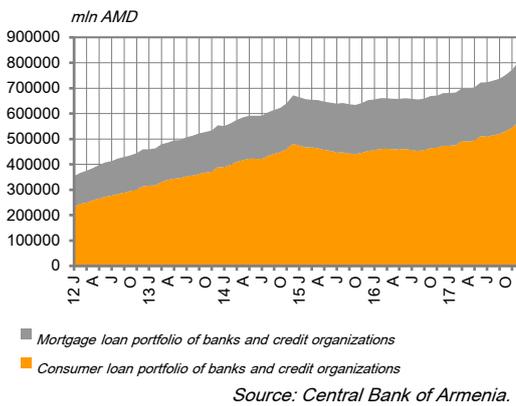


Source: Central Bank of Armenia.

Consumer loan portfolio structure of banks and credit organizations

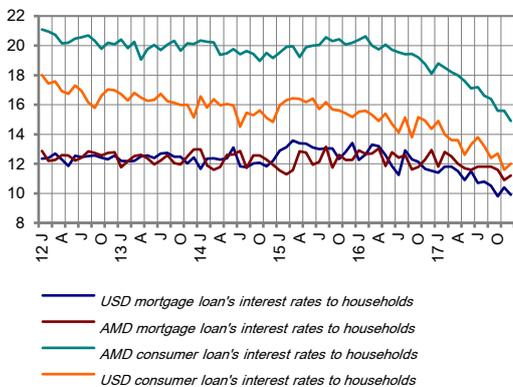


Consumer and mortgage loan portfolio of banks and credit organizations



The risks arising from households' diligence in loan repayments recorded a descending trend.

Lending interest rates to households



The most attractive type of lending to households remains the consumer lending. In 2017, the volume of consumer loans increased by 19.5%, due to increases in all subsectors of consumer loans, except for car loans, which decreased by 19.3%.

The growth rates of credit card loans, gold-backed loans and loans for household appliances and computers were outpaced by other types of consumer loans, which resulted in an overall 7.0 percentage point growth of their share in total consumer lending, making up 32.4%.

In the period under review, the mortgage lending by both banks and other credit organizations improved by 14.4%, contributed mainly by a 16.3% increase in mortgage loans for real estate purchase.

The amendments in the RA Law on Income Tax¹⁴ and the refinancing projects of the National Mortgage Company, as well as the program "Housing for Youth" continue to contribute to the expansion of the mortgage market. Due to the above-mentioned programs, the share of dram-denominated mortgage loans for real estate purchase in total mortgage loans for real estate purchase continued to grow and amounted to 57.7%, positively impacting the credit risk management of this type of loans (53.3%, in 2016). The adoption of the draft law "On Housing Mortgage Crediting" may also have its positive impact on the risk management, which will increase the level of transparency in the mortgage market and ensure the protection of borrowers' interests.

During the year, the easing tendency of consumer loan terms and procedures was maintained, due to the increase in competition between banks and other financial institutions¹⁵. Mitigations refer to almost all aspects of crediting, including maturity of loans and non-interest payments. At the same time, the credit institutions provide differentiated approach depending on the characteristics of their main customer groups.

During the year, the interest rates for both consumer and mortgage loans decreased. According to summary results of the CBA surveys among financial organizations, the decreasing trend of lending interest rates will be maintained in 2018 as well. At the same time, credit institutions expect that the volume of consumer and mortgage lending will continue to grow¹⁶.

In 2017, the quality of households' loan portfolio improved. The share of non-performing consumer loans with banks and credit organizations decreased by 2.3 percentage points to 6.1%. The share of non-performing mortgage loans in total mortgage loans decreased by 2.4 percentage points to 3.7%. The improvement of credit portfolio was conditioned by the increase of both consumer and mortgage loans parallel to the decrease of the volume of the non-performing consumer and mortgage loans.

Overall, the risks arising from the household sector are manageable. Therefore no significant threat to the stability of the financial system arise.

¹⁴ 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.

¹⁵ Source: summary of quarterly surveys on "Lending conditions by banks and credit organizations of Armenia" by the CBA, 2017.

¹⁶ Source: summaries of quarterly survey on "Financial organizations of Armenia" by the CBA, 2017.

2.4. REAL ESTATE MARKET

During 2017, as compared to the previous year, the market prices for 1 square meter of apartments in residential apartment buildings in Yerevan and other towns decreased by 3.5% and 5.0% respectively¹⁷. Moreover, the prices fell in almost all districts of Yerevan, except in the Center, where the average prices for apartments remained merely unchanged.

In 2017, as compared to 2016, the number of real estate and apartment sale and purchase transactions grew by 15.1%. What is more, the number of residential apartments' sale and purchase transactions in Yerevan and other regions increased by 23.7% and 12.3%, respectively. The majority of real estate sale and purchase transactions take place in the primary market, conditioned by the amendments in the RA Law on Income Tax¹⁸, which came into force in January 2015. According to the quarterly surveys conducted by the Central bank of Armenia, the collateral realization risk remains significant for banks, which is relatively high for commercial real estate.

During the year, parallel to lending spurt, the volumes of real estate got as collateral with banks grew. In order to restrain the credit risk derived from possible fluctuations in the real estate prices, the commercial banks kept on the loan-to-value ratio for mortgage loans in the range of 60-80% (for details, see subsection "Market risk of commercial banks").

The mortgage lending has its positive impact on the demand for real estate. In 2017, as compared to 2016, both the volume and number of loans for real estate purchase with banks and other credit organizations grew by 16.3% and 11.9%, respectively (for details, see subsection "Household income and debt burden"). Simultaneously, the quality of the real estate loan portfolio improved. A 2.5 pp. decline in non-performing real estate loans was observed, which amounted 3.2% of total real estate purchase loans.

Loans provided for construction of residential and non-residential buildings increased by 40.3% during the year, while the quality of the portfolio of such loans remained unchanged. The share of non-performing loans in real estate construction loans was 6.8%.

Residential buildings completion by sources of financing

Sources of financing	Exploited residential buildings (sq. m) in 2017	Share in total	Percentage change as compared to 2016
Total, of which:	119,960	100%	-34.6%
State budget	0	0	0
Corporations' funds	5,129	4.3%	-93.3%
Households' funds	114,831	95.7%	8.0%

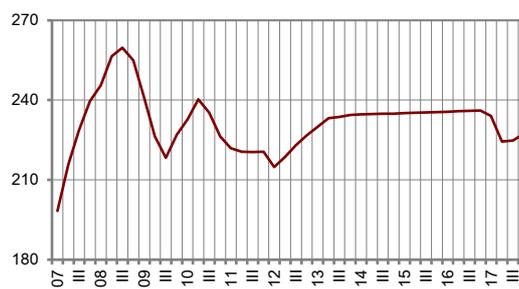
Source: National Statistics service of Armenia.

¹⁷ 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

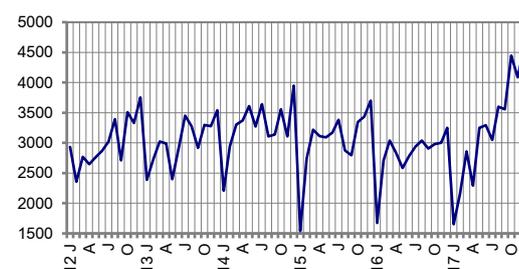
¹⁸ Source: summary of quarterly surveys on "Lending conditions by banks and credit organizations of Armenia" by the CBA, 2017.

In 2017, compared to 2016, the apartment prices fell, while the number of sale and purchase transactions grew.

Average apartment price index in Yerevan (sq m)



Number of real estate sale and purchase transactions



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

Risks associated with the sale of collateral remain key risks.

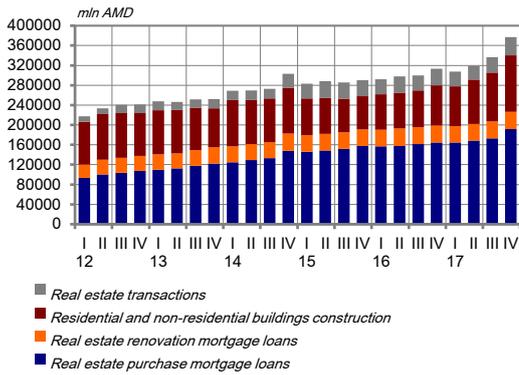
Volume of real estate out of operation held for sale and got as collateral with the commercial banks (bln AMD)



Source: Central Bank of Armenia.

The volume of residential buildings commissioned to operate financed by companies decreased.

Real estate lending



Source: Central Bank of Armenia.

During the year, the volume of residential houses commissioned to operate decreased by 34.6% overall, given the 93.3% fall in the volume of residential houses commissioned to operate financed by companies. The volume of residential houses commissioned to operate financed by households increased by 8.0%, leading to a 95.7% share of the construction of residential houses financed by households (the share was 58.0% in the last year).

From the financial stability viewpoint, the growth of the number of real estate sale and purchase transactions positively influenced the risks arising from the real estate market. Meanwhile, the financial institutions are still limited in their ability to sell the real estate got as collateral.

SUMMARY

In 2017, the favorable developments of the macroeconomic environment of the Republic of Armenia were conditioned by both growth of external demand and factor income, as well as the ongoing recovery of domestic demand. As a result, the economic growth of 2017 was 7.5%, mainly owing to the growth levels of manufacturing and services. At the same time, an increase in salaries and private remittances contributed to the growth of household income and the reduction of credit risks arising from the loan repayment negligence of the household sector.

Thus, due to the reduction of regional macroeconomic uncertainties and the expansion of domestic economy, the risks arising from the macro economy dropped, strengthening the stability of the financial system.

3. FINANCIAL MARKETS STABILITY

3.1. MONEY AND CAPITAL MARKETS

During 2017, the Central bank of Armenia continued its accommodative monetary policy. In February, the CBA Board lowered the refinancing rate from 6.25% to 6.0%, which remained unchanged afterwards. The CBA Board's decision to leave the refinancing rate unchanged was based on the need to maintain the existing accommodative policy. At the same time, at the end of the year, the CBA signaled the financial market about the need of a gradual offsetting of the expansionary monetary conditions¹⁹. The 6.0% refinancing rate is the lowest since 2010, contributing to decreases in interest rates of the financial market, including a moderate decrease in interest rates on loans granted and deposits attracted by commercial banks.

Historically, the changes in the CBA refinancing rate were reflected in the behavior of the interbank repo interest rates, which were mainly close to the refinancing rate. The interbank repo interest rates fell during the year, but rose in the last quarter to 6.1% in December (average monthly interest rate). The latter was conditioned by the Central Bank's deposit deals to withdraw the excess liquidity from the banking sector, due to which short-term interest rates approached the policy rate. As compared to December of the last year, the interbank repo interest rate increased by 0.3 percentage point only.

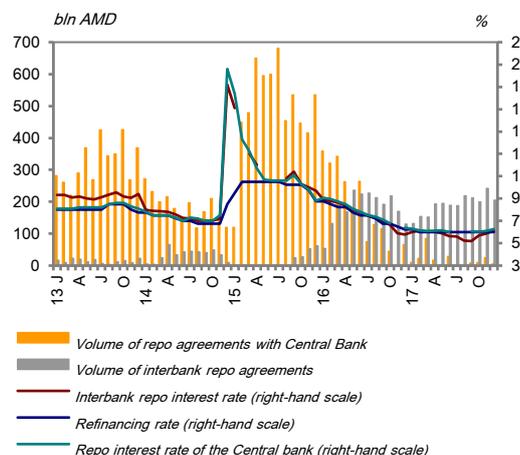
Over the past two years, the interbank repo market has been more active, which is partly due to the excess liquidity in the overall banking sector. High liquidity stimulated the commercial banks to give more preference for interbank transactions instead of referring to the instruments of the Central Bank.

The yields of government bonds followed a downshift all along the curve²⁰, by 0.6 pp. on average. The fall of interest rates is more emphasized in parallel with their maturity increase. Thus, the most pronounced decline was observed for the long-term interest rates, by 0.9 percentage point. The interest rates on medium-term bonds decreased by 0.7 percentage point, while the decrease in short-term interest rates was merely 0.3 percentage point. The volumes of government bond issuances also impacted the decrease in the yields of government bonds.

As a result, the spread between 10-year and 6-month bonds stood at 4.2%, as of end of 2017, falling by 0.7 percentage point, as compared to the previous half of the year.

In 2017, the easing of monetary conditions and a strong liquidity position in banks favored the fall in the financial market interest rates.

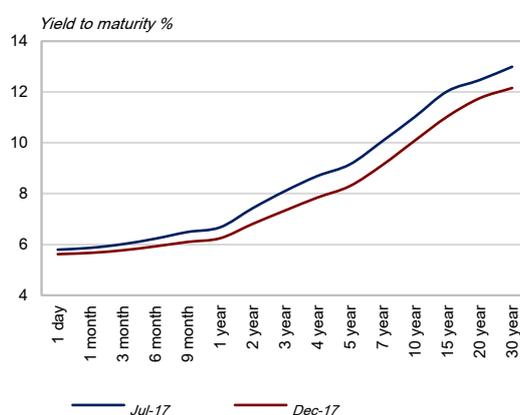
Monthly volume of repo transactions and repo interest rates (interbank and with the CBA)



Source: Central Bank of Armenia.

The yields of government bonds followed a downshift all along the curve and are more emphasized in parallel with their maturity increase.

Yield curves of Armenian government bonds

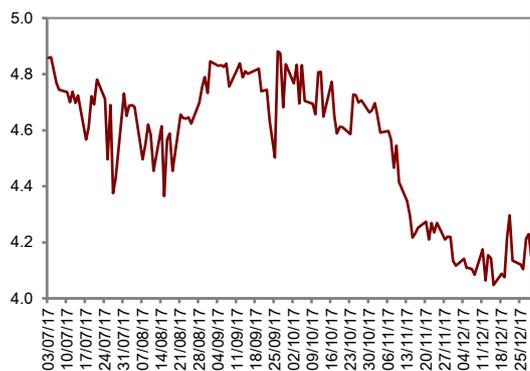


Source: Central Bank of Armenia.

¹⁹ Press release of the CBA Board's meeting on 14.11.2017, 26.12.2017
https://www.cba.am/AM/pmessagingannouncements/Minutes_short_26.12.2017.pdf
https://www.cba.am/AM/pmessagingannouncements/Minutes_short_14.11..2017.pdf

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

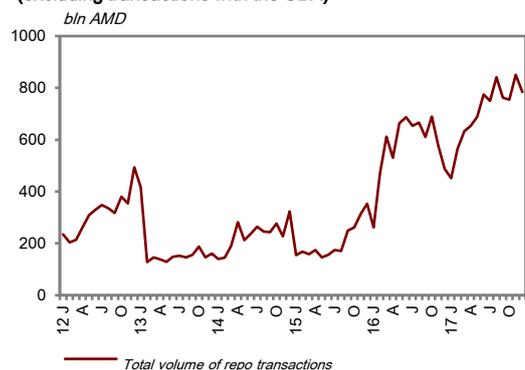
Spread between 6 month and 10 year government securities



Source: Central Bank of Armenia.

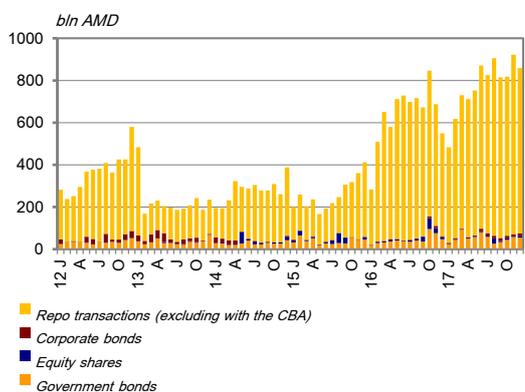
The government bond yields declined all over the yield curve, especially in the long-term.

Repo transactions carried out by investment service providers (excluding transactions with the CBA)



Source: Central Bank of Armenia.

Security trade transactions carried out by investment service providers (including repo and reverse repo transactions, but excluding transactions with the CBA)



Source: Central Bank of Armenia.

To summarize the current trends in the government securities market, the Central Bank calculates indices of government securities²¹, which are presented in the table below.

Indices of government securities in 2017

	TBI	G03	G05	G5I	GMI
Modified duration	0.43	1.32	1.90	6.40	3.92
Risk weighted yield	6.15	7.10	7.71	11.52	10.50
Average maturity (year)	0.45	1.48	2.24	15.67	8.18
Average weighted coupon %		9.30	9.59	12.25	10.77
Market Price of government securities (bln AMD)	21.9	200.0	302.4	246.3	548.7
Market value index change in case of +/-1% yield change (mln AMD)	+/-94.22	+/-2,646.19	+/-5,750.88	+/-15,775.05	+/-21,526.66
Market value index change in case of yield change by the standard deviation ²² (mln AMD)	3.3	130.2	401.3	1082.7	1221.6

The average annual modified duration²³ of government coupon bonds outstanding was 3.92, increasing by 0.21 during the second half of the year. The average maturity also grew to 8.18 years (7.34 in the previous half of the year). These indicators for discount bonds were 0.43 and 0.45, respectively, registering an increase.

The results of a stress test of a 1% parallel change in the government bonds' yields indicate that in case of an increase/decrease in the yield of government securities, the investors' likely loss/gain could be AMD 21.5 billion or 3.9% of the market value of government securities. Moreover, a notable portion of the change might come from the long-term securities, as they are more sensitive to the interest rate change.

In 2017, the operations in securities' markets (including repo and reverse repo transactions but excluding operations with the Central Bank) carried out by investment service providers increased by 22.0%, as compared to the same period of the previous year, and amounted to AMD 9 trillion 310 billion.

²¹ 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, see the CBA website: www.cba.am

²² Standard deviation of risk weighted yield during 30/06/2017- and 31/12/2017.

²³ Modified duration indicates the price change of a bond in case of its percentage change in the yield to maturity.

The aforementioned transactions include repo and reverse repo operations, as well as securities' trading transactions. It should be noted that the repo and reverse repo operations have the biggest share in the transactions carried out by the investment services providers, while securities trading transactions accounted for 8.6% of the aforementioned turnover (9.4% in the previous year), which testifies to the low liquidity of securities.

The volume of repo and reverse repo transactions (excluding operations with the Central Bank) carried out by investment service providers increased by 23.1%, as compared to the previous year, and amounted to AMD 8 trillion 508 billion. While almost all repo transactions involved government securities, unlike the previous year, in 2017, the investment service providers conducted repo and reverse repo operations with corporate bonds as well, which can be considered as a tendency of more active corporate bonds market.

In 2017, the liquidity of government securities' market was volatile. The indicator describing the level of liquidity²⁴ increased, as compared to the same period of the previous year, by 0.5, and amounted 9.9, in December 2017. The liquidity level picked up in March and June. The standard deviation, which shows the volatility of the liquidity of the government securities market increased and was 4.0, against 3.8 in the previous year.

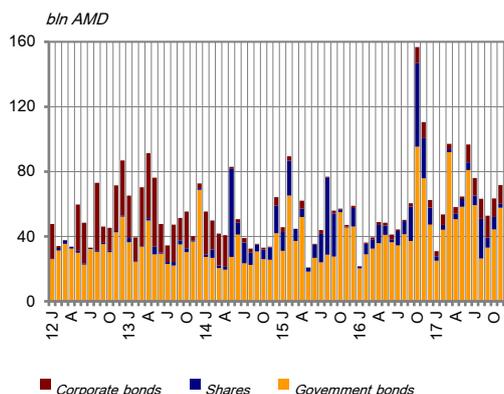
Within the total trades of government securities the share of short-term security trades declined considerably to 2.4% (14.0%, in the previous year). The share of long-term security trades grew markedly and amounted to 59.6%, while the share of medium-term security trades decreased slightly and was 38.0% of total security trades.

The share of regulated market in the structure of securities' trades by investment service providers has been 12.0%, since the beginning of the year.

In 2017, the total volume of securities' trades in the regulated market amounted to AMD 96.2 billion. In the regulated market, transactions with government securities comprised the prevailing part, 67.7%. Trades with corporate securities and shares constituted 19.8% and 12.5%, respectively.

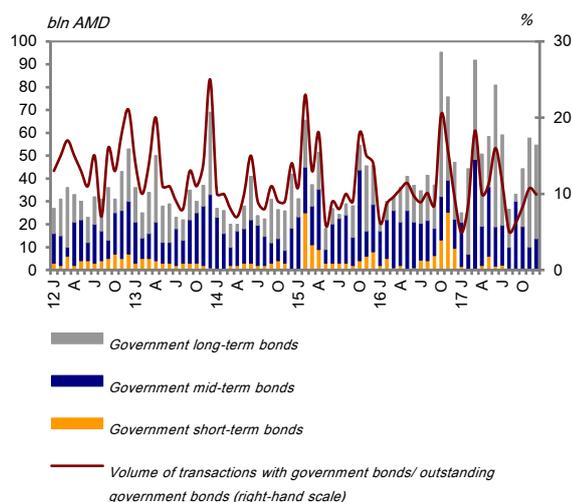
As of December 2017, the capitalization of equity shares' market was AMD 143.8 billion, increasing by 7.1%, as compared to the previous year-end. The concentration of capitalization by issuers has increased compared to the previous year; the share of the first three issuers was 83.3%, while the share for the first five issuers was 98.5%. This denotes the high concentration of share issuers.

Security trades by investment service providers

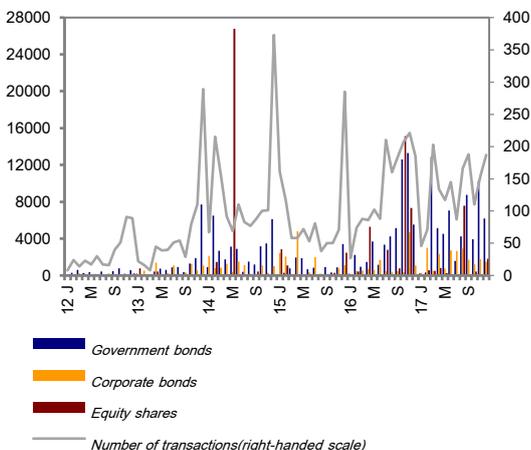


Source: Central Bank of Armenia.

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



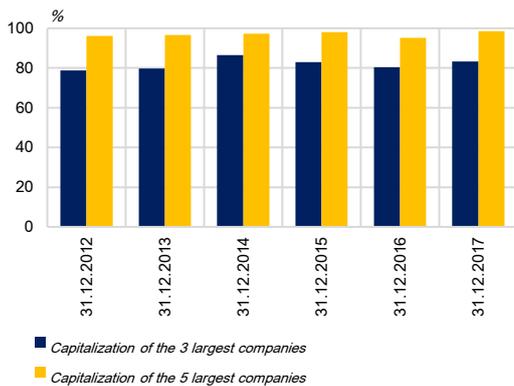
Security trade and repo transactions carried out in the regulated market of securities (mln AMD)



Source: Central Bank of Armenia.

²⁴ 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.

The concentration of 3 and 5 largest share issuers' by capitalization



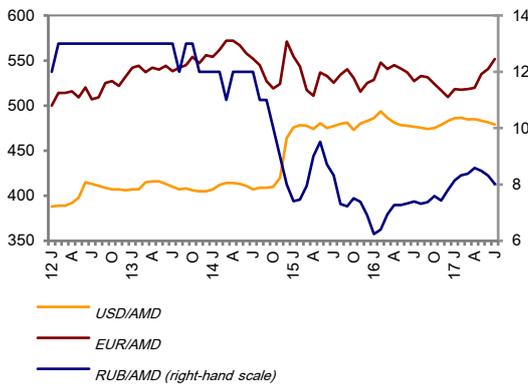
Source: Central Bank of Armenia.

The share of 3 and 5 largest issuers, by capitalization, in 2012 – 2017 (%)

Date	Capitalization of the 3 largest companies (%)	Capitalization of the 5 largest companies (%)
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
31.12.2017	83.3	98.5

The foreign exchange market remained relatively stable.

Exchange rates in exchange market of Armenia



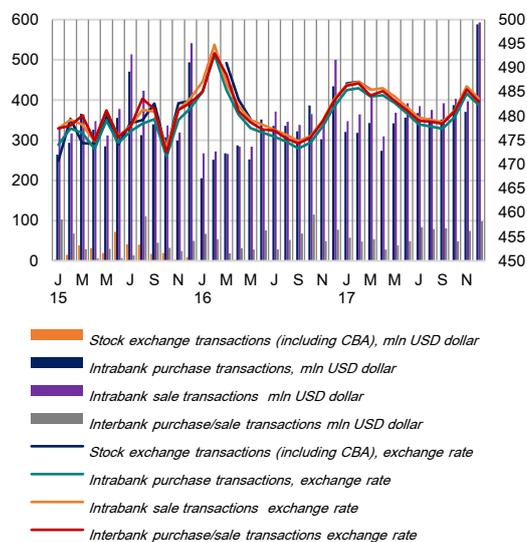
3.2. FOREIGN EXCHANGE MARKET

In 2017, the foreign exchange market remained relatively stable, but the Armenian dram depreciated against main currencies. Specifically, the most pronounced depreciation was against euro, by 12.2% (the average monthly currency rate of December 2017, as compared to the average monthly currency rate of 2016). The AMD/USD exchange rate remained merely unchanged. The AMD/RUB exchange rate depreciated by 5.8%.

At the end of 2017, the real effective exchange rate of Armenian dram depreciated by 4.6%, as compared to the previous year-end. The nominal effective exchange rate of Armenian dram depreciated by 1.6%²⁵, mainly due to the appreciation of partner countries' national currencies.

In 2017, there were no sharp fluctuations in the Armenian foreign exchange market operations. The turnover of the currency market amounted to about AMD 5 trillion, the bulk of which are interbank transactions. It is noteworthy, that historically interbank purchases and sale transactions increase dramatically in December.

The volume of transactions in the foreign exchange market of Armenia and the interest rates



²⁵ 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

Relative stability has been maintained in the financial and foreign exchange markets during the year, and the current developments have a positive effect on the strengthening of the financial stability.

The financial market interest rates have decreased both for interbank instruments, as well as deposits and loans. The monetary easing and the strong liquidity of the banking sector had a significant impact on the decline in interest rates.

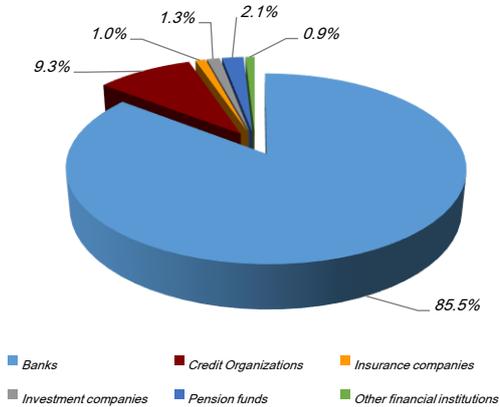
Yields of government bonds dropped down, horizontally moving downwards along the yield curve. Moreover, the decrease becomes more expressed along with the maturity.

From the point of view of market activity, the volumes of gross transactions in the securities market have increased by the investment services providers.

4. STABILITY OF FINANCIAL INSTITUTIONS

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

Structure of financial system assets, by financial institutions, 31.12.2017



In 2017, the volumes of financial intermediation increased, given the prospect of accelerating economic activity and stabilization outlook of income inflows from abroad. The financial sector ratios of assets-to-GDP and credits-to-GDP were 91.4% and 49.8%, respectively.

Armenia's financial system remains bank-dominated, with banks accounting for 85.5% 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 risks of insurance and securities market participants and other players of the financial market are monitored and according to the results of stress-tests therefore their impact on the financial stability is still low.

4.1. COMMERCIAL BANKS

Banking sector stability map

In the fourth quarter of 2017, relative to the fourth quarter of 2016, the elements of the stability map²⁶ incurred some changes (for details, see subsections “Credit risk”, “Liquidity risk”, “Market risk”, “Capital adequacy and Profitability”).

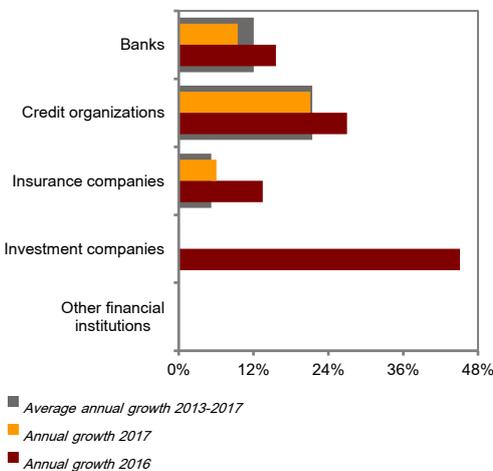
Some positive shifts were observed in the foreign exchange risk, interest rate risk and asset quality indicators (the chart data came closer to the midpoint of the map). The liquidity risk indicator incurred some decrease, while capital adequacy and profitability indicators remained the same.

4.1.1. Financial intermediation and concentration

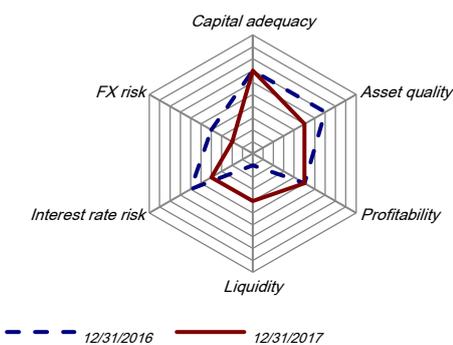
In 2017, the growth rate of nominal GDP was in line with the growth rate of the banking intermediation. As a result, the level of the banking intermediation remained merely unchanged. The banking sector assets-to-GDP and credits-to-GDP ratios were 78.2% and 45.1%, respectively. The deposits-to-GDP and broad money-to-GDP ratios were 44.2% and 46.7%, respectively.

The total capital of the banking sector grew by 4.9%, while total assets increased by 9.2%, relative to the beginning of the year. As a result, the leverage ratio (total capital to total assets) decreased by 0.6 percentage point to 15.7%. The increase of total capital was due to the statutory capital replenishments and the net profit. The banking sector statutory capital grew by a total of AMD 5.7 billion. The share of non-resident participation in the statutory capital of the banking sector amounted 61.8% at the end of the year.

Growth of financial system sectors' assets



Banking sector stability map



Source: Central Bank of Armenia.

²⁶ 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 Herfindahl-Hirschman Concentration Index

Indicator	31/12/14	31/12/15	31/12/16	31/12/17
Total assets	728	764	859	868
Total liabilities	751	800	953	938
Total capital	627	630	580	655

Source: Central Bank of Armenia.

Given the concentration indicators of the main balance sheet items (assets, liabilities and total capital) the concentration risk of the banking sector remains low. Compared to the beginning of the year, the shares of assets, liabilities and capital of the 4 largest banks decreased by 0.8, 0.9 and 0.9 percentage points to 48.9%, 51.5% and 35.4% respectively.

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 the credit risk in risk-weighted assets of commercial banks accounts for 85.8%. In this context, the prudent management of credit risk is extremely important.

During the year, loans to economy increased by 8.5%. Lending to legal entities increased by 10.1%, while lending to individuals, by 14.0%.

The consumer, manufacturing and trade loans had the largest shares in total lending to residents, making up 19.9%, 17.7% and 16.3%, respectively.

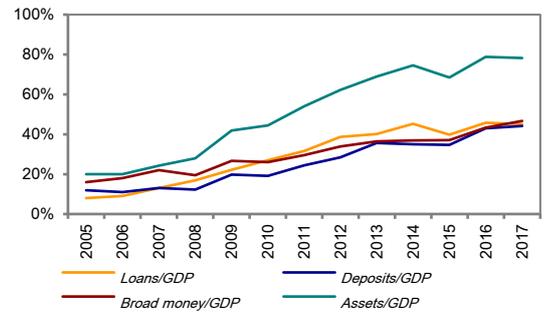
The share of non-performing loans and receivables (classified as “watched”, “substandard”, and “doubtful”) decreased by 1.7 percentage point to 5.1% of total loans and receivables. The shares of “watched”, “substandard”, and “doubtful” loans and receivables were 1.4%, 2.0% and 1.7%, respectively (as of 31.12.2016, they were 1.9%, 1.7% and 2.5%, respectively). The share of non-performing loans and receivables is relatively high in public catering and other services, as well as construction and agricultural sectors, constituting 10.6%, 7.9% and 6.9%, respectively.

The Herfindahl-Hirschman sectorial concentration index for lending remained the same, constituting 1081 at the end of the year, pointing to a moderate concentration of loan allocation in the banking sector. The same indicator calculated using the banks’ average amounted to 1876.

The share of loans to large borrowers increased by 5.1 percentage points to 25.5% of total loan portfolio as compared to the beginning of the year²⁷.

²⁷ The bank’s risk on large borrowers exceeds 5% of average monthly regulatory total capital, considering the interdependence.

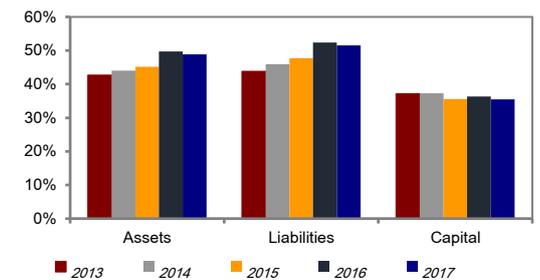
Banking intermediation



*Loans include lending to residents and non-residents. Meanwhile, broad money includes currency in circulation in AMD, deposits and borrowings of residents (both in AMD and in foreign currency)

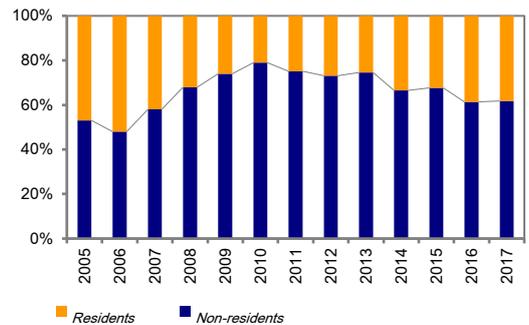
Source: Central Bank of Armenia.

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



Source: Central Bank of Armenia.

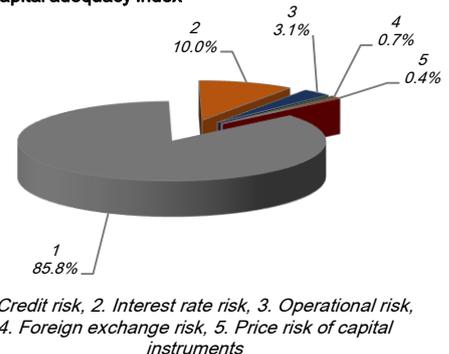
Foreign investors' participation in statutory capital of Armenian banking sector



Source: Central Bank of Armenia.

The credit risk is declining.

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

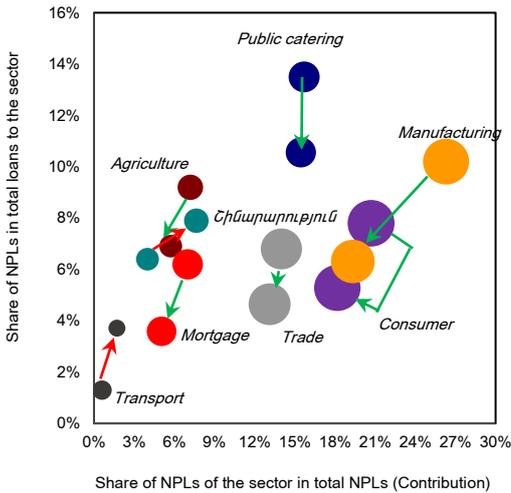


1. Credit risk, 2. Interest rate risk, 3. Operational risk, 4. Foreign exchange risk, 5. Price risk of capital instruments

Source: Central Bank of Armenia.

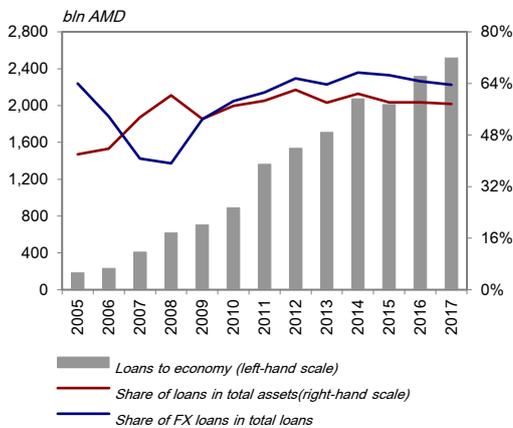
Credit risk stress scenarios²⁸

Change of NPLs share in lending to economy sectors
(The end of the arrow shows data as of 31.12.2017, the beginning, as of 31.12.2016)



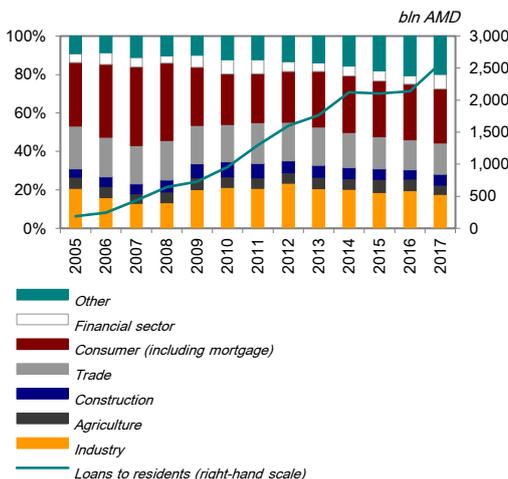
Source: Central Bank of Armenia.

Lending to economy



Source: Central Bank of Armenia.

Structure of bank loans to residents, by economy sectors



Source: Central Bank of Armenia.

31.12.2017	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 25.2 billion or 3.7% of regulatory capital of the banking sector	AMD 14.8 billion or 2.2 % of regulatory capital of the banking sector	AMD 76.6 billion or 11.2% of regulatory capital of the banking sector
Total capital adequacy of the banking sector in case of stress scenario	18.0%	18.2%	16.8%

Source: Central bank of Armenia.

The results of the credit risk stress tests improved at the end of 2017, as compared to the beginning of the year. This was attributable to the drop in the share of non-performing loans and receivables. The strictest stress scenario revealed cases of infringement of the capital adequacy requirement at some banks. However, the capital adequacy levels in these banks remain quite close to the regulatory requirements, while the total capital will be sufficient enough to absorb plausible 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

31.12.2017	Stress scenarios
	When 50% of off-balance sheet contingent liabilities performed
Banking sector capital adequacy ratio before the stress	18.6%
Banking sector capital adequacy ratio after the stress	18.3%

Source: Central bank of Armenia.

The results of stress scenario on 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 the 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 displayed a decreasing trend owing to better lending activity of commercial banks. Prudential ratios of total and current liquidity fell by 0.4 and 29.1 pp. to 32.1% and 141.7%, respectively, relative to the beginning of the year (with

²⁸ 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.

minimum thresholds of 15.0% and 60.0%, respectively). Prudential ratios of total liquidity and current liquidity for Group 1 foreign currencies decreased by 0.5 and 23.6 percentage points to 20.5% and 79.3%, respectively (with minimum thresholds of 4.0% and 10.0%, respectively).

As for assets and liabilities by maturity baskets, the cash inflows practically cover cash outflows in up to 3-month timeframe, in case if the liabilities are not being refinanced. In a near term horizon, there is a significant liquidity gap of only 91-365-day maturity basket. This is a coherent outcome of longer maturities for loans parallel to the deepening of banking intermediation. The ratios of assets to liabilities for up to 30-day (including demand), up to 3-month and up to 1-year maturity baskets amounted to 102.4%, 97.9% and 91.4%, respectively.

In terms of maintaining the current liquidity, it is particularly important to consider the aligned cash flows of assets and liabilities for up to 1-month 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.

In the reporting year, the declining trend of concentration of the funds attracted during the last 3-4 years was maintained, improving the liquidity risk profile of commercial banks. The share of large liabilities in total liabilities dropped by 6.0 pp. to 12.9% at the end of the year, as compared to the beginning of the year²⁹.

The foreign borrowings of commercial banks have decreased by 5.3%, as compared to the beginning of the year. The funds attracted from international financial institutions remained merely the same, with a 24.6% share in total foreign borrowings. The main lender countries include Netherlands (24.9%), Luxembourg (19.8%), the USA (5.3%) and Germany (5.0%). The share of long-term liabilities remained unchanged compared to the beginning of the year, amounting 89.3%.

From the perspective of the stability of loan financing sources, some risk narrowing was observed. The loans to deposits ratio decreased by 4.2 percentage points relative to the beginning of the year and stood at 102.1%³⁰ at the end of the year.

Liquidity risk stress scenarios

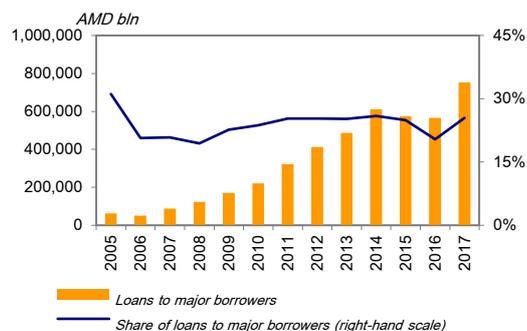
31.12.2017	Stress scenarios		
	Withdrawal of 25% of individuals' time deposits	Withdrawal of 25% of demand liabilities	Withdrawal of 25% of demand liabilities and of 25% of individuals' time deposits
Total liquidity ratio of banking sector	26.6%	28.1%	21.8%
Current liquidity ratio of banking sector	108.1%	155.4%	110.8%

Source: Central Bank of Armenia.

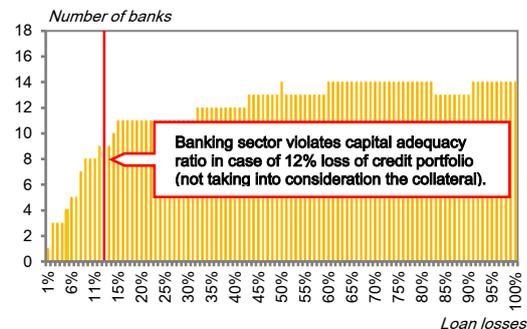
²⁹ Bank's liabilities for major creditors exceed 5% of total liabilities without considering the interconnectedness.

³⁰ In the calculation of this ratio, loans include loans to real sector, while deposits include funds attracted from individuals and companies.

Loans to major borrowers to total loans



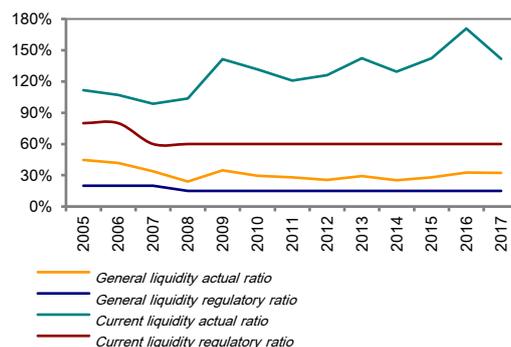
Number of banks violating total capital adequacy in case of dynamic growth of loan losses



Source: Central Bank of Armenia.

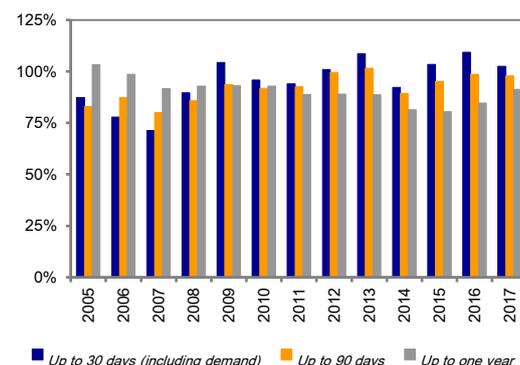
The liquidity ratios of commercial banks are twice higher than the regulatory minimum requirements.

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



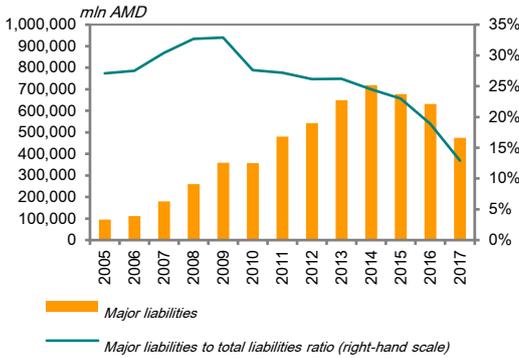
Source: Central Bank of Armenia.

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



Source: Central Bank of Armenia.

The ratio of the banking sector major liabilities to total liabilities



Source: Central Bank of Armenia.

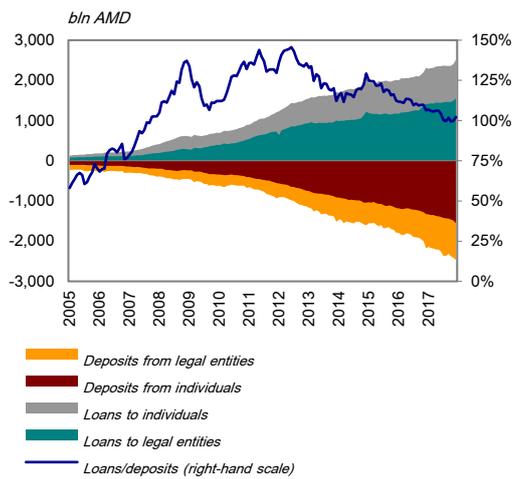
Relative to the previous results of the liquidity risk stress tests, no significant change was observed in the stress test results of the end of 2017. All banks have sufficient level of high liquid assets to absorb the simulated liability outflow, even in case of the worst stress scenario. In this context, 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

31.12.2017	Stress scenarios	
	When 50% of off-balance sheet contingent liabilities performed	
Banking sector high liquid assets to total assets	28.2%	
Banking sector high liquid assets to demand liabilities	124.3%	

Source: Central Bank of Armenia.

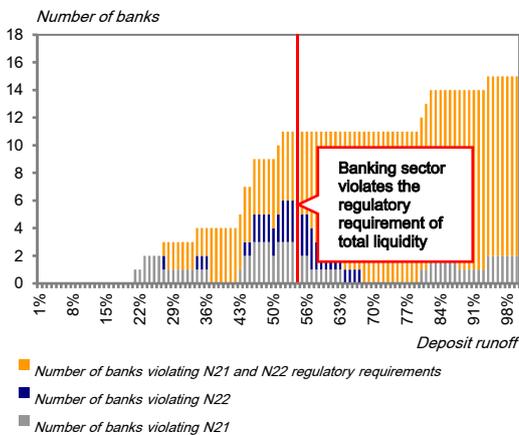
The structure of loans and deposit funds of the banking sector



Source: Central Bank of Armenia.

According to the results of the stress tests to assess liquidity risk arising from the 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.

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



4.1.4. Market risk

Foreign exchange risk

The Armenian dram exchange rate fluctuations against other currencies drove the domestic banking sector to revaluation gains reaching AMD 2.6 billion. The banking sector generated net revenue of AMD 15.4 billion from foreign exchange transactions and transactions with derivatives.

During the year, the declining trend of dollarization of the banking system's balance sheet was maintained. Moreover, the dollarization level of deposits dropped more considerably. The share of foreign currency loans declined by 4.2 percentage points to 63.5% of total loan portfolio. The share of foreign currency deposits decreased by 5.0 percentage points to 62.8% of total deposits.

Foreign exchange risk stress scenarios

31.12.2017	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 536 million or 0.08% of regulatory capital (AMD 536 million)	AMD 29 million or 0.004% of regulatory capital (AMD 29 million)	AMD 278 million or 0.04% of regulatory capital

Source: Central Bank of Armenia.

The banking sector's foreign currency net short position (including derivatives) amounted to AMD 9.7 billion or 1.4% of total regulatory capital (as of 31.12.2016, it was AMD 21.8 billion or 3.5% of total regulatory capital)³¹.

If the worst possible stress scenarios reviewed in the above stress test³² 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

The interest rate risk of the banking sector remained low. During the year the decreasing trend for both 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 banking sector varies in the region of 1/2 to 1 year. This means that possible fluctuations in the market rates will not lead to major losses of the banking sector.

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 5.7 billion.

Interest rate risk stress scenarios

31.12.2017	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 -22.5 billion or 3.3% of banking sector capital (AMD 22.5 billion or 3.3% of banking sector capital)	AMD -92 million or 0.01% of banking sector capital (AMD 92 million or 0.01% 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 will approximately be 3.25% of the total capital. This implies that losses of the banking sector resulting from the interest rate fluctuations are insignificant and the impact of such losses on the financial stability will be weak.

Price risk

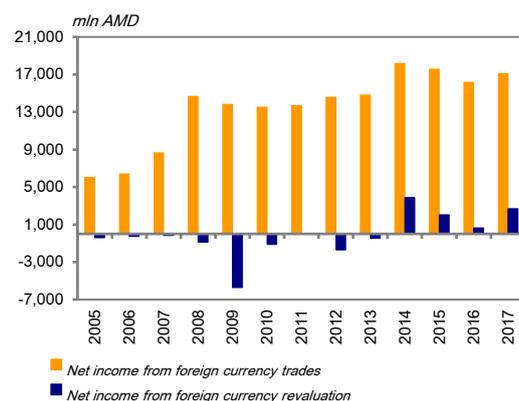
The price risk of the banking sector remains low, owing to the banks' preference for holding government securities and the small amount of financial assets available-for-sale and held at fair value through profit or loss in the balances of banks. Relative to the beginning of the year, the share of the abovementioned assets rose by 1.0 percentage point to 9.7% in total assets, as of end of the year.

³¹ 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)

³² 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 31.12.2017.

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

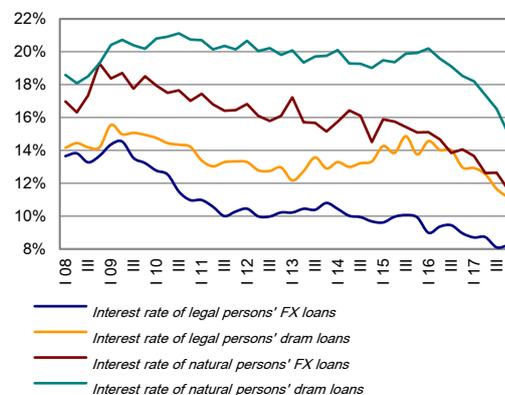
The net income of the banking sector from foreign currency trades and revaluation



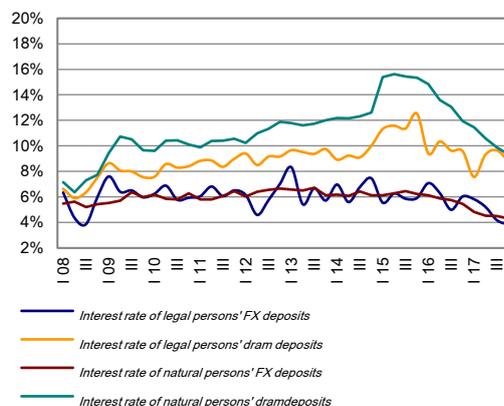
Source: Central Bank of Armenia.

The interest rates of loans and deposits for individuals and legal entities decreased in line with the easing of monetary policy.

Interest rates of loans to legal and natural persons

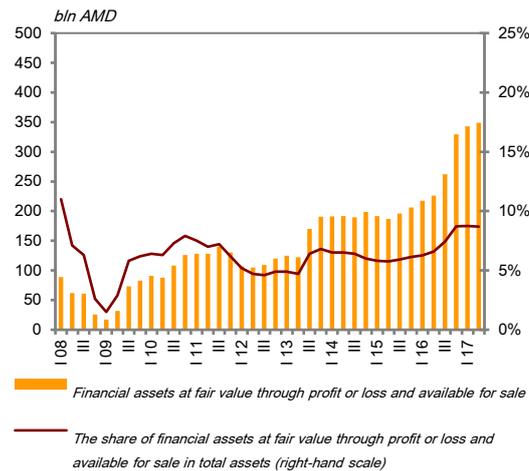


Interest rates of deposits from legal and natural persons



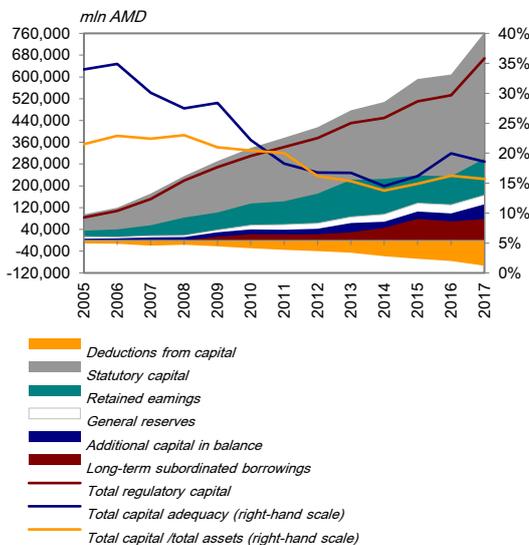
Source: Central Bank of Armenia.

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



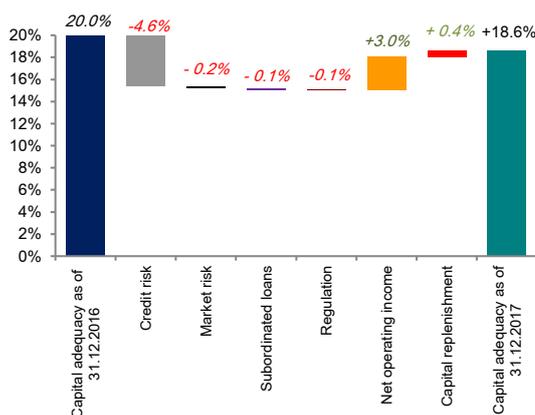
Source: Central Bank of Armenia.

The structure of total regulatory capital



The strengthened capital of commercial banks provides a high level of risk absorption for banks.

Total capital adequacy with banks- Waterfall



Source: Central Bank of Armenia.

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 fluctuations.

Real estate price change stress scenarios

30% depreciation of real estate	31.12.2017
The banking sector's loss due to revaluation of own real estate property (price risk)	AMD 9.4 billion (or 1.4% of banking sector capital)
The banking sector's loss due to a 30% loss of vulnerable credit portfolio ³³ (taking into consideration that the collateral involved has been sold at a depreciated cost), if a stress-scenario occurs (credit risk)	AMD 23.3 billion (or 3.4% 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 77.5 billion (or 11.4% of banking sector capital)

In case of stress scenario of 30% depreciation of real estate prices, the maximum potential losses of commercial banks associated with price risk and credit risk derived from the price risk increased compared to the beginning of the year, mainly due to the expansion of the loan portfolio secured by real estate collateral in the banking sector. Nevertheless, in view of the moderate fluctuations of the real estate prices in the last years, the financial stability is assessed not vulnerable to the impact of credit and price risks.

4.1.5. Capital adequacy and profitability

During 2017, the total capital adequacy ratio of commercial banks decreased by 1.4 percentage point to 18.6%. This decrease was mainly due to expansion of the loan portfolio. The growth of statutory capital and generated net income positively impacted the capital adequacy at banks.

The total regulatory capital of commercial banks increased by 8.7% to AMD 681 billion, compared to the beginning of the year. The structure of the total regulatory capital has high quality in terms of its risk absorption capacity. In particular, the share of CET1 capital is 81.7% of total regulatory capital.

The banking sector's net profit amounted to AMD 39.4 billion, with 15 banks reporting profit and 2 banks incurring losses³⁴. The ROA and ROE were 1.0% and 6.0%, respectively (0.9% and 5.8%, as of 31.12.2016). The return on equity improved due to the increase of the return on assets, while the decreased leverage ratio left its negative impact on it. The return on assets increased

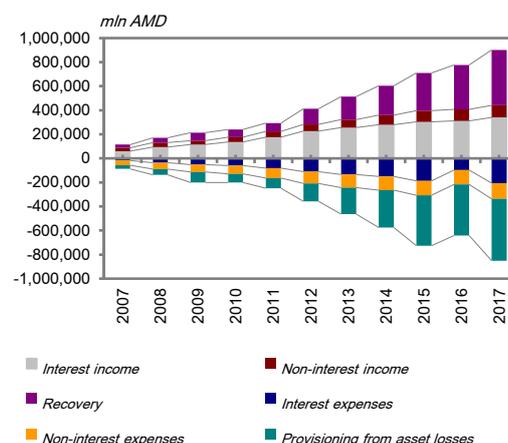
³³ Vulnerable loan portfolio represents the sum of loans outstanding, the residual values of which exceed the 30% devaluated values of the real estate used as collateral.

³⁴ According to the International Financial Reporting Standards (IFRS) the net profit of commercial banks was AMD 38.2 billion. This differs from IFRS mainly on the part of contributions to assets loss provisioning.

mainly as a result of relative cost-savings of non-interest expenses and the decrease in allocations for asset loss provisioning. In comparison with the previous year, the ratio of net provisions to assets declined by 0.3 percentage point, while non-interest expenses declined by 0.2 pp.

The shares of interest and non-interest income decreased in the banking sector income and expenditure structure, while the shares of interest expenses, recoveries from asset loss provisions and allocations for asset loss provisions increased. These structural changes were due to the decrease of the profitability spread, some relative cost-savings of non-interest expenses, as well as a high volatility of the share of NPLs in total loan portfolio, as well as the risk categories of the non-performing loans.

Income and expenses of the banking sector



Source: Central Bank of Armenia.

4.2. CREDIT ORGANIZATIONS

Credit organizations represent the second largest sector of Armenian 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	31.12.2016	31.12.2017	Growth (%)
Assets	391,978,700	474,750,664	21.1%
Liabilities	209,939,988	217,389,789	3.5%
Capital	182,038,712	257,360,874	41.4%
Net profit	19,231,554	52,475,736	172.9%

Source: Central Bank of Armenia.

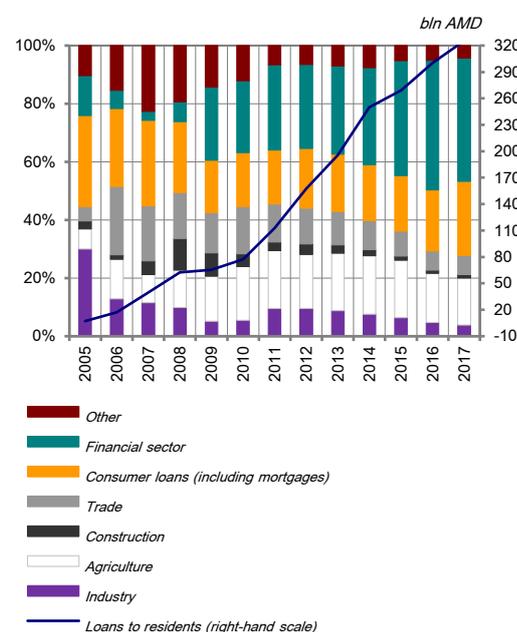
The total capital of credit organizations had a growth rate outpacing that of the total assets, in 2017. As a result, the total capital-to-assets ratio (leverage ratio) has increased by 7.8 percentage points to 54.2%.

The net profit of credit organizations amounted to AMD 52.5 billion. During the year, 31 credit organizations posted profit and 4 reported losses³⁵.

The return on assets (ROA) and return on equity (ROE) grew by 6.5 and 12.4 percentage points, relative to the previous year, to 12.1% and 24.6%, respectively.

In 2017, the share of non-performing loans and receivables fell by 1.4 percentage point to 3.2% in the total loan portfolio. The share of non-performing loans and receivables is relatively high in

Balance of loans to residents by credit organizations, by sectors



Source: Central Bank of Armenia.

³⁵ The net profit of credit organizations, calculated in accordance with the IFRS amounted to AMD 51.7 billion.

consumer loans, loans to agriculture, as well as transport and communication sectors, amounting to 13.5%, 9.3% and 5.9%, respectively.

Relative to the previous year, the ratio of net asset loss provisioning to total assets has decreased by 0.4 pp. to 1.6 percent

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*³⁶

31.12.2017	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 2.5 billion or 1.2% of regulatory capital	AMD 287 million or 0.1% of regulatory capital	AMD 8.1 billion or 3.9% of regulatory capital

Source: Central Bank of Armenia.

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. SECURITIES MARKET PARTICIPANTS³⁷

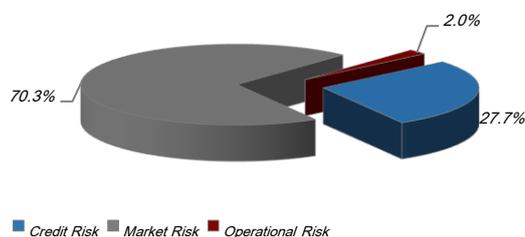
As of end of 2017, 58 classes of securities of 20 reporting issuers were admitted to trading in the regulated market of securities. Two issuers were accountable on both shares and bonds.

As of end of the year, the total amount of shares issued was AMD 57.7 billion, while that of bonds was AMD 92.2 billion. The share of equity securities issued by three commercial banks was 68.9% of total issuance of securities, while the share of bonds issued by eight commercial banks was 92.3% of total issuance of bonds. 31 of these 48 bonds were in foreign currency, with their share making up 86.8%.

There were 17 banks providing investment services and 9 investment companies in the securities market of Armenia, as of end of December, 2017.

The total assets and total capital of investment companies increased by 54.8% and 51.9% and amounted to AMD 64.3 billion

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



Source: Central Bank of Armenia.

³⁶ 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).

³⁷ 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.

and 9.8 billion, respectively. Total profit of investment companies was AMD 2.5 billion. Moreover, all companies posted profit.

The regulatory capital adequacy of investment companies was 17.9%, as of end of December. The credit risk of investment companies accounted for 27.7% of risk-weighted assets, the market risk constituted 70.2% and the operational risk, 2.1%. Remarkably, the interest rate risk had the largest share in market risk of investment companies (86.1%), while foreign exchange and share price risks constituted 11.9% and 2.0%, respectively. The capital adequacy of investment companies is higher than the required minimum level, and the abovementioned risks are manageable.

As of 31.12.2017, there were 2444 security issuers' registers and 105474 owners' accounts in the Central Depository of Armenia.

Overall, the investment companies have low-risk level activity in terms of financial stability vulnerability.

4.4. MANDATORY PENSION FUNDS

As of 31.12.2017, 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 31.12.2017

Name of the manager	Name of the pension fund	Net asset value (NAV)
AMUNDI-ACBA Asset Management Armenia CJSC	Balanced fund	AMD 1.3 billion
	Conservative fund	AMD 51.9 billion
	Fixed income fund	AMD 722 million
C-QUADRAT AMPEGA Asset Management Armenia LLC	Balanced fund	AMD 708 million
	Conservative fund	AMD 50.8 billion
	Fixed income fund	AMD 342 million

The net asset value of the pension funds was AMD 105.7 billion, as of 31.12.2017. The net assets-to-GDP ratio was 1.9%, increasing by 0.7 pp. as compared to the end of 2016.

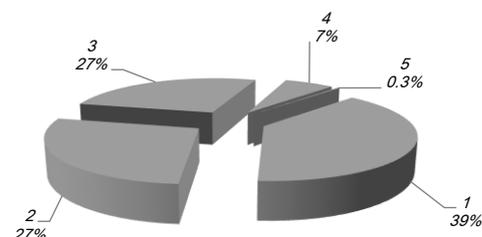
As of the end of 2017, there were 193,000 active pension plan participants.

In 2017, the Herfindahl-Hirschman concentration index for pension fund investments decreased, as compared to 2016, and amounted to 0.28, as of 31.12.2017.

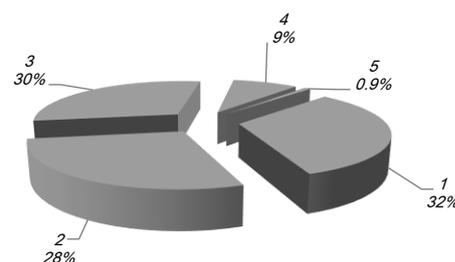
During 2017, the investments in non-government bonds increased by 2 percentage points to 9% of total assets in the investment structure of pension funds, which indicates the rising activity of asset managers in the non-government bond market. The investments in cash and deposits rose by 3 pp. to 30% of total assets, while those in securities of foreign investment funds increased by 1 percentage point to 28% of total assets. The share of government bonds decreased by 7 percentage points.

The share of foreign exchange assets of the funds was 33.3% or AMD 35.2 billion, at the end of the year. The majority of foreign

Pension fund investments as of 31.12.2016



Pension fund investments as of 31.12.2017



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

exchange assets (AMD 29.7 billion) were securities of foreign investment funds.

The average profitability of funds was 13.7% in 2017. Starting from 2014, the cumulative average return for the last four years made up 42.2 percent. The average price of one pension fund unit for all 6 funds was AMD 1000 during the establishment of the funds, which rose by AMD 422 and stood at AMD 1422, as of 31.12.2017.

The 32.1% or AMD 33.9 billion of the fund's assets are invested in the Armenian government bonds. The investments in Eurobonds amounted to AMD 406 million. The weighted average maturity of the fund invested government bonds was 8.8 years and the weighted average yield (before maturity) was 8.7%.

4.5. INSURANCE COMPANIES

As of December 31, 2017, there were 7 insurance companies licenced to carry out insurance activities in the Republic of Armenia.

During the year, the assets of insurance companies increased by 6.1% to AMD 49.5 billion and the amount of liabilities, by 11.2% to AMD 30.3 billion, as of 31.12.2017. Total capital decreased by 1.1% and made up AMD 19.2 billion.

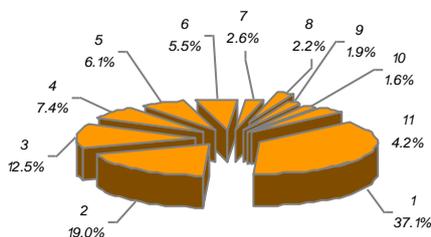
The amount of premiums written, the main indicator of insurance activity, increased by 6.4%, as compared to the previous year, to AMD 35.3 billion (this indicator increased by 5.5% during the previous year).

The premium to GDP ratio, another key indicator of insurance companies, was 0.63%³⁸ as of 31.12.2017, decreasing by 0.02 pp. as compared to 31.12.2016. The premium per capita ratio was AMD 11,835 in December, versus AMD 11,070 reported in 2016.

The insurance companies' expense ratio has increased by 7.9 percentage points, as compared to the previous year, to 59.7%³⁹. The loss ratio of insurance companies grew by 0.1 pp. compared to the previous year and amounted to 29.9%⁴⁰.

The shares of risk-weighted assets and required solvency in the insurance sector's capital adequacy ratio were 38.0 and 62.0 percent, respectively. The regulatory capital adequacy ratio of the insurance sector was 183.3% at the end of the year (the marginal value of regulatory capital adequacy is 100.0%).

Insurance sector assets 31.12.2017



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. Costs for future periods and prepayments on insurance, 6. Fixed assets, 7. Borrowings, 8. Bank accounts and cash, 9. Interest receivables, 10. Claims to reinsurers on compensation, 11. Other assets

Source: Central Bank of Armenia.

³⁸ Based on the 2016 data, the premiums to GDP ratio on non-life insurance was 3.6% on average in developed industrial countries and 1.5% in emerging market countries (source: Swiss Re, Sigma No 3/2017, May 2017).

³⁹ 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).

⁴⁰ 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 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.

Solvency assessment stress scenarios

31.12.2017	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 0.8 billion or 4.4% of regulatory capital of the sector	AMD 0.5 billion or 2.6% of regulatory capital of the sector
Total capital adequacy ratio of the insurance sector, if the stress scenario occurs	175.3%	178.5%

Source: Central Bank of Armenia.

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

31.12.2017	Stress scenarios	
	Classifying 30% of "standard" assets into "watched" category	Classifying 5% of "standard" assets into "loss" category
Loss of the insurance sector	AMD 0.9 billion or 4.8% of regulatory capital	AMD 1.7 billion or 8.7% of regulatory capital
The total capital adequacy ratio of the insurance sector, if the stress scenario occurs	176.4%	170.6%

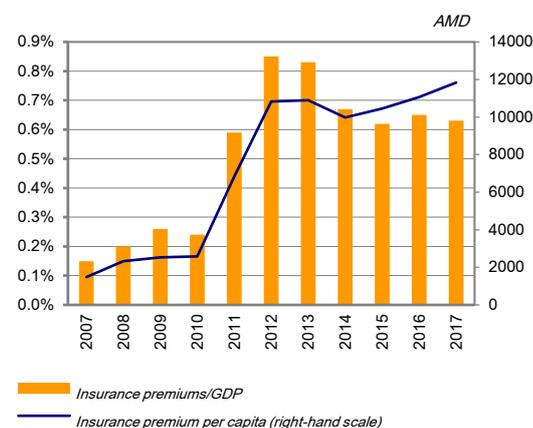
Source: Central Bank of Armenia.

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

Foreign exchange risk

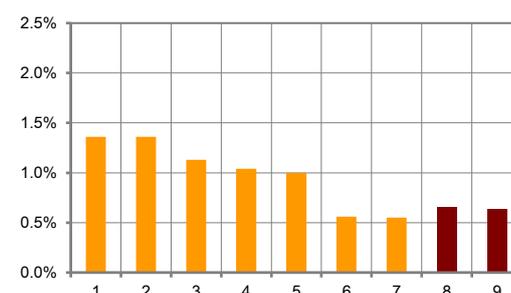
The results of the foreign exchange stress scenario suggest that the loss of insurance companies resulting from foreign exchange risk is non considerable.

Main ratios of the insurance sector



Source: Central Bank of Armenia.

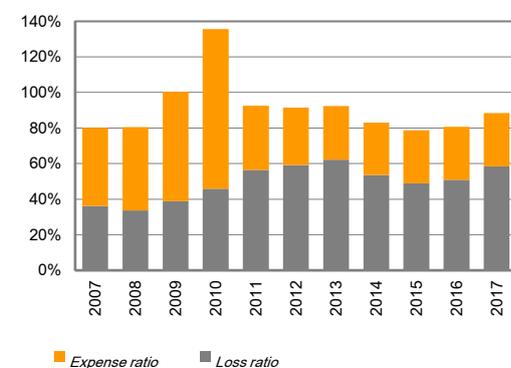
Insurance premiums/ GDP in EEC and CIS (2016)



1. Ukraine, 2. Turkey, 3. Russia, 4. Georgia, 5. Romania, 6. Kazakhstan, 7. Azerbaijan, 8. Armenia 2016, 9. Armenia 2017

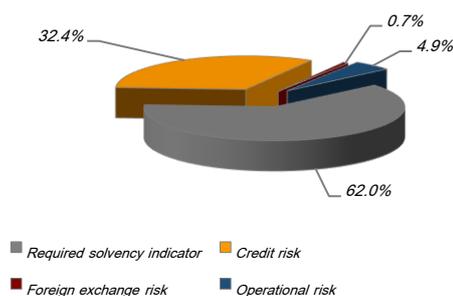
Source: Central bank of Armenia, Swiss Re, Sigma No 3/2017.

Loss and expense ratios of the insurance sector



Source: Central Bank of Armenia.

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



Foreign exchange risk assessment stress scenarios ⁴¹

31.12.2017	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 -1.7 million or 0.01% of regulatory capital (AMD 1.7 million)	AMD 1.1 million or 0.01% of regulatory capital (AMD -1.1 million)	AMD 0.6 million or 0.003% of regulatory capital

Source: Central Bank of Armenia.

Liquidity risk

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

Liquidity risk assessment stress scenario

31.12.2017	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	602.3%

Source: Central Bank of Armenia.

Overall, 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.

SUMMARY

In 2017, under the prospects of the acceleration of the economic activity and a stabilization of income from the external sector, the banks maintained their expansionary credit policy. Given the easing of monetary policy, the declining trend of interest rates on loans and deposits has also been preserved.

A stabilization trend of credit risk has also been observed in line with lending growth. The share of non-performing loans decreased. Given the lending growth, a slight decrease in capital adequacy and liquidity ratios of the banking sector was observed. Nevertheless, the banking sector ratios of capital adequacy and liquidity remain rather higher than the minimum regulatory limits.

Non-bank financial institutions underwent volumetric expansion, while their regulatory ratios remained within the required limits.

Given the strengthening of the financial stability, the financial system recorded improvements in profitability ratios and a stronger risk absorption capacity.

⁴¹ The calculation of losses estimated through stress - scenarios and the VaR Model (the VaR Model is not considered as a stress - scenario since the calculation of the model considers historical exchange rate series of currencies) makes an assumption that FX position of insurance companies would not change in a 10 - day time - span.

5. FINANCIAL MARKET INFRASTRUCTURES STABILITY

Given the importance and the impact of the 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, as well as the telecommunication networks supporting their activity.

In Armenia, over 99 percent of the value of the interbank settlements are made via the Central Bank systems⁴².

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

In 2017, there were about 3.2 million payments (payment messages), totaling AMD 15331.8 billion, executed via the Electronic Payment System (EPS) of the Central Bank of Armenia.

The total value of EPS payments grew by 1.1%, as compared to the previous reporting period. Though the interbank payments decreased by 10.3%, which constitute the biggest share of the value of the EPS payments (41.1 %), increases by 7.1% in budget payments and 13.2% in operations with the Central bank were observed. As a result, no decline in the total value of payments was observed. The sharp decrease in the beginning of the year was seasonal.

In 2017, the number of payments decreased by 16.6%, compared to the previous year. This was due to the decrease in single message types (17.6% of MT100 and 42.7% of MT108) and an increase in bulk messages (in particular 19.2% growth in MT202).

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

Credit risk

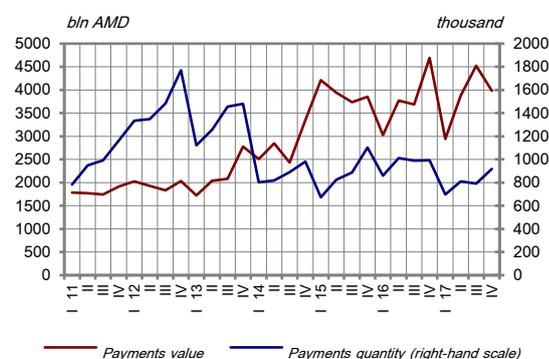
Credit risk to the settlement bank (i.e. the Central Bank of Armenia) in the system is non-existent since the participant can use an intraday repo instrument in case of insufficient funds on their correspondent account, which is secured by government bonds of the Republic of Armenia, securities of the 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 irrevocable⁴³.

⁴² 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.

⁴³ 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 results of the 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)

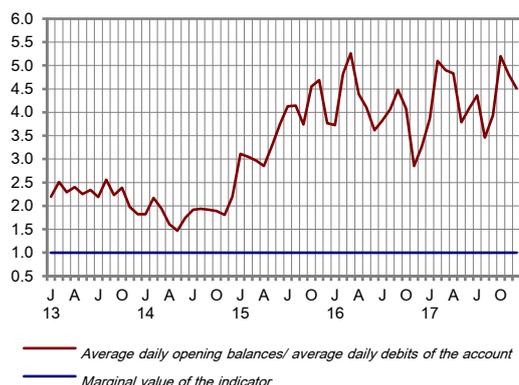


Source: Central Bank of Armenia.

There is no credit risk identified in the EPS.

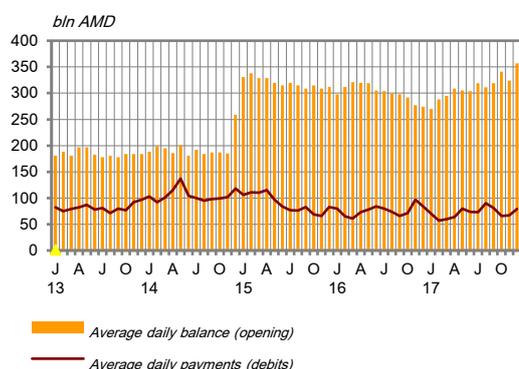
The likelihood of emergence of liquidity risk and systemic problems in the EPS is negligible.

The dynamics of the own liquidity indicator



Source: Central Bank of Armenia.

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

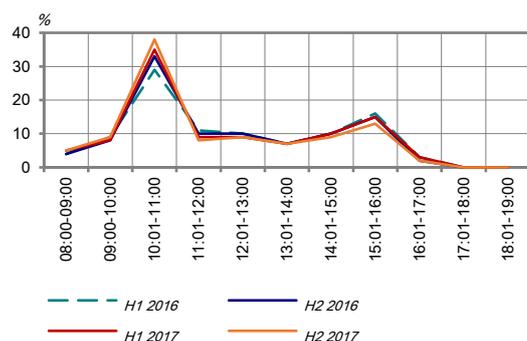


Source: Central Bank of Armenia.

The rejections due to insufficient liquidity are also negligible.

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

Intraday distribution of value of payments on an average semiannual basis



Source: Central Bank of Armenia.

Liquidity risk

In the period under review, the daily average indicator of own liquidity used for assessment of liquidity risk⁴⁴ was 4.3 (4.0 in 2016), reaching 5.2 in October (in 2016, the maximum was 5.3 in March). This high level of the ratio 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 October was due to a rise in average daily balance parallel to a decrease in average daily payments. The sharp increase of the indicator in the fourth quarter was caused by a decrease in average daily payments and an increase in the average daily liquidity at the beginning of the day.

In 2017, the average daily payments by value declined by 5.6%, as compared to 2016. The average daily balance at the beginning of the day increased by 3.4%.

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) by banks 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 0.002% by value and 0.001% by number, on an annual basis.

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

Intraday distribution of payments

In the reported period, 37.3% of the value and 18.2% 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, the share of the peak hour of the beginning of the day increased (by 6.0 percentage points), leading to an uneven distribution of the value of payments

⁴⁴ 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.

during the day. The latter was mainly due to the high flow of payments at 10:00-11:00, in August and in September, conditioned mostly by the rise in the CBA monetary policy transactions. Despite the abovementioned uneven distribution, the peak hour was during the first half of the day, which smoothens the concentration risks, as in case of problems, the participants will have enough time to take the necessary measures to settle the payments on a given day.

The distribution of the number of payments during the day has a substantially proportionate nature. Meanwhile, the peak hour of the end of the day has increased by 1.1 percentage points, as compared to the previous year. The distribution of the number of payments during the beginning of the day (10:00-11:00) also increased by 2.4 pp., reaching 17.1%.

Taking into consideration the sufficient level of system capacity, the positive outcomes of liquidity and operational availability indicators and a 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 2017. Therefore, the likelihood of emergence of risks to the system is generally low.

System capacity

In 2017, the hourly maximum of payment flows (the maximum number of payments per hour for each month) decreased somehow, being a positive indicator in terms of system overload.

The maximum hourly indicator was 4628 payments per hour in 2017, against 5500 payments/hour in 2016. The peak hour was recorded in December, from 11:00 to 12:00, making up 23.4% of the number and 11.3% of the value of the day's payments.

The maximum daily indicator (number of payments per day) decreased to 24,637, against 27,450 payments/day in 2016.

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

Taking into account that the potential capacity indicator estimated in the system is higher than 5000 payments per hour, and that the cases of the abovementioned levels have a small share in total payments flow⁴⁵, the probability of emergence of capacity-related risks is estimated to be low.

Operational availability of the system

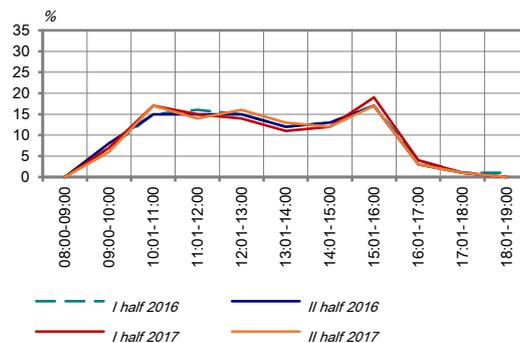
During the reported period, no significant incident (with a 1 hour or more duration) affecting the operational availability of the EPS was reported.

As a result, the operational availability of the EPS was 99.9%, which is a high indicator and corresponds to the service level set by the system operator⁴⁶.

⁴⁵ For example, the share of more than 3,500 payments per hour was 2.5% per annum.

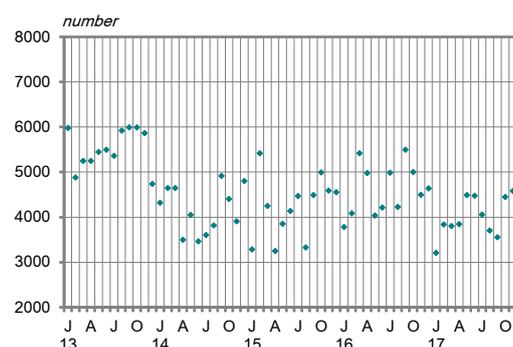
⁴⁶ According to the EPS participation agreement the operational availability of the system should be at least 98.0% yearly.

Intraday distribution of number of payments on an average semiannual basis



Source: Central Bank of Armenia.

The maximum number of payments per hour, by month

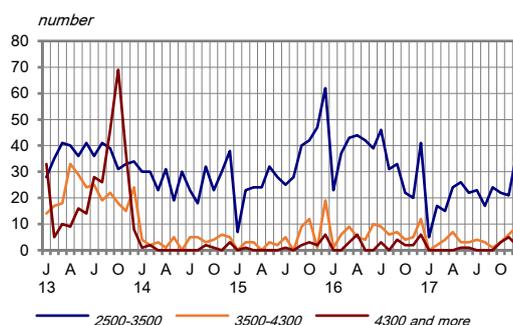


The dynamics of 2500 and more payments per hour and their share in the operating hour in the given month



The share in operating hour

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



Source: Central Bank of Armenia.

5.2. SECURITIES SETTLEMENT SYSTEMS

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

In 2017, secondary market transactions totaling AMD 10737.3 billion of nominal value were carried out through GSASS (AMD 8099.4 billion, in 2016), which represent an increase by 32.6% in relation to the previous year. Such increase was mainly due to increased "free delivery" transactions. Meanwhile, secondary market transactions, totaling AMD 346.2 billion of nominal value, were carried out through the CDA's SSS, which were 34.9% less than in the previous year. This fall was due to a decrease of OTC transactions with corporate shares and bonds and Eurobonds issued on behalf of the RA.

In 2017, the transactions executed through the GSASS accounted for 96.9 percent of secondary market transactions executed totally via securities' settlement systems. Thus, in the financial stability point of view, the 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 ⁴⁷

Transfers	2015	2016	2017
Value of OTC transactions (trades, repo and reverse repo) in nominal value, AMD billion	6285.5	8045.0	10676
Number of OTC transactions (trades, repo and reverse repo)	32154	31651	29066
Value of stock exchange transactions in nominal value, AMD billion	13.7	54.4	61.3
Number of Stock exchange transaction	325	911	642
Total transfers of securities in nominal value, AMD billion	6299.3	8099.4	10737.3
Total number of transfers of securities	32479	32562	29708

Source: Central Bank of Armenia.

In both the GSASS and the 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.

⁴⁷ The statistical information provided includes the GSASS-executed settlements and excludes transfers via CDA nominee account and internal transfers made by sub-custodians for their clients.

Transfers of securities through the Securities Accounting and Settlement System of the Central Depository of Armenia pertaining to the operations with securities in the secondary market⁴⁸

	2015	2016	2017
Value of OTC transactions (trades and repo) in nominal value, AMD billion	1179.3	511.1	326.6
Number of OTC transactions (trades and repo)	2682	1355	1978
Value of stock exchange transactions (trades and repo) in nominal value, AMD billion	3.3	20.6	19.6
Number of stock exchange transactions (trades and repo)	366	597	884
Total transfers of securities in nominal value, AMD billion	1182.6	531.7	346.2
Total number of transfers of securities	3048	1952	2862

Source: Central Bank of Armenia.

In 2017, there were no significant (with duration of more than 1 hour) incidents, which influenced the uninterrupted functioning of the GSASS.

The operational availability of primary and secondary markets' infrastructure of the GSASS was 100.0%.

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

5.3. CREDIT REGISTRY AND ACRA CREDIT BUREAU

The Credit Registry

The main goal of Credit Registry is to collect reliable data for effective monitoring and analysis.

As of the end of 2017, the number of loans recorded in the Credit Registry was 3,963,602 loans to individuals and 193,350 loans to legal entities, totaling 4,156,952 loans.

Number of loans registered in the Credit Registry, as of end of 2017

Number of loans	Outstanding	Repaid	Total
Loans to individuals	1,198,336	2,765,266	3,963,602
Loans to legal entities	22,789	170,561	193,350
Total	1,221,125	2,935,827	4,156,952

Source: Central Bank of Armenia.

As compared to the previous year, the total number of loans registered in the Credit Registry increased by 1,061,999 loans. This incredible increase of the number of loans was conditioned by the introduction of a new regulation on the Credit Registry, which removed the limit that only loans exceeding AMD 1.5 million were being registered.

⁴⁸ The statistical information provided includes the CDA's SSS-executed settlements both with corporate securities and Eurobonds issued by the RA and government bonds held as sub-custodian.

The Credit Registry possessed information on 314,798 loans outstanding, in the previous year, and 890,352 loans outstanding, in this year. A number of methodological and software amendments were made to the Credit Registry.

In particular, the Credit Registry has stopped providing credit data to the banks and other credit organizations for their ongoing monitoring, starting from January 1st, 2014. Both natural and legal persons may obtain data from the Credit Registry about their credit history once a year and free of charge.

A new software system was launched in September 2017.

The new software system includes innovative and more accurate methods for identification of natural and legal entities, as well as new data fields on loans were added. Moreover, the restriction on the information provided to the Credit Registry on loans exceeding AMD 1.5 million was revised, so that the banks and the credit organizations 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.

The ACRA Credit Bureau

The main goal of the ACRA Bureau is to provide reliable information to credit institutions on the creditors' creditworthiness. This will help lenders to make a justified decision on lending based credit history of customers and to avoid from defective borrowers. At the same time, creditors also can learn their credit score from the Bureau.

In 2017, the number of customers registered with the ACRA Credit bureau increased by 1.5%, relative to 2016, and amounted to 1,612,569 borrowers, as of December 31, 2017. Of this number, 98.0 percent are individuals.

The number of loans available in the database grew by 14.8%, as compared to 2016, and reached 15,071,167, as of December 31st, 2017.

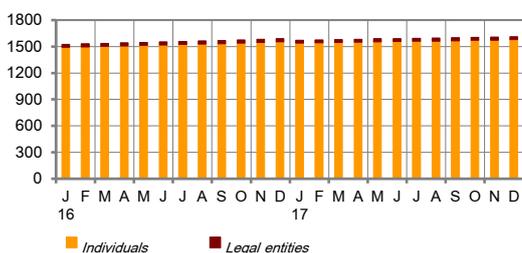
Each natural or legal entity may obtain information on their credit history from the Credit bureau. Since 2016, every natural and legal person has had the opportunity to order and receive their credit report by submitting an application in any of the post offices functioning in Armenia, owing to the cooperation of the Credit Bureau and "Haypost" CJSC.

Individuals may also get their credit history through registering a "My ACRA" online profile.

In order to get information on the credit history of one's customer or partner, the legal entity (bank or other credit organization, as well as companies that execute transactions with post-paid services, such as telecommunication companies) must sign a contract with the Credit bureau and obtain the written consent of the owner of the credit history.

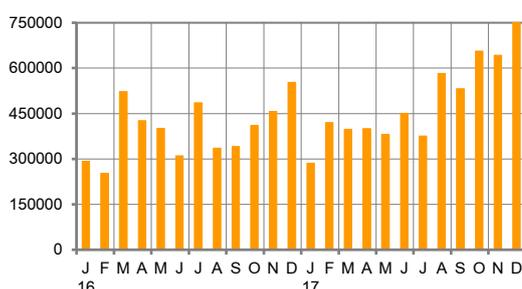
Starting from 2017, the Credit bureau has widened the list of its partners to collect information on their customers, including "First

Number of borrowers registered in ACRA database (in thousands)



Source: ACRA Credit Bureau.

Number of reports provided by ACRA credit registry



Source: ACRA Credit Bureau.

factoring company” UCO CJSC, “Export Finance” UCO CJSC, “Mogo” UCO LLC, “Premium Credit” UCO CJSC. A partnership contract was also signed with “Veon Armenia” CJSC, in 2017.

During 2017, the Credit bureau has introduced “ACRA Signal” service provided to its member organizations. The latter provides information on changes in the credit history of any individual or legal person, who are the customers of ACRA, if any change in the ACRA Credit bureau’s database occurs. The objective of the service is to assist member organizations to manage their loan repayment risk more easily, as well as to learn about customer financing needs and to propose more competitive offers to their customers, in order not to lose them.

In 2017, the ACRA Credit bureau provided 4,950,977 credit reports and 1,033,693 score records. This number grew by 24.8 percent, as compared to 2016.

While broadening the strategic partnership between the Credit bureau and Fair Isaac Corporation, which was obtained in 2016, the ACRA credit bureau developed and launched the “FICO score” and “Retro FICO score” systems, in 2017.

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

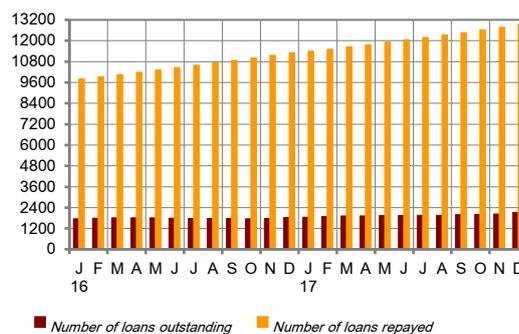
SUMMARY

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 the 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 2017, an increase in loans with both the Credit Registry of the CBA and the ACRA Credit bureau was observed, along with the development of united reporting form and the increased efficiency of the general performance.

Number of loans registered in ACRA database (in thousands)



Source: ACRA Credit Bureau.

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GLOSSARY OF TERMS

<i>Economic growth</i>	The growth of volume of goods and services produced in the economy during a certain period of time.
<i>Inflation</i>	An increase in the general level of prices of goods and services.
<i>Consumer price index</i>	An index of the variation in prices paid by typical consumers for retail goods and other items. The consumer price index measures the changes in the price of a market basket of consumer goods and services purchased by households.
<i>Balance of payments</i>	A system of recording of all economic transactions of Armenia (residents and non-residents) with the rest of the world over a reporting period (a quarter, a year).
<i>Foreign trade</i>	This involves an exchange of capital, goods and services across international borders or territories, in the form of exports and imports.
<i>Gross external debt</i>	Gross external debt, at any given time, is the outstanding amount of those actual current, and not contingent, liabilities that require payment(s) of principal and/or interest by the debtor at some point(s) in the future and that are owed to nonresidents by residents of an economy.
<i>Credit risk</i>	Credit risk refers to the risk that a borrower will default on any type of debt by failing to make payments which it is obligated to do. The risk is primarily that of the lender and includes the lost principal and interest, disruption to cash flows and increased collection costs.
<i>Liquidity risk</i>	Liquidity risk is the risk that a given security or asset cannot be traded by the financial institution quickly enough in the market to prevent a loss (or make the required profit).
<i>Foreign currency risk</i>	Foreign currency risk is the risk that a change in exchange rate in the market will adversely affect profits and/or capital of the financial institution.
<i>Interest rate risk</i>	Interest rate risk is the risk that interest rate volatilities in the market will adversely affect profits and/or capital of the financial institution.
<i>Price risk</i>	Price risk is the risk that a change in price of securities in the market or price of similar financial instruments on balance sheets will adversely affect profits and/or capital of the financial institution.
<i>Standard asset</i>	An asset which is serviced under a contract, and is not problematic.
<i>Watched asset</i>	An asset which is serviced under an original contract yet certain circumstances have emerged that may undermine the borrower's ability to serve that asset.
<i>Substandard asset</i>	An asset the contractual obligations towards which are not performed due to the borrower's fragile financial standing or inability to repay the debt.
<i>Doubtful asset</i>	An asset the contractual obligations towards which are not performed; it is more problematic, making its collection at the given time very difficult or impossible.
<i>Loss asset</i>	An asset non-collectable and fully impaired uncollectible, so that its recording on the balance sheet is no longer reasonable.
<i>Nonperforming asset</i>	An asset which has been classified by the bank as watched or substandard or doubtful or bad.
<i>Return on assets (RoA)</i>	A ratio of net annual profit to average annual total assets.
<i>Return on equity (RoE)</i>	A ratio of net annual profit to average annual total capital.
<i>Total liquidity</i>	A ratio of high liquid assets to total assets.
<i>Current liquidity</i>	A ratio of high liquid assets to demand liabilities.
<i>Regulatory total capital</i>	The difference between total capital as shown in statement on financial standing and deductions as specified in Central Bank "Regulation 2 on Banks and Banking".
<i>Capital adequacy</i>	A ratio of regulatory total capital to risk weighted assets.

<i>Leverage</i>	A ratio of total assets to total capital.
<i>Off-balance sheet contingent asset</i>	Off-balance sheet contingent assets include outstanding credit lines, credit cards and overdrafts as well as letters of credit, guarantees and warranties provided.
<i>Net provisioning</i>	The difference between provisions to and recoveries from assets loss reserve fund.
<i>Net foreign currency position</i>	The difference between assets and liabilities in FX assets and local currency assets containing FX risk.
<i>Gross foreign currency position</i>	This position measures the sum of absolute values of positions of various currencies.
<i>The Herfindahl-Hirschman index</i>	This index is defined as the sum of the squares of the market shares. It varies between 0 and 1, characterizing the level of concentration (values near to 0 denote lower concentration).
<i>Economic cost of capital</i>	The difference of the present value of total assets and present value of total liabilities.
<i>Spread</i>	The difference between deposit and credit interest rates
<i>Current liquidity</i>	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 Depository 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