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THE ASSESMENT OF THE EFFECTIVENESS OF STATE EXTERNAL DEBT OF THE GOVERNMENT OF THE REPUBLIC OF ARMENIA

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The management of state external debt is significant for the social and economic development of any country and in the establishment of foreign economic relations. The progressive growth of state external debt over gross domestic product (GDP) has become one of the main trends in global economic development especially in the last 20 - 30 years. At the same time the growth rate of state external debt of many countries exceeds the GDP growth rate in recent years. It is noteworthy that currently the size of the global external debt exceeds the GDP by more than three times. From this point of view, the Republic of Armenia is not an exception, which is also included in the multi – dimensional arena of external debt. In its turn, the formation of state external debt has limits (restrictions), which, first of all, requires the efficient use of borrowed funds. The latter suggests that external debt growth rates should be slower than the main macroeconomic indicators of the country such as GDP, employment, export and other macroeconomic growth rates. The authors have tried to assess the effectiveness of the state external debt of the RA Government for 2000-2018.

Key words: state external debt, effectiveness of state external debt, rate of comparative efficiency, exceeding growth of GDP, exceeding growth of export, exceeding growth of import, pure export growth.

Introduction:

One of the central issues in the concerns connected with the state debt especially in the external state debt is the return of debts (or, as it is said, "return what you have borrowed"), the key to ensuring of which is the efficient use of those resources.

Only in this way it is possible to repay both borrowed funds and their service costs. Very often the impact of state debt on the main macroeconomic rates of the country is expressed indirectly, as borrowed funds are mainly used to maintain and develop the economy both as a production and social infrastructure. However, such an indirect intervention should also have its positive impact on the rates of socioeconomic development of the country (gross domestic product, employment, export, especially pure export (export-import) and on some other macroeconomic rates as well).

While the World Bank has developed a relevant methodology for evaluating the effectiveness of state debt, however, according to the authors, the use of this methodology is associated with some difficulties and complications. That is why a more simplified approach to the assessment of the effectiveness of foreign debt is proposed which is based on the data available to ordinary citizens. Such calculations, especially in the case of long-term socioeconomic development rates, may have a distinctive role and give an idea of the effectiveness of the means used by the country.

Conflict setting

One of the most important laws of economic life of the Third Republic of Armenia, the RA Law on "State Debt" (adopted by the National Assembly of the Republic of Armenia on May 26, 2008) regulates relations with the state debt of the Republic of Armenia.

Article 2 of the law applies to the following concepts: "The state debt is the sum of the debt obligations assumed on behalf of the Republic of Armenia and the name of the Central Bank of

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Armenia (hereinafter referred to as the Central Bank), except for the existing debt obligations of the Central Bank to residents,

The debt of the Government is the sum of the debt obligations assumed by the Government of the Republic of Armenia (hereinafter referred to as "the Government") at the certain moment,

The debt of the Central Bank is the sum of the debt obligations assumed by the Central Bank to non-residents and foreign countries at certain time ... and

State external debt on behalf of the Republic of Armenia and on behalf of the Central Bank is the sum of the debt obligations to the non-residents and foreign states at certain time" [1].

It is important to note that in 2015, June it was stated by RA Law [2] to make changes in RA Law on "State debt" that the demand of not to exceed the 60 percent of gross domestic products of the previous year is applied for not the state but for the government debt.

One more change was made in the main Law in 2017, December 20 [3] by which the RA Government Law and RA GDP relation was written down in new edited RA Law (Article 5 of RA Law on "State debt") according to which "the limit of GDP and government debt relation is 60 percent on December 31 of each year".

Taking into consideration the importance of external borrowings for the development of both the global economy and the national economies of individual countries, yet in 1992-1993 the World Bank had introduced a new methodology for the assessment of external debt of the countries the advantage of which is that the assessment rates are based not on the nominal amount of debt but on its current value.

Accordingly, at present the rate of pure current price (PCP) of external debt (the rate of current price of future total service payment of the further cost of obligations which includes not only the absolute but also qualitative rates of the loan such as percentage, preferential terms etc.), the latter takes into account the size of debt service during the following years till its final payment.

According to the GDP ratio and the ratio of the rate to extport (pure current price (PCP) of external debt), the World Bank categorizes the countries into those having much, average and low debts [4].

Research results

In order to carry out a comparative analysis of the effectiveness of the external state debt (here and after in the text we mean only the external debt of the Government of the Republic of Armenia) and the macroeconomic rate (through calculating the corresponding rates) we have selected a few rates including the GDP as a rate best describing the economy, then the export rate which reflects the ability of the country to produce competitive products for the global market, the labor market in the RA leading by the prediction that the provision of favorable conditions for economic development in the country also supposes creating new labor market in different sections of economy. Export, import and other annual rates were also analyzed.

1. The indicators of comparative effectiveness of GDP and state external debt

The coefficients of comparative effectiveness of GDP increase and foreign state debt increase (k_1) have been calculated according to the following (1) formula.

$$k_{1} = \frac{\left(\frac{GDP_{n}}{GDP_{n-1}} \times 100\%\right) - 100\%}{\left(\frac{ED_{n}}{ED_{n-1}} \times 100\%\right) - 100\%}$$
(1)

where GDP_n —is the GDP rate with absolute value of the current year; GDP_{n-1} —is the corresponding rate of the previous year; ED_n — is the rate of state external debt of current year with absolute value; ED_{n-1} —is the corresponding rate of the previous year.

Table 1 Comparative effectiveness coefficients of RA GDP and state external debt in 2000-2018

Years and terms	GDP, mln	Growth rates	State external	Growth rates	Coefficients of
	US dollars	of GDP %	debt, mln US	of state	comparative
			dollars	external debt,	effectiveness,
				%	%
2000	1912	3.60	685.4	8.30	0.43
2001	2118	10.77	731.6	6.74	1.60
2002	2376	12.18	821.2	12.25	0.99
2003	2807	18.14	871.5	6.13	2.96
2004	3577	27.43	943.0	8.20	3.34
2005	4900	36.99	903.1	-4.23	-8.74
2006	6384	30.29	1019.9	12.93	2.34
2007	9206	44.20	1257.2	23.27	1.90
2008	11662	26.68	1401.2	11.45	2.33
Average annual rates in 2000-2008	4993.6	23.36	959.3	9.45	2.47
2009	8648	-25.84	2466.1	76.00	-0.34
2010	9260	7.077	2737.9	11.02	0.64
2011	10142	9.525	2952.0	7.82	1.22
2012	10619.4	4.707	3144.5	6.52	0.72
2013	11121.3	4.726	3390.8	7.83	0.60
2014	11609.5	4.39	3345.3	-1.34	-3.27
2015	10553.3	-9.098	3839.9	14.78	-0.62
2016	10546.1	-0.068	4300.9	12.01	-0.01
2017	11536.5	9.391	4893.4	13.78	0.68
2018	12428.0	7.728	4982.8	1.83	4.23
Average annual rates in 2009-2018	10646.4	1.25	3605.4	15.02	0.39
Average annual rates in 2000-2018	7968.7	11.73	2352.0	12.38	0.58

The table was formed and calculated on the basis of RA NSS data (RA Statistical Committee) of statistical recordings and other official data in 2000-2018.

The results of the calculations are summarized in Table 1 which shows that during 2000 - 2008 the rates of GDP and state external debt had the same direction with certain fluctuations, except for 2005, when an opposite trend of rates had been noticed: in the conditions of stable high growth rates of GDP the decrease of state external debt was noticed. Perhaps, the mentioned period was the most favorable for RA economy (it was mailnly conditioned by world economic growth) which was immediately followed by 2009 critical period when the decline of economy was accompanied by notable increase of state external debt. However, since 2010 the macroeconomic rates of the republic have returned back to its pre crisis state. During 2010-2013 and 2017-2018 the rates of GDP and state external debt had the same change directions and for the observed period of 2009 and 2014-2016 they had different change directions.

The above-mentioned circumstance enables us to suppose that in the period of RA pre crisis (before 2009) the prerequisites for stable economic growth were noted in the republic the dependence of which on foreign financing was gradually weakening. Nevertheless, the situation sharply changed as a result of the unprecedented decline in the 2009 crisis (the third worst rate in the world) when the

absolute value of the GDP had fallen for the first time and the significant negative balance of the state budget was possible only in case of borrowing huge state external debt.

It is evidenced by the breakup of the relations between GDP and external state debt in 2009. However, there was also a strong positive dependence between the GDP and the external state debt in 2010 when 1% growth in state external debt resulted in 0.64% GDP growth. A strong positive dependence was observed among the variables of 2011-2013 when the 1% growth of the external debt resulted 1.22%, 0.72% and 0.60% GDP growth respectively. An opposite relation was noted between the variables of 2014-2016 and in 2017-2018 there was again a strong positive dependence when the 1% growth of the external state debt resulted in 0.68% and 4.23% GDP growth respectively.

In general, it is observed from the analysis of the average annual rates that the coefficient of the comparative efficiency of RA GDP and external state debt comprised 2.47% in 2000 - 2008 and the average annual rate comprised 0.39% in 2009-2018 which is almost twice lower than the rate of previous period (this is conditioned by the global financial and economic crisis of 2009). The above-mentioned coefficient of comparative efficiency for the time period of 2000 - 2018 was 0.58% which means that during that period the external state debt had low efficiency (since the coefficient of comparative efficiency is smaller than 1).

Hence, the comparative analysis of the coefficients of effeciency of state external debt and GDP and the fluctuating character of the relations between them during certain years and periods allows us to conclude that the state external debt had had very low efficiency (the coefficient of comparative efficiency was smaller than 1 during 2000-2018). The study and analysis of the relations between the economic growth and other macroeconomic rates of RA is shown in the works of different researchers.

2. The coefficients of comparative efficiency of state external debt and export

The coefficients of RA state external debt and export growth rates are calculated according to the following formula (2):

$$k_{3} = \frac{\left(\frac{EX_{n}}{EX_{n-1}} \times 100\%\right) - 100\%}{\left(\frac{ED_{n}}{ED_{n-1}} \times 100\%\right) - 100\%}$$
(2)

where' EXn-is the export rate of current year with absolute value; EX_{n-1} -is the corresponding rate of the previous year; EDn-is the rate of state foreign debt of the current year with absolute value; ED_{n-1} -is the corresponding rate of the previous year.

Table 2 shows that in the observed period a decrease with absolute rates of export of Armenia was observed in 2008-2009 crisis years as it was in 2015. During the following years the export of RA has recorded growth trends thus recording the most significant increase in exports compared to the previous year (more than 20% in the previous year) in 2002, 2003, 2005, 2010, 2011, 2016 and 2017. In fact, the rate of the export growth of Armenia was mainly positive if we did not take into consideration the crisis. Another problem is that positive trends in export growth have been constantly accompanied by the advanced rates of import growth keeping the constant negative balance of foreign trade.

Rates of the state debt and export growth were mostly reflected by contradicted exchange tendencies only in certain periods (2005, 2008, 2009, 2014 and 2015), i.e. in the case of significant increase in export sizes (or decrease) a relative reduction (or increase) is observed in state external debt whereas the impact of external debt burden on export change rates is not definite. Thus, the increase in the state external debt in 2002 was accompanied by a significant increase in the export rate whereas the growth of state external debt was accompanied by a more moderate rate of growth or even a reduction in the export rate in other years. In this case, the depth of influence of the financial-economic crisis on the export rates of Armenia is also visible.

Table 2
The coefficients of comparative efficiency of RA export and state external growth rates in 2000-2018

Years and	Export	Export growth	State external	Growth rate of	The coefficients
terms	volumes, mln.	rates %	debt, mln. USD	state external	of comparative
	USD			debt,	effectiveness,
				%	%
2000	297.5	28.40	685.4	8.30	3.42
2001	306.2	2.92	731.6	6.74	0.43
2002	507.2	65.64	821.2	12.25	5.36
2003	685.6	35.17	871.5	6.13	5.74
2004	722.9	5.44	943.0	8.20	0.66
2005	973.9	34.72	903.1	-4.23	-8.21
2006	985.1	1.15	1019.9	12.93	0.09
2007	1152.3	16.97	1257.2	23.27	0.73
2008	1057.2	-8.25	1401.2	11.45	-0.72
Average	743.1	20.24	959.3	9.45	2.14
annual rates in					
2000-2008					
2009	768.2	-27.34	2466.1	76.00	-0.36
2010	1041.1	35.52	2737.9	11.02	3.22
2011	1334.3	28.16	2952.0	7.82	3.60
2012	1380.2	3.44	3144.5	6.52	0.53
2013	1478.7	7.14	3390.8	7.83	0.91
2014	1547.3	4.64	3345.3	-1.34	-3.46
2015	1485.3	-4.01	3839.9	14.78	-0.27
2016	1791.7	20.63	4300.9	12.01	1.72
2017	2242.9	25.18	4893.4	13.78	1.83
2018	2411.9	7.53	4982.8	1.83	4.12
Average	1548.2	10.09	3605.4	15.02	1.18
annual rates in					
2000-2008					
Average	1166.8	14.90	2352.0	12.38	1.02
annual rates in					
2000-2008					

The table was drawn and calculated on the basis of the data by the statistical yearbooks of NSSRA (Statistical Committee) of 2000-2018 and RA SRC of 2000-2018 on "Foreign Trade Customs Statistics".

The interval of fluctuations of the coefficients of comparative efficiency «Growth increase of state external debt/export» differs greatly according to separate years and periods of time as in the case of GDP.

According to the results of comparative analysis of coefficients during 2001, 2003-2009 and 2012-2015 the correlation between the rates considered for was largely absent (efficiency coefficients <1). Instead, this dependence was observed in 2002-2003, in 2010-2011 and 2016-2018 and negative dependence in 2005 when export volumes increased in the conditions of reduction of state external debt.

In the period of 2000-2018 the coefficient of comparative efficiency of RA export and state external debt comprised 1.02% which shows the positive but weak impact of the external debt on export rates (the efficiency coefficient is greater than 1). It turns out that the comparative correlation between the coefficients of external debt and export growth is more expressively shown during the period of export decline and complication of external debt which creates the basis to suppose that foreign debt had increased due to foreign funds contributed to the expansion of export volumes of RA, therefore, to the competitiveness of the national economy.

3. The coefficients of comparative efficiency of import and state external debt

The coefficients of comparative efficiency of state external debt and import growth rates of RA (k_3) were calculated according to the following (3) formula

$$k_{3} = \frac{\left(\frac{lM_{n}}{lM_{n-1}} \times 100\%\right) - 100\%}{\left(\frac{ED_{n}}{ED_{n-1}} \times 100\%\right) - 100\%}$$
(3)

where Imn- is import rate of current year with absolute value; IM_{n-1} - is the corresponding rate of the previous year; EDn-is the rate of state external debt of current year with absolute value; ED_{n-1} -is the corresponding rate of ther previous year.

Table 3
The coefficients of comparative efficiency of import rates and state external debt of RA
in 2000-2018

Years and terms	Import sizes,	Import growth	State external	State external	Coefficients of
	mln. USD	rates, %	debt, mln. USD	debt growth	comparative
				rates, %	efficiency,
					%
2000	885.1	9.10	685.4	8.30	1.10
2001	991.0	11.96	731.6	6.74	1.78
2002	1103.0	11.30	821.2	12.25	0.92
2003	1279.5	16.00	871.5	6.13	2.61
2004	1350.7	5.56	943.0	8.20	0.68
2005	1801.7	33.39	903.1	-4.23	-7.89
2006	2191.6	21.64	1019.9	12.93	1.67
2007	3267.8	49.11	1257.2	23.27	2.11
2008	4426.1	35.45	1401.2	11.45	3.09
Average annual	1921.8	21.50	959.3	9.45	2.28
rates in 2000-					
2008					
2009	3321.1	-24.97	2466.1	76.00	-0.33
2010	3748.9	12.88	2737.9	11.02	1.17
2011	4145.3	10.57	2952.0	7.82	1.35
2012	4261.2	2.80	3144.5	6.52	0.43
2013	4385.9	2.93	3390.8	7.83	0.37
2014	4424.4	0.88	3345.3	-1.34	-0.65
2015	3239.2	-26.79	3839.9	14.78	-1.81
2016	3273.5	1.06	4300.9	12.01	0.09
2017	4182.7	27.77	4893.4	13.78	2.02
2018	4429.1	5.89	4982.8	1.83	3.22

Years and terms	Import sizes, mln. USD	Import growth rates, %	State external debt, mln. USD	State external debt growth rates, %	Coefficients of comparative efficiency,
Average annual rates in 2009-2018	3941.1	1.30	3605.4	15.02	0.59
Annual average rates in 2000-2018	2984.6	10.87	2352.0	12.38	0.63

The table was drawn and calculated on the basis of the data by the statistical yearbooks of NSSRA (Statistical Committee) of 2000-2018 and RA SRC of 2000-2018 on "Foreign Trade Customs Statistics".

The analysis of rates of state debt and import growth (Table 3) indicates that in the period of 2000-2008 the average annual coefficient of comparative efficiency was 2.28 and in 2009-2018 respectively 0.59% which indicates that the 2009 global financial and economic crisis had had more severe consequences on the import of the Armenian economy which had its immediate impact for the entire period making the coefficient of comparative efficiency 0.63%. This circumstance shows that there was a reverse link between the state external debt and import sizes.

The results of the analysis of the coefficients of comparative efficiency show that the correlation between the rates observed in 2002, 2004, 2005, 2009 and 2012-2016 was not noticeable (the corresponding coefficients are smaller than 1). Instead, positive dependence has been observed in 2001, 2003, 2006-2008, 2010-2011 and in 2017-2018 the level of state debt had significantly declined in the context of import growth and the opposite trend was observed in 2009.

The comparative correlation between the coefficients of external debt and import growth does not have clear manifestations which is basis for supposing that fluctuations in the sizes of state public debt have a significant impact on the post crisis period (after 2009).

4. The coefficients of comparative efficiency of pure export and state external debt

The coefficients of comparative efficiency of state foreign debt and pure export rate growth of RA (k_4) were calculated according to the following (4) formula

$$k_4 = \frac{\left(\frac{NE_n}{NE_{n-1}} \times 100\%\right) - 100\%}{\left(\frac{ED_n}{ED_{n-1}} \times 100\%\right) - 100\%} \tag{4}$$

where NEn- import rate of current year with absolute value; NE_{n-1} - the corresponding rate of the previous year; EDn- the rate of state external debt of current year with absolute value; ED_{n-1} - the corresponding rate of the previous year.

As we can see from Table 4, the pure export rate is negative for the entire period observed, the export of the given year has conceded to imports. This means that the import rate in our country has had higher growth rates each year than that of export. Such a negative trend had a tendency of growth till 2014 after which there was a significant decline in 2015-2016 and in 2017-2018 it had a tendency to grow again. The analysis of the coefficient of the comparative efficiency showed that there was a positive correlation between the surveyed rates only in 2001, 2004-2008 and 2017-2018. In the following years the connection is either missing or insignificant.

The coefficient of comparative efficiency of pure export and external state debt of Armenia for 2000-2018 comprised 0.48% which indicates a significant failure of pure exports. It is particularly characteristic that this index comprised 0.25% in the period of 2009-2018 which has great difference

compared with the period of 2000-2008 (2.62%).

Table 4
The coefficients of comparative efficiency of pure export and state external debt of RA in 2000-2018

Years, terms	Pure export	Pure export	State external	State external	Coefficients of
	sizes, mln.	growth rates,	debt,	debt growth	comparative
	USD	%	mln. USD	rates,	efficiency,
				%	%
2000	-587.6	1.38	685.4	8.30	0.17
2001	-684.8	16.54	731.6	6.74	2.45
2002	-595.8	-13.00	821.2	12.25	-1.06
2003	-593.9	-0.32	871.5	6.13	-0.05
2004	-627.8	5.71	943.0	8.20	0.70
2005	-827.8	31.86	903.1	-4.23	-7.53
2006	-1207.0	45.75	1019.9	12.93	3.54
2007	-2116.0	75.34	1257.2	23.27	3.24
2008	-3369.0	59.25	1401.2	11.45	5.17
Average annual	-1178.7	24.72	959.3	9.45	2.62
rates in					
2000-2008					
2009	-2553	-24.22	2466.1	76.00	-0.32
2010	-2708	6.07	2737.9	11.02	0.55
2011	-2811	3.81	2952.0	7.82	0.49
2012	-2881	2.49	3144.5	6.52	0.38
2013	-2907	0.91	3390.8	7.83	0.12
2014	-2877	-1.04	3345.3	-1.34	0.77
2015	-1754	-39.04	3839.9	14.78	-2.64
2016	-1482	-15.51	4300.9	12.01	-1.29
2017	-1940	30.91	4893.4	13.78	2.24
2018	-2017	3.99	4982.8	1.83	2.18
Average annual	-2393.0	-3.16	3605.4	15.02	0.25
rates in					
2009-2018					
Average annual	-1817.8	10.05	2352.0	12.38	0.48
rates in					
2000-2018					

The table was drawn and calculated on the basis of the data by the statistical yearbooks of NSSRA (Statistical Committee) of 2000-2018 and RA SRC of 2000-2018 on "Foreign Trade Customs Statistics".

Hence, we can state that there is a reverse dependence between the state external debt and pure export rates, i.e. the sizes of ever-increasing external debt have negative impact on the negative balance of pure export.

5. The coefficients of comparative efficiency of trade circulation and state external debt The coefficients of comparative efficiency of state foreign debt and pure export rate growth of RA (k_5) were calculated according to the following (5) formula:

$$k_{5} = \frac{\left(\frac{TR_{n}}{TR_{n-1}} \times 100\%\right) - 100\%}{\left(\frac{ED_{n}}{ED_{n-1}} \times 100\%\right) - 100\%}$$
(5)

where TRn is the rate of trade cycle of current year with absolute value; TR_{n-1} is the corresponding rate of the previous year; Edn is the rate of state external debt of current year with absolute value; ED_{n-1} is the corresponding rate of the previous year.

As we have already mentioned, the rates of import have exceeded export rates during the entire observed period. This means that the specific weight of imports in the size of observed trade circulation has increased. The coefficients of comparative efficiency (Table 5) were not significant for the observed rates (less than 1) in 2004, 2005, 2009 and in 2012-2016 in other years the connection was positive.

Table 5
The coefficients of comparative efficiency of trade circulation and state external debt of RA in 2000-2018

Years, terms	Trade	Trade circula-	State external	State external	Coefficients of
	circulation,	tion growth	debt, mln.	debt growth	comparative
	mln. USD		USD	rates, %	efficiency, %
2000	1183	13.38	685.4	8.30	1.61
2001	1297	9.69	731.6	6.74	1.44
2002	1498	15.49	821.2	12.25	1.27
2003	1965	31.16	871.5	6.13	5.09
2004	2074	5.52	943.0	8.20	0.67
2005	2776	33.85	903.1	-4.23	-8.00
2006	3177	14.45	1019.9	12.93	1.12
2007	4420	39.14	1257.2	23.27	1.68
2008	5483	24.05	1401.2	11.45	2.10
Average annual	2652.5	20.75	959.3	9.45	2.76
rates in 2000-2008					
2009	4089	-25.42	2466.1	76.00	-0.33
2010	4790	17.13	2737.9	11.02	1.55
2011	5480	14.40	2952.0	7.82	1.84
2012	5641	2.95	3144.5	6.52	0.45
2013	5865	3.96	3390.8	7.83	0.51
2014	5972	1.83	3345.3	-1.34	-1.36
2015	4725	-20.89	3839.9	14.78	-1.41
2016	5065	7.21	4300.9	12.01	0.60
2017	6425	26.85	4893.4	13.78	1.95
2018	6841	6.47	4982.8	1.83	3.54
Average annual rates in 2009-2018	5489.3	3.45	3605.4	15.02	0.73
Average annual rates in 2000-2018	4145.5	11.64	2352.0	12.38	0.75

The table was drawn and calculated on the basis of the data by the statistical yearbooks of NSSRA (Statistical Committee) of 2000-2018 and RA SRC of 2000-2018 on "Foreign Trade Customs Statistics".

Thus, the disclosure of the link between public debt and trade circulation indicates that the

growth of the first rate has significantly exceeded the growth of the second rate.

6. The coefficients of comparative efficiency of state external debt and employment

The coefficients of comparative efficiency of state external debt and employment growth rates of RA (k_6) were calculated according to the following (6) formula:

$$k_7 = \frac{\left(\frac{EN_n}{EN_{n-1}} \times 100\%\right) - 100\%}{\left(\frac{ED_n}{ED_{n-1}} \times 100\%\right) - 100\%}$$
(6)

where ENn is the rate of employment of current year with absolute value; EN_{n-1} is the corresponding rate of the previous year; Edn is the rate of state external debt of current year with absolute value; ED_{n-1} is the corresponding rate of the previous year.

Table 6
The coefficients of comparative efficiency of state external debt and employment of RA in 2000-2017

Years, terms	Employment 1000 people	Employment rate growth,	State external debt, mln. USD	State external debt growth rates, %	Coefficients of comparative efficien-
		70		14103, 70	cy, %
2000	1277.7	-0.89	685.4	8.30	-0.11
2001	1264.9	-1.00	731.6	6.74	-0.15
2002	1106.4	-12.53	821.2	12.25	-1.02
2003	1107.6	0.11	871.5	6.13	0.02
2004	1081.7	-2.34	943.0	8.20	-0.29
2005	1097.8	1.49	903.1	-4.23	-0.35
2006	1092.4	-0.49	1019.9	12.93	-0.04
2007	1101.5	0.83	1257.2	23.27	0.04
2008	1117.6	1.46	1401.2	11.45	0.13
Average annual rates in 2000-2008	1138.6	-1.48	959.3	9.45	1.19
2009	1089.4	-2.52	2466.1	76.00	-0.03
2010	1185.2	8.79	2737.9	11.02	0.80
2011	1175.1	-0.85	2952.0	7.82	-0.11
2012	1172.8	-0.20	3144.5	6.52	-0.03
2013	1163.8	-0.77	3390.8	7.83	-0.10
2014	1133.5	-2.60	3345.3	-1.34	1.94
2015	1072.6	-5.37	3839.9	14.78	-0.36
2016	1006.2	-6.19	4300.9	12.01	-0.52
2017	1011.7	0.55	4893.4	13.78	0.04
Average annual rates in 2009-2017	1112.3	-1.02	3452.3	16.49	0.18
Average annual rates in 2000-2017	1125.4	-1.25	2205.8	12.97	-0.01

The table was drawn and calculated on the basis of the data by the statistical yearbooks of NSSRA (Statistical Committee) of 2000-2018 and RA SRC of 2000-2018 on "Foreign Trade Customs Statistics".

The comparison of growth rate of the state external debt and employment rate (Table 6) shows

that there is no sharp fluctuation in the Armenian economy during the observed period in contrast to state external debt although it has been observed that since the 1990s the employment rate has had a tendency to decline irrespective of the rates of economic growth which is also conditioned by the emigration of the population. Increase of the employment rate was recorded only in 2003, 2005, 2007, 2008, 2010 and in 2017.

According to the coefficients of relative efficiency of the state external debt growth and employment rates showed that the external state debt rate of Armenia had negative impact on the employment level with the external state debt rising in the conditions of employment decline. Even in the years when a certain increase in employment was recorded in the country (2003, 2005, 2007, 2008, 2010, 2017), it was accompanied by the rapid growth of state external debt. Particularly, the comparative analysis of the coefficients shown points out that 0.11% increase of employment was ensured in terms of 6.13% growth of the state external debt in 2003 and in case of 14.78% growth of the state external debt the employment rate was reduced by 5.37% in 2015.

Overall, there was a reverse correlation between the growth of state external debt and the change in the number of employees, i.e. the involvement of foreign loans did not contribute to the creation of employment in the country but vice versa: the increase in the state external debt, even at the progressive rates of GDP growth, led to a reduction in employment.

The coeffcients of comparative efficiency calculated as a result of the growing macroeconomic rates and the growth of state external debt are presented in Table 7.

Table 7
The coefficients of RA separate macroeconomic growth rates and state external debt growth rates, %

Years, terms	GDP/ state	Export/state	Import/state	Pure export/	Trade circu-	Employ-
	external	external debt	external	state external	lation/state	ment /state
	debt		debt	debt	external debt	external
						debt
2000	0.43	3.42	1.10	0.17	1.61	-0.11
2001	1.60	0.43	1.78	2.45	1.44	-0.15
2002	0.99	5.36	0.92	-1.06	1.27	-1.02
2003	2.96	5.74	2.61	-0.05	5.09	0.02
2004	3.34	0.66	0.68	0.70	0.67	-0.29
2005	-8.74	-8.21	-7.89	-7.53	-8.00	-0.35
2006	2.34	0.09	1.67	3.54	1.12	-0.04
2007	1.90	0.73	2.11	3.24	1.68	0.04
2008	2.33	-0.72	3.09	5.17	2.10	0.13
Average	2.47	2.14	2.28	2.62	2.76	1.19
annual rates						
in 2000-						
2008						
2009	-0.34	-0.36	-0.33	-0.32	-0.33	-0.03
2010	0.64	3.22	1.17	0.55	1.55	0.80
2011	1.22	3.60	1.35	0.49	1.84	-0.11
2012	0.72	0.53	0.43	0.38	0.45	-0.03
2013	0.60	0.91	0.37	0.12	0.51	-0.10
2014	-3.27	-3.46	-0.65	0.77	-1.36	1.94
2015	-0.62	-0.27	-1.81	-2.64	-1.41	-0.36
2016	-0.01	1.72	0.09	-1.29	0.60	-0.52
2017	0.68	1.83	2.02	2.24	1.95	0.04
2018	4.23	4.12	3.22	2.18	3.54	

Years, terms	GDP/ state external debt	Export/state external debt	Import/state external debt	Pure export/ state external debt	Trade circu- lation/state external debt	Employ- ment /state external debt
Average annual rates in 2009- 2018	0.39	1.18	0.59	0.25	0.73	0.18*
Average annual rates in 2000- 2018	0.58	1.02	0.63	0.48	0.75	-0.01*

^{*} The deadline is 2017

Drawn on the data base of previous tables

Conclusion

The study allows us to make the following conclusions:

- 1. From 2000 to 2018 the external state debt of the Republic of Armenia has increased continuously (without any exception of the year) (the so called "debt-state" has been formed in 2000-2018) whose size in 2018 increased by 627.0% while the GDP growth comprised 550%, export -710.7%, import 400.4%, pure export 243.3%, trade circulation 470.5% and employment by 20.8% respectively.
- 2. The impact of the observed state external debt on the main macroeconomic rates of the RA has not been adequate (particularly, the picture is poor in terms of employment).
- 3. In the process of signing state external foreign debt, it is necessary to pay special attention to the rates of efficiency of external debt in the coming years not for worsening but for improving the main macroeconomic rates of the republic.

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ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅԱՆ ԿԱՌԱՎԱՐՈՒԹՅԱՆ ԱՐՏԱՔԻՆ ՊԵՏԱԿԱՆ ՊԱՐՏՔԻ ԱՐԴՅՈՒՆԱՎԵՏՈՒԹՅԱՆ ԳՆԱՀԱՏՈՒՄԸ

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Ցանկացած երկրի սոցիալ-տնտեսական զարգացման և արտաքին տնտեսական հարաբերությունների կառուցման գործում էական նշանակություն ունի արտաքին պետական պարտքի կառավարումը։ Հատկապես վերջին 20-30 տարիների ընթացքում համաշխարհային տնտեսության զարգացման հիմնական միտումներից մեկը դարձել է համախառն ներքին արդյունքի (ՀՆԱ-ի) նկատմամբ արտաքին պետական պարտքի առաջանցիկ աձը։ Հստ որում, վերջին տարիներին բազմաթիվ կրների արտաքին պետական պարտքի աձի տեմպերը գերազանցում են ՀՆԱ-ի աձի տեմպերին։ Բավական է նշել, որ ներկայումս համաշխարհային արտաքին պարտքի մեծությունը գերազանցում է ՀՆԱ-ի մեծությունը ավելի քան 3 անգամ։ Այս տեսանկյունից բացառություն չէ նաև Հայաստանի Հանրապետությունը, որը նույնպես ընդգրկված է արտաքին պետական պարտքի բազմաչափ հարթությունում։ Իր հերթին, արտաքին պետական պարտքի բազմաչափ հարթությունում։ Իր հերթին, արտաքին պետական պարտքի անիստում ունի սահմաններ (սահմանափակումներ), ինչն էլ, առաջին հերթին, պահանջում է փոխառու միջոցների արդյունավետ օգտագործում։ Վերջինս ենթադրում է, որ արտաքին պարտքի աձի տեմպերը պետք է ավելի դանդաղ լինեն, քան երկրի հիմնական մակրոտնտեսական ցուցանիշներինը, ինչպիսիք են՝ ՀՆԱ-ի, զբաղվածության, արտահանման և մի շարք այլ մակրո- ցուցանիշներինը, ինչպիսիք ։

Հեղինակները փորձել են 2000-2018թթ. ժամանակահատվածի համար գնահատել ՀՀ կառավարության արտաքին պետական պարտքի արդյունավետությունը։

Բանալի բառեր. արտաքին պետական պարտք, արտաքին պետական պարտքի արդյունավետության, համեմատական արդյունավետության գործակից, ՀՆԱ-ի հավելաձ, արտահանման հավելաձ, ներմուծման հավելաձ, զուտ արտահանման հավելաձ։

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ОЦЕНКА ЭФФЕКТИВНОСТИ ПРИВЛЕЧЕНИЯ ИНОСТРАННОГО ДОЛГА ПРАВИТЕЛЬСТВА В РЕСПУБЛИКЕ АРМЕНИЯ

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Управление внешним государственным долгом необходимо для обеспечения социально-экономического развития любой страны и выстраивания внешнеэкономических связей. Одной из основных тенденций развития мировой экономики, особенно за последние 20–30 лет, является опережающый рост внешнего государственного долга по сравнению с валовым внутренним продуктом (ВВП). В то же время, в последние годы темпы роста внешнего долга многих стран превышают темпы роста ВВП. Примечательно, что в настоящее время размер мирового внешнего долга превышает размер мирового ВВП более чем в три раза. Республика Армения не является исключением и, как и многие страны мира, вовлечена многосторонние связи для привлечения и обеспечения внешнего долга правительства. В свою очередь, формирование внешнего государственного долга имеет границы (ограничения), что, в первую очередь, требует эффективного использования заемных средств. Последнее предполагает, что темпы роста внешнего долга должны быть ниже, чем темпы роста основных макроэкономических показателей страны, таких как ВВП, занятость, импорт, чистый экспорт и другие.

Авторами проведено исследование и дана оценка эффективности внешнего государственного долга правительства РА за период 2000-2018 годы.

Ключевые слова: внешний долг, эффективность государственного долга, сравнительный коэффициент эффективности, рост ВВП, прирост экспорта, прирост чистого экспорта.

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