PUBLIC DEBT

OF THE REPUBLIC OF ARMENIA

ANNUAL REPORT: 2017

Content

Appendix

Abbreviations

GS	Government treasury securities
T-bills	Short-term bills
MTCN	Medium-term coupon notes
LTCB	Long-term coupon bonds
SCB	Saving coupon bonds
TD	Treasury Direct
GDP	Gross National Product *(Since 2015 the GDP is compiled by NSS RA according to System of national accounts 2008 (SNA 2008) international standard. GDP indicators for the period 2012-2014 have also been revised taking into account SNA 2008 and they are not comparable with the GDP indicators for the period 2000-2011, which had been compiled according to the System of national accounts 1993 (SNA 1993) standard. In April, 2018 the NSS of RA revised the GDP indicator for 2016.)*
NPV	Net Present Value
MTEF	Medium-Term Expenditure Framework
TSA	Treasury Single Account
MoF of RA	Ministry of Finance of the Republic of Armenia
CBA	Central Bank of Armenia
AMD	Armenian drams
USD	U.S. dollars

Macroeconomic Environment

The summary of 2017 annual indicators shows, that the positive development trends of the economy in the beginning of the year accelerated at the end of the year causing an essential improvement in the macroeconomic environment. As a result, an unprecedented economic growth was registered in the post-crisis period conditioned by favorable developments of both internal and external factors. Those factors were: the acceleration of economic growth rates of partner countries, the increase of international prices of metals, the increase of inflow of remittances, the increase of the lending levels, the positive expectations of population and economic entities, as well as the economic policies implementing by the RA Government, specifically for attracting investments and for supporting export.

Economic growth: In 2017 the economy grew faster than the previous year mainly due to the high growth rates of services and industry. The GDP growth was 7.5%, which exceeded the same indicator of the previous year by 7.3 percentage points. The GDP growth was positively contributed by industry, services, trade and construction sectors, however, the agriculture had a negative impact on the economic growth.

External Sector: In 2017 the exports of goods and services increased by 22.1%, the imports of goods and services by 28.8%. In contrast with the last three years, the inflow of remittances increased by 15.2% in 2017. As a result of these developments, the current account deficit worsened by 1.2 percentage points compared to the previous year and amounted to 3.5% of GDP (2.3% in 2016), mostly due to the progressive growth of imports of goods and services.

Exchange rate: In 2017 the average exchange rate was 482.7 AMD against USD and depreciated by 0.5% compared to the previous year (480.5 AMD), moreover, the 2016 annual average exchange rate was also depreciated by 0.5%.

Inflation: In contrast with the previous year where there was a deflation of 1.4%, in 2017 the inflation amounted to 1%, furthermore, the inflation was due to the increase of prices both in food and non-food goods markets.

State Budget: Within the environment of the high rates of the economy recovery, the contractionary fiscal policy had been targeted and implemented in order to maintain fiscal and debt sustainability. In 2017 the state budget total revenues totaled 22.2% of GDP, against 23.1% in the previous year. Taxes and duties amounted to 20.8% of GDP; the previous year they were 21.3%. The adjusted taxes (taxes that exclude VAT returns) amounted to 20.5% improving by 0.2 percentage

points in comparison with the previous year. When comparing with the previous year, in 2017 the nominal growth of state budget revenue was 5.7%, the nominal growth of tax revenues and duties was 7.3%, meanwhile the growth of adjusted taxes was 10.7%. It is remarkable that tax revenues and duties exceeded the planned amount of the "RA Law on State Budget 2017" by AMD 21.3 billion[1].

The share of current expenditures in GDP declined, meanwhile the share of capital expenditures in GDP improved. In 2017 the state budget expenditures amounted to 27% of GDP, in contrast with 28.6% in the previous year, of which the capital expenditures were 4.3% of GDP compared to 3.3% in the previous year (these indicators include the estimated amounts of the "Financing of the supply of the weaponry at the expense of the state export credit of Russian Federation" loan program that amounted to 0.5% of GDP in 2016, and 1.6% of GDP in 2017).

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[1] The difference between the taxes and duties planned in the State budget and the actual taxes and duties (moreover, the actual taxes and duties are calculated without the off-balance accounts).

RA Public Debt

As of 31 December 2017, the RA public debt was AMD 3,279.6 billion or USD 6,774.6 million.

**Table 1.   Public Debt of the Republic of Armenia**

	31.12.2016		31.12.2017	
	% of GDP	AMD billion	% of GDP	AMD billion
Public Debt of RA	**56.7**	**2,875.6**	**58.9**	**3,279.6**
of which				
Debt of the Government of RA*	**51.9**	**2,631.4**	**53.7**	**2,988.4**
of which				
External Debt	*41.1*	*2,081.4*	*42.5*	*2,368.9*
of which				
Credits and Loans		1,635.7		1,946.6
Government Treasury Bonds purchased by non-residents		8.0		9.7
Foreign Currency Denominated Bonds purchased by non-residents		437.7		409.0
External guarantees**				3.6
Domestic Debt	*10.9*	*550.0*	*11.1*	*619.5*
of which				
Credits and Loans		-		-
Government Treasury Bonds purchased by residents		500.3		540.0
Foreign Currency Denominated Bonds purchased by residents		46.3		75.1
Domestic guarantees		3.4		4.4
External Debt of the Central Bank of RA	**4.8**	**244.2**	**5.2**	**291.2**
of which				
Loans provided with the Guarantee of the RA Government		70.8		76.7

* External and domestic Government debts are distinguished by residency according to the 5th and 6th points of the second article of "The Law on Public Debt".
** All Government external guarantees were provided to the Central Bank of RA, and in order to avoid double counting they were included in the external debt of the Central Bank of RA.

In comparison with the previous year RA Public debt increased by AMD 404.0 billion (USD 832.5 million) or by 14%, of which RA Government debt increased by AMD 357.0 billion (USD 735.6 million) or by 13.6%, and the Central bank debt increased by AMD 47.0 billion (USD 96.9 million) or by 19.2%.

Chart 1.   Dynamics of the RA public debt and Public Debt/GDP ratios
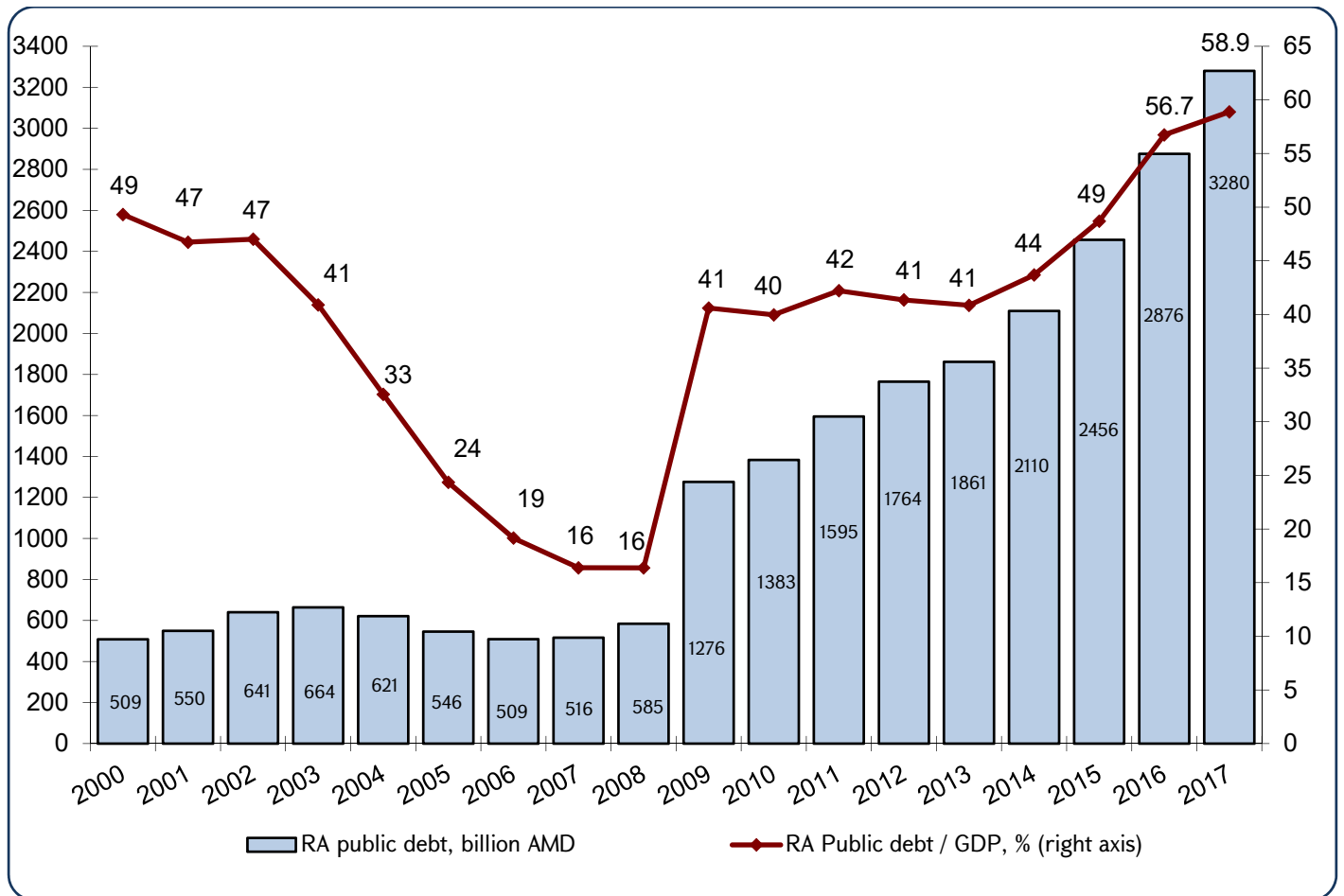
As of December 31, 2017 Public Debt/GDP ratio made up 58.9% that is 2.2 percentage points higher than the previous year, which was mostly due to the higher growth of public debt (14.0% in contrast to 9.9% of GDP growth). During this period, the RA external public debt increased by USD 689.3 million (AMD 334.5 billion) in nominal terms or by 14.3%, moreover the growth was mainly due to the increase of the RA Government external debt that was USD 592.4 million (AMD 287.5 billion) or 13.8%.

According to 2018-2020 RA Government Debt Management Strategy[2], RA Government debt should not have been more than AMD 2,802 billion or 51.8% of GDP. However, the RA Government debt to GDP ratio, as of the end of the year, amounted at 53.7% exceeding the programmed level by 1.9 percentage points. In 2017 the nominal growth of the RA Government debt was mostly caused by

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[2] 2018-2020 RA Government Debt Management Strategy includes RA Government debt planned indicators of 2017 and forecast indicators for 2018-2020 period.

the disbursement of the Russian Federation public export loan by AMD 82.3 billion instead of AMD 2.2 billion stated in the 2017 public budget law.

In 2017 the Public budget deficit financing in expense of the domestic net funding (without promissory notes) comprised AMD 45.7 billion and in respect to the external net funding totaled AMD 233.0 billion.

Table 2. Public budget deficit financing in expense of the net borrowings (without promissory notes)

(AMD billion)	2016 Actual	2017 Program	2017 Adjusted program	2017 Actual
Domestic sources	171.0	45.0	45.0	45.7
External sources	238.4	129.5	261.2	233.0
Total	**409.4**	**174.5**	**306.2**	**278.7**

Public budget deficit financing through the external net funding indicator envisaged in the 2018-2020 RA Government debt management strategy and approved by the 2017 State budget law was adjusted during the year and increased by AMD 131.7 billion. In comparison to the adjusted plan of 2017, the performance of net funding of deficit was 91.0% or AMD 287 billion instead of AMD 306.2 billion. The net funding from external sources was AMD 233.0 billion or the 83.6% of deficit financing, and the net funding from domestic sources was AMD 45.7 billion or the 16.4% of deficit financing.

The deficit financing via domestic sources exceeded the planned indicator by 1.6% which was the result of the adjustment of the GS allocation amounts. The deviation of the deficit financing via external sources is mainly due to the performance of the project loans that amounted at AMD 176.6 billion instead of the planned AMD 204.9 billion.

The indicators, characterizing the burden of 2017 RA external public debt, were the following:

Chart 2.   Characteristic indicators of the RA external public debt
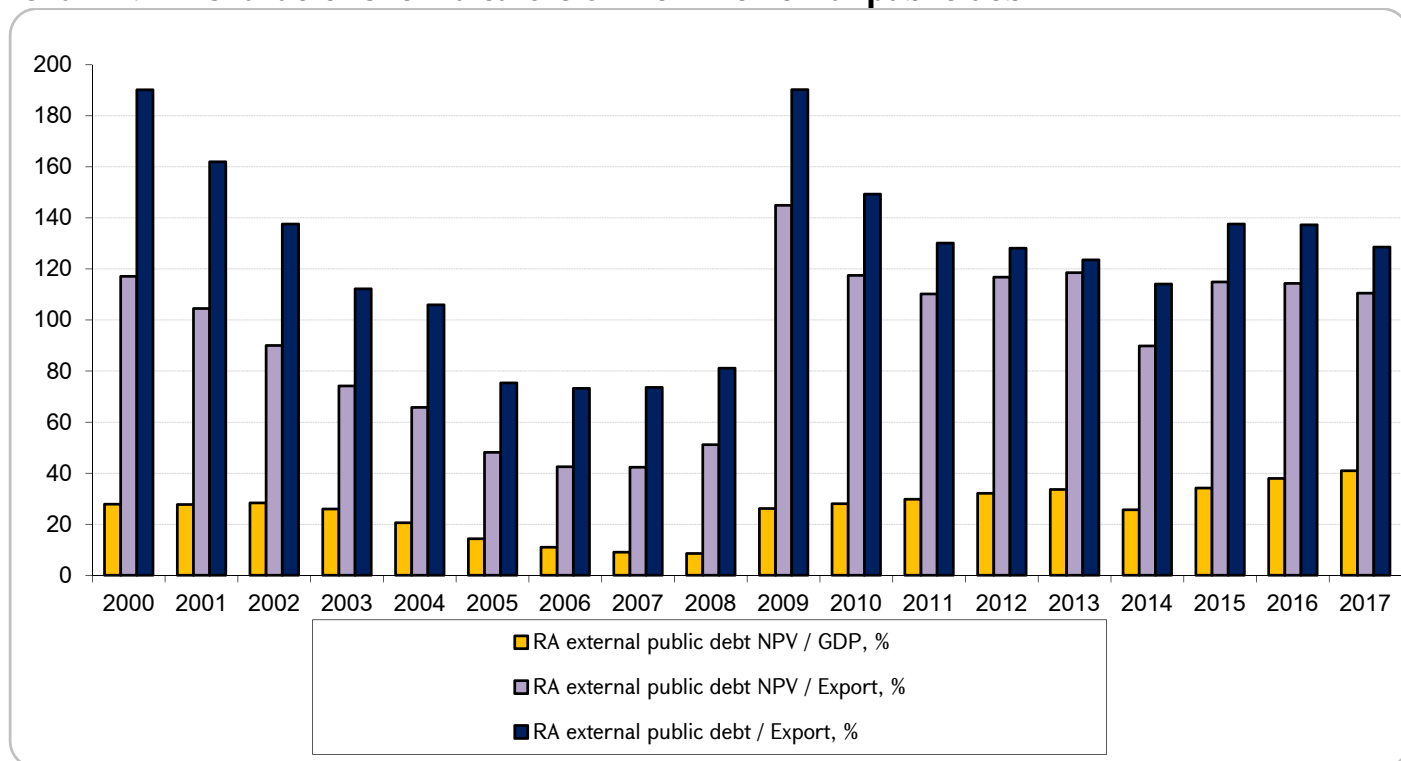
Compared to the previous year, in 2017 the RA external public debt NPV[3]/GDP ratio increased by 3.0 percentage points, RA external public debt NPV/Export ratio and RA external public debt/Export ratio increased by correspondingly 3.8 percentage points and 8.7 percentage points. The enlargement of the above mentioned indicators was due to the increase NPV of RA external debt denominated in USD by 18.0%, the increase of nominal GDP by 9.4% and the increase of the exports by 22.1%.

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[3] The calculations include the 5% discount rate that International Monetary Fund and World bank use.

Chart 3.   Characteristic indicators of the RA external public debt service
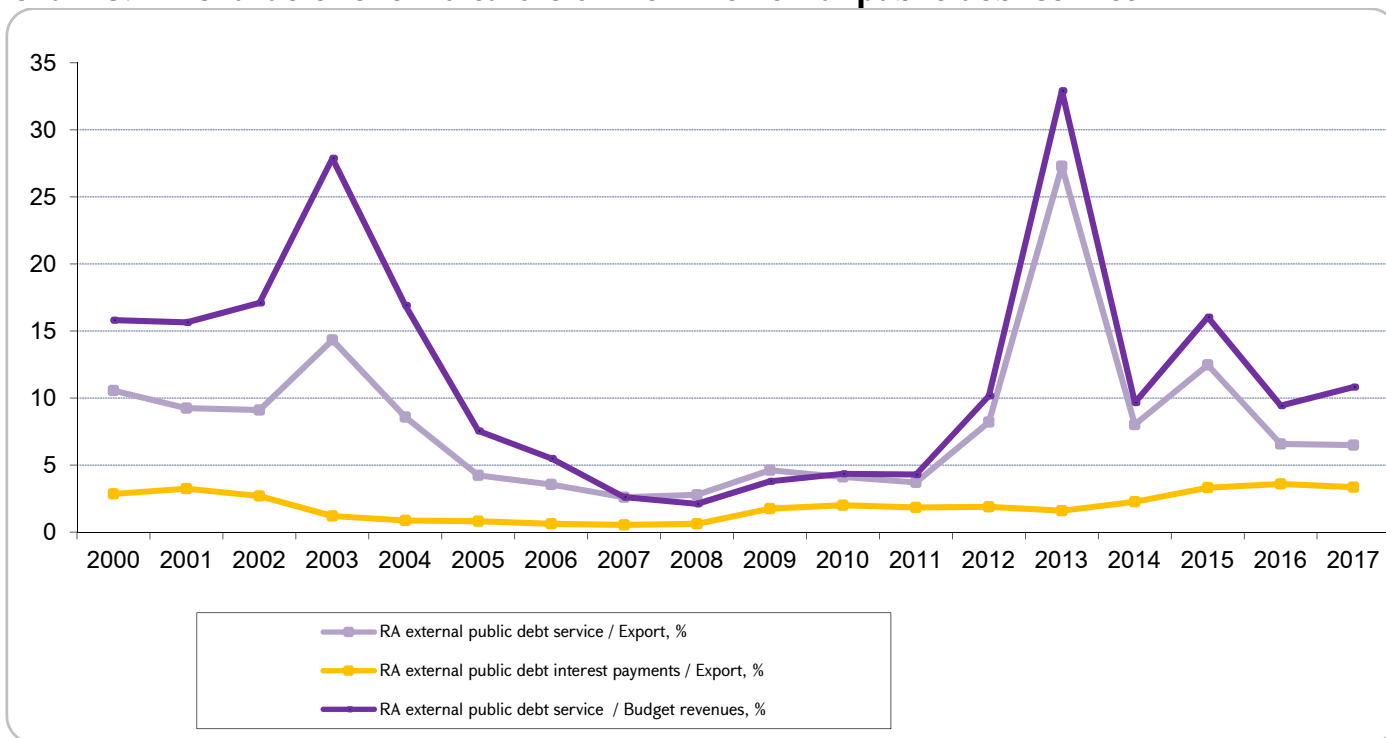
The RA external public debt Service (redemption and interest payment)/Export and the RA external public debt interest payment/Export indicators decreased slightly compared to the previous year, respectively by 0.1 and 0.2 percentage points, and the RA external public debt Service/Budget Revenues increased by 1.4 percentage points. The change of the RA external public debt Service (redemption and interest payment)/Export and RA external public debt interest payment/Export indicators were due to the fact that in contrast to the exports growth of 22.1% the external debt redemption increased by 28.2% and external debt interest payments increased by 14.2%. In terms of RA external public debt Service/Budget Revenues, the budget revenues increased by 5.2%.

RA Government Debt Service

In 2017, as well as in the previous years, the RA Government has fully and timely fulfilled its interest payments obligations.

Table 3.   RA Government Interest Payments

(AMD billion)	2016 Actual	2017 Program	2017 Adjusted program	2017 Actual
Interest payments	**98.3**	**120.3**	**122.6**	**122.1**
of which				
Domestic debt	42.0	51.5	58.2	58.2
External debt	56.3	68.8	64.4	63.9

In 2017 the RA Government debt interest payments amounted to AMD 121.1 billion increasing by AMD 23.9 billion or 24.3% compared to the previous year. As a result, the share of debt service expenses in the state budget expenditures increased by 1.2 percentage points and totaled 8.2% in 2017, meanwhile the share of debt service expenses in GDP increased by 0.3 percentage points and comprised 2.2%. The service expenses of GS increased by 38.4%, the service expenses of external loans increased by 30.1% and the same indicator for Eurobonds increased only by 0.4%. The latter small increase was due to the change of the exchange rate that was used for the external payments (namely, AMD 473.4 per USD was switched to AMD 475.36 per USD, increasing by 0.4%).

In 2017 the interest payments program was adjusted by AMD 2.3 billion.

"Debt service (interest payments) of the loans from foreign states, international organizations and other external sources" program envisaged in the 2018-2020 RA Government debt management strategy and approved by the 2017 state budget was adjusted during the reporting period decreasing by AMD 4.4 billion. The saving was due to the deviation of 6-month LIBOR and 6-month EURIBOR forecast rates against the applied actual payment rates in 2017, due to the underperformance of disbursements of several loans from their planned levels and due to the unequal distribution of disbursements throughout the year.

RA Government bonds (Government securities) service (interest payments) envisaged in the 2018-2020 RA Government debt management strategy and approved by the 2017 state budget was increased by AMD 6.7 billion in order to manage the cash flows of the state budget, as well as serve the additional GSs interest payments that were issued in the second half of 2016 within the framework

of fiscal and monetary policies coordination, and that was not planned by the 2017 state budget. Moreover, the inflows from the T-bills issued to coordinate the fiscal and monetary policies in the second half of 2016 were deposited at the RA Central Bank ensuring additional revenues in the "other revenues" article.

When comparing the share of RA Government debt service expenses in GDP with European Union countries, the RA Government debt interest payments to GDP ratio is in the medium level.

Chart 4.   Interest payments as share of GDP in different countries as of 2017

Country	Value
Portugal	3.9
Italy	3.8
Greece	3.2
Cyprus	3.2
Hungary	2.8
Croatia	2.7
United Kingdom	2.7
Spain	2.6
Slovenia	2.5
Belgium	2.5
Armenia	2.2
Ireland	2.0
Euro-19	2.0
Euro-28	2.0
Belarus	2.0
Malta	1.9
Austria	1.8
France	1.8
Poland	1.6
Slovakia	1.4
Romania	1.3
Kyrgyzstan	1.1
Germany	1.1
Denmark	1.1
Lithuania	1.1
The Netherlands	1.0
Finland	1.0
Latvia	0.9
Kazakhstan	0.9
Bulgaria	0.8
Russia	0.8
Czech Republic	0.7
Georgia	0.6
Sweden	0.4
Luxembourg	0.3
Estonia	0.0

The increase in RA Government debt service expenses in 2017 is mostly determined by the increase of the Government debt by 13.6%. The increase was due to:

- ✓ The volume of GS increased by AMD 41.4 billion, where the share of LTCB increased by 9.2 percentage points resulting an increase of the debt service expenses. Generally, the service expenses of GS increased by AMD 16.2 billion, meanwhile the share of GS service expenses in the total debt service expenses increased by 4.9 percentage points,

- ✓ The increase of the average interest rate of the RA Government loans from the external sources was 2.1% instead of 1.8% in the previous year,

- ✓ The deviation of the exchange rates that were used for the foreign currency payments.

At the end of 2017 the nominal weighted average interest rate of the RA Government debt was 4.9%, which was the same as in the previous year, however, these indicators among the separate debt tools altered.

Table 4.   RA Government public debt average interest rates

	31.12.2016	31.12.2017	Difference
RA Government public debt average interest rate, %	**4.9**	**4.9**	-
External loans and borrowings interest rate	1.8	2.1	0.3
Government securities interest rate	13.2	13.1	(0.1)
Foreign currency Government securities interest rate	6.9	6.9	-
External guarantees interest rate	-	1.0	1.0

The average interest rate for the external loans increased by 0.3 percentage points, which can be explained with the following statements:

- The increase of the LIBOR rate which is taken into account for calculation of the service expenses of the loans with floating rates. In 2016 the average 6-month LIBOR rate of USD was 1.06%, but in 2017 it was 1.48%, moreover the 20% of the service of the external loans is calculated with this LIBOR rate,

- The increase of the interest rates of the concessional loans from the Asian Development Bank; due to the fact that Armenia upgraded as a medium income country. Thus, at the end of 2016 the average interest rate of concessional loans from the Asian Development Bank was 1.36%,

but at the end of 2017 it was 2.75%. Moreover, at the end of 2017 the share of ADB concessional loans in the structure of external loans comprised 9.2%.

The weighted average yield of outstanding Government treasury securities decreased by 0.1 percentage points. This was a result of the decline of the weighted average yield of 2016 allocations in the primary market, which continued to decline during 2017. Thus, in 2017 the weighted average yield of primary allocations was 9.93%, meanwhile it was 1.14 percentage points lower than the same indicator in the previous year.

Government Treasury Securities

According to the 2017 state budget, the budget deficit was planned to be financed through Government treasury securities by AMD 45.0 billion. For that purpose, it was planned to allocate AMD 160.0 billion GS and redeem AMD 110.4 billion GS, and continue the policy of monthly repurchases.

As of the end of 2017, the public budget deficit was financed through the Government treasury securities by AMD 45.7 billion exceeding the planned indicator by 1.6%. The deviation is explained by the adjustment of the allocation volumes.

In 2017 the total amount of Government securities allocation was AMD 182.5 billion, and the proceed from the allocations amounted at AMD 183.2 billion, meanwhile the amount of buybacks and redemptions totaled AMD 137.5 billion.

Monthly and accumulative data of the budget deficit financing through GS for the year are presented in Table 5.

Table 5. Monthly and accumulative data of the budget deficit financing through GS (AMD million)

	Monthly		Accumulative (increasing)	
	2016	2017	2016	2017
January	5,193	1,105	5,193	1,105
February	6,805	(3,856)	11,998	(2,752)
March	3,688	7,299	15,686	4,547
April	(4,529)	8,585	11,157	13,132
May	17,909	(9,813)	29,066	3,319
June	11,967	12,355	41,033	15,674
July	15,093	5,035	56,126	20,710
August	21,861	10,143	77,987	30,853
September	26,809	963	104,796	31,816
October	27,108	5,819	131,904	37,635
November	17,220	12,814	149,124	50,449
December	21,882	(4,726)	171,006	45,723

Chart 5.   Monthly and accumulative financing of RA State budget deficit (AMD billion)
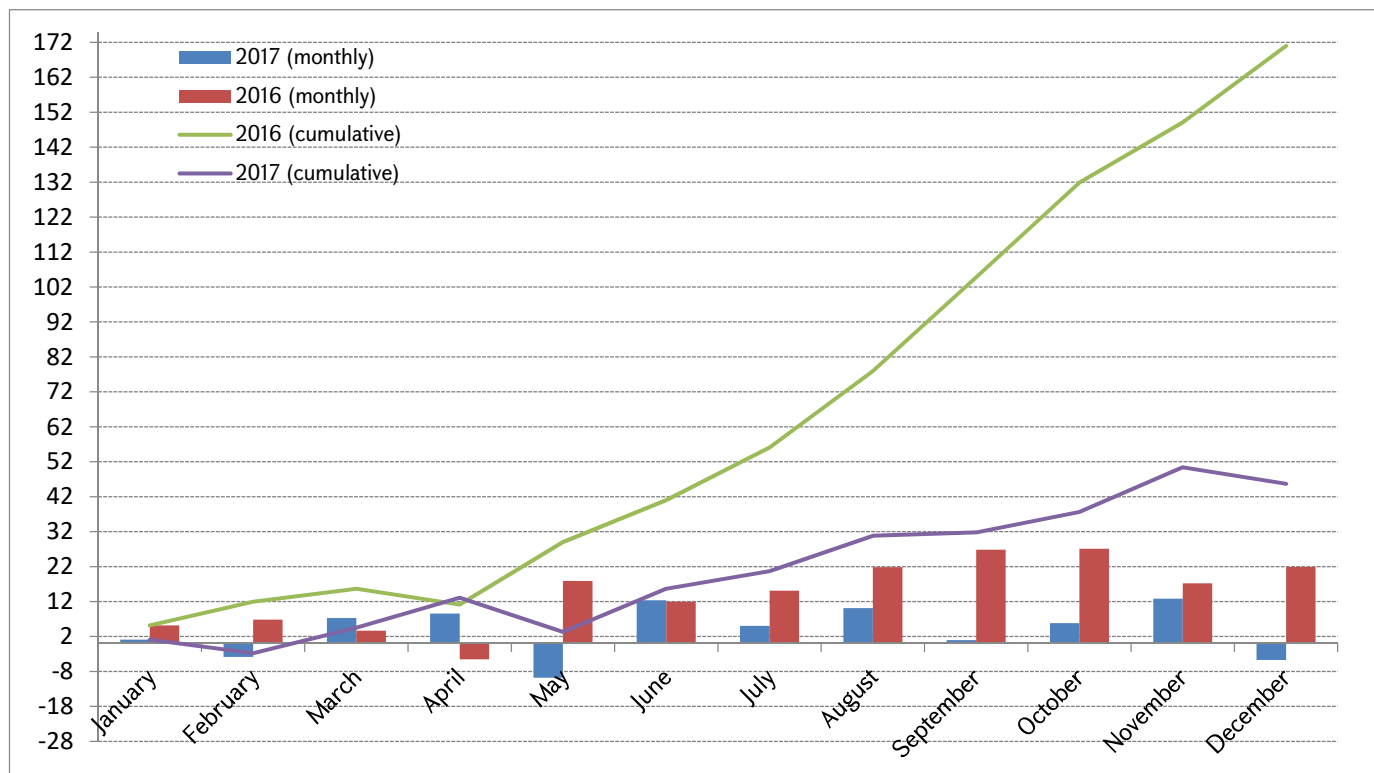
The dynamic of cumulative financing of the RA 2017 State budget deficit declined in May because of the huge redemption of the Government securities, afterwards it stably increased.

As of December 31, 2017 the volume of outstanding GS amounted at AMD 549.7 billion, which was more by AMD 41.4 billion or by 8.1% in comparison to the same indicator of the previous year. The structure of the GS was as follows:

Table 6.   The structure of the outstanding GS

	2016		2017	
	(billion AMD)	(Share)	(billion AMD)	(Share)
T-bills	78.84	15.5%	22.7	4.1%
MTCN	212.69	41.8%	241.4	43.9%
LTCB	214.65	42.2%	282.5	51.4%
SCB	2.15	0.5%	3.1	0.6%
Total	**508.33**	**100%**	**549.7**	**100%**

As of the end of 2017, the residents owned the 98.2% of GS or AMD 540.0 billion, and the non-residents owned the 1.8% or AMD 9.7 billion.

As of December 31, 2017 the structure of GS by days to maturity was as follows:

Table 7.   The structure of GS by days to maturity as of December 31, 2017

	Program	Actual
Up to 1 year	**16.0%**	**16.4%**
1-5 years	**44.5%**	**40.5%**
5 and more years	**39.5%**	**43.1%**

The deviation of "The structure of GS by days to maturity" indicator envisaged in the 2018-2020 RA Government debt management strategy from the actual one is during the medium and long-term periods, which is mainly due to the non-planned and successful allocation of 30 years' maturity bonds in 2017.

The appendix 2 includes information on outstanding GS.

The weighted average maturity of GS amounted at 2787 days as of December 31, 2017 in contrast to 2208 days as of December 31, 2016, and the weighted average yield was 13.09% against 13.15% at the end of 2016. As a result, the weighted average maturity was managed to be prolonged by 579 days. The weighted average yield of GS decreased by 0.1 percentage points due to the ongoing decline of the weighted average yield of GS primary allocations during 2017. In its turn, the decrease in the average yield of the primary allocations was due to the reduction of the refinancing rate by the CBA, the existence of the excessive liquidity in the market, the proper debt management policy implemented by the issuer, the developments taking place in the other sectors of the financial market and other factors.

Chart 6.   Dynamics of GS interest rates and maturity in 2017

Legend: —— Maturity (day)   —— Interest rate (%), (right axis)

X-axis: 10.01.17, 10.02.17, 10.03.17, 10.04.17, 10.05.17, 10.06.17, 10.07.17, 10.08.17, 10.09.17, 10.10.17, 10.11.17, 10.12.17
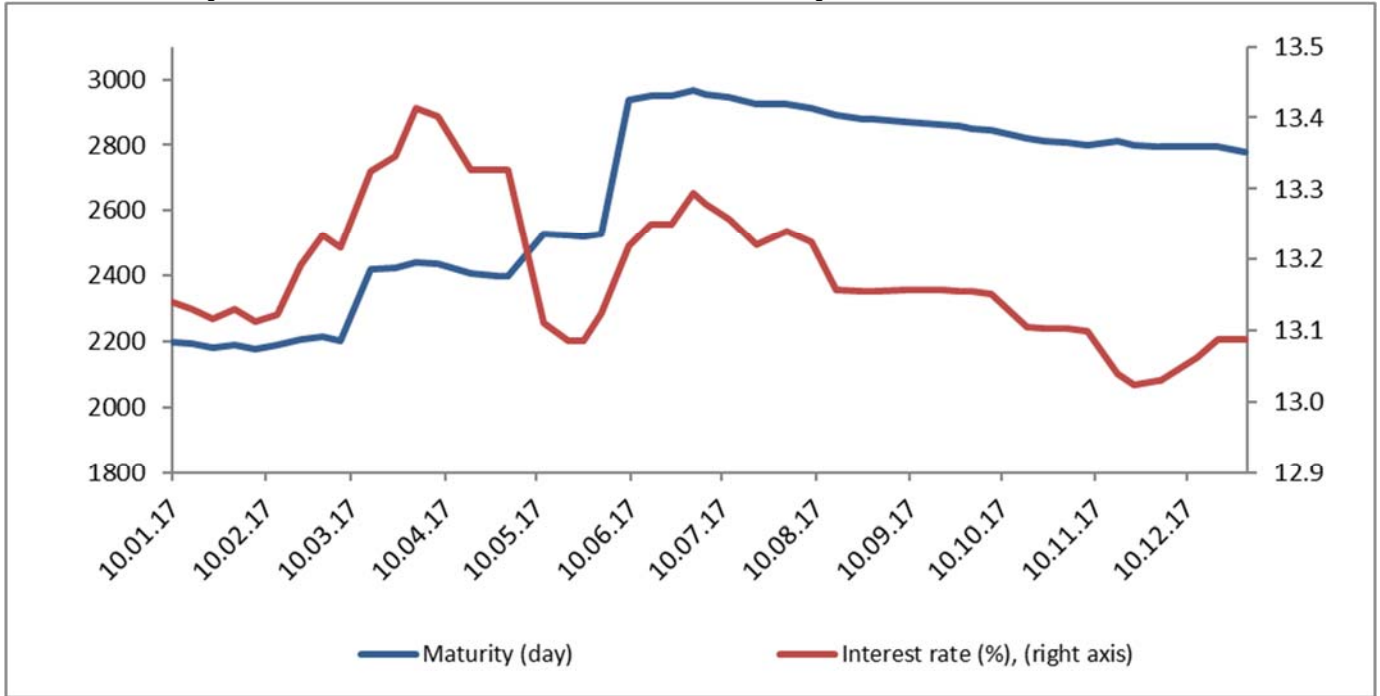
Chart 7.   The structure of GS by issuing maturity as of December 31, 2017

First pie chart labels:
- 31-40 weeks 0.7%
- 41-52 weeks 3.0%
- 21-30 weeks 0.3%
- 11-20 weeks 0.1%
- SCB 0.6%
- 2-3 years 19.2%
- 4-5 years 24.7%
- LTCB, 51.4%

Second pie chart labels:
- 20 years 26.0%
- 6-10 years 20.8%
- 30 years 4.6%

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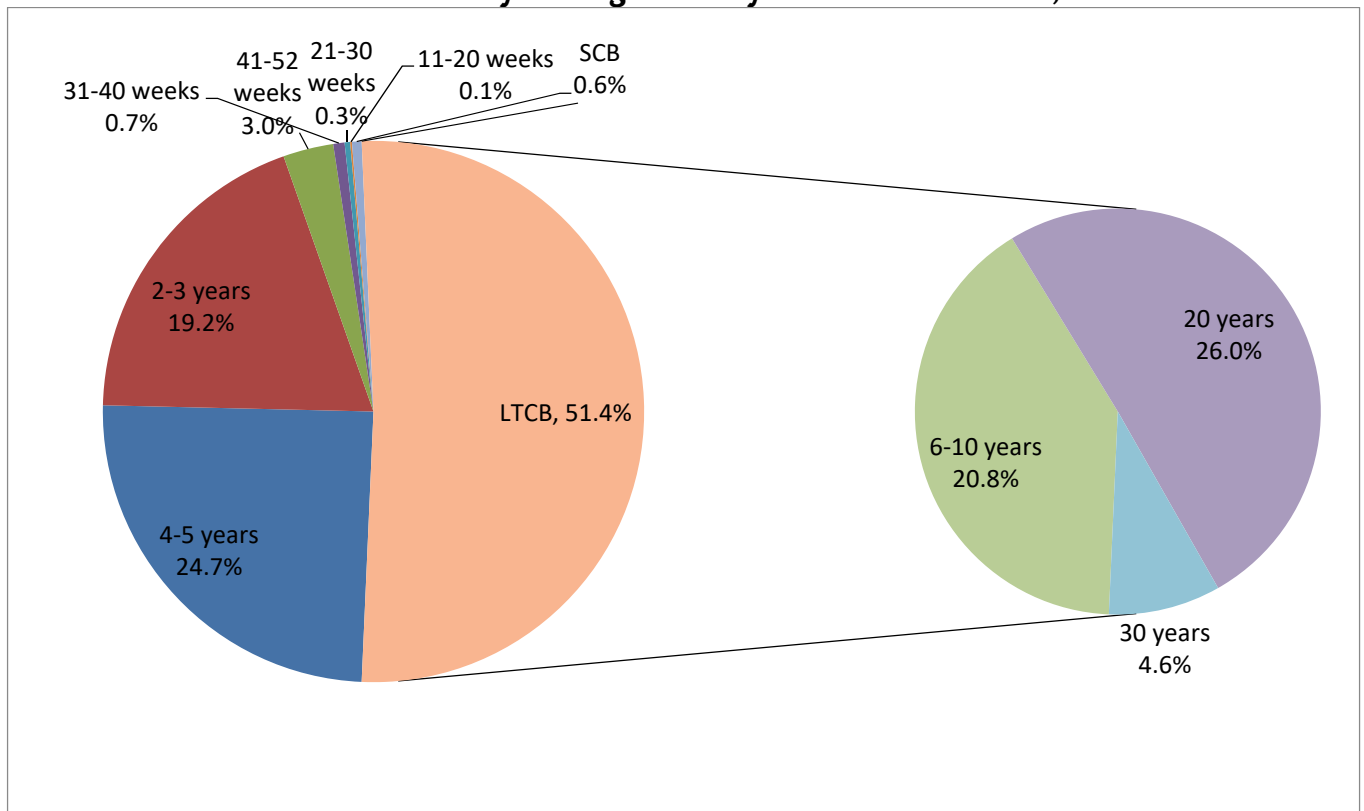
The volume of SCB allocated through the TD system of MoF of RA in the retail market and outstanding as of December 31, 2017 increased by 47.7% amounting at AMD 3,168,2 million. The detailed information on the GS retail market transactions in 2017 is listed in Appendix 3.

Along with the increase of outstanding GS, the redemption and interest payments increase as well.

Table 8.   The distribution of GS redemption and interest payments during the year (AMD million)

	Redemption		Interest payments	
	2016	**2017**	**2016**	**2017**
January	2,415	7,403	102	664
February	3,013	15,473	7,447	7,171
March	5,736	21,751	331	796
April	35,906	3,899	9,645	330
May	4,317	46,357	243	19,207
June	5,712	21,292	10	1,089
July	3,281	4,686	231	349
August	2,701	1,085	7,210	6,471
September	11,372	4,575	245	1,913
October	13,749	1,963	15,817	19,728
November	15,356	4,042	272	153
December	25,775	4,940	475	312
Total	**129,334**	**137,466**	**42,030**	**58,182**

The huge redemption in May 2017 was the redemption of previously allocated 3-year and 5-year maturity benchmark GS. Furthermore, the significant interest payments in May and October are also due to the service of issued benchmark GS. It is important to note that the largest redemptions of 2017 were to be on 29th of April, however, according to the RA legislation, that day was non-working day that is why the redemptions and interest payments were done on the next working day, which was May 2nd.

The information about the GS transactions in 2017 is presented in Appendix 1.

The Secondary Market of the Government Securities

Compared to the previous year, in 2017 the number of transactions diminished by 22% and the amount of transactions increased by 11%. The share of transactions in the over-the-counter increased by 12.8 percentage points in the total amount of transactions, and the share of transactions in NASDAQ-OMX Armenia increased by 12.9 percentage points. In 2017 the weighted average yield of transactions decreased by 2.22 % which was due to the overall decrease of the interest rates in the Armenian financial market. The main characteristics of the secondary market transactions are presented below:

Table 9.   The general description of the Government securities transactions implemented in the secondary market

	2016	2017
The number of transactions	**2,366**	**1,848**
The total amount of transactions (AMD billion), of which	**333.6**	**371.4**
Interbank market	272.3	307.1
NASDAQ-OMX Armenia	54.3	61.3
CBA transactions	7.0	3.0
Secondary market indicators		-
Weighted average interest rate of all transactions (%)	12.54	10.32
Weighted average time to maturity (days)	3,609	4,319
Weighted daily average amount (AMD million)	1,329	1,491
Daily average number of transactions	9	7

Government Foreign Exchange Securities

According to the 2018-2020 RA Government debt management strategy that was approved by the RA Government, decree N 818 on 6th of July 2017 new issuance of Eurobonds was not planned. However, it was stated by the above mentioned strategy that the issuance of the new Eurobonds can be considered in the case of emerged fiscal policy implementation risks arose by the possible negative impacts from the external economic environment. As there were not any essential risks concerning the fiscal policy implementation during 2017, and the existing risks were managed via the existing domestic and external debt instruments, the RA Government did not undertake new issuance of Eurobonds.

As of December 31, 2017 the volume of the outstanding foreign currency GS didn't change and amounted at USD 1,000.07 million, of which

> ➢ USD 500.07 million maturing in 2020 with a coupon rate of 6%,
> ➢ USD 500.00 million maturing in 2025 with a coupon rate of 7.15%.

As of December 31, 2017 the 15.5% (USD 155.1 million) of foreign currency bonds were owned by residents, which increased by 5.9 percentage points in comparison to the previous year.

The price spread of 2013 and 2015 Eurobonds issued by the RA Government and outstanding during 2017 is computed with respect to the same maturity US benchmark notes.

Chart 8.   **The price spread of RA Government Eurobonds towards USA benchmark securities during 2017 (basis points)**
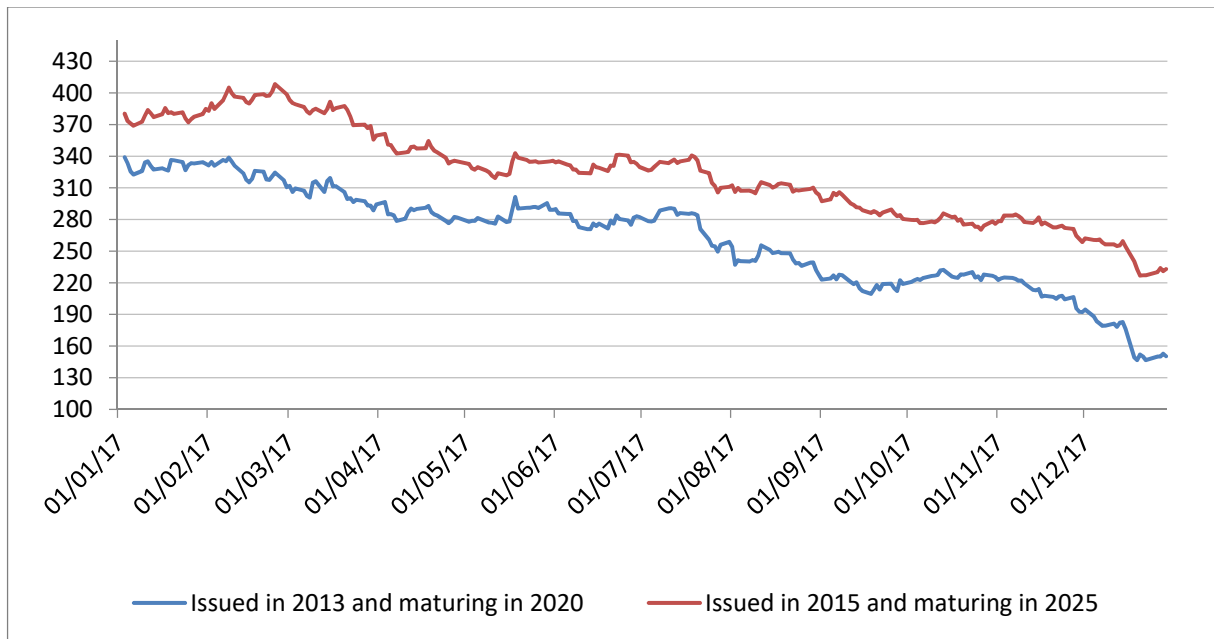
Source: Bloomberg

The quotation dynamic of Eurobonds issued by RA Government during the reported period is presented in chart 9.

Chart 9.   **The quotation dynamic of Eurobonds issued by RA Government in 2017 (%)**
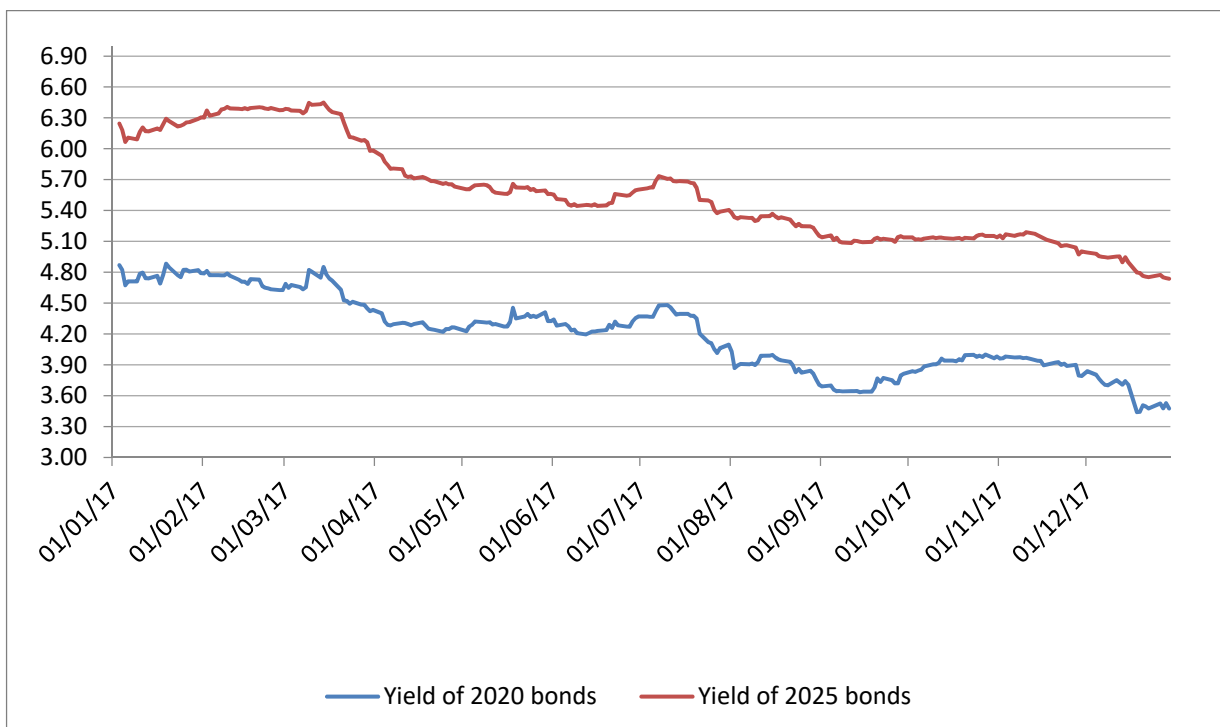
Source: Bloomberg

RA Government Loans and Borrowings

As of 31st of December, the RA Government external loans outstanding amount was USD 4,021.0 million (AMD 1,946.6 billion) and compared to the 31st December 2016 it increased by USD 641.1 million or by 19.0%. The growth is mainly due to the transactions (during the reporting period the net borrowings of the Government debt were USD 484.1 million).

During 2017 five new loan agreements were signed.

Table 10.   Loan Agreements signed in 2017

| Debtor / Loan agreement	Amount, millions	Currency	Signed on
I. Asian Development Bank			
1. Public Efficiency and Financial Markets Program - subprogram 1	40.0	USD	27.10.2017
II. International Bank for Reconstruction and Development			
1. Irrigation System Enhancement (Additional Financing)	2.0	USD	20.11.2017
III. Germany (KfW)			
1. Policy based Loan (PBL) multisectoral (budget support)	80.0	EUR	14.11.2017
2. Akhouryan River's Water Resources Management, II Phase	18.5	EUR	18.12.2017
IV. Russian Federation			
1. Public Export Credit	100.0	USD	24.10.2017

It was initially planned to attract AMD 177.5 billion or USD 373.5 million external loans in the 2017 state budget. This indicator was adjusted later and amounted to AMD 309.2 billion or USD 650.5 million, meanwhile the actual performance of the indicator was 90.9%, namely AMD 280.9 billion or USD 584.6 million. Moreover, budget support loans were AMD 104.3 billion or USD 219.0 million, fully completing the program, and the targeted loans amounted to AMD 176.6 billion or USD 365.6 million, providing 86.2% of the planned indicator.

Table 11.   Total disbursements during 2017

AMD million	Program	Adjusted Program	Actual	Performance %	Share, %
Total disbursements	**177.5**	**309.2**	**280.9**	**90.9**	**100.0**
Of which					
Targeted loans	72.0	204.9	176.6	86.2	62.9
Budget support loans	105.5	104.3	104.3	100.0	37.1

In comparison to the previous year the total amount of disbursements was increased by USD 13.7 million or by 2.4%. The disbursements of the loans from international organizations were decreased by USD 149.6 million, resulting a decrease of its share by 27.5 percentage points. The disbursements from the other countries increased by USD 164.0 million.

72.8% of total disbursements belongs to three lenders: Russian Federation (USD 196.2 million), Asian Development Bank (USD 129.4 million) and Eurasian Development Bank (USD 100.2 million).

Chart 10.   The structure of RA Government Loans and Borrowings by Donors as of December 31, 2017
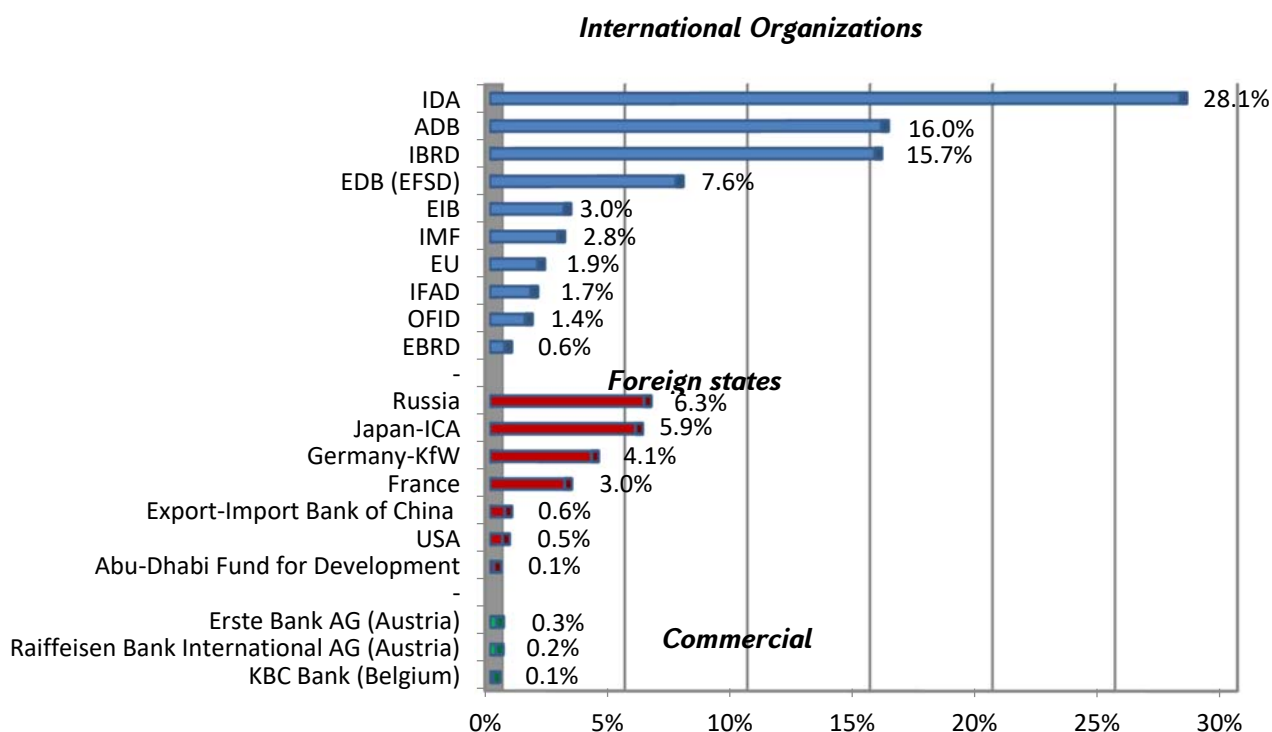
In general, the share of international organizations declined by 5.0 percentage points in the structure of the external donors. Namely, the share of International Development Agency decreased by 4.3 percentage points, the share of International Bank for Reconstruction and Development declined by 2.0 percentage points, the share of International Monetary Fund diminished by 1.0 percentage points; the declines of the shares were mainly due to the increase of other donor's volumes. Meanwhile, other international organizations had an increase of their shares. Hence, the share of European Development Bank and Asian Development Bank correspondingly increased by 1.5 and 1.1 percentage points, which took place mostly as a result of transactions.

The share of foreign states increased by 5.1 percentage points, which is mostly due to the increase of the share of Russian Federation (4.6 percentage points), Germany (1.2 percentage points) and France (0.7 percentage points). The share of Japan declined by 1.2 percentage points due to the repayments.

Chart 11.   The currency structure of RA Government Loans and Borrowings for 1999-2017
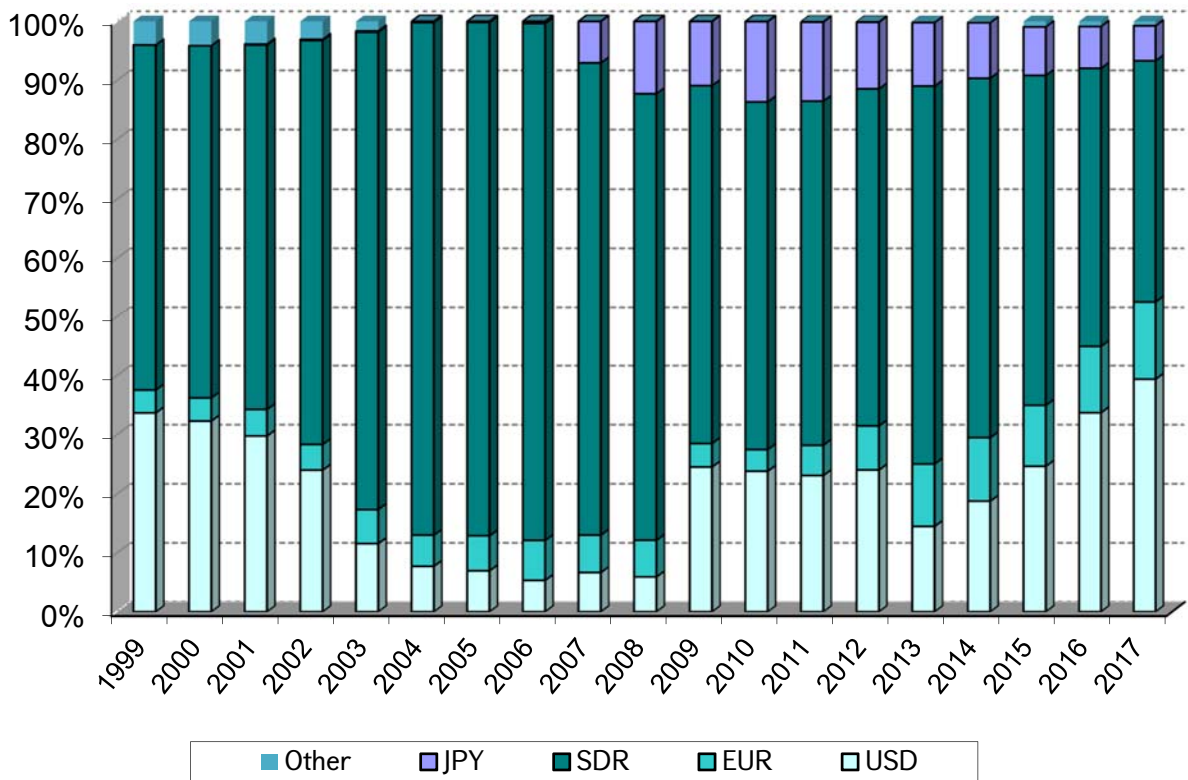
In 2017 the share of USD and EUR loans increased by 5.7 and 2.0 percentage points correspondingly, as in 2017 the disbursements were mainly in these currencies (correspondingly 77.9% and 18.6% of total disbursements). At the same time, the share of SDR loans declined by 6.4 percentage points and the share of JPY loans diminished by 1.2 percentage points.

During 2017 the exchange rate of SDR/USD and EUR/USD increased (SDR increased from 1.34 to 1.42, and EUR from 1.06 to 1.2), which inhanced debt level. Thus, if there was no transaction, the public debt would increase by USD 155.1 million due to the appreciation of other currencies in the basket with respect to USD.

Chart 12.   Dynamics of the average monthly exchange rates of SDR, GBR, EUR and JPY against USD[4]
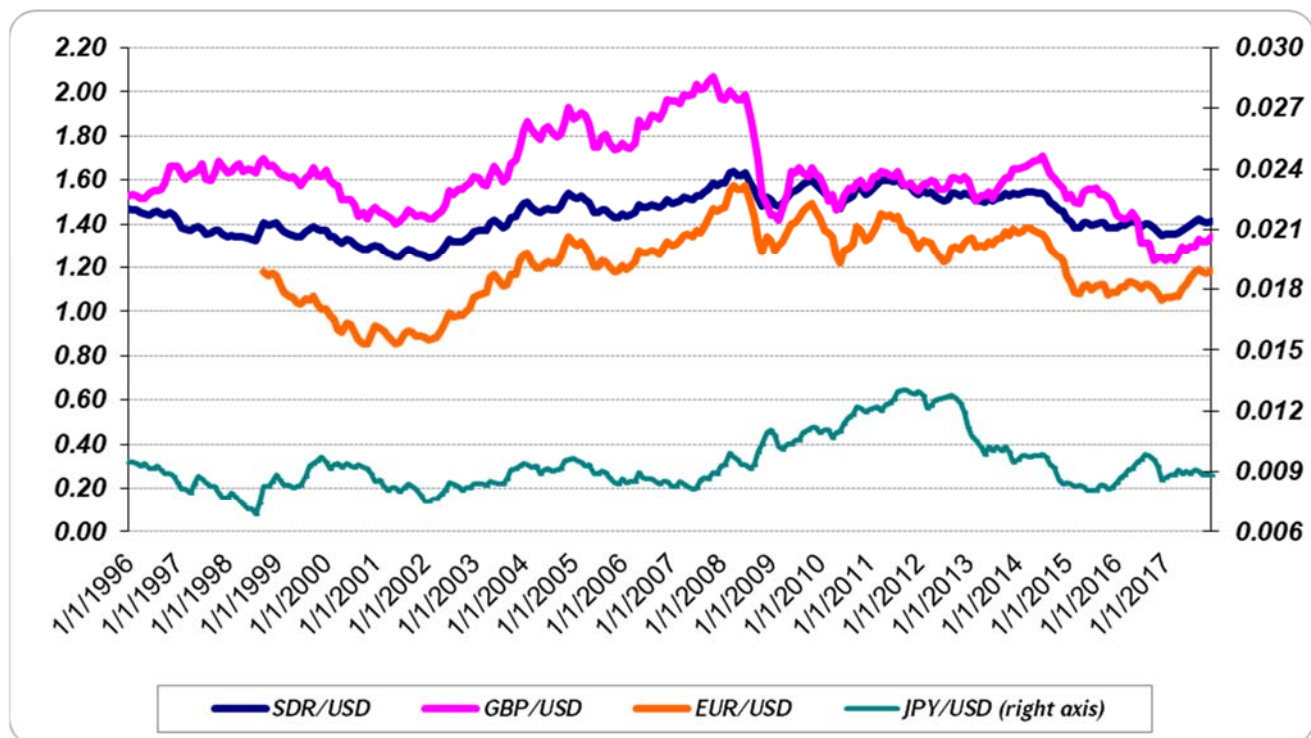
As of the end of 2017, the share of floating rate loans in the RA Government loans and borrowings was 20.7%, which is 0.6 percentage points more than in the previous year. In 2017 the new borrowings of RA Government were 27.2% or USD 159.3 million with floating rate and 72.8% with fixed rate. In 2017 the disbursement of floating rate loans increased by 7.9 percentage points, and the repayment of floating rate loans was 8.3% or USD 8.3 million. The increase of disbursements of floating rate loans is mainly due to the decrease of the loan disbursements of the European Bank for Reconstruction and Development.

The change of the share of the floating rate loans is also explained by the fluctuation of AMD with respect to other currencies that are included in the RA Government debt structure.

Chart 13. The structure of RA Government Loans and Borrowings by the type of the interest rate (1999-2017)
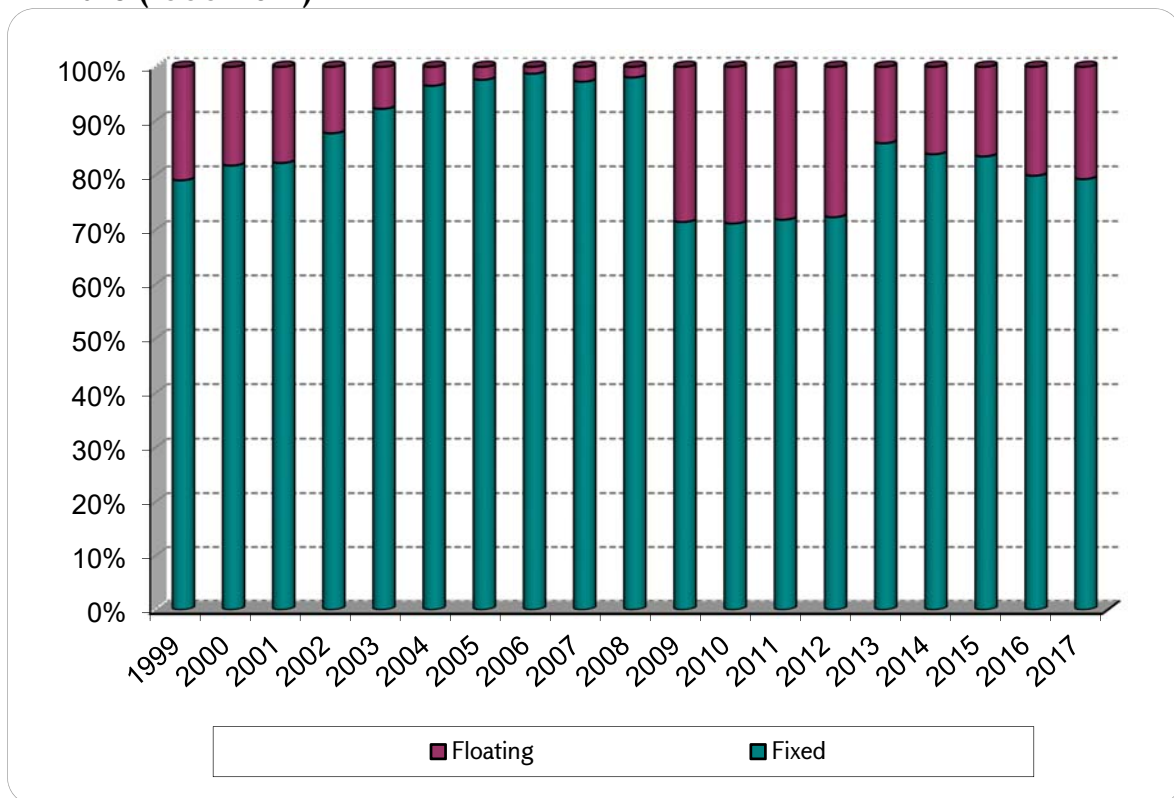
The calculation of the floating interest rate loans is based on the Libor and Euribor interest rates, the behavior of which depends on the existing situation in the international financial market and it is highly volatile (see chart 14).

Chart 14. Dynamics of the average monthly interest rates for 6 months USD Libor and Euribor
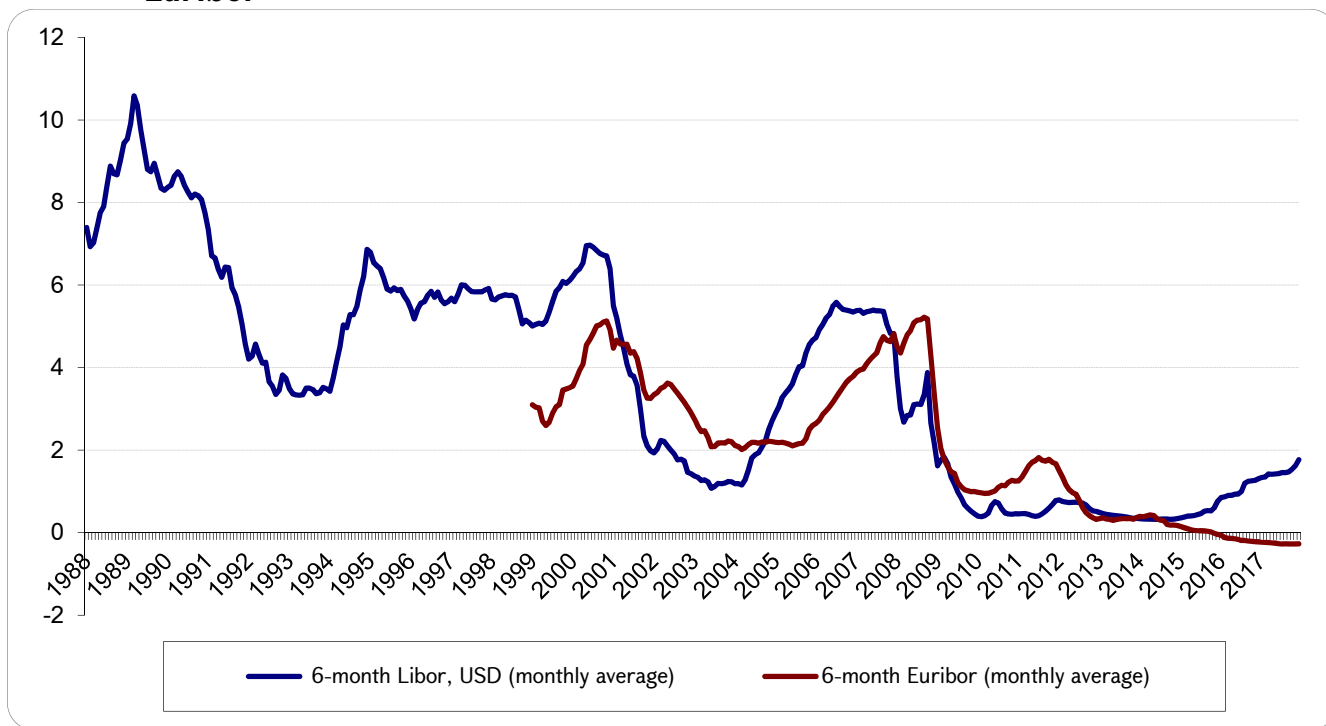
The share of commercial loans increased in comparison to the previous year, amounting to 40.7% from 36.0% in 2016 (chart 15).

Chart 15. The dynamics of the concessionality of the RA Government loans and borrowings (1999-2017)
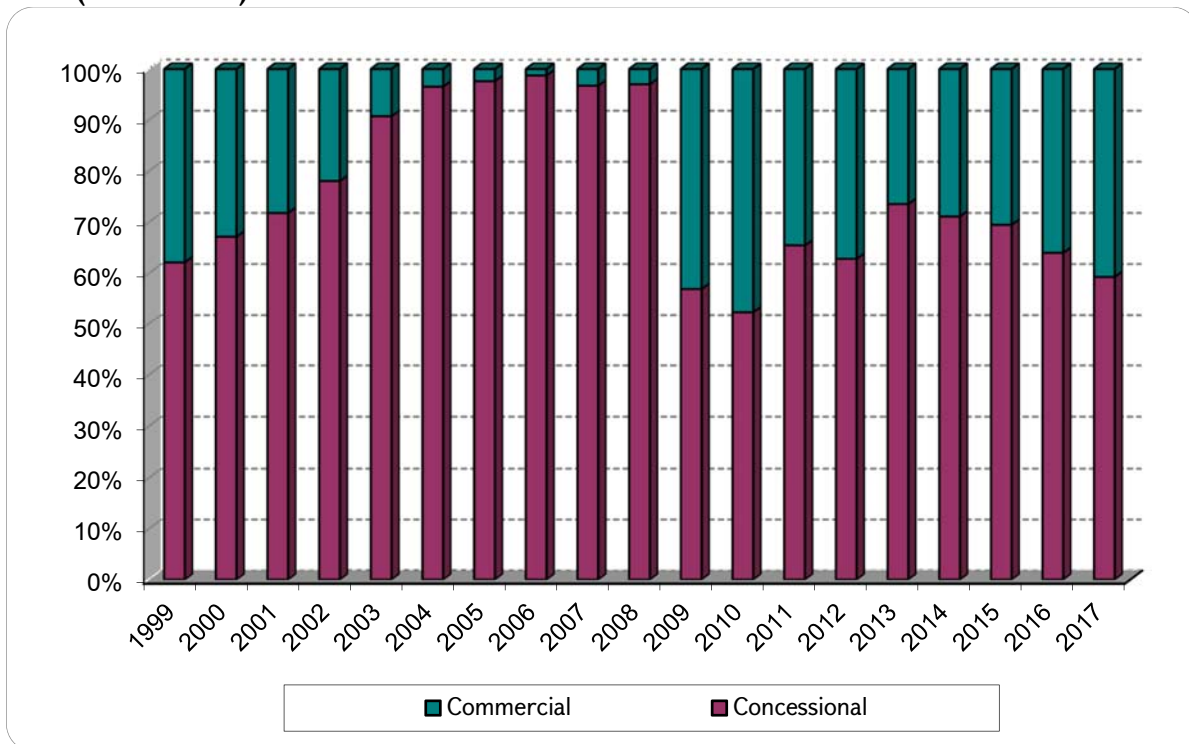
Detailed information on the transactions implemented with the loans is presented in Appendix 4.

External Debt of the Central Bank of RA

As of December 31, 2017 the external debt of the Central Bank of RA amounted to USD 601.5 million (AMD 291.2 billion) or 5.2% of GDP. Compared to the end of the previous year the external debt of CBA denominated in USD increased by 19.2%, and it increased against GDP by 0.4 percentage points.

The share of the loans provided with the Guarantee of the RA Government decreased in the structure of the external debt of CBA and it comprised 26.3%[5] in 2017 against 29.0% in the previous year. The loans provided by the IMF had been dominating in the structure of the external debt of CBA, and the share of those loans preserved the diminishing tendency by declining 7.7 percentage points.

Table 12. The Structure of the External Debt of the Central Bank of RA

	As of 31.12.2016		As of 31.12.2017	
	USD million	%	USD million	%
External Debt of the Central Bank of RA	**504.7**	**100.0**	**601.5**	**100.0**
of which				
by Creditors				
International organizations, of which	*404.4*	*80.1*	*471.9*	*78.4*
International Monetary Fund	285.2	56.5	*293.5*	48.8
International Bank for Reconstruction and Development	46.5	9.2	*45*	7.5
Asian Development Bank	10.4	2.0	*17.3*	2.9
European Investment Bank	62.3	12.4	*116.1*	19.3
Foreign States	*100.3*	*19.9*	*129.6*	*21.6*
Germany (KfW)	100.3	19.9	*129.6*	21.6
by type of interest rate				
with fixed interest rate	219.0	43.4	308.9	51.4
with floating interest rate	285.7	56.6	292.6	48.6
by currency				
SDR	295.3	58.5	310.8	51.7
USD	109.0	21.6	161.1	26.8
EUR	100.4	19.9	129.6	21.6

During 2017 the CBA borrowed USD 218.3 million credits from the external sources. Meantime, the service expenses of the external debt comprised USD 107.6 million, of which USD 17.9 million as an interest payment and USD 89.7 million as a principal payment.

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[5] According to the 8th point of the 23rd article of "The Law on Public Debt" the loans provided with the guarantee of the RA Government are recorded in the external debt of CBA.

Cash Flow Management

As of December 31, 2017 the total funds of the treasury single account (TSA and time deposits) amounted at AMD 145.9 billion against AMD 170.7 billion as of December 31, 2016. During 2017 the average daily residual of TSA made up AMD 114.1 billion, of which AMD 99.7 billion comprised the average daily residual deposited in the Central Bank.

During the year, the cash flow management, in total, was run in a stable and predictable fiscal environment. The RA Government quarterly proportions of the revenues were collected without shocks, and the budget expenditures has the same seasonality as previous years.

Chart 16. Dynamics of the TSA daily residual (without deposits) and total outstanding dynamics in 2017 (AMD million)

TSA total outstanding   TSA daily residual
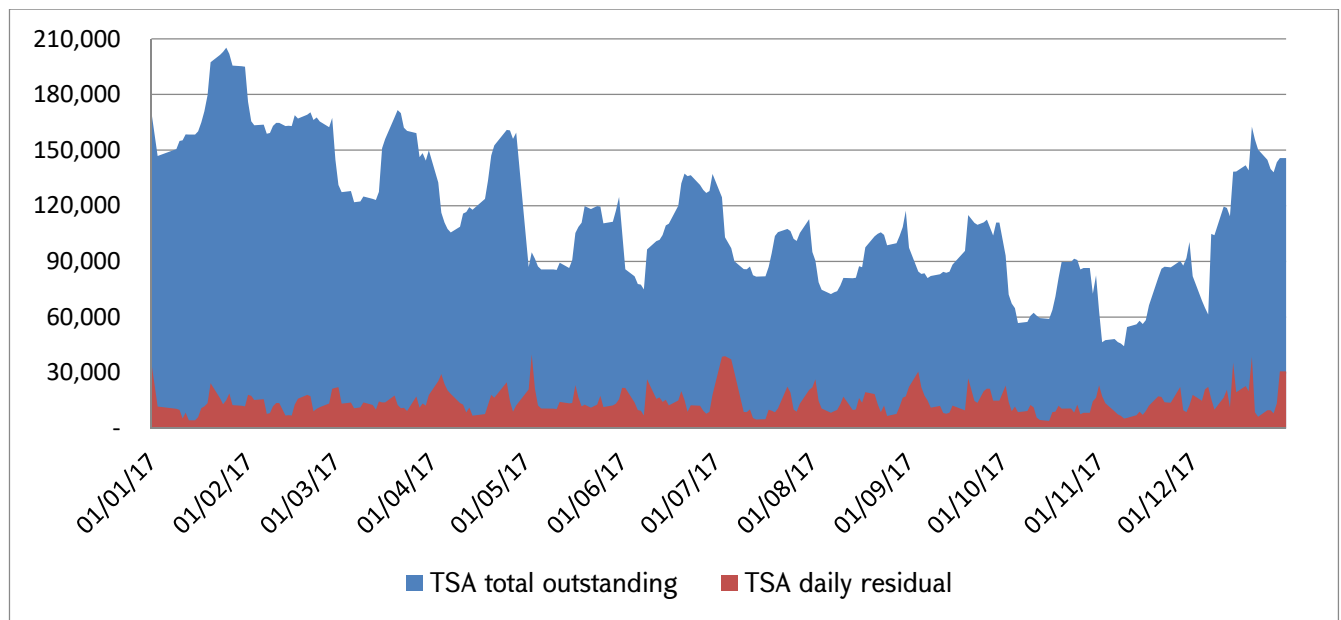
Chart 17.   The average residuals of TSA (without deposits) and time deposits (AMD million)

	2016	2017
■ TSA (without deposit)	14,121	14,332
■ Deposit	56,845	99,738
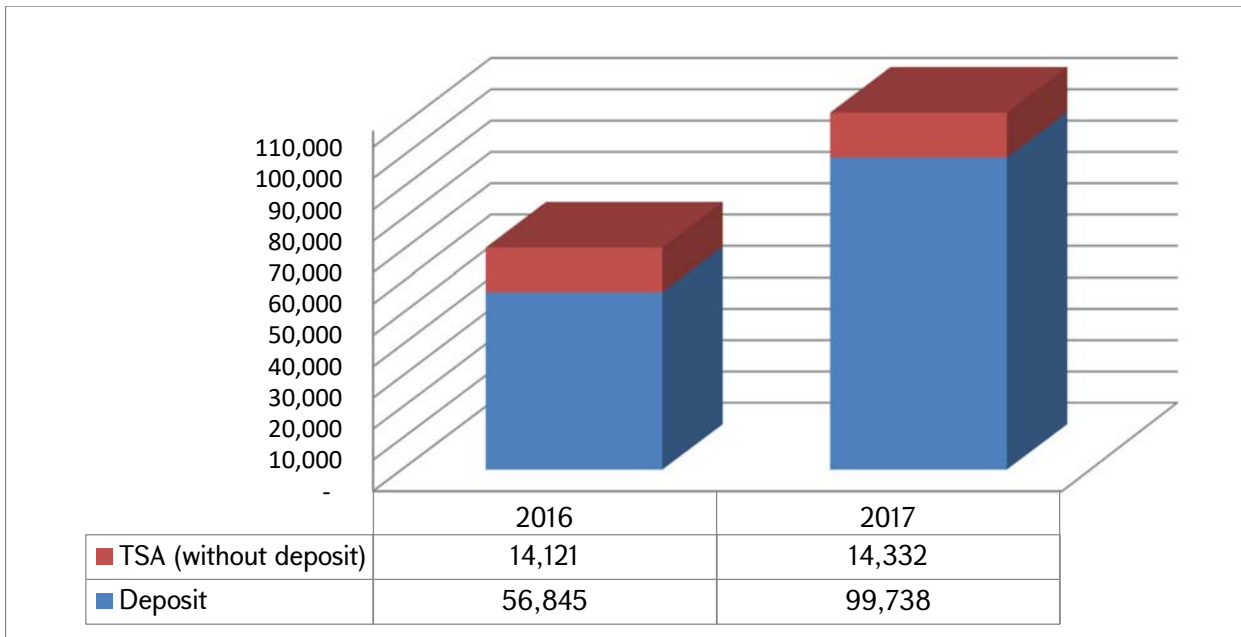
Chart 17 shows that the residual of TSA (without deposits) did not change much in 2017 compared to 2016, though the deposits significantly increased. The average outstanding amount in 2017 was higher due to the fact that during 2017 there were additional free funds arisen from the differences between the actual performance and the planned indicators of the state budget quarterly proportions.

Table 13.   TSA indicators (AMD billion)

	2016	2017
TSA balance as of December 31	170.7	145.9
Daily average residual of the time deposits at the CBA	56.8	99.7
Income earned from the time deposits invested in the CBA	4.7	5.7

During 2017 the average interest rate of the time deposits totaled 5.62% against 7.65% in the previous year. As the deposit yields are calculated based on the GS yield curve, and the latter showed a downward trend during 2017, therefore the yields of term deposits also declined. Despite the above mentioned fact, the interest revenues from the deposits increased and amounted to AMD 5.7 billion.

Risks analysis

In this part of the report the main risks associated with public debt have been described. Mainly there have been discussed market risks (interest rate, exchange rate, liquidity and re-financing risks) and operational risks.

As in the previous years, in 2017 the MoF of RA also took measures to reduce the Government debt management risks. As a result, the Government debt of RA remained within the manageable level.

As of December 31, 2017 the increase of the RA Government debt by 13,6% is explained by the following breakdown: 80.5% from the external sources and 19.5% from the domestic sources.

In 2017 the nominal growth of the RA Government debt exceeded the nominal GDP growth (9.9%), and as a result the RA Government debt/GDP indicator increased by 1.8 percentage points compared to the previous year and amounted to 53.7%.

During 2017 the fiscal rules were changed, according to which "The Law on Public Debt" stated that at the end of each year the threshold of the Government debt to GDP ratio is 60%. If the Government debt over GDP ratio of the previous year exceeds 40%, then the 8.2 and 8.4 points of the 21st article of "the Law on Budgeting System" is applied.

Chart 18. **The dynamic of the RA Government debt/GDP ratio**
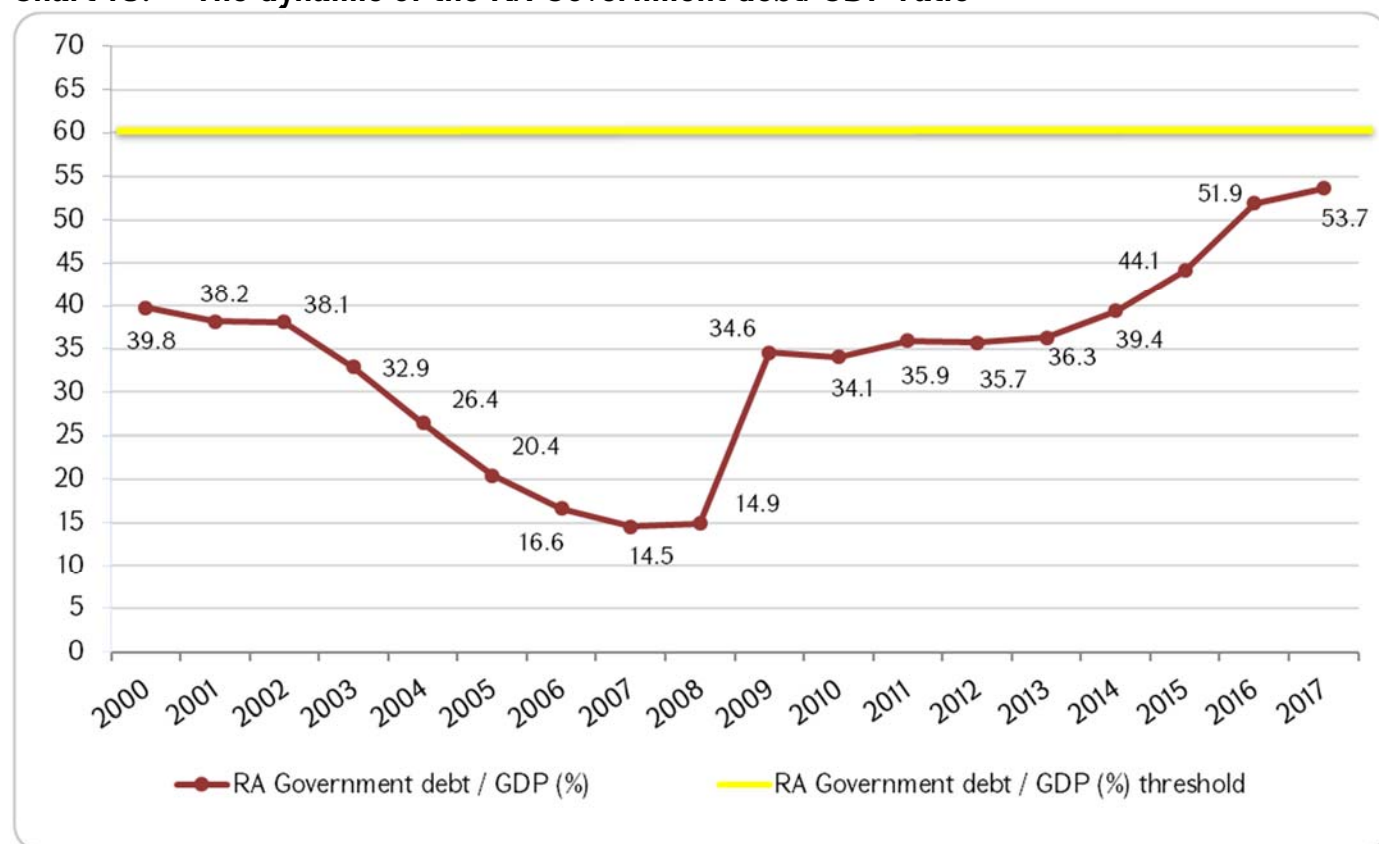
As at the end of 2017, the Government debt to GDP ratio exceeded 50%, therefore, in accordance with the new fiscal rules and according to "the Law on Budgeting System", the draft of the state budget law of the following year, to be presented to the National Assembly, should include the followings: i) the capital expenditures should not be less than the deficit ii) the Government must define the maximum amount of the growth of the current expenditures (excluding Government interest payments) with respect to the actual data in the previous year, iii) the Government should include the action plan in the "Medium Term Expenditure Framework" to be drafted in 2018 on how the Government debt to GDP ratio can be gradually declined below 50%.

On 6th of July, 2017 the Government approved the "2018-2020 Medium Term Expenditure Framework" with the decree N818-N, which includes the 2018-2020 RA Government debt management strategy. The strategy document defines the Government debt planned indicators for 2017 and the predicted indicators for 2018-2020. 2018-2020 RA Government debt management strategy defined the following benchmark indicators for the main market risks:

Table 14.   RA Government debt benchmark indicators for 2018-2020

	Benchmark	2017 Actual
Refinancing risk		
Average time to maturity	8 – 11	9.0
The share of up to 1 year maturity bonds in the total GS (at the end of the year)	maximum 20%	16.4 %
Interest rate risk		
The share of fixed rate debt in the total debt	minimum 80%	86.5 %
Exchange rate risk		
The share of domestic debt in the total debt	minimum 20%	20.7 %

As it is clear from the table, the RA Government debt management strategy benchmark indicators were followed as a result of the implemented transactions during 2017. It should be noted that the same indicators were also determined in the 2017-2019 RA Government debt management strategy.

Interest Rate Risk

In the table 15, the RA Government debt interest payments/GDP indicators are presented with the comparison to the indicators approved by 2017 state budget and by the 2018-2020 RA Government Debt Management Strategy.

Table 15.   RA Government debt interest payments

	2016	2017	2017
	actual	**program**	**actual**
Interest payments/GDP (%)	1.94	2.16	2.19

The programmed interest payments in the 2018-2020 RA Government debt management strategy and the actual interest payments increased as share of GDP. The growth of interest payments was 24.3% against the previous year, which was mainly due to the increase of the debt stock. Moreover, the interest payments for GS and loans from the external sources increased compared to the previous year, and the interest payments of foreign currency bonds remained almost the same.

Table 16.   GS primary allocation interest rates

	2016	2017
	actual	**actual**
Weighted average interest rate of GS allocated in the current year (%)	11.07	9.93

The weighted average interest rates of the Government securities allocated during 2017 decreased by 1.14 percentage points compared to the previous year. This was contributed due to essentially softening of the monetary policy, including the decrease of the refinancing rate by 0.25%, as well as due to the high demand of the Government securities.

The restriction of the growth of loans with floating interest rates was highlighted in the perspective of the interest rate risk management.

Table 17.   The shares of RA Government fixed and floating rate debt

	2016	2017	2017

Interest rate	actual	program	actual
Fixed	87.5	84.3	86.5
Floating	12.5	15.7	13.5

The Government set in the 2018-2020 Government Debt Management Strategy the target shares of the floating and fixed interest rates of the existing debt for the end of 2017 as 15.7 and 84.3, respectively. The Government managed to increase the share of the fixed liabilities in comparison to the planned indicator, though in comparison to the previous year it is less by 1 percentage point mainly due to the structure of the transactions with external loans.

Table 18.   Interest rate risk indicators of RA Government debt in 2017

	2017	2017
	Program	**Actual**
Average time to refixing of the RA Government debt (year)	7.3	7.5
Average time to refixing of the external debt (year)	7.3	7.5
Average time to refixing of the domestic debt (year)	7.4	7.4
The share of the RA Government debt refixing during a year (%)	20.8	18.6
The share of the external debt refixing during a year (%)	22.4	19.7
The share of the domestic debt refixing during a year (%)	14.7	14.2

Actually, the interest rate indicators, defined by the 2018-2020 RA Government debt strategy, were improved, where "Average time to refixing" was increased and the same time the "Share of the RA Government debt refixing during a year" indicator was declined.

Exchange Rate Risk

To reduce the interest rate risk, the MoF of RA signed an agreement with the CBA in 2007, according to which during the budgeting year all foreign currency inflow and outflow transactions of the Government debt payments should be converted based on the exchange rates that are applied in the RA Government budget message and are used for the calculation of the current RA Government state budget law (if the budget is not in force, then the draft of the budget) indicators.

The monthly average exchange rates of AMD against USD and EUR for 2017 is presented in Chart 19.

Chart 19.   AMD exchange rate against USD and EUR in 2017
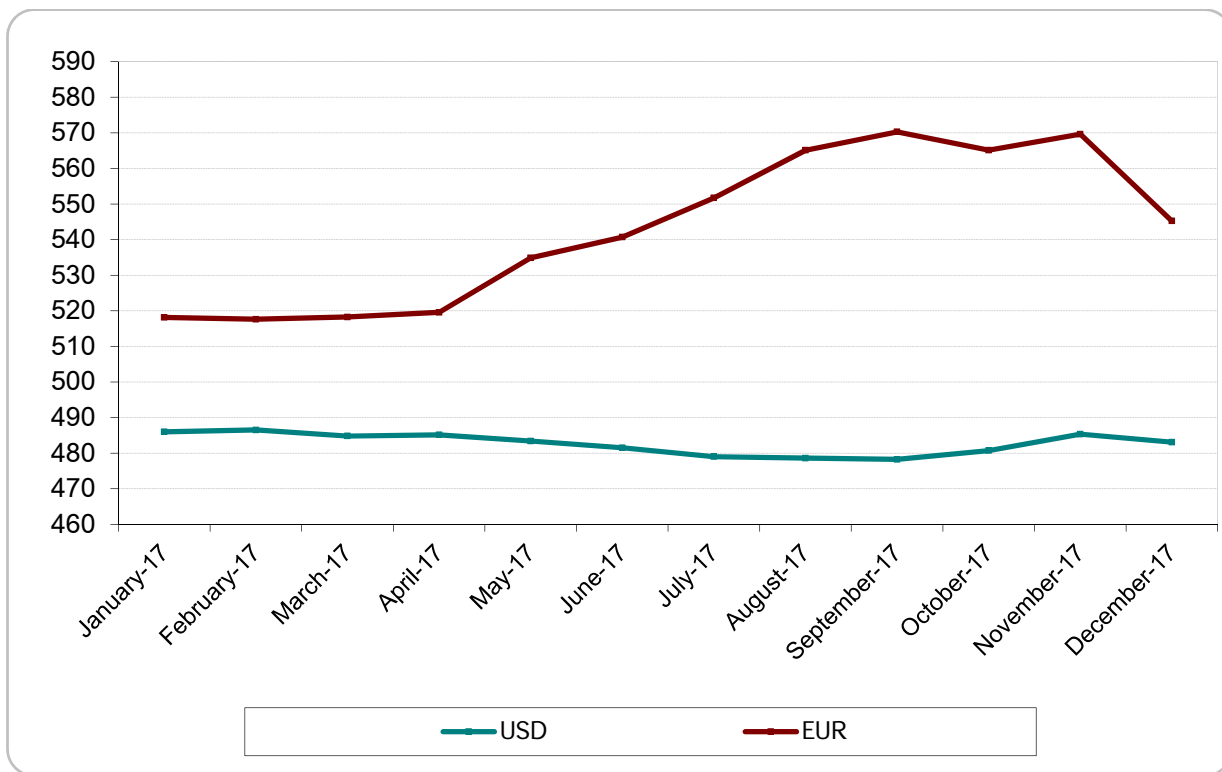
During the 2017 USD/AMD exchange rate did not fluctuate much, which is not true for EUR/AMD. 81.6% share of foreign currency debt was exposed to exchange rate risk (if AMD devaluates) and it could negatively affect the Government debt indicators, particularly on the debt level denominated in national currency.

Table 19.   RA Government external debt

	2016	2017	Difference %
RA Government external debt (AMD billion)	2,081.4	2,368.9	13.8%
RA Government external debt (USD million)	4,300.9	4,893.4	13.8%
USD exchange rate at the end of the year	483.94	484.10	

As of the end of 2017, the external debt increased both in USD and AMD.

Table 20.   RA Government debt currency structure

	2016	2017
Interest rate	Actual	Actual
Currency structure	100.0	100.0
of which		
Debt denominated in AMD	19.3	18.4
Debt denominated in foreign currency	80.7	81.6
of which		
USD	39.5	42.0
SDR	29.3	26.5
EUR	7	8.7
JPY	4.4	3.9
AED	0.1	0.1
CNY	0.4	0.4

The decrease of the share of AMD denominated debt by 0.9 percentage points was due to the decline of the share of GS. In the currency structure the share of USD denominated debt increased by 2.5 percentage points, which is mainly due to the new borrowings in USD.

Refinancing Risk

Refinancing risk is being assessed by the smoothness of the repayment schedule of the outstanding debt (which means that there aren't any heavy periods in meeting debt redemption obligations), by the Average Time to Maturity (ATM), the share of short-term debt in overall debt portfolio and some other similar indicators.

The biggest redemption of RA Government debt in 2017 was envisaged on 29th of April, however the redemption was implemented in the first working day of May, as 29th of April was a non-working day. This concentration is emanated from the domestic debt management strategy, where according to the best international practice, the payments are concentrated on the specific days in order to increase the liquidity of the bonds. In this case, 76.3% of RA Government redemptions in May comprised the payments of 3 and 5-year maturity benchmark bonds.

Chart 20. Government debt redemption schedule in 2017 (AMD billion)

	Jan 17	Feb 17	Mar 17	Apr 17	May 17	Jun 17	Jul 17	Aug 17	Sep 17	Oct 17	Nov 17	Dec 17
■External	3,04	2,89	4,56	4,99	164	6,19	3,97	2,94	5,42	4,62	792	8,29
■Domestic	8,04	15,8	22,3	4,13	46,8	22,0	4,94	1,11	4,70	2,02	4,12	4,97
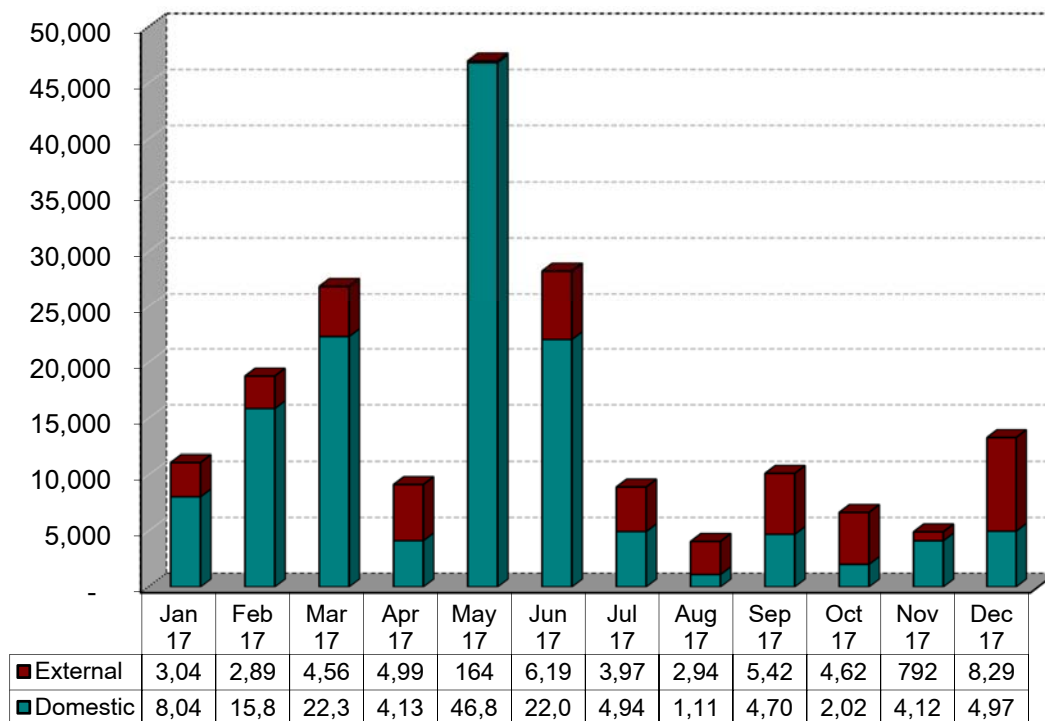
From the point of view of refinancing risk assessment, it is noteworthy that the demand for allocated bonds on the redemption date of 3-year and 5-year maturity bonds comprised AMD 35.4 billion, which made up 98.8% of 3-year and 5-year AMD 35.8 billion maturing bonds. Thus, it can be concluded that the high repayment of benchmark bonds did not cause any refinancing risk.

Table 21. RA Government debt structure by weighted average time to maturity

	2016 Actual	2017 Actual
The structure by weighted average time to maturity, %	100.0	100.0
of which		
Short-term (up to 1 year)	4.4	3.0
Medium-term (1-5 years)	21.6	23.5
Long-term (more than 5 years)	74.0	73.5

The Table 21 describes that the share of the short-term debt decreased in the RA Government debt in comparison to the previous year. This is mainly due to the redemption of AMD 36 billion of the short-term debt in 2017 that was issued in 2016 in order to support the monetary policy within the framework of fiscal and monetary policy coordination.

Below the main indicators of GS are shown in comparison to the previous year.

Table 22.   The indicators of outstanding GS

	2016	2017
Average time to maturity (year)	6.1	7.6
The share of GS maturing in the forthcoming year in the total GS (%)	22.9	16.4
Duration (years)	3.4	4.2

All of the indicators of the outstanding securities improved in comparison to the previous year.

As of the end of 2017 the repayments of the Government external loans were extended up to 2054, the repayments of AMD denominated bonds were spread up to 2047, the repayments of foreign currency securities were extended up to 2025, and the repayments of the guarantees were up to 2036.

Chart 21.   Government debt maturity profile as of December 31, 2017 (AMD billion)

Legend: ■ External Loans   ■ Eurobonds   ■ GS in AMD   ■ Guarantees
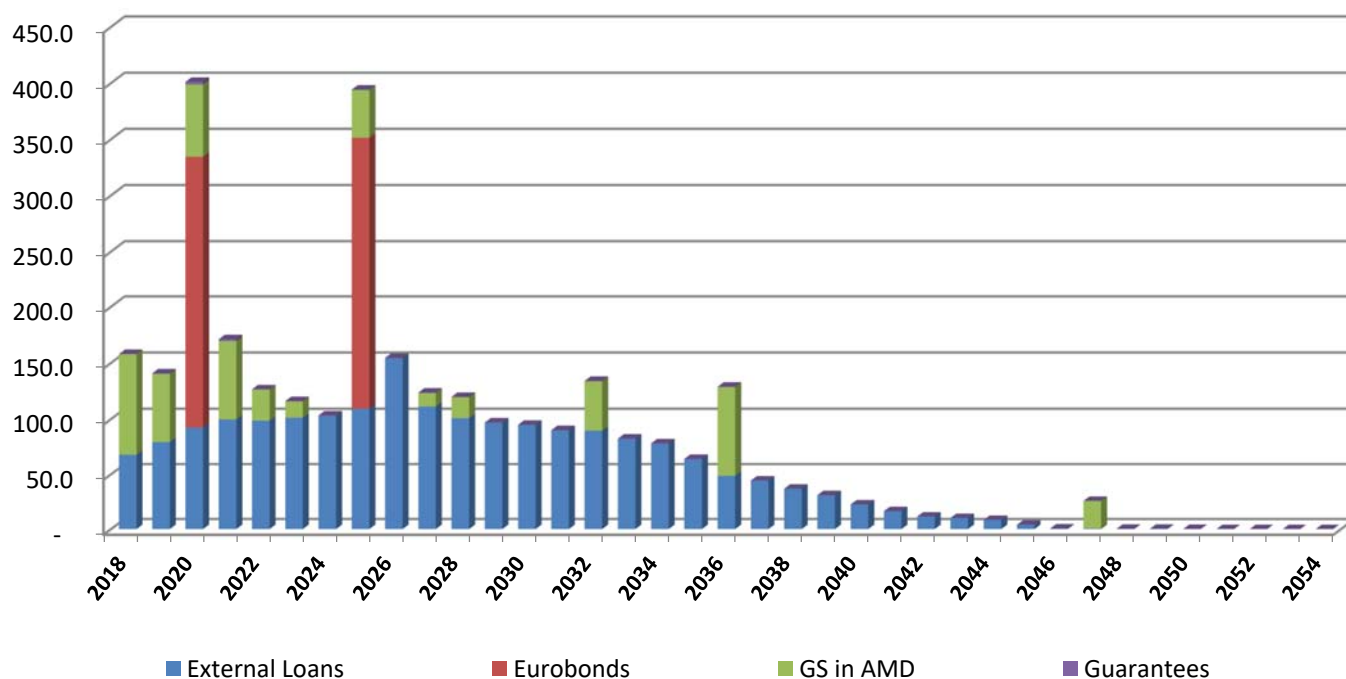
60.4% of the Government debt redemption in 2020 consists of the redemption of 7-year maturity Eurobonds issued in 2013, and 61.4% of the Government debt redemption in 2025 consists of the redemption of 10-year maturity Eurobonds issued in 2015.

RA Government defined the following refinancing risk targeted indicators in the 2018-2020 RA Government Debt Management Strategy Program:

Table 23.   RA Government debt refinancing risk indicators in 2017

	2017 Program	2017 Actual
RA Government debt average time to maturity (year)	9.1	9.0
External debt ATM (year)	9.5	9.4
Domestic debt ATM (year)	7.4	7.4
RA Government debt maturing within one year (%)	5.2	5.3
Share of RA Government external debt maturing within one year (%)	2.6	2.9
Share of RA Government domestic debt maturing within one year (%)	14.7	14.2

In the perspective of the refinancing risk management, RA Government succeeded to maintain the "RA Government debt average time to maturity" indicator defined by the 2018-2020 RA Government Debt Management Strategy. Along with the recovery of the Armenian economy, the World Bank upgraded Armenia as a middle-income country, as a result of which the international lenders and foreign countries have been gradually tightening the lending terms, reducing the concessionality of the loans. However, in the medium term the Average time to maturity indicator will not change much and will remain in the benchmark range.

The actual data of the all above mentioned indicators evidence that the refinancing risk was within the manageable scope in 2017.

Operational Risk

The RA Ministry of Finance continually reveals, assesses, manages and minimizes the operational risk concerning the RA Government debt management.

From 2015 to 2017 the EU Delegation in Armenia provided technical assistance to promote and support the Government debt management reforms. As a result of the technical support, EU experts consulted on improving the legal framework of the Government debt management, developing the operational risk management capabilities and developing the domestic debt market, which were summarized in the reports prepared and submitted by the consultants.

For the purpose of identifying, evaluating and mitigating operational risks, a step-by-step methodology has been presented which is summarized in six steps:

1. perception and documentation of the business activity

2. Identification, assessment and measurement of the operational risks

3. Development of the risk management strategies

4. Implementation of the elaborated strategies

5. Performance monitoring of the operational risk management of PDMD

6. Continuous improvement of the risk management processes by PDMD

The identification, assessment and management of the RA Government debt management operational risks is an ongoing process which includes not only the implementation of the above mentioned six steps, but also a revision of the work done and improvement of risk identification, as well as risk mitigating strategies.

As a result of the improvement of the RA Government debt management and operational risk management processes, several rules and procedures were elaborated and approved in 2017:

1) By the RA Government Decree N 381 on 13th of April 2017 it is approved:

   a) "The rule for issuance, allocation, buyback, circulation and redemption of the RA Government treasury bills, medium-term and long-term coupon bonds; the rule for issuance, allocation, buybacks circulation and redemption of the RA Government saving coupon bonds; the rule of treasury direct activities; the termination of the RA Government

decree N1580-N on 27th of December 2007and the RA Government decree N1606-N on 19th of October 2006".

2) The following documents were approved by the orders of RA Minister of Finance:

   a) The rule of behavior assessment and selection of primary market participants of GS of the Republic of Armenia.

   b) The rule on technical maintenance of the debt management and financial analysis system and performance of administrator's duties

   c) The procedure of issuance of Government foreign exchange securities

   d) The procedure of RA Government external debt service

   e) The procedure of registration and service of RA Government treasury securities

In 2017, a number of reforms have been implemented in the Government domestic debt management, aimed at minimizing operational risks, diversifying the structure and composition of investors, extending the debt maturity and improving the work with investors, including:

- In order to further develop the RA Government treasury securities market, to minimize the operational costs for market participants, the primary allocation auction system of securities was moved from the Central Bank to the NASDAQ OMX's trading platform that has modern software solutions and endowed with the ability to fulfil transactions with the debt management instruments, where the transactions with the securities are implemented with the (T+n) principle, which delays the transaction execution day from the auction date.

- The online retail system of securities (gp.minfin.am) was introduced through the Treasury Direct, and the security instruments sold through the Treasury Direct were expanded. Currently, all types of issued securities can be purchased through this system.

- An assessment and selection system for the behavior of the primary market participants of the Government treasury securities has been introduced.

Appendix 1. Government Treasury Securities Transactions in 2017

In 2017 Government issued new up to 1 year T-bills, 3 and 5-years maturity MTCN, as well as 10-years, 20-years and 30-years maturity LTCB. Respectively, during the year the allocation amounts were: T-bills - AMD 28.3 billion, 3 years MTCN - 40.9 billion and AMD 5 years MTCN - AMD 41.2 billion, 10 years LTCB - AMD 26.8 billion, 20 years LTCB – AMD 21.0 billion and 30 years LTCB – AMD 25.2 billion.

Table 1.1. Marketable GS transactions in 2017

	T-bills	MTCN	LTCB	Total
Number of auctions	49	27	10	86
Issue amount (AMD billion)	28.3	82.1	73.0	183.4
Allocated amount (AMD billion)	27.7	79.8	72.8	180.3
The weight in the allocation amount	15.4%	44.3%	40.3%	100%
The average amount of an issue (AMD billion)	0.57	2.96	7.28	2.10

➢ The demand of GS totaled AMD 409.9 billion and it exceeded the issued amount by 2 times,
➢ The weighted average yield of allocations comprised 9.93%,
➢ The maximum allocation maturity extended up to 30 years,
➢ The minimum maturity of allocations was 13 weeks.

During 2017 the MoF of RA carried out monthly buybacks of GS with the total amount of AMD 19.65 billion.

During the reporting period 41 issues of SCB took place with the total amount of AMD 4.25 billion, of which AMD 2.19 billion was allocated.

Table 1.2. The data of GS auctions took place in 2017 (AMD million)

Issue date	GS	Issue volume	Demand	Allocation amount	Minimum yield	Cut of yield	The weighted average yield	Maturity day
10/JAN/2017	MTCN60	3,000	6,613	3,000	10.2100	10.4130	10.3297	29/APR/2021
16/JAN/2017	T-BILLS52	1,500	3,116	1,500	7.7100	7.8437	7.7615	16/JAN/2018
17/JAN/2017	MTCN36	3,000	5,250	3,000	9.7000	10.0200	9.8902	29/APR/2019
23/JAN/2017	T-BILLS39	500	1,060	500	7.0990	7.4200	7.1877	23/OCT/2017
30/JAN/2017	T-BILLS26	500	1,650	500	7.0000	7.0000	7.0000	31/JUL/2017
Total January		8,500	17,689	8,500			9.3407	
6/FEB/2017	T-BILLS52	1,500	3,470	1,500	7.6497	7.7487	7.6990	5/FEB/2018
9/FEB/2017	LTCB10	4,000	13,810	4,000	11.2300	11.6330	11.5867	29/OCT/2025
13/FEB/2017	T-BILLS39	500	1,015	500	7.1497	7.1698	7.1584	13/NOV/2017
21/FEB/2017	MTCN36	5,000	9,628	5,000	9.4500	9.9200	9.8048	29/APR/2019
27/FEB/2017	T-BILLS13	500	2,219	500	6.2497	6.3487	6.2988	29/MAY/2017
Total February		11,500	30,142	11,500			9.8824	
6/MAR/2017	T-BILLS52	1,500	5,211	1,500	7.2497	7.3487	7.2958	5/MAR/2018
16/MAR/2017	LTBC20	21,000	47,759	21,000	12.9800	13.6400	13.4820	29/OCT/2036
20/MAR/2017	T-BILLS26	500	3,050	500	6.2000	6.2000	6.2000	18/SEP/2017
21/MAR/2017	MTCN60	5,000	20,793	5,000	9.9400	9.9810	9.9692	29/APR/2021
27/MAR/2017	T-BILLS13	500	1,200	500	6.0001	6.0496	6.0248	26/JUN/2017

Date	Instrument	Amount 1	Amount 2	Amount 3	Rate 1	Rate 2	Rate 3	Maturity
Total March		28,500	78,013	28,500			12.2815	
Total I quarter		48,500	125,844	48,500				
3/APR/2017	T-BILLS52	1,500	4,722	1,500	6.8110	7.0400	7.0052	2/APR/2018
10/APR/2017	T-BILLS39	1,500	2,786	1,500	6.4497	6.5487	6.4980	8/JAN/2018
11/APR/2017	MTCN60	5,000	19,680	5,000	9.3888	9.3888	9.3888	29/APR/2021
18/APR/2017	MTCN36	4,000	15,265	4,000	7.4700	7.9200	7.8739	29/APR/2019
Total April		12,000	42,453	12,000			8.2245	
2/MAY/2017	MTCN60	10,000	19,507	10,000	8.4400	9.4300	9.2772	29/APR/2022
3/MAY/2017	MTCN60	2,000	1,873	1,873	9.2772	9.2772	9.2772	29/APR/2022
2/MAY/2017	MTCN36	10,000	12,832	10,000	7.4900	8.6200	8.3498	29/APR/2020
3/MAY/2017	MTCN36	2,000	1,180	1,180	8.3498	8.3498	8.3498	29/APR/2020
11/MAY/2017	LTCB10	5,000	14,273	5,000	10.5000	10.7500	10.6447	29/OCT/2025
12/MAY/2017	LTCB10	1,000	787	787	10.6447	10.6447	10.6447	29/OCT/2025
15/MAY/2017	T-BILLS52	1,500	3,788	1,500	6.5000	6.7877	6.7395	14/MAY/2018
16/MAY/2017	T-BILLS52	300	295	295	6.7395	6.7395	6.7395	14/MAY/2018
16/MAY/2017	MTCN36	5,000	8,585	5,000	7.9400	8.3400	8.2273	29/APR/2020
22/MAY/2017	T-BILLS26	500	1,642	500	5.9500	6.2620	6.1443	20/NOV/2017
29/MAY/2017	T-BILLS13	500	1,000	500	5.9800	6.0790	6.0295	28/AUG/2017
Total May		37,800	65,762	36,635			8.8555	

Date	Instrument				Yield 1	Yield 2	Yield 3	Maturity
5/JUN/2017	T-BILLS52	1,000	3,500	1,000	6.6997	6.7300	6.7240	4/JUN/2018
6/JUN/2017	T-BILLS52	200	200	200	6.7240	6.7240	6.7240	4/JUN/2018
8/JUN/2017	LTCB30	21,000	44,422	21,000	13.4400	13.6969	13.5833	16/MAR/2047
9/JUN/2017	LTCB30	4,200	4,200	4,200	13.5833	13.5833	13.5833	16/MAR/2047
12/JUN/2017	T-BILLS39	1,000	3,100	1,000	6.2500	6.3107	6.2850	12/MAR/2018
20/JUN/2017	MTCN60	5,000	14,775	5,000	8.7100	9.0800	8.9968	29/APR/2022
21/JUN/2017	MTCN60	1,000	910	910	8.9968	8.9968	8.9968	29/APR/2022
26/JUN/2017	T-BILLS13	500	1,000	500	5.7997	5.8987	5.8492	25/SEP/2017
Total June		33,900	72,107	33,810			12.2079	
Total II quarter		83,700	180,322	82,445				
Total I Half year		132,200	306,166	130,945				
3/JUL/2017	T-BILLS52	1,000	1,400	1,000	6.3997	6.4987	6.4492	2/JUL/2018
4/JUL/2017	T-BILLS52	200	200	200	6.4492	6.4492	6.4492	2/JUL/2018
10/JUL/2017	T-BILLS39	1,000	1,082	1,000	6.1497	6.2487	6.1977	9/APR/2018
11/JUL/2017	T-BILLS39	200	194	194	6.1977	6.1977	6.1977	9/APR/2018
11/JUL/2017	MTCN60	3,000	8,540	3,000	8.7000	8.9577	8.8820	29/APR/2022
12/JUL/2017	MTCN60	600	495	495	8.8820	8.8820	8.8820	29/APR/2022
17/JUL/2017	T-BILLS26	1,000	1,031	1,000	6.0497	6.1487	6.0977	15/JAN/2018
18/JUL/2017	T-BILLS26	200	194	194	6.0977	6.0977	6.0977	15/JAN/2018

Date	Instrument	Amount 1	Amount 2	Amount 3	Rate 1	Rate 2	Rate 3	Maturity
18/JUL/2017	MTCN36	2,000	4,315	2,000	7.8900	7.9300	7.8984	29/APR/2020
19/JUL/2017	MTCN36	400	399	399	7.8984	7.8984	7.8984	29/APR/2020
Total July		9,600	17,850	9,482			7.6367	
7/AUG/2017	T-BILLS52	1,000	1,626	1,000	6.3900	6.4437	6.4047	6/AUG/2018
8/AUG/2017	T-BILLS52	200	95	95	6.4047	6.4047	6.4047	6/AUG/2018
10/AUG/2017	LTCB10	4,000	10,230	4,000	9.6710	10.1790	10.0299	29/OCT/2025
11/AUG/2017	LTCB10	800	799	799	10.0299	10.0299	10.0299	29/OCT/2025
14/AUG/2017	T-BILLS52	1,000	1,308	1,000	6.1497	6.2318	6.1926	14/MAY/2018
15/AUG/2017	T-BILLS52	200	160	160	6.1926	6.1926	6.1926	14/MAY/2018
15/AUG/2017	MTCN36	3,000	2,705	2,705	7.6575	8.1450	7.8993	29/APR/2020
16/AUG/2017	MTCN36	541	340	340	7.8993	7.8993	7.8993	29/APR/2020
28/AUG/2017	T-BILLS13	500	1,300	500	5.7799	5.8397	5.7989	27/NOV/2017
29/AUG/2017	T-BILLS13	100	20	20	5.7989	5.7989	5.7989	28/NOV/2017
Total August		11,341	18,583	10,619			8.4188	
4/SEP/2017	T-BILLS52	500	1,453	500	6.2500	6.3077	6.2876	3/SEP/2018
5/SEP/2017	T-BILLS52	100	60	60	6.2876	6.2876	6.2876	3/SEP/2018
11/SEP/2017	T-BILLS39	500	1,352	500	5.8500	6.0700	5.9931	4/JUN/2018
12/SEP/2017	T-BILLS39	100	75	75	5.9931	5.9931	5.9931	4/JUN/2018
19/SEP/2017	MTCN60	3,000	8,500	3,000	8.8100	8.8799	8.8683	29/APR/2022

20/SEP/2017	MTCN60	600	500	500	8.8683	8.8683	8.8683	29/APR/2022
25/SEP/2017	T-BILLS26	500	700	500	5.7997	5.8492	5.8245	26/MAR/2018
26/SEP/2017	T-BILLS26	100	100	100	5.8245	5.8245	5.8245	26/MAR/2018
Total September		5,400	12,740	5,235			7.9276	
Total III quarter		26,341	49,173	25,336				
2/OCT/2017	T-BILLS52	500	1,415	500	6.0997	6.1985	6.1492	1/OCT/2018
3/OCT/2017	T-BILLS52	100	90	90	6.1492	6.1492	6.1492	1/OCT/2018
9/OCT/2017	T-BILLS39	500	1,000	500	5.9997	6.0382	6.0212	2/JUL/2018
10/OCT/2017	T-BILLS39	100	100	100	6.0212	6.0212	6.0212	2/JUL/2018
10/OCT/2017	MTCN60	2,500	8,035	2,500	8.4900	8.7373	8.6825	29/APR/2022
11/OCT/2017	MTCN60	500	327	327	8.6825	8.6825	8.6825	29/APR/2022
17/OCT/2017	MTCN36	2,500	7,002	2,500	7.7400	7.9797	7.8518	29/APR/2020
18/OCT/2017	MTCN36	500	370	370	7.8518	7.8518	7.8518	29/APR/2020
23/OCT/2017	T-BILLS13	500	2,055	500	5.5700	5.6000	5.5850	22/JAN/2018
24/OCT/2017	T-BILLS13	100	100	100	5.5850	5.5850	5.5850	22/JAN/2018
Total October		7,800	20,494	7,487			7.7029	
6/NOV/2017	T-BILLS52	500	2,000	500	6.0700	6.1500	6.0980	5/NOV/2018
7/NOV/2017	T-BILLS52	100	100	100	6.0980	6.0980	6.0980	5/NOV/2018
9/NOV/2017	LTCB10	10,000	23,728	10,000	9.8999	9.8999	9.8999	29/OCT/2027

10/NOV/2017	LTCB10	2,000	2,000	2,000	9.8999	9.8999	9.8999	29/OCT/2027
13/NOV/2017	T-BILLS39	500	1,300	500	5.8000	5.8200	5.8100	6/AUG/2018
14/NOV/2017	T-BILLS39	100	100	100	5.8100	5.8100	5.8100	6/AUG/2018
20/NOV/2017	T-BILLS26	500	786	500	5.7000	5.9850	5.9425	14/MAY/2018
21/NOV/2017	T-BILLS26	100	100	100	5.9425	5.9425	5.9425	14/MAY/2018
21/NOV/2017	MTCN36	2,500	3,754	2,500	7.3909	7.7600	7.5387	29/APR/2020
22/NOV/2017	MTCN36	500	231	231	7.5387	7.5387	7.5387	29/APR/2020
Total November		16,800	34,099	16,531			9.0798	
Total IV quarter		24,600	54,593	24,018				
Total II half year		50,941	103,766	49,354				
Total year		183,141	409,932	180,299			9.9280	

Appendix 2.   Outstanding GS as of 31st of December, 2017 (AMD Million)

Short-term bonds			Medium and Long-term bonds				Benchmark bonds			
	Outstanding	Maturity day		Outstanding	Coupon rate	Maturity day		Outstanding	Coupon rate	Maturity day
1	1,500	08/01/2018	1	31,000.0	9.0%	29/04/2018	1	47,516.5	9.0%	29/04/2019
2	194	15/01/2018	2	47,516.5	9.0%	29/04/2019	2	27,224.5	8.0%	29/04/2020
3	1,000	15/01/2018	3	27,224.5	8.0%	29/04/2020	3	27,605.0	9.0%	29/04/2022
4	1,500	15/01/2018	4	10,728.5	10.0%	29/04/2018	4	42,574.2	11.0%	29/10/2025
5	100	22/01/2018	5	12,362.8	8.0%	29/04/2019	5	80,000.0	13.0%	29/10/2036
6	500	22/01/2018	6	34,930.0	10.0%	29/04/2020	6	25,200.0	13.0%	16/03/2047
7	1,500	05/02/2018	7	50,000.0	10.0%	29/04/2021				
8	1,500	05/03/2018	8	27,605.0	9.0%	29/04/2022				
9	1,000	12/03/2018	9	12,012.5	12.0%	17/02/2018				
10	100	26/03/2018	10	12,391.1	10.0%	7/02/2018				
11	500	26/03/2018	11	19,757.0	12.0%	17/02/2021				
12	1,500	02/04/2018	12	14,625.0	10.0%	29/10/2023				
13	194	09/04/2018	13	42,574.2	11.0%	29/10/2025				
14	1,000	09/04/2018	14	12,000.0	10.0%	29/10/2027				
15	100	14/05/2018	15	18,690.1	11.0%	7/02/2028				
16	160	14/05/2018	16	44,000.0	13.0%	17/02/2032				
17	295	14/05/2018	17	80,000.0	13.0%	29/10/2036				
18	500	14/05/2018	18	25,200.0	13.0%	16/03/2047				
19	1,000	14/05/2018								
20	1,500	14/05/2018								
21	75	04/06/2018								
22	200	04/06/2018								
23	500	04/06/2018								
24	1,000	04/06/2018								
25	100	02/07/2018								
26	200	02/07/2018								
27	500	02/07/2018								
28	1,000	02/07/2018								
29	95	06/08/2018								
30	100	06/08/2018								
31	500	06/08/2018								
32	1,000	06/08/2018								
33	60	03/09/2018								
34	500	03/09/2018								
35	90	01/10/2018								
36	500	01/10/2018								
37	100	05/11/2018								
38	500	05/11/2018								

Saving Coupon Bonds

	Issue number	Outstanding amount (AMD thousand)	Coupon rate	Maturity day
1	AMGS02071183	7,661	10.0%	07.11.18
2	AMGS02082180	90,500	10.0%	08.02.18
3	AMGS02232181	33,973	10.0%	23.02.18
4	AMGS02263186	4,150	9.5%	26.03.18
5	AMGS02274183	11,350	9.5%	27.04.18
6	AMGS02016188	39,350	9.5%	01.06.18
7	AMGS04191187	32,450	11.5%	19.01.18
8	AMGS04232189	17,700	11.5%	23.02.18
9	AMGS04273183	16,800	11.5%	27.03.18
10	AMGS04025187	28,339	11.5%	02.05.18
11	AMGS04066181	87,060	11.5%	06.06.18
12	AMGS04077188	59,034	10.5%	07.07.18
13	AMGS04088185	46,219	10.5%	08.08.18
14	AMGS04129187	113,792	10.0%	12.09.18
15	AMGS0427A186	76,424	10.0%	27.10.18
16	AMGS0401C187	43,009	9.5%	01.12.18
17	AMGS08181184	17,800	14.5%	18.01.18
18	AMGS08222186	11,500	14.5%	22.02.18
19	AMGS08293187	18,900	14.5%	29.03.18
20	AMGS08025183	39,908	14.5%	02.05.18
21	AMGS08026181	41,700	14.5%	02.06.18
22	AMGS08207187	54,300	14.0%	20.07.18
23	AMGS08258180	70,000	14.0%	25.08.18
24	AMGS08077184	49,200	14.5%	07.07.18
25	AMGS08149181	33,694	14.0%	14.09.18
26	AMGS0817A188	26,630	13.5%	17.10.18
27	AMGS0828B183	41,870	13.0%	28.11.18
28	AMGS08121198	43,784	12.0%	12.01.19
29	AMGS081721911	28,830	12.0%	17.02.19
30	AMGS08233191	22,471	12.0%	23.03.19
31	AMGS08284194	22,100	12.0%	28.04.19
32	AMGS08066195	100,000	12.0%	06.06.19
33	AMGS08077192	29,900	11.0%	07.07.19
34	AMGS0888199	45,750	11.0%	08.08.19
35	AMGS08129191	20,000	10.5%	12.09.19
36	AMGS0827A195	44,630	10.5%	27.10.19
37	AMGS0801C196	77,975	10.5%	01.12.19
38	AMGS12132181	5,050	14.0%	13.02.18
39	AMGS12193183	5,250	14.0%	19.03.18
40	AMGS12016186	38,807	14.0%	01.06.18
41	AMGS12097186	10,840	14.5%	09.07.18
42	AMGS12118180	12,040	14.5%	11.08.18
43	AMGS12229185	29,000	14.5%	22.09.18
44	AMGS1205B183	44,305	15.0%	05.11.18

45	AMGS1207C187	5,950	15.0%	07.12.18
46	AMGS12181196	10,140	15.0%	18.01.19
47	AMGS12222198	36,100	15.0%	22.02.19
48	AMGS12293199	47,250	15.0%	29.03.19
49	AMGS12254191	15,800	15.0%	25.04.19
50	AMGS12265197	24,350	15.0%	26.05.19
51	AMGS12067197	50,000	15.0%	06.07.19
52	AMGS12207199	61,680	14.5%	20.07.19
53	AMGS12258192	69,681	14.5%	25.08.19
54	AMGS12249191	56,520	14.5%	24.09.19
55	AMGS1227A197	99,816	14.0%	27.10.19
56	AMGS1201C198	100,000	13.5%	01.12.19
57	AMGS1229C199	99,700	13.5%	29.12.19
58	AMGS12191203	50,645	12.5%	19.01.20
59	AMGS12232205	98,590	12.5%	23.02.20
60	AMGS12233203	85,700	12.5%	23.03.20
61	AMGS12284206	53,598	12.5%	28.04.20
62	AMGS12066207	90,875	12.5%	06.06.20
63	AMGS12077204	41,517	11.5%	07.07.20
64	AMGS12088201	87,736	11.5%	08.08.20
65	AMGS12129203	88,570	11.0%	12.09.20
66	AMGS1227A205	100,000	11.0%	27.10.20
67	AMGS1221B206	99,900	11.0%	21.11.20

Appendix 3. Government Treasury Securities Retail Market in 2017

The retail sale of GS has been organizing through the Treasury Direct that is a system of directly selling, accounting and servicing of GS by the authorized body of the RA Government, the functions of which are the retail sale and buybacks of securities, refinancing, free delivery of securities, as well as the current payments, redeemed and buyback payments to investors.

In 2017 the instruments sold through the Treasury direct have been expanded. If previously the investors could obtain only saving coupon bonds or short-term securities, so starting from 2017 investors can also obtain medium-term and long-term bonds.

Starting from April 2017, the Treasury direct offers to obtain, buyback and generally follow the Treasury direct activities, new issuances and news not only by visiting the service centers, but also through the online system entering into the Treasury direct website: gp.minfin.am.

In 2017 the transactions implemented in the retail market were as follows:

- The TD allocated all 41 issues of SCBs and participated in allocations of five T-bills,
- The investment amount made up AMD 2,284.4 million, of which AMD 87.2 million T-bills and AMD 2,197.2 million SCB,

- The matured amount of GS made up AMD 3,123.2 million, of which AMD 1,948.8 million T-bills and AMD 1,174.4 million SCB,

- The buybacks amount of GS comprised AMD 85.3 million SCB,

- As of December 31, 2017 the outstanding SCB made up AMD 3,168.2 million,
- The number of depository accounts totaled 1366,
- The average investment amount per investor made up AMD 6.5 million (for T-bills it made up AMD 87.2 million and for SCB - AMD 6.3 million),

- Average investment amount in the bids made up AMD 3.6 million (for T-bills it made up AMD 87.2 million and for SCB it comprised AMD 3.5 million),

- In average 13.9 bids were presented in one issuance of bonds, including 1.0 bid for T-bills, and 15.4 bids for SCB,

- The refinancing amount of matured GS increased by 3.8% compared to the previous period and made up AMD 781.2 million.
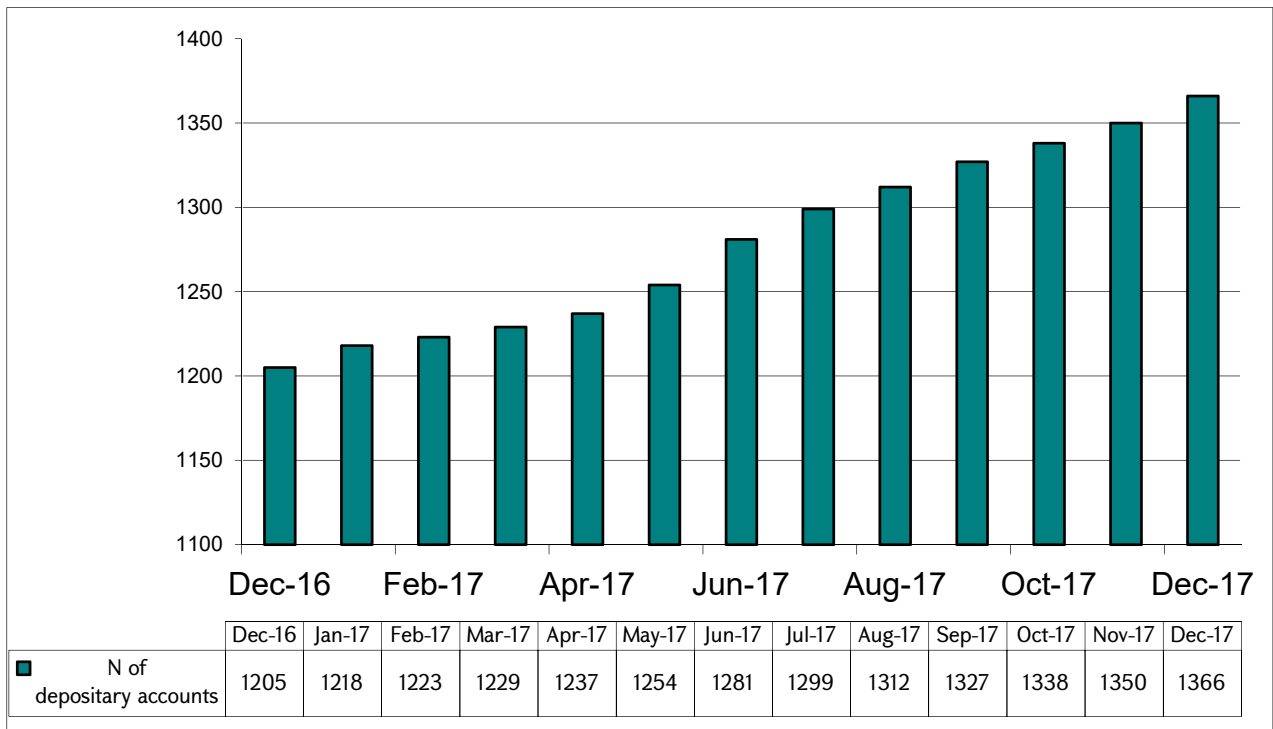
In 2017 the investment volume of SCB increased by 1.36% over the previous year. As of December 31, 2017 the outstanding volume of SCB was increased by 47.7% compared to the same indicator in the previous year (see chart 3.1).

Chart 3.1. The Amount of Outstanding SCB as of December 31, 2017 (AMD million)
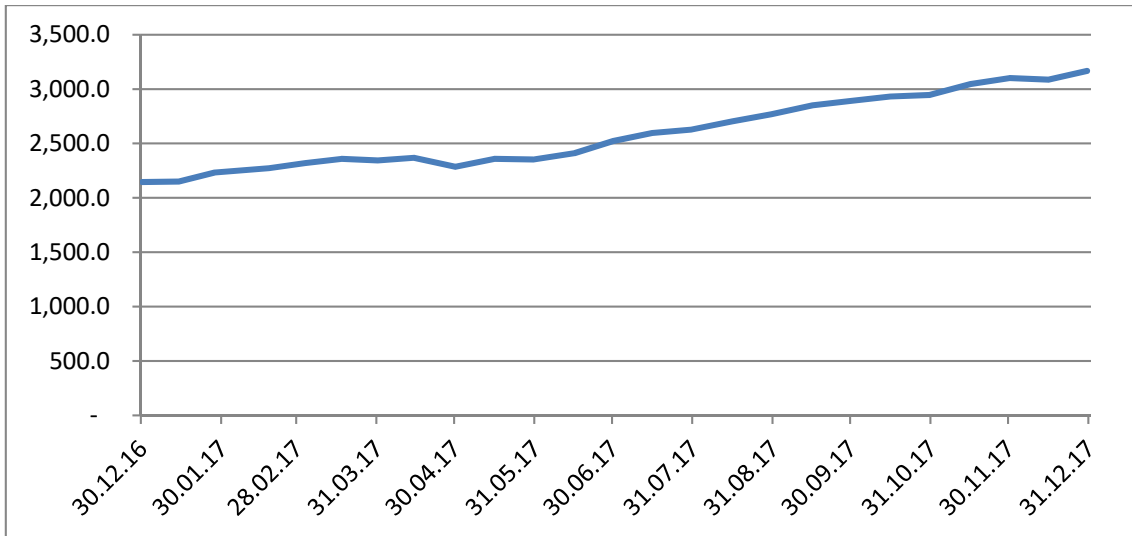
As of December 31, 2017 the number of depositary accounts were 1366 which was 161 more than the same indicator in the previous year (see chart 3.2):

Chart 3.2. The dynamics of depositary accounts in 2017

	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
☐ N of depositary accounts	1205	1218	1223	1229	1237	1254	1281	1299	1312	1327	1338	1350	1366

SCB coupon yield is being determined based on the interest rate in the financial market and the average yields of the deposits attracted from individuals by the RA commercial banks.

Appendix 4.   The Transactions of the Loans Borrowed by the RA Government during 2017

		Disbursements		Principal payments		Interest payments	
		USD million	AMD billion	USD million	AMD billion	USD million	AMD billion
	Total RA Government loans	584.56	280.93	68.70	32.67	100.49	47.92
	International Organizations	299.41	143.23	59.04	28.10	80.01	38.18
1	International Bank for Reconstruction and Development (IBRD)	35.75	17.20	13.85	6.59	1.36	0.64
2	International Development Association (IDA)	10.07	4.86	22.41	10.65	38.17	18.15
3	European Bank for Reconstruction and Development (EBRD)	3.63	1.75	0.62	0.29	2.56	1.22
4	European Investment Bank (EIB)	14.16	6.83	1.69	0.80	0.50	0.24
5	International Fund for Agricultural Development (IFAD)	0.87	0.42	0.51	0.24	1.74	0.83
6	OPEC Fund for International Development (OFID)	5.30	2.56	2.22	1.06	3.27	1.55
7	Asian Development Bank (ADB)	129.39	61.96	11.11	5.31	9.47	4.50
8	International Monetary Fund (IMF)	-	-	-	-	22.94	11.06
9	European Union (EU)	-	-	2.40	1.14	-	-
10	Eurasian Development Bank (Manager of Eurasian Fund of Stabilization and Development)	100.24	47.65	4.23	2.01	-	-
	Foreign States	285.15	137.70	9.40	4.45	19.73	9.38
1	Germany (KfW)	58.99	28.30	3.25	1.55	6.50	3.09
2	France	29.94	14.49	1.46	0.69	0.13	0.06
3	USA	-	-	0.41	0.19	1.73	0.82
4	Japan (JICA)	-	-	2.28	1.09	10.70	5.09
5	Abu-Dhabi Fund for Development	-	-	0.22	0.11	0.67	0.32
6	China Export-Import Bank	-	-	0.45	0.21	-	-
7	Russian Federation	196.22	94.91	1.33	0.62	-	-
	Commercial banks	-	-	0.25	0.12	0.76	0.36
1	KBC BANK NV (Belgium)	-	-	0.03	0.02	0.54	0.26
2	Raiffeisen Bank International (Austria)	-	-	0.09	0.04	-	-
3	Erste Bank (Austria)	-	-	0.13	0.06	0.22	0.10

Appendix 5.   Central Bank of RA Borrowed Loans Transactions during 2017

		Disbursements	Principal payments	Interest payments
		USD million	USD million	USD million
	Total CBA loans	**109.14**	**44.85**	**8.93**
	International Organizations	**81.62**	**32.06**	**6.86**
1	International Monetary Fund (IMF)	21.7	30.55	3.61
2	International Bank for Reconstruction and Development (IBRD)	-	1.51	0.64
3	Asian Development Bank (ADB)	6.09	-	0.33
4	European Investment Bank (EIB)	53.83	-	2.27
	Foreign States	**27.53**	**12.79**	**2.07**
1	Germany (KfW)	27.53	12.79	2.07

Appendix 6.   Guaranties Provided by the RA Government and Outstanding as of December 31, 2017

N	Borrower	The Date and the number of Guarantee	Donor bank	The duration of the loan agreement	Guarantee agreement	Guarantee amount (USD)
1	"Agarak copper-molibdenum combine" CJSC	25.02.2016 N 1(01)2016	"Ardshinbank" CJSC	24.05.2021	1(01)EP/2016	7,000,000
2	"Agarak copper-molibdenum combine" CJSC	31.03.2017 PVH17/03-01	"Ardshinbank" CJSC	24.03.2022	1(01)EP/2016	2,000,000
3	"Norq-Marash" Medical Centre CJSC	20.02.2017	Erste Bank (Austria)	31.03.2036		7,400,000
	Total					**16,400,000**

Appendix 7.   Government Treasury Securities Primary Market Agents

Ameriabank CJSC 9 Grigor Lusavorich Str. 0010 Yerevan, Armenia Tel: (+37410) 51 31 73	**ARMECONOMBANK OJSC** 23/1 Amiryan Str. 0002 Yerevan, Armenia Tel: (+37410) 51 09 10
ARARATBANK OJSC 19 Pushkin Str. 0010 Yerevan, Armenia Tel: (+37410) 59 23 23	**Converse Bank CJSC** 26/1 Vazgen Sargsyan Str. 0010 Yerevan, Armenia Tel: (+37410) 51 12 06
ARDSHINBANK CJSC 13 Grigor Lusavorich Str. 0015 Yerevan, Armenia Tel: (+37410) 56 18 95	**VTB Bank Armenia CJSC** 46 Nalbandyan Str. 0010 Yerevan, Armenia Tel: (+37410) 54 72 49
ArmSwissBank CJSC 10 Vazgen Sargsyan Str. 0010 Yerevan, Armenia Tel: (+37460) 75 70 00	

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