# PUBLIC DEBT OF THE REPUBLIC OF ARMENIA

**ANNUAL REPORT: 2016** 

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# **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, 2017   |
|           | the NSS of RA revised the GDP indicator for 2015.)                     |
| 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  |
| OPEC      | OPEC Fund for International Development                                |
| AMD       | Armenian drams   |
| USD       | U.S. dollars   |

#### **Macroeconomic Environment**

The economic growth slowed down in 2016 compared to the previous year. During the first quarter there was a rapid growth rate, however it significantly slowed down by the end of the year and amounted at 0.2% for the annual indicator. The latter was a consequence of: the unfavorable economic developments of the main partner countries, the decreases in international prices of the metals, the declines in the remittances from Russian Federation, consequently, the decline in the disposable income, to which the government reacted by carrying out countercyclical fiscal policy. The implementation of the countercyclical policy by the RA Government was also emanated from the need to attract additional funds from the domestic debt market in order to manage the cash flows, which was a consequence of the underperformance of the tax revenues program started from the second quarter of the year.

In order to stimulate the aggregate demand and to mitigate the results of the private investment weak activities, in 2016 expansionary fiscal policy was adopted. As a result, the deficit of the state budget was 5.5% of the GDP.

**Economic Growth** – In 2016 within the framework of the unfavorable economic developments in the global, there was recorded 0.2% GDP growth, which was less by 2.8% than the same indicator in the previous year. Moreover, the industry and service sectors had a positive impact on GDP growth, but the agriculture and construction had a negative impact.

**External Sector** – The trade balance improvement was due to the exceeding growth rate of the export compared to the import growth rate (correspondingly 11.6% and 3.4%). In comparison to the previous year, in 2016 the remittance inflows decreased by 8.6% continuing the declining trend of the previous two years. Aggregating the impacts, the deficit of the current account amounted at 2.7% of the GDP and retained the level of the previous year.

**Exchange rate** – In 2016 the average exchange rate amounted at 480.5 AMD against USD and depreciated by 0.5% compared to the previous year (477.9 AMD). To compare, in 2015 the average exchange rate depreciation was 13%.

**Inflation** – The deflationary tendency nascent in the middle of the previous year was retained during 2016. In 2016 the average deflation was 1.4%, which was mostly impacted by the weak domestic demand, by the low prices of some products formulated in the international markets, as well as by the food industry price declines due to the development of the agricultural sector.

**Public Budget** – Although the activity of the domestic economy weakened during the 2016, the share of the state budget taxes and duties in GDP slightly improved. According to 2016 data, the total revenue of the state budget as a share of GDP was 23.1% against 23.2% in 2015, and the taxes and duties as a share of GDP amounted at 21.3% against 21.2% in 2015. In 2016 the share of the state budget expenses in GDP increased mostly due to the current expenses and amounted at 28.5%, which was by 0.6% more than the same indicator in the previous year.

#### **RA Public Debt**

As of December 31, 2016 the RA public debt amounted at AMD 2,875.6 billion or USD 5,942.1 million. In comparison to the previous year the public debt increased by AMD 419.3 billion or USD 864.4 million, including the Central Bank debt which increased by AMD 13.8 billion or USD 28.3 million.

Table 1. Public Debt of the Republic of Armenia

|   | 3           | 1.12.2015   | 31.1        | 2.2016         |
|---|-------------|-------------|-------------|----------------|
|   | % of<br>GDP | AMD billion | % of<br>GDP | AMD<br>billion |
| Public Debt of RA   | 48.7        | 2,456.3     | 56.6        | 2,875.6        |
| of which  |             |             |             |                |
| Debt of the Government of RA*                                 | 44.1        | 2,225.9     | 51.8        | 2,631.4        |
| of which  |             |             |             |                |
| External Debt   | 36.8        | 1,857.5     | 41.0        | 2,081.4        |
| of which  |             |             |             |                |
| Credits and Loans   |             | 1,420.4     |             | 1,635.7        |
| Government Treasury Bonds purchased by non-<br>residents      |             | 0.7         |             | 8.0            |
| Foreign Currency Denominated Bonds purchased by non-residents |             | 436.4       |             | 437.7          |
| External guarantees**   |             |             |             |                |
| Domestic Debt   | 7.3         | 368.4       | 10.8        | 550.0          |
| of which  |             |             |             |                |
| Credits and Loans   |             | -           |             | -              |
| Government Treasury Bonds purchased by residents              |             | 320.0       |             | 500.3          |
| Foreign Currency Denominated Bonds purchased by residents     |             | 47.4        |             | 46.3           |
| Domestic guarantees   |             | 1.0         |             | 3.4            |
| External Debt of the Central Bank of RA                       |             | 230.4       | 4.8         | 244.2          |
| of which  |             |             |             |                |
| Loans provided with the Guarantee of the RA Government        |             | 68.1        |             | 70.8           |

<sup>\*</sup> 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".

<sup>\*\*</sup> 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.

56.6 48.7 49.3 47.0 46.7 43.7 42.2 41.4 40.9 40.9 40.6 40.0 32.6 24.4 16.4 16.4 19.2 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 RA Public debt, AMD billion RA Public debt / GDP, %

Chart 1. Dynamics of the RA public debt and Public Debt/GDP ratios

The public debt over GDP share amounted to 56.6% on the December 31, 2016 which is 7.9% higher than the same indicator of the previous year. The increase of the share was mostly caused by the increase of the public debt and by the moderately low growth of nominal GDP (correspondingly 17.1% and 0.7%). During 2016 the external debt of RA increased by USD 489.4 million (AMD 237.6 billion) or by 11.3%, moreover, the surge was recorded mainly in account of Government external debt: USD 461 million or 12%.

2017-2019 Government Debt Management Strategy<sup>1</sup> estimated that the Government debt at the end of 2016 would not exceed the AMD 2,408 billion or the 44.3% of GDP. However, the Government debt over GDP exceeded the planned level and amounted at 51.8% exceeding the planned indicator by 7.5%. The main contributing factors were the lower level of the actual GDP against planned one, as well as the increment of GS allocations in order to smooth the state budget cash flows and to decrease the budget execution risks raised within lower performance of tax inflows starting from the second quarter of 2016.

<sup>&</sup>lt;sup>1</sup> 2017-2019 Government Debt Management Strategy defines the planned Government debt indicators for 2016 and the forecasted Government debt indicators for 2017-2019.

In 2016 the Public budget deficit financing through domestic net funding (without promissory notes) comprised AMD 171.0 billion and in respect to the external net funding totaled AMD 238.4 billion.

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

| (AMD billion)    | 2015   | 2016    | 2016     | 2016   |
|------------------|--------|---------|----------|--------|
|                  | actual | program | adjusted | actual |
|                  |        |         | program  |        |
| Domestic sources | 13.9   | 42.0    | 53.8     | 171.0  |
| External sources | 302.9  | 141.1   | 183.8    | 238.4  |

The indicators of the public budget deficit financing in expense of the net borrowings (without promissory notes) that were envisaged in 2017-2019 Government Debt Management Strategy and were approved by the 2016 public budget were adjusted during the year.

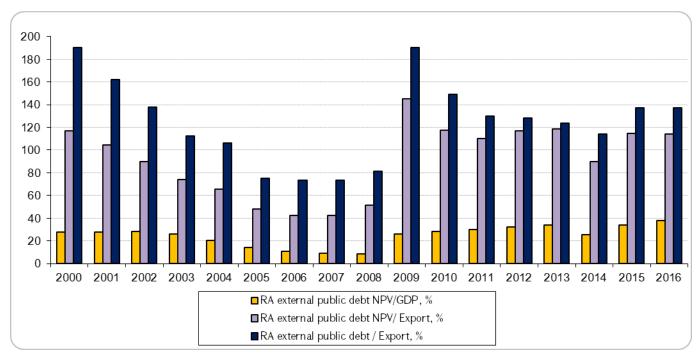
The difference between the adjusted program and the actual performance indicators of the deficit financing from the domestic sources was due to the supplementary allocations of GS in the existence of the excessive demand for GS in the domestic debt market during the year. The supplementary allocations of GS were executed in order to smooth financial flows and to manage the risks that followed lower performance of state budget's revenues and high performance of expenditures.

The deviation between the adjusted program and the actual performance indicators of the deficit in expanse of external sources was due to the:

- Disbursements of 5 loan programs, that were not envisaged in the adjusted program and totaled AMD 1.64 billion (USD 3.43 million) or comprised 0.6% of the total actual disbursements of loan programs.
- Disbursements of 29 loan programs, that were envisaged with lower amounts in the adjusted program,
- Deviations of the 2016 planned exchange rate and the actual exchange rate formed during the disbursements processes of the project loans. Thus, during the 2016 the planned exchange rate was 473.4 Armenian drams per one U.S. dollar, however, the average exchange rate for 2016 was 480.49 Armenian drams per one U.S. dollar.

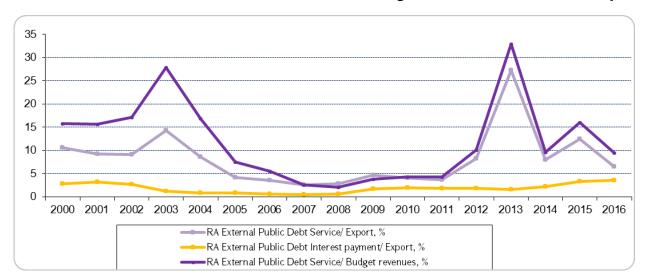
The indicators, characterizing the burden of 2016 RA external public debt, are depicted below.

Chart 2. The indicators characterizing RA external public debt



In comparison to the previous year the external public debt NPV over GDP ratio has increased by 3.7 percentage points, meanwhile the external public debt NPV over exports and the external public debt over exports ratios decreased correspondingly by 0.5 and 0.2 percentage points. These changes can be explained with the following: the external public debt denominated in US dollar increased by 11.3%, and nominal GDP increased only by 0.7%, as well as the export increased by 11.5%.

Chart 3. The indicators characterizing the service of RA external public debt



The indicators of RA external public debt service (redemption and interest payment) over the export and RA external public debt service over the budget revenues decreased in comparison to the previous year, correspondingly 5.9 and 6.6 percentage points, meanwhile the RA external public debt interest payments over export indicator increased by 0.3 percentage points. The changes in above mentioned indicators are explained by the following: RA external debt redemptions decreased by 63.6% in comparison to the previous year, and RA external debt interest payments increased by 21%, as well as the export increased and the budget revenues denominated in USD decreased by 1.6%.

#### **RA Government Debt Service**

In 2016 the Government of Armenia completely and timely fulfilled its responsibilities on interest payments.

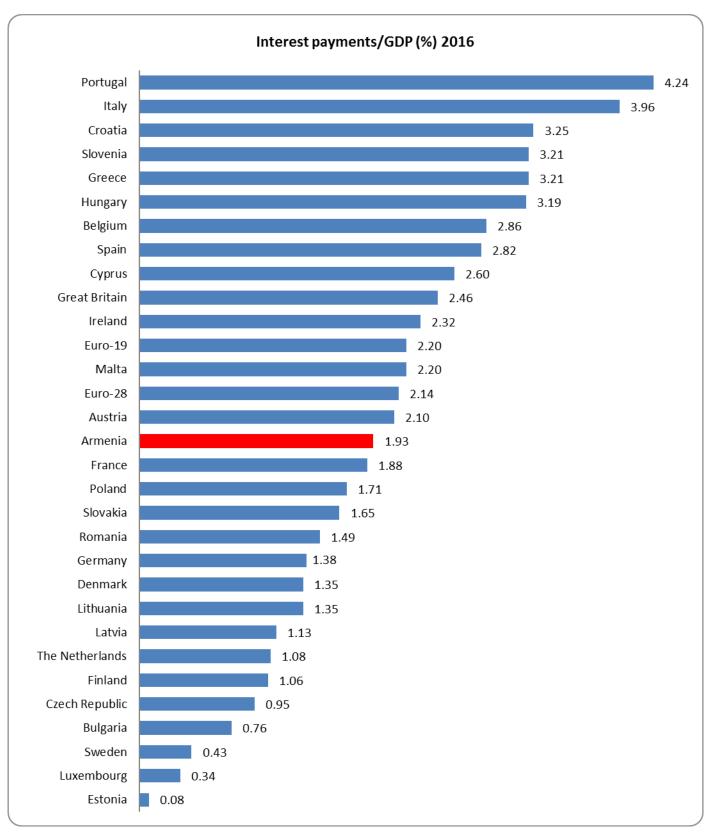
Table 3. RA Government Debt Interest Payments

| (AMD billion)     | 2015   | 2016    | 2016     | 2016   |
|-------------------|--------|---------|----------|--------|
|                   | actual | program | adjusted | actual |
|                   |        |         | program  |        |
| Interest payments | 74.08  | 100.62  | 98.70    | 98.27  |
| of which          |        |         |          |        |
| Domestic debt     | 32.1   | 38.20   | 42.20    | 42.03  |
| External debt     | 41.90  | 62.42   | 56.50    | 56.24  |

RA Government interest payments amounted at AMD 98.27 billion in 2016, which are AMD 24.2 billion or 32.7% more than the previous year. As a result, the share of service expenses in the state budget expenditures has increased by 1.5 percentage points and amounted at 6.8% in 2016, and the share of service expenses in GDP increased by 0.47 percentage points amounting at 1.93%. Service expenses increased for all debt instruments, but there were not recorded any significant changes in the structure of service expenses.

When comparing the share of RA Government debt service expenses in GDP within European Union countries, the interests over GDP ratio in Armenia is in the medium level.

Chart 4. Interest payments as share of GDP in different countries as of 2016



The increase in public debt service expenses in 2016 is mostly determined by the increase of the Government debt by 18.2%. The increase was due to:

- ✓ In 2016, the shift in the debt structure was driven by the increase in the share of GS which rose by 4.9 percentage points as of the end of 2016 and had higher interest rates compared to the external debt.
- ✓ The change in the applicable exchange rates for the foreign currency payments (particularly, the USD exchange rate increased from 411.21 to 473.4, namely 15.1%)

In addition, the weighted average nominal interest rate increased by 0.4 percentage points and amounted at 4.9% at the end of 2016.

The RA Government external debt interest rate payment program implied by the 2018-2020 RA Government Debt Management Strategy was adjusted during the year and was decreased by AMD 5.92 billion. This was according to the following factors:

- The difference between 6 month USD LIBOR, 6 month EURIBOR forecasts and the actual measures in 2016. Furthermore, the USD LIBOR was assumed to be 1.7%, however the actual average interest rate was 1.1% in 2016. In the case of EURIBOR the forecast indicator was 0.5%, and the actual average indicator was negative 0.2%.
- The unequal distribution of the external loans by months and their concentration on the fourth quarter of the year (December absorbed the 57.1% of all inflows of the year).
- The planned disbursements of some external loan programs were not fully received.
- The difference between the forecasted exchange rate of USD and SDR and the formulated actual exchange rate.

The domestic debt interest payments program envisaged by the 2017-2019 Government Debt Management Strategy was also adjusted increasing by AMD 4.0 billion. The aim was to secure those GS interest payments that were issued and refinanced for the state budget cash flow purposes during the second half of the year. As a result, not only the program of the state budget deficit financing (without promissory notes) via domestic sources was increased, but also the actual performance considerably exceeded the adjusted indicator for the year. Moreover, the historical low levels of LIBOR and EURIBOR rates restrained the service expenses of the loans borrowed almost in marketable terms.

## **Government Treasury Securities**

The state budget deficit was planned to be financed by AMD 42 billion through government treasury securities in 2016. For that purpose, it was planned to allocate AMD 136.0 billion with the GS and redeem AMD 81.2 billion, and continue the policy of monthly repurchases.

However, starting from the second quarter of the year, new risks came up concerning to the state budget performance as a consequence of the under fulfilment of tax revenue program. As a result, additional GS were allocated within the favorable domestic debt market framework:

- 1. To smooth the cash flows of the state budget.
- 2. To create a "fiscal buffer"; which amounted at AMD 24 billion. The whole amount was deposited in CBA and was redeemed on 30th of December.
- 3. To support the monetary policy within the framework of monetary and debt management policies coordination. AMD 36 billion T-bills were issued and deposited in CBA that envisaged to be matured during 2017.

Compared to the planned indicator, the state budget deficit financing in expense of GS was actually financed more by AMD 129.0 billion.

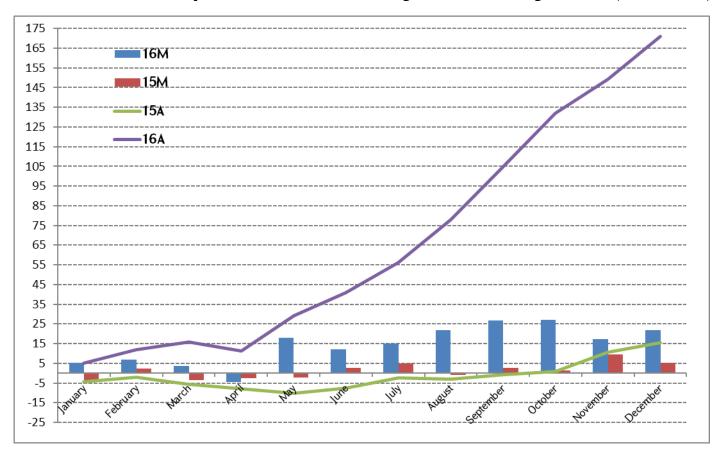
During the year the monthly and accumulative indicators of the deficit financing through GS is depicted in the Table 4.

Table 4. Monthly and accumulative data of the budget deficit financing through GS (AMD million)

|           | Monthly |         |          | ulative<br>asing) |
|-----------|---------|---------|----------|-------------------|
|           | 2015    | 2016    | 2015     | 2016              |
| January   | (4,450) | 5,183   | (4,450)  | 5,183             |
| February  | 2,411   | 6,815   | (2,039)  | 11,998            |
| March     | (3,544) | 3,688   | (5,583)  | 15,686            |
| April     | (2,407) | (4,531) | (7,990)  | 11,155            |
| May       | (2,191) | 17,911  | (10,181) | 29,066            |
| June      | 2,721   | 11,967  | (7,460)  | 41,033            |
| July      | 5,044   | 15,093  | (2,416)  | 56,126            |
| August    | (774)   | 21,861  | (3,190)  | 77,987            |
| September | 2,541   | 26,809  | (649)    | 104,796           |

| October  | 1,487 | 27,108 | 838    | 131,904 |
|----------|-------|--------|--------|---------|
| November | 9,630 | 17,220 | 10,468 | 149,124 |
| December | 5,097 | 21,882 | 15,565 | 171,006 |

Chart 5. Monthly and accumulative financing of RA State budget deficit (AMD billion)



The accumulative financing of RA 2016 state budget deficit, being positive at the beginning of the year, had stably increased recording positive indices throughout the year.

As of December 31, 2016 the volume of outstanding GS amounted at AMD 508.33 billion, which was more by AMD 187.6 billion or by 58.5% in comparison to the same indicator of the previous year. The structure of the GS was as follows:

Table 5. The structure of the outstanding GS

|          | 2015          | 2016    |               |         |
|----------|---------------|---------|---------------|---------|
|          | (billion AMD) | (Share) | (billion AMD) | (Share) |
| T-bills  | 21.50         | 6.7%    | 78.84         | 15.5%   |
| MTCN     | 153.89        | 48.0%   | 212.69        | 41.8%   |
| LTCB     | 144.35        | 45.0%   | 214.65        | 42.2%   |
| SCB      | 1.03          | 0.3%    | 2.15          | 0.5%    |
| Total GS | 320.77        | 100%    | 508.33        | 100%    |

As of December 31, 2016 the structure of GS by days to maturity was as follows:

Table 6. The structure of GS by days to maturity as of December 31, 2016

|                  | Program | Actual |
|------------------|---------|--------|
| Up to 1 year     | 15.0%   | 22.9%  |
| 1-5 years        | 55.0%   | 44.0%  |
| 5 and more years | 30.0%   | 33.1%  |

The table 6 shows that the GS actual structure according to the days to maturity deviated from the programed structure. Short-term and long-term GS increased their share in the structure; meanwhile, the medium-term GS decreased their share.

The appendix 2 includes information on outstanding GS.

The weighted average maturity of GS amounted at 2208 days as of December 30, 2016 against 2065 days as of December 30, 2015 and the weighted average yield was 13.15% against 13.99% at the end of 2015. As a result, the weighted average maturity was managed to be prolonged by 143 days. The weighted average yield of GS decreased by 0.84 percentage points, which was mainly caused by the decline of the GS primary allocations' weighted average yield by 3.5 percentage points in 2016 compared to the previous year (it decreased from 14.61% to 11.07%). In addition, the decrease in the average yield of the primary allocations was due to the gradually reduction of the refinancing rate by the CBA, and due to the existence of excessive liquidity in the market.

Chart 6. Dynamics of GS interest rates and maturity in 2016

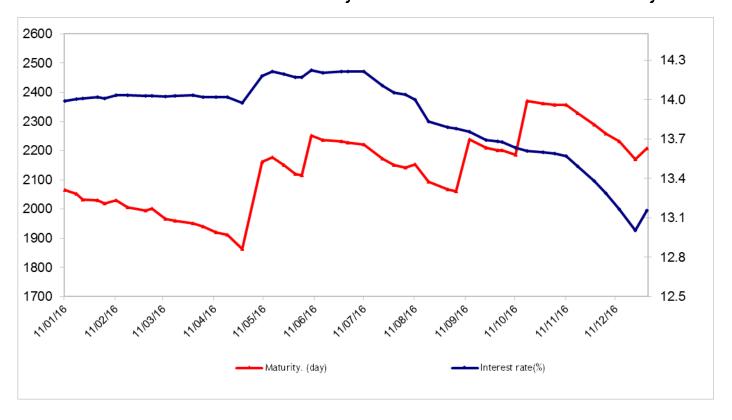
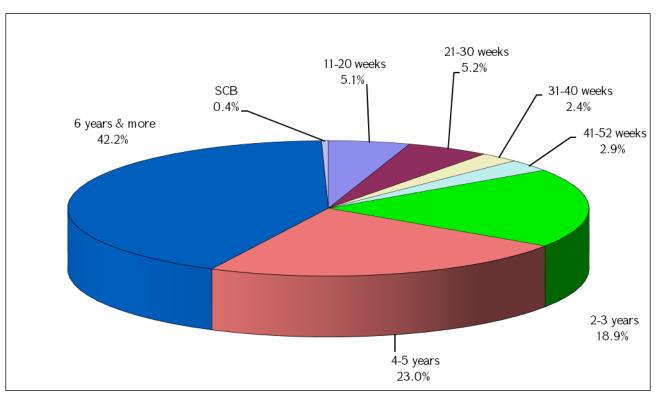


Chart 7. The structure of GS by issuing maturity as of December 31, 2016



The volume of SCB (allocated through the TD system of MoF of RA and outstanding as of December 31, 2016) increased by 107.7% amounting at AMD 2,145.3 million. The detailed information on the GS retail market transactions is listed in Appendix 3.

Along with the increase of outstanding GS, the redemption and service costs increase as well.

Table 7. The distribution of GS redemption and interest costs during the year (AMD million)

|           | Rede    | mption  | Intere | st costs |
|-----------|---------|---------|--------|----------|
|           | 2015    | 2016    | 2015   | 2016     |
| January   | 4,499   | 2,425   | 249    | 102      |
| February  | 13,583  | 3,003   | 6,059  | 7,447    |
| March     | 16,121  | 5,736   | 655    | 331      |
| April     | 20,122  | 35,909  | 8,056  | 9,645    |
| May       | 8,288   | 4,314   | 340    | 243      |
| June      | 3,524   | 5,712   | 176    | 10       |
| July      | 3,471   | 3,281   | 119    | 231      |
| August    | 9,021   | 2,701   | 6,925  | 7,210    |
| September | 4,422   | 11,372  | 271    | 245      |
| October   | 17,259  | 13,749  | 8,453  | 15,817   |
| November  | 6,467   | 15,356  | 375    | 272      |
| December  | 4,767   | 25,775  | 453    | 475      |
| Total     | 111,543 | 129,334 | 32,129 | 42,030   |

The higher payment in April of 2016 was the redemption of benchmark GS. Furthermore, the significant redemption increase in November and December was due to the issued and refinanced T-bills within the coordination framework of the monetary and debt policies. Comparably high volumes of service expenses in February, April, August and October were due to the benchmark bond services.

Following the international best practice of debt management and targeting to increase the liquidity of GSs, as well as taking into consideration the fact that the state budget revenues are

relatively high in April and October, the RA Ministry of Finance continues to focus its main repayments and service payments on two dates of the year; On April 29 and October 29. As a result, mediumterm bond repayments are made in the first half of the year, while long-term bonds are in the second half of the year.

The detailed information on the transactions of the GS is in the Appendix 1.

#### The Secondary Market of the Government Securities

In comparison to the previous year, the number of transactions of the GS in the secondary market increased by 66%, the volume of the transactions increased by 82% which were results of the increase of the outstanding GS. The number of transactions in the over-the-counter increased by 10.36% in the total number of transactions. In 2016 the weighted average yield decreased by 1.92% 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 8. The general description of the government securities transactions implemented in the secondary market

|  | 2015  | 2016    |
|--|-------|---------|
| The number of transactions                             | 1425  | 2366    |
| The total amount of transactions (AMD billion),        | 183.3 | 333.6   |
| of which   |       |         |
| Interbank market                                       | 168.6 | 272.3   |
| NASDAQ-OMX Armenia                                     | 13.7  | 54.3    |
| CBA transactions                                       | 1.0   | 7.0     |
| Secondary market indicators                            |       |         |
| Weighted average interest rate of all transactions (%) | 14.46 | 12.54   |
| Weighted average time to maturity (days)               | 2873  | 3609    |
| Weighted daily average amount (AMD million)            | 776.7 | 1,329.2 |
| Daily average number of transactions                   | 6     | 9       |

## **Government Foreign Exchange Securities**

According to the 2016-2018 RA Government debt management strategy that was approved by the RA government, decree N 755 on 8th of July 2015 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 economy. As there were not any essential risks concerning the fiscal policy implementation during 2016, and the existing risks were managed via the existing domestic and external debt instruments, the RA government did not undertake new issuance of Eurobonds.

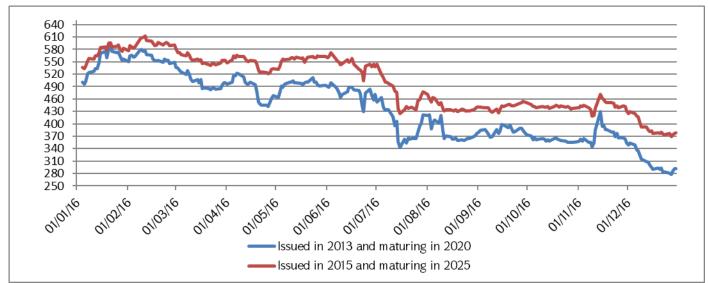
As of December 31, 2016 the volume of the outstanding foreign currency GS didn't change and amounted at USD 1,000.07 million, of which

- 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, 2016 the 9.6% (AMD 95.6 million) of foreign currency bonds were owned by residents. This indicator almost did not change in comparison to the previous year (it decreased only by 0.2%).

The price spread of 2013 and 2015 Eurobonds issued by RA Government and outstanding during 2016 is computed with respect to the same maturity US benchmark notes.

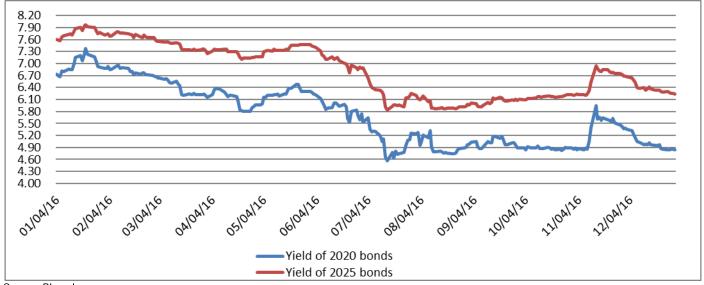
Chart 8. The price spread of RA Government Eurobonds towards USA benchmark securities during 2016 (basis points) 640 610 580 550 520



Source: Bloomberg

The quotation dynamics for the reporting year is depicted in the Chart 9.

Chart 9. The quotation dynamic of Eurobonds issued by RA Government in 2016 (%)

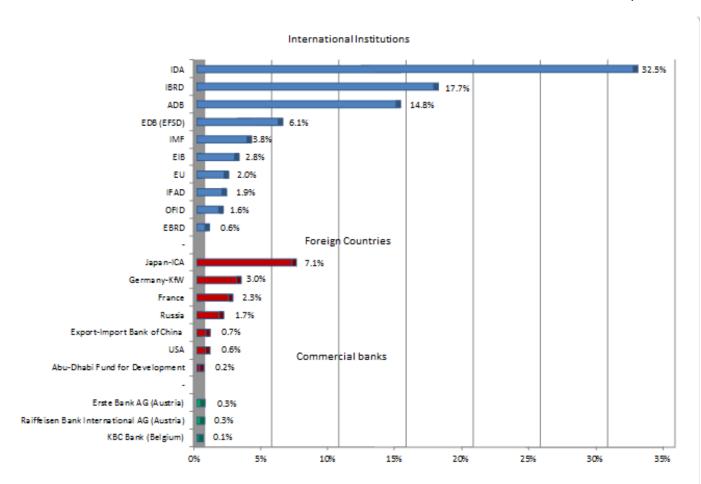


Source: Bloomberg

### RA Government Loans and Borrowings

During 2016 ten new loan agreements were signed (more detailed information is available on the official website of the RA Ministry of Finance in the "Public Debt" sub-section). Compared to the previous year, the volume of the government loans and borrowings increased by 15.1% or by USD 3,380 million.

Chart 10. The structure of RA Government Loans and Borrowings by Donors as of December 31, 2016

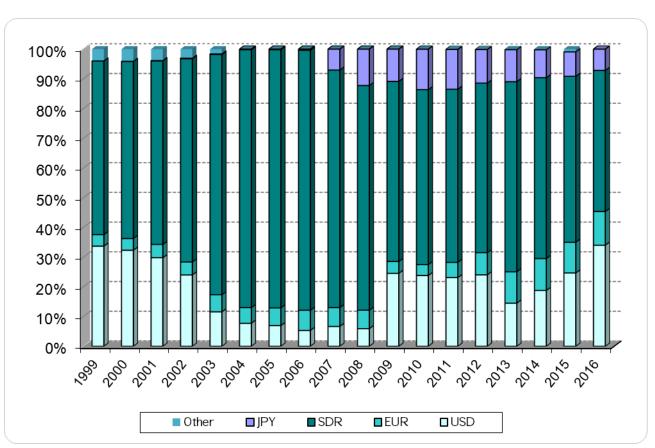


The share of the international financial institutions in the structure of the RA government loans and borrowings by donors has decreased by 1%. Particularly, the share of the International Development Association (IDA) has decreased by 6.3% and the share of the International Monetary Fund (IMF) has diminished by 1%; both declines are mostly explained by decrease of the exchange rate. At the same time, some of the international institutions have recorded increase of their shares. Hereby, the shares of the Eurasian Development Bank (EDB), European Bank for Reconstruction and

Development (EBRD), Asian Development Bank (ADB) and European Investment Bank (EIB) have increased correspondingly by 2.7%, 1.9%, 1.6% and 0.6%.

The share of the foreign countries has increased by 1.2%. The latter was due to the transactions of the loans from France and Russian Federation; their shares increased by 1.6% and 1.4%, respectively. Due to the repayments during the year, the shares of Japan and Germany decreased by 1.1% and 0.6%, accordingly.

Chart 11. The currency structure of RA Government Loans and Borrowings for 1999-2016<sup>2</sup>



The increase of the USD and EUR shares in the debt currency structure by 9.0% and 0.9% correspondingly is explained by the fact that in 2016 the disbursements were mainly fulfilled with the loans that had been provided with above mentioned currencies. At the same time, the share of loans provided by SDR and Japanese Yen decreased by 8.8% and 1.1%, respectively.

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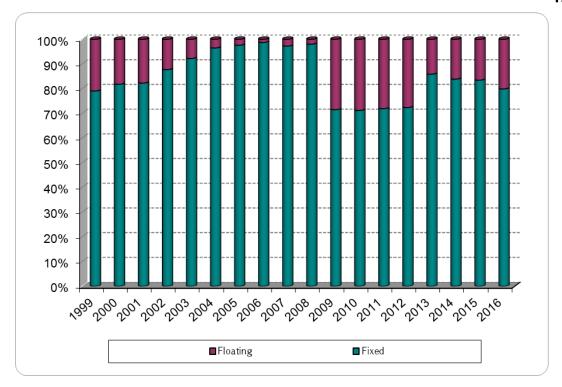
Exchange rates as of 31.12.2015: 1 SDR = 1.386 USD, 1 EUR = 1.093 USD, 1 JPY = 0.0083 USD Exchange rates as of 31.12.2016: 1 SDR = 1.344 USD, 1 EUR = 1.058 USD, 1 JPY = 0.0086 USD

Chart 12. Dynamics of the average monthly exchange rates of SDR, GBP, EUR and JPY against USD



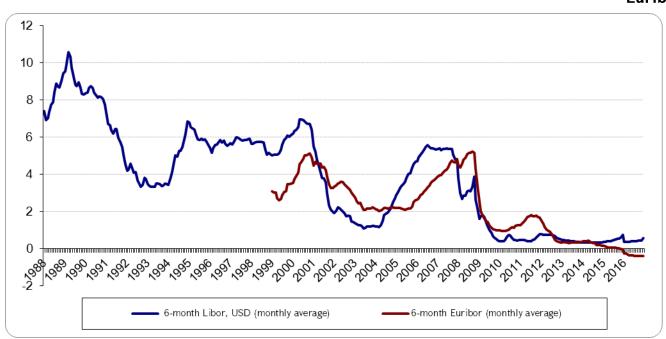
In 2016, the structure of the loan disbursements by the RA government was as follows: 35.1% were with floating interest rate and 64.9% were with fixed interest rate. During the 2016, the disbursement of the floating interest rate loans increased by 18.9% against the previous year. This surge was due to the increase of the loans with commercial and close to the commercial terms lent by the external creditors during recent years (such kind of loans are being mainly provided with floating interest rate), as well as due to the increase of loan disbursements absolute volume by 39.3%. In 2016, the share of the floating interest rate loans in the structure of the RA government loans and borrowings amounted to 20.1%, increasing by 3.6% against the previous year.

Chart 13. The structure of RA Government Loans and Borrowings by interest rates for 1999-2016



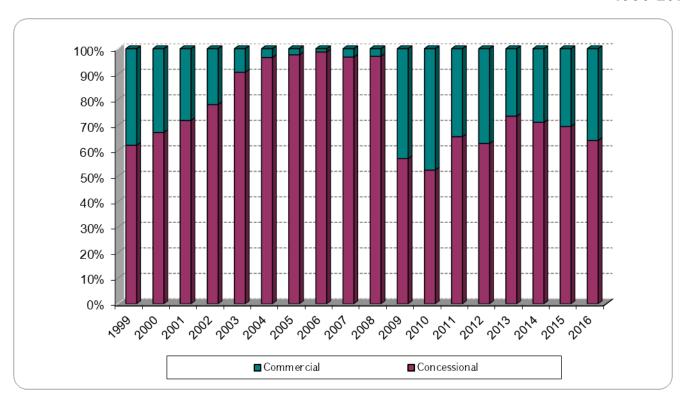
The calculation of the floating interest rate loans is based on the Libor and Euribor interest rates, the behavior of which depends on the current situation in the international financial market and it is extremely volatile (see chart 14).

Chart 14. Dynamics of the average monthly interest-rates for 6-months USD Libor and Euribor



As of December 31, 2016 the share of commercial loans increased in comparison to the previous year; from 30.5% in 2015 to 36% in 2016 (see chart 15).

Chart 15. The concessionality dynamics of RA Government Loans and Borrowings for 1999-2016



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, 2016 the external debt of the Central Bank of RA amounted at USD 504.7 million (AMD 244.2 billion) or 4.8% of GDP. Compared to the previous year, the external debt of the Central Bank denominated in USD increased by 6%, and it increased against GDP by 0.2 percentage points.

The share of RA government guarantees in the structure of RA Central Bank external debt decreased in comparison to the previous year, comprising 29.6% in 2016 against 29.0% in the previous year. The International Monetary Fund Loans have the largest share in the debt structure, though the share of those loans decreased by 0.9% in comparison to the previous year.

Table 9. The Structure of the External Debt of the Central Bank of RA

|   | As of 31.1     | 2.2015 | As of 31.1     | 2.2016 |
|---|----------------|--------|----------------|--------|
|   | USD<br>million | %      | USD<br>million | %      |
| External Debt of the Central Bank of RA               | 476.3          | 100.0  | 504.7          | 100.0  |
| of which  |                |        |                |        |
| by Creditors  |                |        |                |        |
| International organizations, of which                 | 390.6          | 82.0   | 404.4          | 80.1   |
| International Monetary Fund                           | 273.3          | 57.4   | 285.2          | 56.5   |
| International Bank for Reconstruction and Development | 48.0           | 10.1   | 46.5           | 9.2    |
| Asian Development Bank                                | 7.0            | 1.5    | 10.4           | 2.0    |
| European Investment Bank                              | 62.3           | 13.1   | 62.3           | 12.4   |
| Foreign States  | <i>85.7</i>    | 18.0   | 100.3          | 19.9   |
| Germany (KfW)   | 85.7           | 18.0   | 100.3          | 19.9   |
| by type of interest rate                              |                |        |                |        |
| with fixed interest rate                              | 206.7          | 43.4   | 219.0          | 43.4   |
| with floating interest rate                           | 269.6          | 56.6   | 285.7          | 56.6   |
| by currency   |                |        |                |        |
| SDR   | 280.6          | 58.9   | 295.3          | 58.5   |
| USD   | 110.0          | 23.1   | 109.0          | 21.6   |
| EUR   | 85.7           | 18.0   | 100.4          | 19.9   |

During the 2016, the Central Bank of RA borrowed USD 74.4 million loans from the external sources. Meanwhile, the external debt payments were 40.2% of which interest payments comprised USD 6.8 million and principal payments amounted at USD 33.4 million.

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<sup>&</sup>lt;sup>3</sup> According to the Article 23, paragraph 8 of the RA Law on "Public Debt" government guarantees are recorded in the RA central bank debt

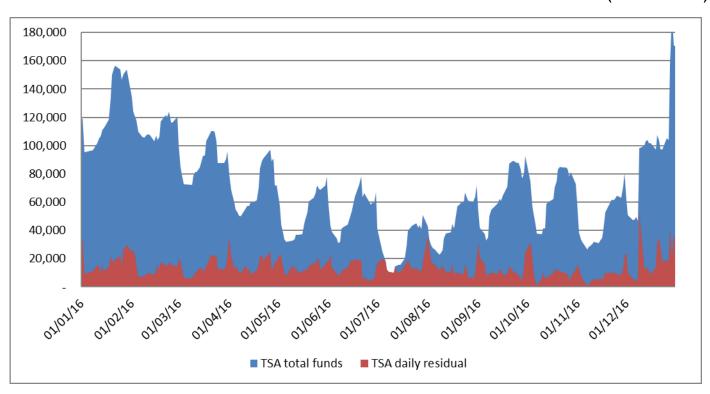
## Cash Flow Management

As of December 31, 2016 the total funds of the Treasury Single Account (TSA) (TSA and term deposits) amounted at AMD 170.5 billion against AMD 119.5 billion as of December 31, 2015. During 2016 the daily average residual of TSA comprised AMD 71.0 billion, of which the daily average residual of term deposits in the Central Bank made up AMD 56.8 billion.

During 2016, the cash flow management was accompanied by several challenges. The implementation of programmed economic growth was accompanied by several risks, and during the year it wasn't succeeded to implement the quarterly approved programs of the government revenue by 100%, except for the first quarter, mostly because of the external signals.

Meanwhile, the RA Ministry of Finance fulfilled additional issuances of the government securities in order to provide the financing of quarterly approved expenditure programs approved by the RA government without any delays and shocks.

Chart 16. Dynamics of the TSA daily residual (without deposits) and total funds in 2016 (AMD million)



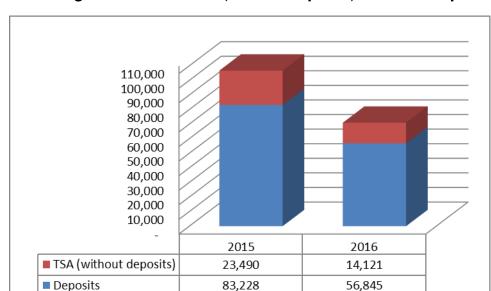


Chart 17. The average residuals of TSA (without deposits) and time deposits (AMD million)

Chart 17 shows that the residual of TSA (without deposits) was diminished in 2016 compared to 2015, which means that TSA total funds were essentially better managed, and thus relatively less amounts were held in TSA, as no interest is being calculated for TSA residual. On the other hand, the outstanding amount of term deposits decreased in 2016 compared to 2015. This could be explained by the fact that in 2015 the main source of deposits was USD 300 million credited to the state budget as a result of transactions implemented with Eurobonds by RA in March, 2015.

Table 10. TSA indicators (AMD billion)

|  | 2015  | 2016  |
|--|-------|-------|
| TSA balance as of December 31                            | 118.7 | 170.5 |
| Daily average residual of the time deposits at the CBA   | 83.2  | 56.8  |
| Income earned from the time deposits invested in the CBA | 9.7   | 4.7   |

In 2015 the weighted average interest rate of term deposits made up 7.65% against 11.44% in the previous year. Such decline was due to the mitigation of the monetary policy terms by Central Bank of RA during the year, especially due to the decline in refinancing rate. If the refinancing rate was 8.75% at the end of 2015, then it comprised 6.25% at the end of 2016. As the term deposit interest rates are calculated taking into account the yield curve of the government bonds, and the latter is

closely related to the refinancing rate, therefore the term deposits interest rates essentially declined in 2016.

The state budget income from the term deposits diminished to AMD 4.7 billion in 2016 according to the decline in interest rate of term deposits and the funds of TSA.

## Risks Analysis

Main risks concerning to the public debt are considered in this part of the report. The main risks include market (interest rate, exchange rate, liquidity and refinancing) and operational risks.

As in previous years, in 2016, the RA Ministry of Finance also took measures to manage and reduce the risks associated with the government debt management; thus, government debt remained within the controllable scope.

According to the "The Law on Public Debt" as of December 31, the government debt of the reporting year must not exceed 60% of GDP of the previous year. As well, if the government debt of the reporting year exceeds 50% of GDP of the previous year as of December 31, the state budget deficit for the next year cannot exceed the 3% of the average GDPs of the previous three years. At the end of 2016, the government debt over GDP of the previous year ratio exceeded 50% and amounted at 52.2%, thus the 2017 budget deficit was planned considering the above mentioned fiscal constraint. The deterioration of the debt to previous year GDP ratio was mostly caused by the higher surge of the nominal debt level over the low increase of GDP. From 2009-2016 the average growth of government nominal debt was 24.9%, meanwhile the average growth of GDP was 3.9%.

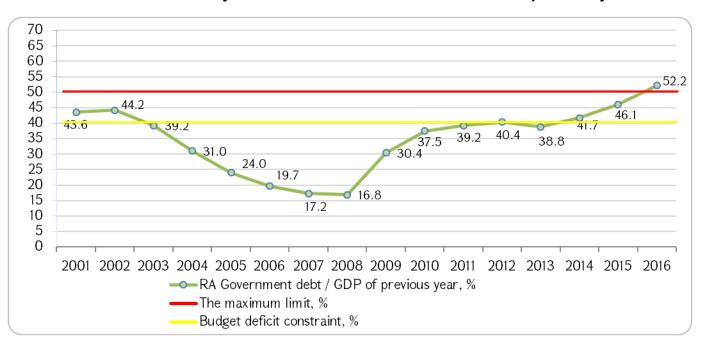


Chart 18. Dynamics of RA Government debt/GDP in previous year indicator

According to the RA government Decree N755-N of July 8, 2015, the debt strategy of 2016-2018 defined "Average Time to Maturity (ATM)" and "Deficit Financing by Domestic Net Borrowings (without promissory notes)" as benchmark indicators.

Table 11. Government debt management benchmark indicators in 2016

|  | Benchmark | Actual |
|--|-----------|--------|
| Average time to maturity (year)  | 8 – 11    | 9.3    |
| Deficit financing by domestic net borrowings (without promissory notes), (%) | ≥ 25      | 41.8   |

In 2016 the government debt management was able to maintain the actual indicators in comparison to the benchmarks of "Average Time to Maturity (ATM)" and "Deficit Financing by Domestic Net Borrowings (without promissory notes)".

The RA government approved the "2017-2019 Medium Term Expenditure Framework" (MTEF) by the Decree N 723-N on July 7, 2016, which also involved 2017-2019 Government debt management Strategy document.

The number of benchmark indicators have been expanded in the 2017-2019 RA government debt management strategy, and for 2017-2019 benchmark indicators were defined for all market risks:

Table 12. Government debt management benchmark indicators in 2017-2019

|  | Benchmark    | 2016<br>Actual |
|--|--------------|----------------|
| Refinancing risk                                   |              |                |
| Average time to maturity                           | 8-11 years   | 9.3            |
| The share of up to 1 year maturity bonds in the    | At most 20%  | 22.9           |
| total GS (at the end of the year)                  | At most 20%  |                |
| Interest rate risk                                 |              |                |
| The share of the fixed rate debt in the total debt | At least 80% | 87.5           |
| Exchange rate risk                                 |              |                |
| The share of domestic debt in the total debt       | At least 20% | 20.9           |

Table 12 shows that even the benchmark indicators were defined for 2017-2019 years, however the actual indicators for 2016 were also in the desired range.

## **Interest Rate Risk**

The table 13 shows the RA government debt interest payments/GDP actual indicators in comparison to the RA state budget approved indicators and RA government debt management 2017-2019 strategy defined indicators.

Table 13. RA Government debt interest payments

|                           | 2015   | 2016    | 2016   |
|---------------------------|--------|---------|--------|
|                           | actual | program | actual |
| Interest payments/GDP (%) | 1.47   | 1.85    | 1.93   |

The RA government strategy 2017-2019 programmed interest payments and actual interest payments increased over GDP, as the interest payments growth rate exceeded the nominal GDP growth rate in 2016. The growth of the actual interest payments increased by 32.7% compared to the previous year, which was mainly due to the increase of the debt volume. Moreover, the interest payments increased for all debt tools.

Table 14. GS primary allocation interest rates

|  | 2015   | 2016   |
|--|--------|--------|
|  | actual | actual |
| Weighted average interest rate of GS allocated | 14.61  | 11 07  |
| in the current year (%)                        | 14.01  | 11.07  |

The weighted average interest rates of the government securities allocated during 2016 decreased significantly compared to the previous year. This was contributed due to essentially softening of the monetary policy in 2016, including the decrease of the refinancing rate, as well as due to the high demand of the government securities.

The restriction of the increase of the floating interest rate debt volumes is important from the point of view of the interest rate risk management.

Table 15. The shares of RA Government floating and fixed debt

|               | 2015   | 2016    | 2016   |
|---------------|--------|---------|--------|
| Interest rate | actual | program | actual |
| Fixed         | 89.5   | 85.5    | 87.5   |
| Floating      | 10.5   | 14.5    | 12.5   |

The Government defined in the 2017-2019 RA Government Debt Management Strategy the target shares of the floating and fixed interest rates of the existing government debt for the end of 2016 as 14.5% and 85.5% respectively. According to the management of the government debt it was succeeded to increase the share of the fixed interest rate debt, which was also contributed by the increase of the share of the domestic borrowings (government securities with fixed interest rates) in the structure of the RA budget deficit financing sources.

Table 16. RA Government debt's interest rate risk indicators in 2016

|  | 2016    | 2016   |
|--|---------|--------|
|  | program | actual |
| Average time to refixing of the RA Government debt (year)      | 7.4     | 7.8    |
| Average time to refixing of the external debt (year)           | 7.7     | 8.2    |
| Average time to refixing of the domestic debt (year)           | 6.1     | 6.0    |
| The share of the RA Government debt refixing during a year (%) | 18.9    | 18.5   |
| The share of the external debt refixing during a year (%)      | 19.8    | 17.8   |
| The share of the domestic debt refixing during a year (%)      | 14.8    | 21.1   |

Actually, the interest rate indicators defined by the 2017-2019 RA government debt management strategy were improved; the actual Average time to refixing of the RA government debt increased and at the meantime the actual share of the RA government debt refixing during a year decreased in comparison to their programmed indicators.

# 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 public debt payments should be converted based on the exchange rates that are applied for the calculation of the current RA Government public budget law indicators (if it is not in force, then of the draft) and are introduced in the RA government budget massage.

The agreement allowed the Government to fix the exchange rates of the external debt payments making them more manageable.

The monthly average exchange rates of US dollars and euros in 2016 are depicted in chart 19.

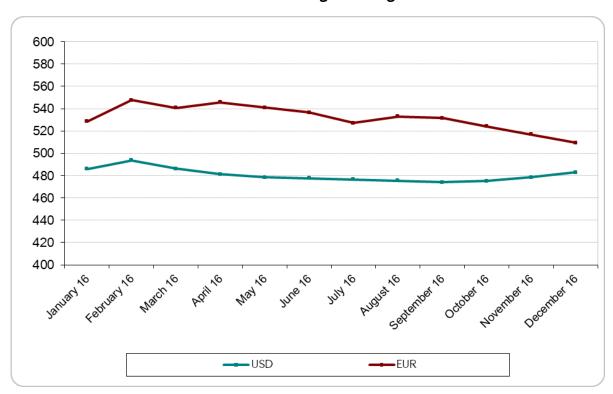


Chart 19. AMD exchange rate against USD and EUR in 2016

During the 2016 USD/AMD exchange rate did not fluctuate much. 80.7% 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 17. RA Government external debt

|   | 2015    | 2016    |
|---|---------|---------|
| RA Government external debt (AMD billion) | 1,857.5 | 2,081.4 |
| RA Government external debt (USD million) | 3,839.9 | 4,300.9 |
| USD exchange rate at the end of the year  | 483.75  | 483.94  |

As of December 31, 2016 the RA government debt increased both in USD denomination and in AMD denomination.

Table 18. RA Government debt currency structure

|                                      | 2015   | 2016   |
|--------------------------------------|--------|--------|
| Interest rate                        | actual | actual |
| Currency structure                   | 100.0  | 100.0  |
| of which                             |        |        |
| Debt denominated in AMD              | 14.4   | 19.3   |
| Debt denominated in foreign currency | 85.6   | 80.7   |
| of which                             |        |        |
| USD                                  | 37.5   | 39.5   |
| SDR                                  | 35.7   | 29.3   |
| EUR                                  | 6.6    | 7.0    |
| JPY                                  | 5.2    | 4.4    |
| AED                                  | 0.1    | 0.1    |
| CNY                                  | 0.4    | 0.4    |

Compared to the previous year the share of attracted AMD debt significantly increased, which positively affected on the exchange rate risk. Considering the favorable conditions in the RA financial market, and the risks of the state budget execution in 2016, the RA government managed to increase the national currency debt share by 5 basis points. Significant change in the structure of the debt denominated in foreign currency was recorded with the share of SDR denominated debt, which decreased by 6.4%. This was due to the reductions of SDR denominated loans, and increase of government securities in AMD and loans denominated in USD. The latter increased by 2 basis points during 2016.

## 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.

April and December could be considered as "heavy" months for the RA government debt payments in 2016. The payments on 29th of April comprised 86% of the total payments in April. This concentration emanates from the domestic debt management policy: according to the best international practice, in order to increase the liquidity of government bonds, redemptions are concentrated on the specific days. Meanwhile, the 58% of redemptions on 29th of April, 2016 was refinanced by the funds from the allocation of new securities at the same day.

The payments on 30th of December made up 76% of the payments in December. As there were risks concerning to the state budget execution, and there was a favorable situation in the domestic debt market, the Ministry of Finance of RA allocated additional securities and created a fiscal buffer during the year, which was deposited in the Central bank of Armenia and redeemed on 30th of December.

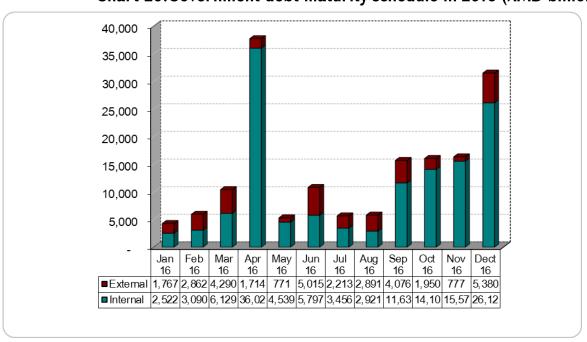


Chart 20. Government debt maturity schedule in 2016 (AMD billion)

Table 19. RA Government debt structure by weighted average time to maturity

|   | 2015   | 2016   |
|---|--------|--------|
| Interest rate   | actual | actual |
| The structure by weighted average time to maturity, % | 100.0  | 100.0  |
| of which  |        |        |
| Short-term (up to 1 year)                             | 2.5    | 4.4    |
| Medium-term (1-5 years)                               | 21.8   | 21.6   |
| Long-term (more than 5 years)                         | 75.7   | 74.0   |

The table 19 shows that the short-term debt share has increased in the RA government debt structure compared to the previous year. In the framework of monetary and fiscal policy coordination, in order to support the monetary policy AMD 36 billion of short-term securities were issued (which are to mature in 2017). If we exclude this amount, the share of short term debt would decrease from 4.4% to 3.0%, which means that the refinancing risk did not increase significantly in 2016. Moreover, the volume of the domestic debt increased in 2016, and the medium term and long term components of the domestic debt had higher growth rate compared to the short term debt.

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

Table 20. The Indicators of Outstanding GS

|  | 2015  | 2016  |
|--|-------|-------|
| Interest Rate (%)  | 13.99 | 13.15 |
| Average time to maturity (year)                                      | 5.7   | 6.0   |
| The share of GS maturing in the forthcoming year in the total GS (%) | 17.1  | 22.9  |
| Domestic debt duration (year)  | 3.0   | 3.4   |

Almost all the indicators of the outstanding GS improved in comparison to the previous year. The only exception is the share of GS maturing in the forthcoming year in the total GS, which was due to the short-term GS issuance within the framework of monetary policy support.

At the end of 2016, the government external debt maturity is spread until 2054 and domestic debt is spread until 2036.

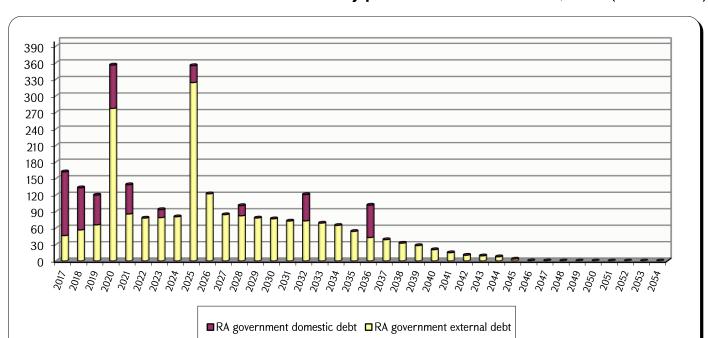


Chart 21. Government debt maturity profile as of December 31, 2016 (AMD billion)

68.0% of the government debt redemption in 2020 consists of the redemption of 7-year maturity Eurobonds issued in 2013, and 68.2% 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 2017-2019 RA Government Strategy Program:

Table 21. RA Government debt refinancing risk indicators in 2016

|   | 2016    | 2016   |
|---|---------|--------|
|   | program | actual |
| RA Government debt average time to maturity (year)                | 9.3     | 9.3    |
| External debt ATM (year)  | 10.0    | 10.1   |
| Domestic debt ATM (year)  | 6.1     | 6.0    |
| RA Government debt maturing within one year (%)                   | 4.6     | 6.2    |
| Share of RA Government external debt maturing within one year (%) | 2.3     | 2.2    |
| Share of RA Government domestic debt maturing within one year (%) | 14.8    | 21.1   |

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 2017-2019 RA Government Debt Management Strategy. However, the "RA Government debt maturing within one year" indicator increased due to the surge of the share of the RA government short term domestic debt.

All above mentioned indicators evidence factually that the refinancing risk was within the manageable scope in 2016.

# Operational risk

Ministry of Finance of RA makes efforts to reveal, assess, manage and reduce RA government debt management operational risks. Information on the implemented activities will be periodically presented in the debt reports.

### Appendix 1. Government Treasury Securities Transactions in 2016

In 2016 Government issued new up to 1 year T-bills, 3 and 5-years maturity MTCN, 20-years maturity LTCB, 140 billion, 50 billion, 50 billion and 80 billion, respectively.

Table 1.1. Marketable GS transactions in 2016

|  | T-bills | MTCN  | LTCB  | Total |
|--|---------|-------|-------|-------|
| Number of auctions                           | 68      | 23    | 10    | 101   |
| Issue amount (AMD billion)                   | 140.0   | 102.5 | 80.5  | 323   |
| Allocated amount (AMD billion)               | 136.3   | 100.5 | 80.5  | 317   |
| The weight in the allocation amount          | 43.0%   | 31.7% | 25.3% | 100%  |
| The average amount of an issue (AMD billion) | 2.06    | 4.46  | 8.05  | 3.20  |

- The demand for the GS was 770 billion AMD and it exceeded the issued amount by 2.38 times,
- The weighted average maturity of the allocations amounted to 2076 days,
- The weighted average yield of the allocations comprised 11.07%,
- > The maximum allocation maturity was 20 years,
- The minimum allocation maturity was 5 weeks.

In 2016 the MoF of RA carried out monthly buybacks of GS with the total amount of AMD 19.27 billion.

During the reporting period 44 SCB were issued amounting AMD 3.16 billion, of which AMD 2.17 billion was allocated.

Table 1.2. The data of GS auctions took place in 2016 (AMD million)

| Issue date      | GS        | lssue<br>volume | Demand | Allocation<br>amount | Minimum yield | Cut of yield | The weighted<br>average yield | Maturity day |
|-----------------|-----------|-----------------|--------|----------------------|---------------|--------------|-------------------------------|--------------|
| 12-JAN-2016     | MTCN60    | 3,000           | 3,568  | 3,000                | 15.2989       | 15.8934      | 15.6211                       | 29-APR-2020  |
| 18-JAN-2016     | T-BILLS52 | 1,000           | 1,918  | 1,000                | 11.7800       | 11.9459      | 11.8716                       | 16-APR-2017  |
| 19-JAN-2016     | MTCN36    | 4,000           | 7,370  | 4,000                | 14.0000       | 14.6300      | 14.3356                       | 29-APR-2018  |
| 25-JAN-2016     | T-BILLS26 | 500             | 1,000  | 500                  | 10.8000       | 10.8000      | 10.8000                       | 25-JUL-2016  |
| Total January   |           | 8,500           | 13,856 | 8,500                |               |              | 14.2914                       |              |
| 1-FEB-2016      | T-BILLS52 | 1,500           | 2,667  | 1,500                | 11.7500       | 11.9303      | 11.8677                       | 30-JAN-2017  |
| 8-FEB-2016      | T-BILLS39 | 500             | 911    | 500                  | 11.2997       | 11.4329      | 11.3394                       | 7-NOV-2016   |
| 11-FEB-2016     | LTCB10    | 3,000           | 3,780  | 3,000                | 16.2000       | 16.4800      | 16.3271                       | 29-OCT-2025  |
| 15-FEB-2016     | T-BILLS26 | 500             | 1,506  | 500                  | 10.6997       | 10.8107      | 10.7631                       | 15-AUG-2016  |
| 16-FEB-2016     | MTCN36    | 4,000           | 7,659  | 4,000                | 14.1900       | 14.5000      | 14.3833                       | 29-APR-2018  |
| 18-FEB-2016     | T-BILLS52 | 1,000           | 3,380  | 1,000                | 11.6000       | 11.7441      | 11.6645                       | 16-FEB-2017  |
| 22-FEB-2016     | T-BILLS13 | 500             | 2,000  | 500                  | 9.7777        | 9.8383       | 9.7950                        | 23-MAY-2016  |
| Total February  |           | 11,000          | 21,903 | 11,000               |               |              | 13.8118                       |              |
| 10-MAR-2016     | MTCN36    | 5,000           | 14,336 | 5,000                | 13.3800       | 14.1900      | 13.8786                       | 29-APR-2018  |
| 14-MAR-2016     | T-BILLS52 | 1,500           | 2,667  | 1,500                | 11.3233       | 11.5900      | 11.4124                       | 13-MAR-2017  |
| 15-MAR-2016     | MTCN60    | 3,000           | 13,920 | 3,000                | 10.3500       | 14.9800      | 14.8582                       | 29-APR-2020  |
| 21-MAR-2016     | T-BILLS26 | 500             | 1,220  | 500                  | 10.3497       | 10.4044      | 10.3876                       | 19-SEP-2016  |
| Total March     |           | 10,000          | 32,144 | 10,000               |               |              | 13.6280                       |              |
| Total I quarter |           | 29,500          | 67,902 | 29,500               |               |              |                               |              |
| 4-APR-2016      | T-BILLS52 | 1,500           | 2,520  | 1,500                | 11.1997       | 11.3000      | 11.2317                       | 3-APR-2017   |
| 11-APR-2016     | T-BILLS39 | 1,500           | 2,879  | 1,500                | 10.5000       | 10.9000      | 10.7874                       | 9-JAN-2017   |
| 12-APR-2016     | MTCN60    | 5,000           | 11,132 | 5,000                | 14.4800       | 14.7600      | 14.6299                       | 29-APR-2020  |
| 19-APR-2016     | MTCN36    | 2,000           | 5,724  | 2,000                | 13.3300       | 13.5490      | 13.4836                       | 29-APR-2018  |
| 25-APR-2016     | T-BILLS13 | 500             | 1,800  | 500                  | 9.5445        | 9.5719       | 9.5566                        | 25-JUL-2016  |
| 28-APR-2016     | T-BILLS39 | 3,000           | 6,998  | 3,000                | 10.3000       | 10.5163      | 10.4724                       | 26-JUL-2017  |
| 29-APR-2016     | MTCN60    | 5,000           | 12,956 | 5,000                | 14.3900       | 14.9470      | 14.7170                       | 29-APR-2021  |
| 29-APR-2016     | MTCN36    | 6,000           | 12,957 | 6,000                | 13.3900       | 14.0900      | 13.8877                       | 29-APR-2019  |
| 29-APR-2016     | LTCB20    | 7,000           | 16,469 | 7,000                | 15.2705       | 16.8800      | 16.5159                       | 29-OCT-2036  |
| 29-APR-2016     | LTCB10    | 5,000           | 7,082  | 5,000                | 15.2495       | 16.4400      | 16.1017                       | 29-OCT-2025  |
| Total April     |           | 36,500          | 80,516 | 36,500               |               |              | 14.3116                       |              |
| 12-MAY-2016     | LTCB10    | 5,000           | 9,108  | 5,000                | 16.0000       | 16.3877      | 16.2718                       | 29-OCT-2025  |

| 16-MAY-2016      | T-BILLS52 | 1,500   | 3,992   | 1,500   | 10.4989 | 10.4989 | 10.4989 | 15-MAY-2017 |
|------------------|-----------|---------|---------|---------|---------|---------|---------|-------------|
| 17-MAY-2016      | MTCN36    | 6,000   | 16,856  | 6,000   | 13.1000 | 13.6400 | 13.5300 | 29-APR-2019 |
| 23-MAY-2016      | T-BILLS39 | 1,500   | 3,071   | 1,500   | 9.6710  | 9.8550  | 9.7572  | 20-FEB-2017 |
| 24-MAY-2016      | MTCN36    | 6,000   | 16,112  | 6,000   | 13.0515 | 13.3400 | 13.2631 | 29-APR-2019 |
| 25-MAY-2016      | MTCN60    | 5,000   | 15,471  | 5,000   | 13.9200 | 14.2400 | 14.0241 | 29-APR-2021 |
| 30-MAY-2016      | T-BILLS26 | 500     | 1,313   | 500     | 9.2700  | 9.3100  | 9.2983  | 28-NOV-2016 |
| Total May        |           | 25,500  | 65,923  | 25,500  |         |         | 13.6185 |             |
| 6-JUN-2016       | T-BILLS52 | 1,500   | 3,088   | 1,500   | 10.1000 | 10.4037 | 10.2930 | 5-JUN-2017  |
| 9-JUN-2016       | LTCB20    | 12,000  | 32,186  | 12,000  | 15.3505 | 16.6800 | 16.4361 | 29-OCT-2036 |
| 13-JUN-2016      | T-BILLS39 | 1,500   | 2,611   | 1,500   | 9.3400  | 9.7937  | 9.6402  | 13-MAR-2017 |
| 21-J-2016        | MTCN60    | 5,000   | 28,207  | 5,000   | 13.0512 | 13.6000 | 13.4777 | 29-APR-2021 |
| 27-JUN-2016      | T-BILLS13 | 500     | 1,901   | 500     | 8.2997  | 8.4537  | 8.3767  | 26-SEP-2016 |
| Total June       |           | 20,500  | 67,993  | 20,500  |         |         | 14.5712 |             |
| Total II quarter |           | 82,500  | 214,431 | 82,500  |         |         |         |             |
| Total I Semi-ann | ual       | 112,000 | 282,333 | 112,000 |         |         |         |             |
| 11-JUL-2016      | T-BILLS52 | 1,000   | 3,288   | 1,000   | 9.5000  | 9.8800  | 9.6726  | 10-JUL-2017 |
| 12-JUL-2016      | MTCN60    | 6,000   | 35,260  | 6,000   | 12.7700 | 12.8500 | 12.8403 | 29-APR-2021 |
| 18-JUL-2016      | T-BILLS39 | 1,000   | 3,528   | 1,000   | 8.9997  | 9.0987  | 9.0712  | 17-APR-2017 |
| 19-JUL-2016      | MTCN36    | 4,000   | 20,057  | 4,000   | 10.9000 | 11.1000 | 11.0161 | 29-APR-2019 |
| 22-JUL-2016      | T-BILLS09 | 3,000   | 9,007   | 3,000   | 7.7400  | 7.9327  | 7.7725  | 23-SEP-2016 |
| 25-JUL-2016      | T-BILLS26 | 1,000   | 3,802   | 1,000   | 7.9800  | 8.2000  | 8.0131  | 23-JAN-2017 |
| 29-JUL-2016      | T-BILLS09 | 3,000   | 5,154   | 3,000   | 7.6279  | 7.8400  | 7.7232  | 30-SEP-2016 |
| Total July       |           | 19,000  | 80,096  | 19,000  |         |         | 10.2290 |             |
| 1-AUG-2016       | T-BILLS52 | 1,500   | 3,342   | 1,500   | 8.6000  | 9.0000  | 8.8950  | 31-JUL-2017 |
| 8-AUG-2016       | T-BILLS39 | 1,500   | 1,415   | 1,415   | 8.2484  | 8.8000  | 8.6617  | 8-MAY-2017  |
| 11-AUG-2016      | LTCB10    | 6,000   | 16,058  | 6,000   | 12.4800 | 12.4800 | 12.4800 | 29-OCT-2025 |
| 12-AUG-2016      | T-BILLS09 | 4,000   | 5,700   | 4,000   | 7.6400  | 7.7490  | 7.6499  | 14-OCT-2016 |
| 15-AUG-2016      | T-BILLS26 | 1,500   | 1,253   | 1,253   | 7.7700  | 8.1000  | 7.9323  | 13-FEB-2017 |
| 16-AUG-2016      | MTCN36    | 6,000   | 5,108   | 4,848   | 9.1111  | 10.8000 | 10.2105 | 29-APR-2019 |
| 19-AUG-2016      | T-BILLS09 | 3,000   | 8,820   | 3,000   | 7.4300  | 7.5800  | 7.5063  | 21-OCT-2016 |
| 26-AUG-2016      | T-BILLS09 | 3,000   | 5,100   | 3,000   | 7.4100  | 7.4800  | 7.4460  | 28-OCT-2016 |
| Total August     |           | 26,500  | 46,795  | 25,015  |         |         | 9.4090  |             |
| 5-SEP-2016       | T-BILLS52 | 1,000   | 1,050   | 1,000   | 8.4900  | 8.9400  | 8.6205  | 4-SEP-2017  |
| 8-SEP-2016       | LTCB20    | 18,000  | 42,245  | 18,000  | 14.0000 | 15.1900 | 14.7237 | 29-OCT-2036 |
| 9-SEP-2016       | T-BILLS08 | 4,000   | 3,700   | 3,700   | 7.2882  | 7.9800  | 7.3756  | 4-NOV-2016  |
| 13-SEP-2016      | T-BILLS39 | 1,000   | 972     | 972     | 8.2500  | 8.6700  | 8.6238  | 13-JUN-2017 |

| 16-SEP-2016       | T-BILLS08 | 4,000  | 1,749   | 1,749  | 7.7400  | 8.3500  | 7.9031  | 11-NOV-2016 |
|-------------------|-----------|--------|---------|--------|---------|---------|---------|-------------|
| 19-SEP-2016       | T-BILLS26 | 1,000  | 2,098   | 1,000  | 7.9000  | 8.8800  | 8.3274  | 20-MAR-2017 |
| 20-SEP-2016       | MTCN60    | 5,000  | 15,082  | 5,000  | 10.9499 | 11.0599 | 10.9923 | 29-APR-2021 |
| 23-SEP-2016       | T-BILLS08 | 4,000  | 4,900   | 4,000  | 7.8400  | 7.9400  | 7.8983  | 18-NOV-2016 |
| 30-SEP-2016       | T-BILLS08 | 4,000  | 7,100   | 4,000  | 7.1900  | 7.5900  | 7.3524  | 15-NOV-2016 |
| Total September   | r         | 42,000 | 78,896  | 39,421 |         |         | 11.3501 |             |
| Total III quarter |           | 87,500 | 205,787 | 83,437 |         |         |         |             |
| 3-0CT-2016        | T-BILLS52 | 500    | 1,420   | 500    | 8.2997  | 8.4317  | 8.3799  | 2-OCT-2017  |
| 10-OCT-2016       | T-BILLS39 | 500    | 1,100   | 500    | 7.9950  | 8.1937  | 8.1435  | 10-JUL-2017 |
| 11-OCT-2016       | MTCN60    | 5,000  | 6,178   | 5,000  | 9.8000  | 10.9000 | 10.4130 | 29-APR-2021 |
| 13-0CT-2016       | LTCB20    | 20,000 | 32,425  | 20,000 | 13.5500 | 14.1500 | 13.9819 | 29-0CT-2036 |
| 14-OCT-2016       | T-BILLS11 | 4,000  | 15,656  | 4,000  | 6.9900  | 6.9900  | 6.9900  | 30-DEC-2016 |
| 17-OCT-2016       | T-BILLS26 | 500    | 2,210   | 500    | 7.0000  | 7.4900  | 7.1087  | 17-APR-2017 |
| 18-OCT-2016       | MTCN36    | 5,000  | 4,219   | 4,169  | 9.4955  | 10.5800 | 9.9972  | 29-APR-2019 |
| 21-OCT-2016       | T-BILLS10 | 3,000  | 8,626   | 3,000  | 6.7898  | 6.9400  | 6.8709  | 30-DEC-2016 |
| 28-OCT-2016       | T-BILLS09 | 3,000  | 6,100   | 3,000  | 6.7497  | 6.9300  | 6.8576  | 30-DEC-2016 |
| Total October     |           | 41,500 | 77,934  | 40,669 |         |         | 11.1717 |             |
| 4-NOV-2016        | T-BILLS08 | 4,000  | 18,054  | 4,000  | 6.2100  | 6.2500  | 6.2250  | 30-DEC-2016 |
| 7-NOV-2016        | T-BILLS52 | 500    | 1,311   | 500    | 7.4997  | 7.6757  | 7.5836  | 6-NOV-2017  |
| 10-NOV-2016       | LTCB10    | 2,500  | 9,032   | 2,500  | 11.3700 | 11.9330 | 11.5685 | 29-OCT-2025 |
| 11-NOV-2016       | T-BILLS07 | 2,000  | 9,250   | 2,000  | 5.7500  | 5.7500  | 5.7500  | 30-DEC-2016 |
| 14-NOV-2016       | T-BILLS39 | 500    | 1,600   | 500    | 7.0000  | 7.0000  | 7.0000  | 14-AUG-2017 |
| 15-NOV-2016       | MTCN36    | 2,500  | 4,080   | 2,500  | 9.5000  | 10.2500 | 9.9043  | 29-APR-2019 |
| 18-NOV-2016       | T-BILLS26 | 3,000  | 9,150   | 3,000  | 6.4300  | 6.6860  | 6.5279  | 19-MAY-2017 |
| 18-NOV-2016       | T-BILLS06 | 4,000  | 10,796  | 4,000  | 5.4000  | 5.9900  | 5.9466  | 30-DEC-2016 |
| 21-NOV-2016       | T-BILLS26 | 500    | 1,500   | 500    | 6.4900  | 6.4900  | 6.4900  | 22-MAY-2017 |
| 22-NOV-2016       | T-BILLS13 | 3,000  | 12,700  | 3,000  | 6.1800  | 6.2400  | 6.2328  | 21-FEB-2017 |
| 25-NOV-2016       | T-BILLS05 | 4,000  | 10,700  | 4,000  | 5.7500  | 5.7500  | 5.7500  | 30-DEC-2016 |
| 25-NOV-2016       | T-BILLS26 | 3,000  | 9,000   | 3,000  | 6.4600  | 6.4700  | 6.4695  | 26-MAY-2017 |
| 28-NOV-2016       | T-BILLS13 | 500    | 1,480   | 500    | 6.0900  | 6.1620  | 6.1234  | 27-FEB-2017 |
| 29-NOV-2016       | T-BILLS13 | 3,000  | 9,200   | 3,000  | 5.9800  | 5.9800  | 5.9800  | 28-FEB-2017 |
| Total November    |           | 33,000 | 107,853 | 33,000 |         |         | 6.8514  |             |
| 2-DEC-2016        | T-BILLS26 | 3,000  | 7,000   | 3,000  | 6.3997  | 6.6300  | 6.5048  | 2-JUN-2017  |
| 5-DEC-2016        | T-BILLS52 | 500    | 650     | 500    | 7.5997  | 7.8800  | 7.7288  | 4-DEC-2017  |
| 6-DEC-2016        | T-BILLS13 | 3,000  | 5,600   | 3,000  | 6.3997  | 6.4800  | 6.4678  | 7-MAR-2017  |

| 8-DEC-2016            | LTCB20               | 2,000   | 10,051  | 2,000   | 12.8995 | 12.9699 | 12.9584 | 29-0CT-2036 |
|-----------------------|----------------------|---------|---------|---------|---------|---------|---------|-------------|
| 9-DEC-2016            | T-BILLS26            | 3,000   | 5,850   | 3,000   | 6.4900  | 6.7500  | 6.7380  | 9-JUN-2017  |
| 12-DEC-2016           | T-BILLS39            | 500     | 900     | 500     | 6.9900  | 7.2900  | 7.1698  | 11-SEP-2017 |
| 13-DEC-2016           | T-BILLS13            | 3,000   | 5,200   | 3,000   | 6.4700  | 6.4700  | 6.4700  | 14-MAR-2017 |
| 16-DEC-2016           | T-BILLS26            | 3,000   | 3,256   | 3,000   | 6.7000  | 7.0400  | 6.9380  | 16-JUN-2017 |
| 20-DEC-2016           | MTCN60               | 2,000   | 7,282   | 2,000   | 10.2400 | 10.2400 | 10.2400 | 29-APR-2021 |
| 20-DEC-2016           | T-BILLS13            | 3,000   | 6,520   | 3,000   | 6.6400  | 6.8400  | 6.7275  | 21-MAR-2017 |
| 23-DEC-2016           | MTCN60               | 4,000   | 7,630   | 4,000   | 10.1000 | 10.3400 | 10.2557 | 29-APR-2021 |
| 23-DEC-2016           | MTCN36               | 4,000   | 10,590  | 4,000   | 9.4100  | 9.9339  | 9.8798  | 29-APR-2019 |
| 23-DEC-2016           | T-BILLS26            | 3,000   | 3,760   | 3,000   | 7.0000  | 7.4800  | 7.2559  | 23-JUN-2017 |
| 26-DEC-2016           | T-BILLS08            | 4,000   | 6,200   | 4,000   | 6.5997  | 7.1200  | 7.0544  | 20-FEB-2017 |
| 26-DEC-2016           | T-BILLS26            | 4,000   | 6,614   | 4,000   | 7.2400  | 7.2400  | 7.2400  | 26-JUN-2017 |
| 26-DEC-2016           | T-BILLS13            | 4,000   | 3,200   | 3,200   | 6.6997  | 7.4800  | 7.2717  | 27-MAR-2017 |
| 29-DEC-2016           | T-BILLS13            | 3,000   | 5,300   | 3,000   | 7.0290  | 7.0290  | 7.0290  | 30-MAR-2017 |
| <b>Total December</b> |                      | 49,000  | 95,603  | 48,200  |         |         | 7.8263  |             |
| Total IV quarter      |                      | 123,500 | 281,390 | 121,869 |         |         |         |             |
| Total II semi-ann     | Total II semi-annual |         | 487,177 | 205,306 |         |         |         |             |
| Total year            |                      | 323,000 | 769,510 | 317,306 |         |         | 11.0709 |             |

# Appendix 2. Outstanding Government Treasury Securities as of December 31, 2016 (AMD million)

| T-bills  |         |                          |    | МТС      | N and LTCB              |             |   | Benchmark Bonds |                |                 |  |
|----------|---------|--------------------------|----|----------|-------------------------|-------------|---|-----------------|----------------|-----------------|--|
|          |         |                          |    |          |                         |             |   |                 | Coupon<br>rate | Maturity<br>day |  |
| 1        | 1,500.0 | 09/01/2017               | 1  | 17,327.5 | 11.0%                   | 29/04/2017  | 1 | 40,000.0        | 9.0%           | 29/04/2018      |  |
| 2        | 1,000.0 | 16/01/2017               | 2  | 18,500.0 | 8.0%                    | 29/04/2017  | 2 | 37,516.5        | 9.0%           | 29/04/2019      |  |
| _3       | 1,000.0 | 23/01/2017               | 3  | 560.9    | 10.0%                   | 19/09/2017  | 3 | 37,000.0        | 10.0%          | 29/04/2021      |  |
| 4        | 3,000.0 | 26/01/2017               | 4  | 21.0     | 10.0%                   | 20/09/2017  | 4 | 27,988.0        | 11.0%          | 29/10/2025      |  |
| 5        | 1,500.0 | 30/01/2017               | 5  | 12,391.1 | 10.0%                   | 07/02/2018  | 5 | 48,000.0        | 13.0%          | 17/02/2032      |  |
| _6       | 1,253.0 | 13/02/2017               | _6 | 12,340.1 | 12.0%                   | 17/02/2018  | 6 | 59,000.0        | 13.0%          | 29/10/2036      |  |
| 7        | 1,000.0 | 16/02/2017               |    | 11,728.5 | 10.0%                   | 29/04/2018  |   |                 |                |                 |  |
| 8        | 1,500.0 | 20/02/2017               | 8  | 15,690.0 | 8.0%                    | 29/04/2019  |   |                 |                |                 |  |
| _ 9      | 4,000.0 | 20/02/2017               | 9  | 34,930.0 | 10.0%                   | 29/04/2020  |   |                 |                |                 |  |
| _10      |         | 21/02/2017               | 10 | 1,090.0  | 10.0%                   | 13/12/2020  |   |                 |                |                 |  |
| 11       |         | 27/02/2017               | 11 | 184.2    | 10.0%                   | 19/12/2020  |   |                 |                |                 |  |
| 12       |         | 28/02/2017               | 12 | 19,757.0 | 12.0%                   | 17/02/2021  |   |                 |                |                 |  |
| 13       | •       | 07/03/2017               | 13 | 8.3      | 10.0%                   | 21/03/2021  |   |                 |                |                 |  |
| 14       |         | 13/03/2017               | 14 | 14,625.0 | 10.0%                   | 29/10/2023  |   |                 |                |                 |  |
| 15       | •       | 13/03/2017               | 15 | 18,690.1 | 11.0%                   | 07/02/2028  |   |                 |                |                 |  |
| 16       | •       | 14/03/2017               |    |          |                         |             |   |                 |                |                 |  |
|          | •       | 20/03/2017               |    |          |                         |             |   |                 |                |                 |  |
| 18       | •       | 21/03/2017               |    |          |                         |             |   |                 |                |                 |  |
| 19       |         | 27/03/2017               |    |          |                         |             |   |                 |                |                 |  |
| 20       |         | 30/03/2017               |    |          |                         |             |   |                 |                |                 |  |
| 21       |         | 03/04/2017               |    |          |                         |             |   |                 |                |                 |  |
|          |         | 17/04/2017               |    |          |                         |             |   |                 |                |                 |  |
| 23       |         | 17/04/2017               |    |          |                         |             |   |                 |                |                 |  |
| 24       |         | 08/05/2017               |    |          |                         |             |   |                 |                |                 |  |
| 25       |         | 15/05/2017               |    |          |                         |             |   |                 |                |                 |  |
| 26       |         | 19/05/2017               |    |          |                         |             |   |                 |                |                 |  |
| 27       |         | 22/05/2017               |    |          |                         |             |   |                 |                |                 |  |
| 28       | •       | 26/05/2017               |    |          |                         |             |   |                 |                |                 |  |
| 29       |         | 02/06/2017               |    |          |                         |             |   |                 |                |                 |  |
| 30       |         | 05/06/2017               |    |          |                         |             |   |                 |                |                 |  |
| 31<br>32 | •       | 09/06/2017<br>13/06/2017 |    |          |                         |             |   |                 |                |                 |  |
| 33       |         | 16/06/2017               | 39 | 500.0    | 14/08/2017              |             |   |                 |                |                 |  |
| 34       |         | 23/06/2017               | 40 |          | 04/09/2017              | <del></del> |   |                 |                |                 |  |
| 35       |         |                          | 40 | 500.0    | 11/06/2017              | _           |   |                 |                |                 |  |
| 36       |         | 26/06/2017<br>10/07/2017 | 41 |          | 02/10/2017              | _           |   |                 |                |                 |  |
| 37       |         | 10/07/2017               | 42 |          | 06/11/2017              |             |   |                 |                |                 |  |
| 38       | •       | 31/07/2017               | 43 |          | 04/12/2017              | _           |   |                 |                |                 |  |
|          | 1,500.0 | 31/07/2017               | 44 | 500.0    | U <del>1</del> /12/201/ | _           |   |                 |                |                 |  |

# **Saving Coupon Bonds**

|    | Issue number | Outstanding amount<br>(AMD thousand) | Coupon rate | Maturity day |
|----|--------------|--------------------------------------|-------------|--------------|
| 1  | AMGS02174174 | 137,624                              | 12.5%       | 17.04.17     |
| 2  | AMGS02243177 | 69,910                               | 13.0%       | 24.03.17     |
| 3  | AMGS02252178 | 51,200                               | 13.0%       | 25.02.17     |
| 4  | AMGS02285178 | 46,150                               | 12.0%       | 28.05.17     |
| 5  | AMGS0401B174 | 45,900                               | 13.0%       | 01.11.17     |
| 6  | AMGS04025176 | 6,750                                | 14.0%       | 02.05.17     |
| 7  | AMGS04026174 | 42,600                               | 14.0%       | 02.06.17     |
| 8  | AMGS0402C171 | 52,350                               | 12.5%       | 02.12.17     |
| 9  | AMGS04077177 | 49,700                               | 14.0%       | 07.07.17     |
| 10 | AMGS04141171 | 33,050                               | 14.0%       | 14.01.17     |
| 11 | AMGS04207170 | 27,190                               | 13.5%       | 20.07.17     |
| 12 | AMGS04222179 | 43,590                               | 14.0%       | 22.02.17     |
| 13 | AMGS04258173 | 60,200                               | 13.5%       | 25.08.17     |
| 14 | AMGS04279179 | 53,525                               | 13.5%       | 27.09.17     |
| 15 | AMGS04293170 | 28,336                               | 14.0%       | 29.03.17     |
| 16 | AMGS08025180 | 39,908                               | 14.5%       | 02.05.18     |
| 17 | AMGS08026188 | 41,700                               | 14.5%       | 02.06.18     |
| 18 | AMGS08038175 | 5,003                                | 14.0%       | 03.08.17     |
| 19 | AMGS0805B176 | 13,055                               | 14.5%       | 05.11.17     |
| 20 | AMGS08074170 | 2,300                                | 13.5%       | 07.04.17     |
| 21 | AMGS08077181 | 49,200                               | 14.5%       | 07.07.18     |
| 22 | AMGS0807C172 | 15,550                               | 14.5%       | 07.12.17     |
| 23 | AMGS08132176 | 7,400                                | 13.5%       | 13.02.17     |
| 24 | AMGS08149188 | 33,694                               | 14.0%       | 14.09.18     |
| 25 | AMGS0817A182 | 26,630                               | 13.5%       | 17.10.18     |
| 26 | AMGS08181181 | 17,800                               | 14.5%       | 18.01.18     |
| 27 | AMGS08207184 | 54,300                               | 14.0%       | 20.07.18     |
| 28 | AMGS08215179 | 800.0                                | 13.5%       | 21.05.17     |
| 29 | AMGS08222183 | 11,500                               | 14.5%       | 22.02.18     |
| 30 | AMGS08229170 | 16,500                               | 14.0%       | 22.09.17     |
| 31 | AMGS08256173 | 20,950                               | 14.0%       | 25.06.17     |
| 32 | AMGS08258187 | 70,000                               | 14.0%       | 25.08.18     |
| 33 | AMGS0828B187 | 41,870                               | 13.0%       | 28.11.18     |
| 34 | AMGS08293184 | 18,900                               | 14.5%       | 29.03.18     |
| 35 | AMGS12016183 | 38,807                               | 14.0%       | 01.06.18     |
| 36 | AMGS1201C198 | 99,450                               | 13.5%       | 01.12.19     |
| 37 | AMGS1203B172 | 44,530                               | 12.0%       | 03.11.17     |
| 38 | AMGS12049176 | 6,100                                | 12.0%       | 04.09.17     |
| 39 | AMGS1205B188 | 44,305                               | 15.0%       | 05.11.18     |
| 40 | AMGS12067194 | 50,000                               | 15.0%       | 06.07.19     |
| 41 | AMGS1207C184 | 5,950                                | 15.0%       | 07.12.18     |
| 42 | AMGS12097183 | 10,840                               | 14.5%       | 09.07.18     |

| 43 | AMGS12118187 | 12,040 | 14.5% | 11.08.18 |
|----|--------------|--------|-------|----------|
| 44 | AMGS12132188 | 6,350  | 14.0% | 13.02.18 |
| 45 | AMGS12181193 | 10,140 | 15.0% | 18.01.19 |
| 46 | AMGS12193180 | 5,250  | 14.0% | 19.03.18 |
| 47 | AMGS12207196 | 61,680 | 14.5% | 20.07.19 |
| 48 | AMGS12222195 | 36,100 | 15.0% | 22.02.19 |
| 49 | AMGS12229182 | 29,000 | 14.5% | 22.09.18 |
| 50 | AMGS12249198 | 56,520 | 14.5% | 24.09.19 |
| 51 | AMGS12254198 | 15,800 | 15.0% | 25.04.19 |
| 52 | AMGS12258199 | 69,681 | 14.5% | 25.08.19 |
| 53 | AMGS1225C174 | 34,200 | 12.0% | 25.12.17 |
| 54 | AMGS12265194 | 24,350 | 15.0% | 26.05.19 |
| 55 | AMGS1227A192 | 99,816 | 14.0% | 27.10.19 |
| 56 | AMGS12293196 | 47,250 | 15.0% | 29.03.19 |
| 57 | AMGS12294178 | 4,000  | 12.0% | 29.04.17 |
| 58 | AMGS12297171 | 8,500  | 12.0% | 29.07.17 |
| 59 | AMGS1229C196 | 89,550 | 13.5% | 29.12.19 |
|    |              | ·      | ·     |          |

### Appendix 3. Government Treasury Securities Retail Market in 2016

The retail market 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.

In 2016 SCB and T-bills were sold through the retail system. The sale of GS is being implemented by 5 service centers that are located in the different parts of Yerevan city.

In 2016 the transactions implemented in the retail market were as follows:

- The TD allocated all the 44 issuance of SCBs and participated in allocations of 21 T-bills out of 68.
- The investment amount made up AMD 4,266.6 million, of which AMD 2,098.8 million T-bills and AMD 2,167.8 million SCB,
- The redeemed amount of GS made up AMD 1,936.2 million, of which AMD 1,1162.0 million Tbills and AMD 774.2 million SCB
- The buy-back amount of SCB comprised AMD 281.1 million,
- As of December 31, 2016 the outstanding GS made up AMD 3,994.1 million, of which AMD 1,848.8 million T-bills and AMD 2,145.3 million SCB,
- The number of depository accounts made up 1205,
- 1.5% of the allocated GS were bought through the Treasury Direct,
- The average investment amount per investor made up AMD 15.6 million (for T-bills it made up AMD 2,098.8 million and for SCB AMD 7.9 million),
- Average investment amount in the bids made up AMD 8.7 million (for T-bills it made up AMD 99.9 million and for SCB it comprised AMD 4.4 million),
- In average 8.6 bids were presented in one issuance of bonds, including 1.0 bid for T-bills, and
   12.8 bids for SCB,
- The refinancing amount of matured GS was increased by 8.0% compared to the previous period and made up AMD 812.4 million.

In 2016 the investment volume of SCB was increased by 136.3% over the previous year. As of December 31, 2016 the outstanding volume of SCB increased by 107.7% compared to the previous year (see chart 3.1).

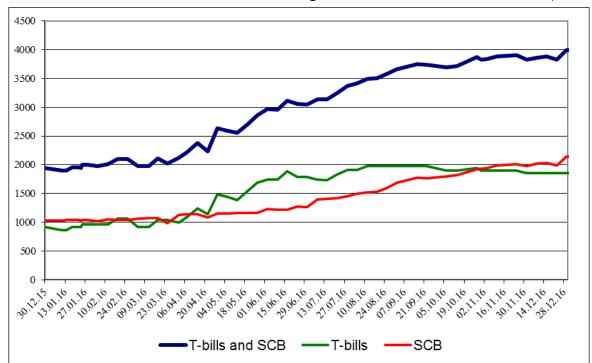


Chart 3.1. The Amount of Outstanding SCB as of December 31, 2016 (AMD million)

As of December 31, 2016 the number of depositary accounts amounted to 1,205, which was 133 more than the same indicator in the previous year (see chart 3.2):

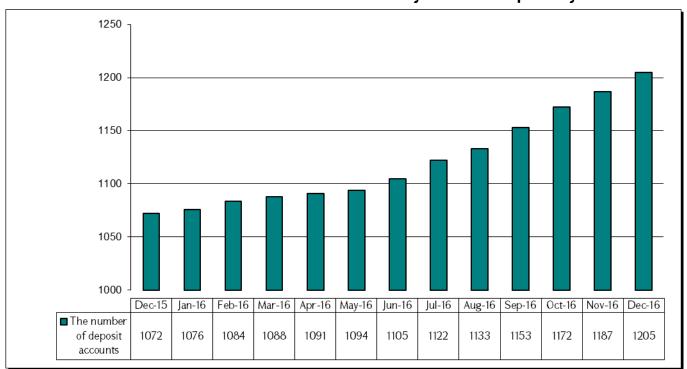


Chart 3.2. The dynamics of depositary accounts in 2016

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

Appendix 4. The Transactions of the Loans Borrowed by RA Government during 2016

|     |   | Disburs        | sements        | Principal      | payments       | Interest       | payments       |
|-----|---|----------------|----------------|----------------|----------------|----------------|----------------|
|     |   | USD<br>million | AMD<br>billion | USD<br>million | AMD<br>billion | AMD<br>billion | AMD<br>billion |
|     | Total RA Government loans   | 570.90         | 272.10         | 71.06          | 33.71          | 53.03          | 25.12          |
|     |   | 449.04         | 213.82         | 51.97          | 24.67          | 45.08          | 21.35          |
| 1   | International Organizations   |                |                |                |                |                |                |
| 1   | International Bank for Reconstruction and Development (IBRD)                          | 135.01         | 64.27          | 1.18           | 0.56           | 7.74           | 3.67           |
| 2   | International Development<br>Association (IDA)  | 17.88          | 8.56           | 26.96          | 12.76          | 23.06          | 10.91          |
| 3   | European Bank for Reconstruction and Development (EBRD)                               | 4.22           | 2.03           | 2.10           | 0.99           | 0.49           | 0.23           |
| 4   | European Investment Bank (EIB)  | 33.11          | 15.79          | 0.40           | 0.19           | 1.52           | 0.72           |
| 5   | International Fund for Agricultural Development (IFAD)                                | 6.07           | 2.93           | 1.73           | 0.82           | 0.48           | 0.23           |
| 6   | OPEC Fund for International Development (OFID)  | 17.86          | 8.54           | 3.27           | 1.55           | 1.78           | 0.84           |
| 7   | Asian Development Bank (ADB)  | 129.89         | 61.99          | 5.98           | 2.83           | 5.49           | 2.61           |
| 8   | International Monetary Fund (IMF)   | -              | -              | 10.34          | 4.96           | -              | -              |
| 9   | European Union (EU)   | -              | 1              | -              | -              | 2.40           | 1.14           |
| 10  | Eurasian Development Bank (Manager of Eurasian Fund of Stabilization and Development) | 105.00         | 49.72          | -              | -              | 2.13           | 1.01           |
| For | reign States  | 121.07         | 57.91          | 18.33          | 8.68           | 7.71           | 3.65           |
| 1   | Germany (KfW)   | 5.49           | 2.62           | 6.50           | 3.08           | 3.12           | 1.48           |
| 2   | France  | 62.70          | 29.77          | 0.13           | 0.06           | 1.24           | 0.59           |
| 3   | USA   | -              | -              | 1.73           | 0.82           | 0.45           | 0.21           |
| 4   | Japan (JICA)  | -              | -              | 9.30           | 4.40           | 2.08           | 0.99           |
| 5   | Abu-Dhabi Fund for Development  | 0.88           | 0.43           | 0.67           | 0.32           | 0.23           | 0.11           |
| 6   | China Export-Import Bank  | 3.35           | 1.61           | -              | -              | 0.41           | 0.20           |
| 7   | Russian Federation  | 48.65          | 23.47          | _              | -              | 0.18           | 0.09           |
| Co  | mmercial banks  | 0.78           | 0.37           | 0.76           | 0.36           | 0.23           | 0.11           |
| 1   | KBC BANK NV (Belgium)   | -              | -              | 0.54           | 0.25           | 0.04           | 0.02           |
| 2   | Raiffeisen Bank International (Austria)   | -              | ı              | -              | -              | 0.09           | 0.04           |
| 3   | Erste Bank (Austria)  | 0.78           | 0.37           | 0.22           | 0.10           | 0.11           | 0.05           |

Appendix 5. The Transactions of the Loans Borrowed by the Central Bank of RA during 2016

|                             |  | Disbursements | Principal payments | Interest<br>payments |
|-----------------------------|--|---------------|--------------------|----------------------|
|                             |  | USD million   | USD<br>million     | USD million          |
| Total CBA loans             |  | 74.39         | 33.42              | 6.84                 |
| International Organizations |  | 46.67         | 23.89              | 4.87                 |
| 1                           | International Monetary<br>Fund (IMF)                               | 43.22         | 22.45              | 2.42                 |
| 2                           | International Bank for<br>Reconstruction and<br>Development (IBRD) | -             | 1.44               | 0.40                 |
| 3                           | Asian Development Bank (ADB)                                       | 3.45          | -                  | 0.09                 |
| 4                           | European Investment<br>Bank (EIB)                                  | -             | -                  | 1.97                 |
| Foreign States              |  | 27.72         | 9.53               | 1.97                 |
| 1                           | Germany (KfW)  | 27.72         | 9.53               | 1.97                 |

Appendix 6. Guaranties Provided by the RA Government and Outstanding as of December 31, 2016

| "Agarak copper- 25.02.2016 "Ardshinbank" 24.05.2021 1(01)EP/2016 7,000,000 molybdenum N 1(01)2016 CJSC combine" CISC | Borrower | The Date<br>and the<br>number of<br>Guarantee | Donor bank | The<br>duration of<br>the loan<br>agreement | Guarantee<br>agreement | Guarantee<br>amount (USD) |
|--|----------|---|------------|---|------------------------|---------------------------|
| •  |          |   |            | 24.05.2021                                  | 1(01)EP/2016           | 7,000,000                 |

## Appendix 7. Government Treasury Securities Primary Market Agents

#### ARARATBANK CJSC

19 Pushkin str., Yerevan 0010, Armenia Tel: (374 10) 54 79 35

#### **HSBC Bank Armenia CJSC**

66 Teryan str, Yerevan 0009, Armenia Tel: (37460) 65 50 32

#### Converse Bank CJSC

26/1 Vazgen Sargsyan str., Yerevan 0010, Armenia Tel: (374 10) 51 12 06

#### Ameriabank CJSC

0010, Yerevan, 9 G. Lusavorich str. Tel: (374 10) 51 31 73

#### Armswissbank CJSC

10 Vazgen Sargsyan str, Yerevan 0010, Armenia Tel: (374 10) 52 95 97

#### Ardshinbank CJSC

13 Grigor Lusavorchi str., Yerevan 0015, Armenia Tel. (374 10) 56 18 95

#### VTB Bank Armenia CJSC

46 Nalbandyan str., Yerevan 0010, Armenia Tel: (374 10) 54 72 49

# Ministry of Finance of the Republic of Armenia

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