

PUBLIC DEBT AND THE COVID-19 PANDEMIC: REALITY AND INTERCONNECTEDNESS

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Abstract

In the process of fulfilling their functions and obligations, states often find themselves in a situation where their own financial resources are not sufficient to achieve the set goals and objectives. Under such conditions, in order to finance government expenditures and the formation of budget revenues, it is necessary to attract domestic and foreign loans, which leads to the emergence and growth of both domestic and foreign debt.

Borrowing in the face of globalization should not be considered a sensation. At the modern stage, capital has taken on the character of international mobility and it is constantly moving from country to country in order for its owner to make more profit. The unequal level of development of countries, their division into developed and developing countries gives the flow of capital movement in a largely one-way direction.

Effective management of public debt, including the external debt component, is essential to ensure Georgia's fiscal sustainability. Borrowing public debt is sound in the face of economic growth, but if payments for foreign debt services are growing faster than foreign exchange earnings, then there are problems with the balance of payments and the state budget.

The action of any government in obtaining loans is conditioned by its financial condition. The larger the volume of government loans, the higher the share of public debt to GDP, the deeper the financial crisis. The best indicator of public debt sustainability is its ratio to nominal GDP.

Keywords: *public debt, economic development, gross domestic product, financial crisis, securities*

JEL Classification: *E58, F34, F36, F37*

I. INTRODUCTION

The existence of the institution of public debt as a term and macroeconomic indicator does not count for a long period, but it gains relevance over time, especially during crises, both at the large-scale and local-state levels. The management and volume of public debt is often related to the socio-economic situation of a particular country and its historical experience, as well as the use of different mechanisms to regulate the economy. Accordingly, the functions of public debt may vary from country to country, but general trends can still be identified, in particular, public debt helps states to finance international trade, manage budget deficits, and can play an important role in organizing socio-economic-infrastructure change. It should also be noted that the World Bank, which was originally established within the framework of the Bretton Woods Conference, provided financial assistance to the states, in addition to the IMF's objectives include technical assistance to states in managing public debt and lending various types of loans. Overall, there are many critical views on how effective public debt growth can be and how it affects various economic parameters. Of course, there is no unified, agreed position on this issue, but the existence of public debt has a special place in crisis management, and Of course, the crisis caused by the current Covid-19 pandemic, in which Georgia, like other countries, found itself, can not be an exception. Therefore, it will be interesting to present the views of the sciences in the framework of the study of the effects of public debt and economic growth, and at the same time to assess the effectiveness of the current public external debt of Georgia.

II. LITERATURE REVIEW

There is no common view between public debt and economic development, the issue is still the subject of controversy, but common trends can still be identified. It should also be noted that the differing conclusions of the scholars' views are related to the socio-economic as well as the political situation of the borrowing country. For example, (Pattillo et al.:2004) It was found that public debt affected the economies of 61 developing

countries during the period 1996-1998. The results showed that the negative impact on economic growth is at the expense of reducing the accumulation of physical capital and slowing down economic growth.

(Schclarek:2004) studied the economies of 59 developing and 24 advanced countries during the period 1970-2002, concluding that for developing economies there is a negative relationship between public debt and economic growth, while in advanced economies no significant relationship between public debt and economic growth. However, it should also be noted that studies have shown a positive relationship between investment, export growth and economic growth.

(Sen et al.:2007) studied the impact of debt and economic growth on the example of different countries, after which it was concluded that debt has a negative impact on economic growth in the cases of Latin America and Asian countries.

(Misztal:2010) Examined the dependence of public debt and economic growth on the example of EU member states in the period 2000-2010, after which it concluded that a 1% increase in public debt in these countries led to an average reduction of 0.3% of GDP. At the same time, a 1% increase in GDP led to a 0.4% decrease in public debt.

(Kumar and Woo:2010) On the example of 38 developed and poor economies, it was surveyed for 1970-2007 that a 10% increase in public debt led to a 0.2% decrease in GDP growth. However, the negative effect was stronger for the economies of poor countries and relatively weak for developing economies.

(Drine and Nabi:2010) 27 For developing economies, it was found that an increase in external debt between 1970 and 2005 reduced output efficiency.

(Afonso and Jalles:2013) Using the indicators of 155 countries, the link between economic growth, output and public debt was studied. They found that debt had a negative effect on GDP and economic growth. At the same time, the financial crisis slowed economic growth, while fiscal consolidation encouraged growth.

(Afonso and Alves:2015) According to a similar study, the following findings were made on the example of 14 European countries in the period 1970-2012, namely, a 1% increase in public debt affected economic growth within -0.01%, and debt service had 10 times more negative effect. However, science has identified a margin after which debt had a negative impact on economic growth, and it's considered to be 75%.

It should also be noted that econometric analyzes conducted in individual countries, for example, **(Anyanwu and Erhijakpor:2004)** found a negative correlation between public debt and economic growth in the years 1970-2003. **(El-Mahdy and Torayeh:2009)** Examined the Egyptian practice 1981-2006, in this case also revealed a negative effect. **(Shah and Shahida:2012)** estimated the effect of public debt on economic growth on the example of Bangladesh in the period 1980-2012, but found no link between debt and economic growth.

(Tchereni et al.:2013) The impact of debt on the Malawian economy between 1975-2003 was studied, but no statistically significant negative correlation was found.

Some scholars believe that public debt can have a negative effect on economic growth only after overcoming a certain amount. However, everyone agrees that the effect may be different on the example of different countries. **(Reinhart and Rogoff:2010)** and Reinhart, Reinhart and Rogoff **(Reinhart et al.:2012)** argue that higher public debt correlates more negatively with economic growth. However, they found no link between debt and economic growth when public debt is below 90% of GDP. It should also be noted that, according to various studies, the state debt has a significant negative effect on economic growth when its benchmark reaches 100% of GDP **(Checherita-Westphal and Rother 2012, Furceri and Zdzienicka:2012)**.

III. MAIN PART

In the current period, the urgency of public debt has again become an important issue in the circles of academic and economic policy. Over the last 20 years, there have been worldwide crises caused by a variety of factors or circumstances, including substandard lending, the sovereign debt crisis, and most recently the Covid-19 pandemic. It should be noted at once that the EU had not even recovered from the recent financial crisis, that a pandemic had arisen, which of course further complicated the situation, both in EU countries and around the world. All of the above for the EU countries in 2020 was an additional result of the budget deficit and increase in public debt, which logically based on the measures taken by the states, in particular, mandatory quarantine, closure of borders, reduction of international trade, rising unemployment and more.

Financial support and resources were received from various developing economies from the World Bank and the International Monetary Fund. Also, the G20 Group's developed economies decided not to impose liability on poor states for failing to service public debt. However, after various meetings, proposals and discussions, the EU approved the € 100 billion fund requested by the Spanish government, which was mainly intended to support employment and unemployment insurance - ERTE (Expediente de Regulación Temporal de Empleo), a program Adapted after the declaration of quarantine in Spain. **(Herman Ricardo Bricero, Javier Perote:2020)**

The importance of the International Monetary Fund in managing public debt is special and recognized. It also issues loans of certain types according to the level of economic development of the country and the current situation. For example, one of the IMF loan instruments is the use of the Extreme Financing Facility, which was introduced by the organization in 1995 and used a total of six times, namely during the 1997 Asian crisis in the Philippines, Thailand, Indonesia and Korea, in 2001 in Turkey and in 2008 in Georgia. **(IMF Survey,2008:1)**

This mechanism is used only in special situations / crises, the use of this mechanism for Georgia coincided with the global crisis and the war between Russia and Georgia, which made the financial crisis and socio-economic situation much more difficult than in other countries.

Of course, we can not look at loans from the International Monetary Fund, because the loan portfolio from other international / multilateral lenders is much larger, but the role of the International Monetary Fund should be especially noted in debt management, crisis and extreme situations, at least, the loan issued to Georgia by the IMF during the pandemic.

IV. RESEARCH METHODOLOGY

It is impossible to study and realize the effective direction of public debt management without analyzing the current situation. It is important to evaluate all the factors related to public debt. In this regard, it is important to quantitatively assess the statistical data on public debt, on the one hand, and on the other hand - a qualitative analysis of the legal framework. In the research process, this allows us to evaluate the existing public debt management strategy and tactics, determine how well it adapts to the current reality of our country and at the same time fully complies with international legal standards and requirements.

V. THE INTERPRETATION OF THE RESULTS

At the present stage, the study of public debt effectiveness mainly uses econometric analyzes, which study the impact on the economy and GDP according to various economic indicators, for example, the relatively recognized methods are the Autoregressive Distributed Lag (ARDL) model and the Vector Autoregressive Model (VAR) methodology. As mentioned, such a study does not link only one indicator to economic or GDP growth, but also a comparative efficiency study, for example, on public debt, investment, liberal foreign trade, and other parameters.

The process of public debt management remains a challenge for both developing and developed countries, especially in times of crisis, and therefore we can not avoid the pandemic that has caused the increase in public debt in countries around the world.

Table №1. Georgian State Foreign Debt (2020)

Creditors	Currency	Debt Stock (thousand)		
		In Credit Currency	In USD	In GEL
External Public Debt			7,535,168	24,689,731
Government External Debt			7,162,138	23,467,463
Multilateral			5,010,415	16,417,126
Asian Development Bank	USD	410,024	410,024	1,343,484
	SDR	463,616	667,732	2,187,889
	EUR	297,896	365,783	1,198,525
Asian Infrastructure Investment Bank	USD	38,071	38,071	124,743
	EUR	98,912	121,453	397,952
Council of Europe Development Bank	EUR	2,692	3,306	10,832
European Bank For Reconstruction and Development	EUR	162,209	199,175	652,617
European Investment Bank	EUR	602,901	740,295	2,425,650
European Union	EUR	133,000	163,309	535,099
International Bank for Reconstruction and Development	USD	846,508	846,508	2,773,669
	EUR	231,629	284,415	931,914
International Development Association	SDR	638,935	920,239	3,015,254
International Fund for Agriculture Development	SDR	23,664	34,082	111,673
	EUR	1,418	1,741	5,704
International Monetary Fund	SDR	147,000	211,719	693,720
Nordic Environment Finance Corporation	EUR	2,088	2,564	8,402
Bilateral creditors			1,650,025	5,406,472
France	EUR	472,735	580,466	1,901,955

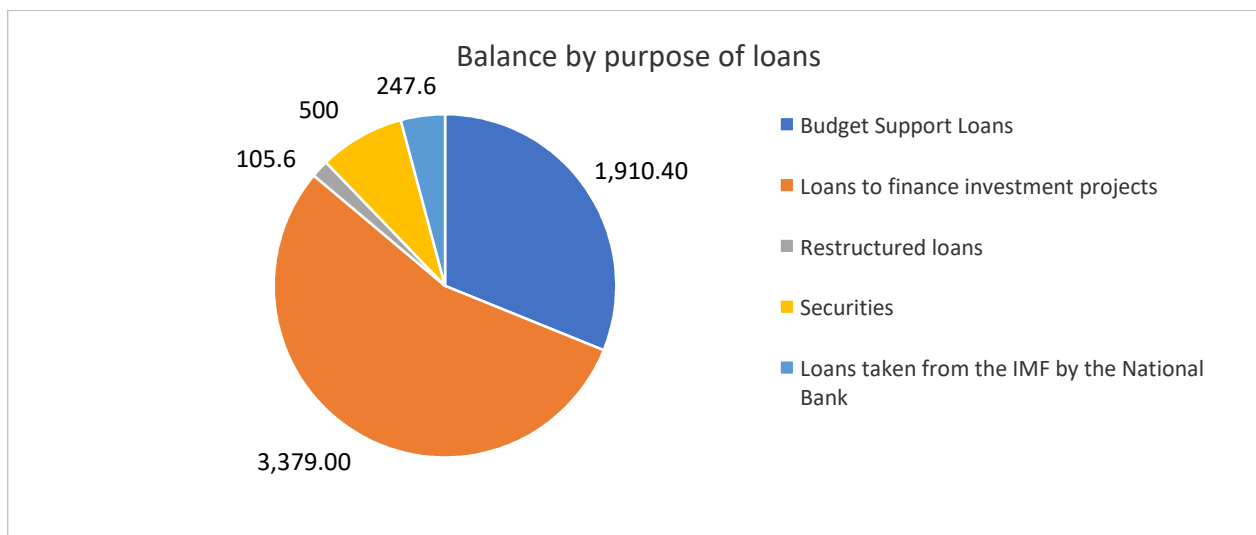
Germany	EUR	595,707	731,462	2,396,709
Japan	JPY	22,437,602	217,480	712,596
Other				395,212
Bonds			500,000	1,638,300
Guaranteed	EUR	1,383	1,698	5,564
External Debt of National Bank of Georgia			373,030	1,222,269
International Monetary Fund	SDR	259,000	373,030	1,222,269

Source: Georgian Public Debt Management Statistical Bulletin, №14, 2020.

https://mof.ge/images/File/2020/biuletenebi/N14_GE.pdf

The structure of public debt and its standardization is dictated by the guidelines issued by the IMF, which are common to the IMF member states. At the same time, Georgia has adopted the Law of Georgia on Public Debt, which makes the structure of state debt consisting of state foreign and state domestic debt. Of course, bringing general statistics will help us better understand how important public debt is for Georgia. Accordingly, we will present a small amount of information on the volume of public debt, its further purpose and make a comparative analysis with other countries against the background of the pandemic.

Figure 1. Balance by purpose of loans USD (II quarter of 2020, 31.12.2020)



Source: Compiled according to the Public Debt Management Statistical Bulletin of Georgia, №14, 2020.

https://mof.ge/images/File/2020/biuletenebi/N14_GE.pdf

It's good fact that 55% of the borrowed loans are aimed at financing investment projects, which should contribute to the growth of economic activity, 31.1% hold loans from the International Monetary Fund, 4% of the total loan is directed to the state budget revenues, which is explained by the slowdown in the economic growth rate caused by the pandemic in the country and, consequently, the reduction of other state budget revenues. As for restructured loans, it accounts for only 1.7% of loans taken. Instead, a loan of USD 500 million was repaid by 2021 with the formation of a new loan of the same amount, and finally the proceeds from the sale of the securities are about double the amount of the budget support loans.

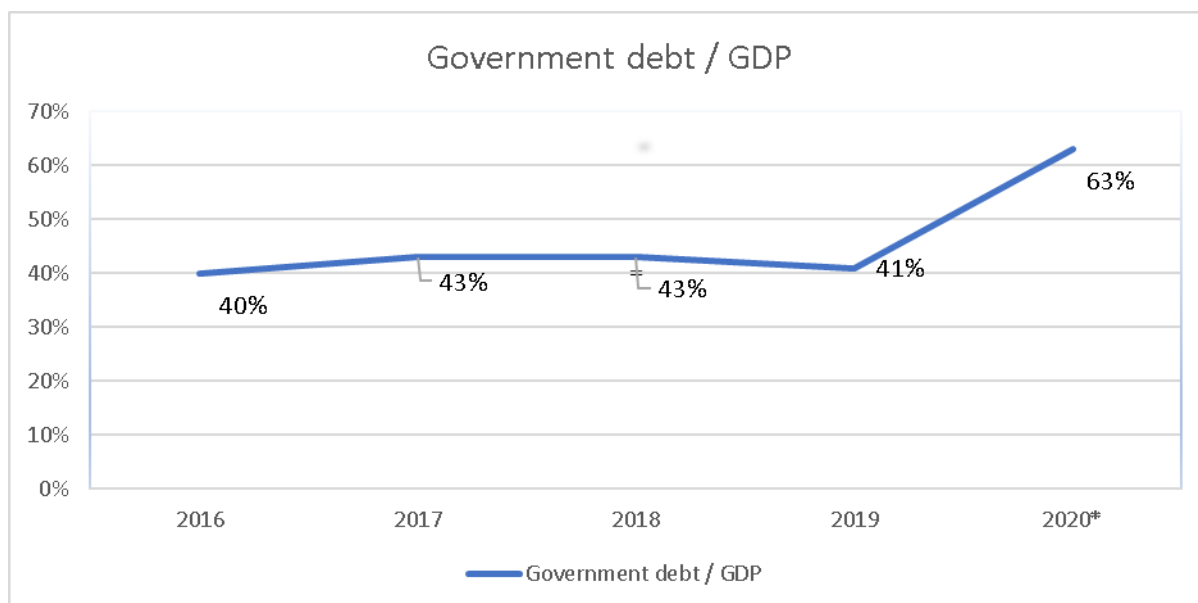
Table №2. Government domestic debt (31.12.2020, thousand GEL)

Government domestic debt	6,201,177
Treasury securities	5,807,507
6-month treasury liabilities	120,000
12-month treasury liabilities	660,000
2-year treasury bonds	1,530,000
5-year treasury bonds	2,260,689
10-year treasury bonds	1,236,818
Other securities	352,846
Bond for NBG	200,846
Bond for open market operations	152,000
Debt in the form of loans to budget organizations	40,824

Source: Compiled Bulletin of Public Debt Management of Georgia, №14, 2020.
https://mof.ge/images/File/2020/biuletenebi/N14_GE.pdf

Domestic debt volume at December 31, 2020 is 6 201 177 thousand GEL, of which 93.6% comes from treasury securities (including 6-month, 12-month, 2.5 and 10-year treasury bonds), about 5.7% from other securities, which combines open market operations and National Bank of Georgia bonds, while the debt borrowed by budget organizations is 0.7%. The relationship between public debt and GDP is clearly shown in the following Figure 2.

Figure №2. Debt and GDP Ratio (2016-2020)¹



Source: Analytical Portal of the State Audit Office, budget monitoring
[https://budgetmonitor.ge/ka/debt?fbclid=IwAR1aYmE015m5psy4kp7Ml438NogcWhBOjX4yg0kHczqMA sLWhplmyJ60CA](https://budgetmonitor.ge/ka/debt?fbclid=IwAR1aYmE015m5psy4kp7Ml438NogcWhBOjX4yg0kHczqmA sLWhplmyJ60CA)

As can be seen from the Figure 2, before the pandemic period, the attitude of public debt to GDP was characterized by a small percentage growth trend (2016-2017), for the next two years this indicator is identical, In 2019 - it decreased by 2%, and after the first year of the pandemic "Covid-19" there is a 22% leapfrog increase.

Table №3. Dependence of GDP and public debt (forecast by some countries)

State	Last		2021	2022	2023
Argentina	89.4%	Dec / 19	95%	93%	93%
Australia	45.1%	Dec / 19	69%	72%	72%
Brasil	75.79%	Dec / 19	92%	93%	93%
Canada	88.60%	Dec / 19	115%	114%	114%
China	52.6%	Dec / 19	65%	70%	70%
Euro area	77.6%	Dec / 19	98%	92%	92%
France	98.1%	Dec / 19	117%	115%	115%
Germany	59.80%	Dec / 19	72%	69%	69%
India	69.62%	Dec / 19	85%	84%	84%
Indonesia	30.50%	Dec / 19	40%	42%	42%
Italy	134.80%	Dec / 19	152%	148%	148%
Japan	236.60%	Dec / 19	255%	260%	260%
Mexico	45.50%	Dec / 19	58%	59%	59%
The Netherlands	48.60%	Dec / 19	58%	52%	52%

¹Note: The public debt dynamics are preliminary data for 2020, presented based on "Trading Economics"

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Russia	12.2%	Dec / 18	18.5%	18.3%	18.3%
Saudi Arabia	22.8%	Dec / 19	33%	34%	34%
Singapore	126.30%	Dec / 19	140%	142%	142%
South Africa	62.20%	Dec / 19	83%	86%	86%
South Korea	37.70%	Dec / 19	52%	55%	55%
Spain	95.50%	Dec / 19	121%	118%	118%
Switzerland	41%	Dec / 19	48%	46%	46%
Turkey	33.1	Dec / 19	45.6%	49%	49%
United Kingdom	80.70%	Dec / 19	110%	112%	112%
USA	107.6%	Dec / 20	125%	122%	122%

Source: <https://tradingeconomics.com/forecast/government-debt-to-gdp?continent=g20>

The action of any government in obtaining loans is due to its financial condition. The higher the volume of government loans, the higher the share of public debt to GDP, the deeper the financial crisis. The best indicator of government debt sustainability is its ratio to nominal GDP. As recognized by the International Monetary Fund, to maintain debt sustainability, debt for developed countries should not exceed 60% of GDP, and for developing countries 50%-40%. According to the "Economic Freedom Act" adopted by the Parliament of Georgia in 2011 (entered into force on December 31, 2013), public debt should not exceed 60% of GDP.

At present, according to preliminary data, the volume of public debt is within 60% (already within 63%), which is an important signal and requires effective monitoring by the government and adjustment of public debt management strategy / services.

Of course important statements are made at the governmental level and several times it has been said by the economic team that the main task for the next 5 years will be to reduce public debt because in the long run, increasing public debt has a negative impact on the economy and social situation.

Table №4. Public debt, PUI, current account and GDP by years Million USD

Years	State foreign debt	FDI (Foreign Direct Investment)	Current account balance	Gross Domestic Product
2010	3,283	865	-1,195,673.8	21,821.6
2011	3,607	1,134	-1,843,527.1	15,111.6
2012	3,997	1,048	-1,886,356.5	16,488.8
2013	4,202	1,039	-958,424.2	17,189.3
2014	4,199	1,837	-1,789,576.7	17,625.5
2015	4,314	1,728	-1,763,401.6	14,948.2
2016	4,515	1,652	-1,885,140.8	15,141.7
2017	5,177	1,978	-1,307,670.1	16,248.5
2018	5,434	1,306	-1,190,037.2	17,596.6
2019	5,741	1,310	-957,217.8	17,470.7
2020	7,535	616	-1,961,678.2	15,888.1

Note: Compiled by the authors based on the following materials: Statistical Bulletin of the Ministry of Finance Public Debt, Geostat Data on GDP and FDI, as well as data published by the National Bank on the current account balance

International experience also speaks for itself. However, the budget deficit is considered separately and as it's presented in the above statistics, about 31% of the external debt comes from budget support loans. In fact, public debt in the current period mainly serves to take measures against the crisis caused by the Covid-19 Pandemic and should be considered justified, because the call for this has been made several times by international financial organizations. However, we must also take into account the fact that the stability of the national currency exchange rate against the foreign currency is decreasing in the background of the crisis, which corrects the volume of public debt in a negative way. All this is required by the Treasury Service to correct and re-approve the document on public debt management.

According to the given table 5, we can present a small conclusion about the standard deviation and the correlation with GDP of the external debt, FDI and current account balance.

Table №5.

	State foreign debt	FDI	Current account balance
Standart deviation	1194	432	398

Correlation	-0.0723	-0.45048	0.477
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As it's seen from the table 5, the standard deviation ratio of public external debt is relatively high compared to other economic data. At the same time, the negative correlation shows that there is no significant relationship between government external debt and GDP growth, while in the case of Georgia, GDP growth coincides with economic growth. Also, we can conclude from the table 5 that we have a relatively positive balance from the indicators discussed above between the decrease in the current account balance and GDP growth (certainly not annually).

It should also be noted that there are also critical views that cast doubt on the public debt calculation methodology and speak of non-compliance with the International Monetary Fund standardization. For example, this does not include the debt of state-owned enterprises in the public debt statistics, which should be considered as an objectively fair remark, because based on logical explanation and reasoning, state-owned enterprises also act on behalf of the state in financial relations (International ... 2016: 2). But it should also be noted that the number and volume of state-owned enterprises in Georgia is not very high and therefore it will not have a radical impact on the final result.

One of the important issues that arises in the service of foreign debt is the exchange rate of the national currency. Determining the strength of a currency during a floating exchange rate by considering various factors. It also depends on demand-supply and expectations. Consequently, the service of foreign debt in foreign currency makes the national currency even more unstable, which in itself affects the socio-economic situation of the population and the country.

VI. CONCLUSIONS

Public debt under effective financial governance can be considered as one of the important factors and tools stimulating the economy. Otherwise, public debt for the country may become a stimulus for the realization of the crisis, which may lead to a significant and irreparable crisis in the economy of any country. Therefore, prudent management of public debt is important for the sustainable development of the country.

External debt volume is an important tool in determining the economic pulsation of a country. By observing it, we can judge the economic viability of a particular country. An increase in public debt is always accompanied by an increase in budget expenditures. This is an inevitable process. The dynamics of debt growth, which is evident from the example of our country, clearly shows the expectation that budget consolidation will be needed to maintain sustainability and solvency in the future: scaling down the costs or raising taxes to maintain debt stability. Increasing tax pressure is almost impossible for a country with such a transition economy and current economic postulates. At this time, in order to better ensure maneuvering, countries resort to budget cuts, which have a direct negative impact on the socio-economic well-being of society.

As a result of the spread of Covid-19, the socio-economic well-being of the above-mentioned societies in the process of recession of the world economies, including our country, has approached a significant negative mark. To reverse the point of economic efficiency, government domestic and foreign debt played an important role in this process. But it is important to remember that this is a short-term effect that is achieved at the expense of the commitment and in terms of budgetary resources it should not be given the function of repaying the social obligation. This is the first important factor that is often rejected in our country's debt management strategy plan, and in the process of dynamic growth of foreign debt, it can not create a positive perspective for a country with a transition-consumer economy like Georgia.

Any state should understand that borrowing does not affect a country's wealth and fortune, as well as interest rates and capital formation. Its sole function is to bring more flexibility to finance the state's current revenues and government expenditures. In our country, this balance is often disturbed and public debt as a result of non-performing economic policies is the main source of interest rates and capital formation. This is the second important negative understanding of effective debt strategy management and it needs to be revised.

The third important problem that places a heavy "burden" on countries with economies in transition, including Georgia, is the constant concern to pursue the policies of the International Monetary Fund and to align it with our strategic plan, which often does not justify modernity. The proposed strategy is a framework that does not allow the country to maneuver, which ultimately serves as a stimulus to economic inhibition. In such an environment, transition countries are forced to create a compatible expectation and environment of the desires that the IMF wants, because after Bretton Woods, IMF benevolence is the primary positive signal for lenders to become donors to the country. Such a process is an imaginary creditor compatibility, achieved in exchange for the proposed economic framework for the state and in parallel with the pressure of a new obligation. We must understand that it suppresses the ability of the economy to maneuver freely.

The fourth significant gap of an effective debt management strategy is the frequent restructuring of public debt or the repayment of an existing loan obligation in exchange for a new one. In this case, the state must understand that such a process only increases the pressure on the economy and any effect obtained from it is

illusory. Commitment mobilized resource is characterized by the dynamics of growth of service costs over time, and in both cases above it is only manipulated by numbers and it can not create a tangible positive environment for our country's economy.

Finally, we can say that in the current "Covid-19" pandemic, Georgia's borrowing of state debt was dictated by necessity and should be considered justified, because by not borrowing public debt, it would be even more difficult for the state to finance the current slowdown and economic stagnation with its own funds. But taking on debt also requires responsibility, which should be reinforced by the debt management document, and this document should minimize the deficiencies or shortcomings discussed above.

Prospects for short-term and long-term scenarios should also be identified. The norm adopted by the International Monetary Fund is expected to increase in terms of GDP and public debt. At the same time, according to the international call, the repayment schedule of overdue loans is likely to be postponed during the crisis and post-crisis period (the concept of international debt and the assistance mechanisms of international organizations are based on cooperation during the crisis).

Therefore, we can conclude that public debt in Georgia plays an important role in the development of the country, but the debt management strategy in the context of the crisis needs to be adjusted and adapted to future scenarios. At the same time, it is necessary to regulate the exchange rate of the national currency by the demand for foreign currency caused by the debt service in times of crisis and the depreciation of the national currency.

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