The Influence of Covid-19 on the Public Debt Growth and Default Risk: A Fiscal Sustainability Analysis

George Abuselidze[a]
Batumi Shota Rustaveli State University, Ninoshvili street 35, Batumi, Georgia

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Abstract: This topic is relevant due to the fact that Georgia's public debt is increasing from year to year, and there is a lack of comprehensive research on the public debt management. The problem is how to assess whether or not the public debt is managed properly. The purpose of this article is to analyse and evaluate the Georgia public debt management by developing a public debt management assessment model. The paper deals improving mechanisms of State Debt management and determining its importance for economic development of the country. It is offered in the future decisions, related to Georgia public debt management, to take into account the burden of public debt to future generations.

1 INTRODUCTION

The global financial crisis of 2007-2008 and global pandeconomic crisis of 2019 (Abuselidze & Mamaladze, 2020; Abuselidze & Slobodianyk, 2021) made a negative impact on Georgia's fiscal sustainability, which reflected in state budget deficit and large-scale growth of state debt levels. Although the current level of state debt is in a reasonable interval, considering sharp social orientation of fiscal policy since 2012, planned rate of fiscal consolidations and the fiscal limits determined by the "Act of Economic Freedom", independent assessment and analysis of fiscal sustainability for medium and short term periods gains special importance. Fiscal or state finance stability is the ability of the state to maintain its current expenses, taxes and other economic policies in long term, without risking state's ability to pay debts, or to refuse to pay certain liabilities and budget expenses (incl. pensions, health care, etc.).

2 METHODOLOGICAL FOUNDATIONS

Study was conducted by means of qualitative and quantitative methods. The logic of theoretical analysis consists on the systemization of scientific literature on public debt management assessment criteria, indicators and methods; as well as analysis and synthesis of evaluation criteria and indicators. Empirical research is based on information from the Ministry of Finance (2020), the Ministry of Economy and Sustainable Development (2020), the National Bank (2020), the Parliament (2018; 2019) and the Georgian Department of Statistics (2020). My research shows that management of public debt in 2009-2019 years was as acceptable by public debt structure, indicators and its compliance with the thresholds, and by public debt growth rates. Issues of State debt management were studied by economy scientists, among them Alesina *et al.*, (1992), Bhandari, Evans (Bhandari et al., 2017), Denison and Guo (2015), Di Bartolomeo and Di Gioacchino (2008), Dunaev (2013), Dutta (2018), Faraglia *et al.*, (2010), Fastenrath *et al.*, (2017), Hackbart and Denison (2014), Kim and Lim (2018), Livne and Yonay (2016), Mareček and Machová (2017), Scott-Clayton and Zafar (2019), Trampusch (2015), Werner (2013; 2014) and others. In their scientific researches, they have deeply disclosed issues of state long-term debt, Management Challenges, theory of debt management, Enhanced debt management, sustainable financial architecture, defined problem issues in this area, however, the impact of debt

[a] https://orcid.org/0000-0002-5834-1233

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management on the economic and financial stability requires continuous improvement and research.

3 RESULTS AND DISCUSSION

For the management and service of State Debt, its quantitative calculation and reflection, it is necessary to define what is actually a State Debt and which major components are included in it.

With a State Debt definition, the WGPD (Working Group on Public Debt) of the INTOSAL (International Organization of Supreme Audit Institutions) suggests, State Debt is defined as the sum of optional and direct liabilities taken by state institutions (INTOSAI-Public Debt Committee). With the Definition provided by the International Monetary Fund (IMF), the State Debt is defined as the sum of debt of government sector and state corporation, where the debt of the state sector combines the unity of the debts of the country's central, autonomous republics and local authorities, and the state corporation's debt combines the debt of financial and non-financial corporations and the various financial institutions" (Definitions and Accounting Principles, 2013).

According to the Law of State Debt of Georgia (Legislative Herald of Georgia, 2016), the State Debt is defined as "The debt in national currency, taken by other institutions with the name of Georgia and guarantee of Ministry of Finance, also the debt taken by Financial Ministry, with the name of Georgia, using state securities in national or foreign currency, in addition the State Debt includes total amount of state domestic and foreign debt received from the financial resources approved by the International Monetary Fund" (Transparency International Georgia, 2019).

The definitions that offer international financial institutions are sharply different from the definition provided by the Georgian legislation. In particular, under the legislation of Georgia the state liabilities portfolio does not take into account the state non-financial corporations liabilities, also the credit liabilities of enterprises created by the state share participation is not considered as part of State Debt. This is attached to the state sector liabilities by definition of the International Monetary Fund. Under the INTOSAI definition, it is a state obligation.

The funds attracted by the State Debt are an important source of budget financing and at the initial stage of the budget planning process, It is important for the country to properly determine the debt needs in order to avoid liquidity risk and paying extra expenses due to large amounts of debt, as long as the State Debt management process implies development and implementation of debt management strategy.

Generally, the initiator of taking foreign debt, if it is considered as a source of funding of the budget, is the Ministry of Finance, and if it is taken for funding some investment projects, the role of the initiator becomes a specific spending institution.

According to the 6th chapter of the budget project of 2018, 86% of the debt, 1,074,800.0 GEL was allocated to the Ministry of Regional Development and Infrastructure of Georgia (this indicator is 1,062,680.0 GEL in 2019), taking into consideration the funds allocated for the defense, education, energy and agriculture ministries for infrastructural development, Overall, 95% of the total volume of debt is financed to cover the expenditure incurred in this direction (Transparency International Georgia, 2019).

The total volume of State Debt in the current year is 2.04, 2019 forecast for 2.3 billion GEL (State audit office of Georgia 2014, 2015; Analytical portal of state audit office of Georgia, 2020; Budget monitor, 2020; Legislative Herald of Georgia, 2018) this is 245 million GEL higher than the previous year's figure. The trend of decrease is reflected in the volume of credit supporting credits, but the share of long-term and investment credits increases (Analytical portal of state audit office of Georgia, 2020) (see Figure 1).

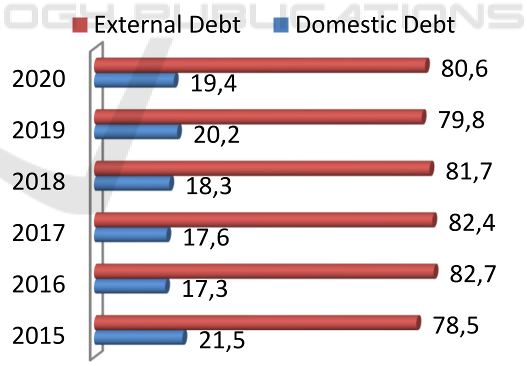

Figure 1: Dynamics of public debt, %
Source: Author calculation on base budget monitor (2020).

According to the 2018 Budget project law (Legislative Herald of Georgia, 2018), 790 million GEL is allocated for the reduction of State Debt, which is approximately 18% higher than the same in 2017 (see Figure 2).

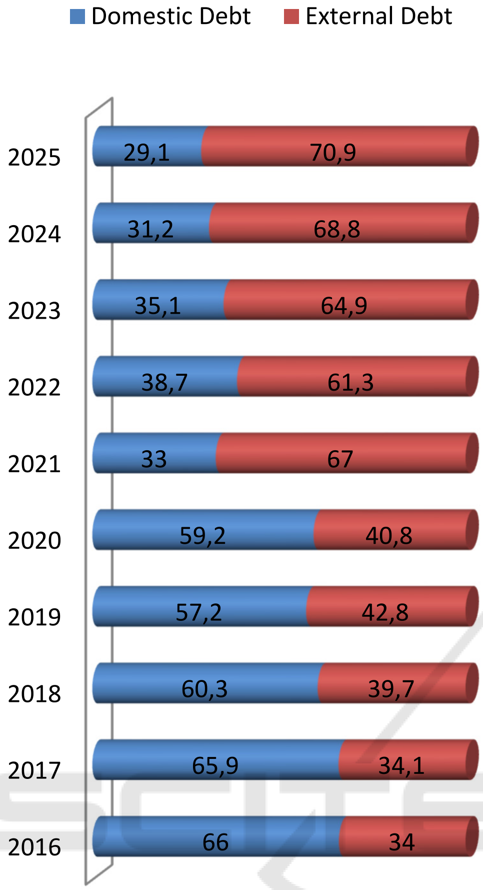

Figure 2: Public debt service, %
Source: author calculation on base budget monitor (2020).

Depending on the foregoing, even though the volume of debt increases, the funds allocated for its cover are increased. The increase in liabilities is due to attract investment credits and according to the budget classification, the share of debt taken to finance current expenditures is minimal. It shows that if the current expenditure will be planned effectively, the government's savings will be increased and converted into investments, as a result, the state will need less debt to finance investment projects. There is no connection between the State Debt and the current expenses, but if the funds needed to finance the projects defined by the budget classification could not be obtained, it will be necessary to reduce the on-going expenditures. One of the most important tasks for Georgia is to increase the share of state budget revenues and related expenditures in the overall domestic product (Abuselidze, 2020).

With the mobilization of internal resources, according to the 2019 budget draft law, tax revenues are increased compared to the previous year (State audit office of Georgia), while the share of grants is characterized by a decrease in trend, State Debt levels are still increasing 44.6% of GDP which is less than 60% of the level defined by the Organic Law on Economic Freedom Act in Georgia and If we take into account that the level of State Debt service is proportional to debt, the country has the opportunity to take additional debt over the next few years, However, a change in the Law on Economic Freedom must be taken into account which implies a abolition 30% margin for budget expenditures in respect of GDP (Legislative Herald of Georgia, 2018), which means the absence of another powerful control over the efficient spending of funds (Fig. 3).

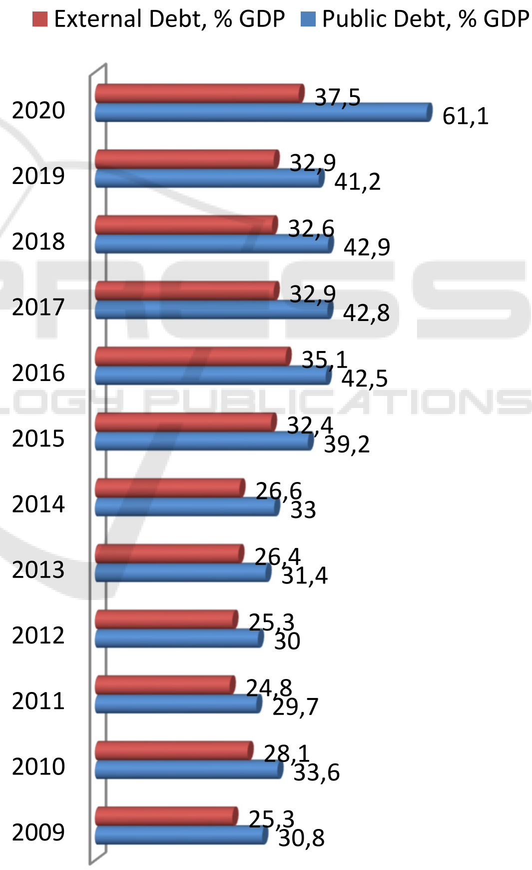

Figure 3: Dynamics of Public Debt, % GDP
Source: Author calculation on based of Ministry of Finance of Georgia (2020).

In line with the assumed impact of GDP growth on declining public debt to GDP ratio, the scatter diagram indicates that the decrease of public debt to

GDP ratio is only possible through increase in investment activity. The primary budget deficit did not have significant influence on public debt in New Member States countries (EU). The external debt positively influenced public debt taking into account large capital inflows before the crisis (Pecaric *et al*., 2018).

Optimal amount of debt needs and optimal ratio with GDP should be determined correctly so that it is necessary to maintain the data base of the State Debt for the current and previous years, to get detailed information about the priorities and needs of a particular field of economy.

The procedure for determining debt needs is desirable to be regulated by special rules, in order to ensure transparency of the process, but the most important is the establishment of the State Debt definition clearly and its compliance with international standards, the fact that the debt of non-financial corporations and enterprises, created by the State's participation, does not take into account the total amount of the State Debt, creates a threat to poorly evaluated debt sustainability.

After the study of existing literature about sustainable development (Dodds, 2008; Bell & Morse, 2004; Logar, 2010), it is considered that there is no universally accepted definition of sustainability. However, according to Blanchard's definition (Blanchard, 1985; 1990), sustainability is achieved when the government avoids accumulating large volume debts based on current policy, more specifically, sustainable fiscal policy implies returning Debt ⁄ GDP ratio to its initial level.

In our opinion, Blanchard's (Blanchard, 1985; 1990; 2019) definition is inaccurate due to the following circumstances: first of all, there is no theoretical and practical reason why Debt ⁄ GDP ration should return to its initial level or any other stable level, that will be lower or higher compared to initial level. Second, the policy on the first stage may consider increasing debt ratio to a level that can actually be evaluated as an overly high and on next step reducing debt level and returning to "safe" level.

For assessing fiscal challenges in medium term is used indicator, based on which existing budget deficit (structural initial balance) correction level is calculated, that is necessary to achieve the desired level of state debt at certain time. Hereby, the best way to get rid from this is taking new loan that exceeds amount repayment of principal and interest of the credit, as well as other forms of capital outflow from the country, that can be presented with the following formula:

$$RT=L-S+O \tag{1}$$

Where:
L - Volume of new credits;
S - Amount paid for credits;
O - Flow of capital from debtor country.

If $RT>0$, then volume of new credits, that debtor is taking, exceeds the payments and there is a resource outflow. When $RT<0$, it means recently received credits don't cover principal of credit and service costs, i.e. there is a capital outflow from debtor countries.

The debtor country will not refuse returning loan, until receiving resources from creditors (e.g. Greece), i.e. until $RT>0$. The debtor will always fulfill the contract of returning principal and service costs, if receives new loans from creditor.

Based on practices used by European Commission (2009; 2012) fiscal sustainability based on calculation of indicator is assessed as following: 1. If the value of indicator is lower than 20, the country is rated as low risk. 2. If indicator value is between 20 and 60, the country is rated as medium risk. 3. If indicator value is more than 60, the country is rated as high risk.

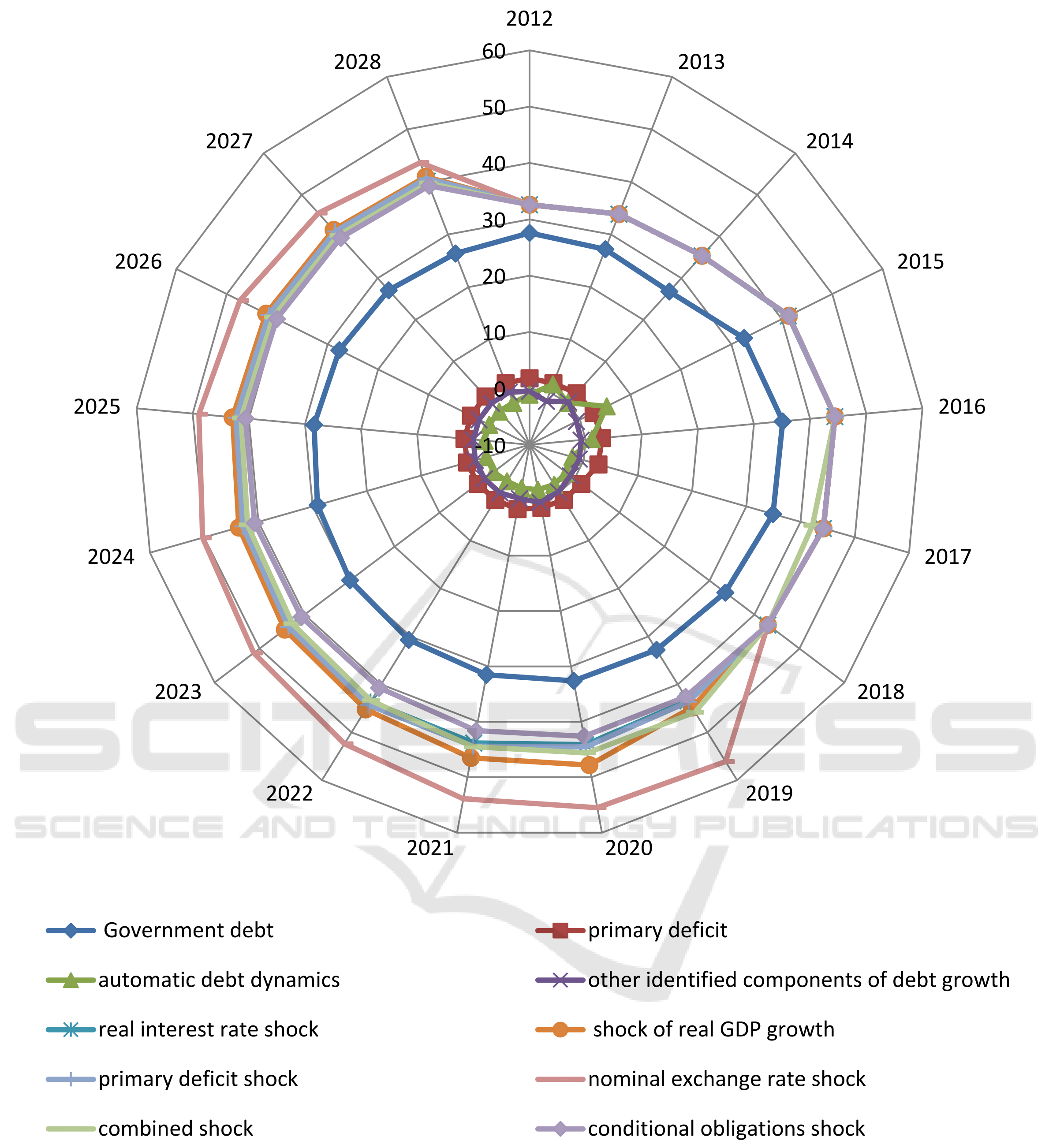

Figure 4: Fiscal sustainability based on calculation of indicator

According to the data of 2019, percentage of government debt to GDP ratio was 42.6%, of which 32.8% was foreign debt. The results of the shocks used to assess sustainability analysis based on actual and forecast data on government debt for 2012-2028 give a satisfactory picture (see Figure 4). According to all scenarios, government debt to GDP is growing, but steadily maintains a declining trend. It should be noted that in the case of any scenario, the government's debt to GDP does not reach the critical limit. However, the country is rated as medium risk (see Figure 5).

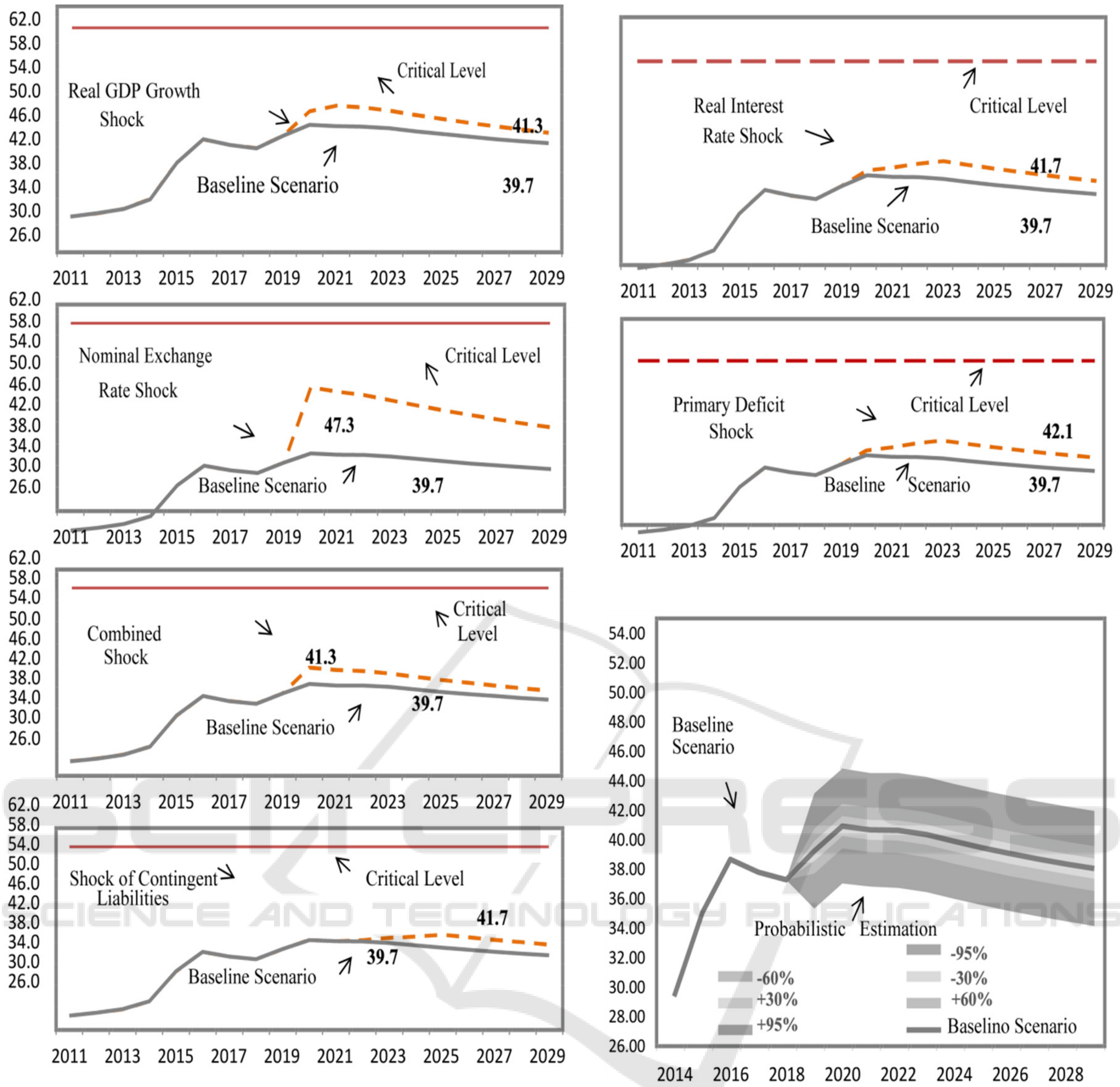

Figure 5: State Debt Management
Source: Author calculation on based Ministry of Finance of Georgia (2020)

While fiscal sustainability analysis, inter-temporal budget restriction or intermediate equilibrium condition determines equivalence between initial debt level and present value of primary proficiencies of future period budgets'. This condition was presented by Bohn (2005) with the following formula:

$$B_t = \sum_{i=1}^{\infty}(1+r)^{-i} PB_{t+1} \quad (2)$$

Where:
B_t - state debt/ GDP,
r - real interest rate.

PB_{t+1} - Primary Balance, that represents difference between state revenues and expenditures (excluding interest expenses).

Studies to assess sustainability in the fiscal policy is mainly based on assessing the necessary level of reduction in the budget deficit to ensure sustainability in fiscal policy, based on fiscal gap indicator calculation.

Sustainability indicator calculates the difference between the current state of the budget deficit (initial structural balance) and budget initial balance for debt level stabilization, for ensuring fiscal sustainability in long-term period. Sustainability indicator can be determined by the following formula:

$$"ITGAP = " \ (("Real\ interest\ rate - Real\ GDP\ growth\ rate")" \ (" \textstyle\sum\_"i = 1" \ \text{^}"\infty" ▒("1 + Real\ interest\ rate")\text{^}" - i" \ \ "Primary\ Balance - " \textstyle\sum\_"i = 1" \ \text{^}"\infty" ▒("1 + Real\ GDP\ growth\ rate" /"1 + Real\ interest\ rate")"iPrimary\ Balance)") /"1 + Real\ GDP\ growth\ rate"$$

However, corrective measures to achieve fiscal sustainability can be done in various ways. In particular, by increasing the tax revenues (typically on the basis of optimal tax pressure formations) (Abuselidze, 2020), or/and by efficiencies social or infrastructural expenses (Abuselidze, & Mamuladze, 2020; Abuselidze, Surmanidze, 2020; Abuselidze, 2019, 2021). When choosing policy, we should keep into consideration its potential impact on economic or fiscal sustainability. Causality between public debt and economic growth can only be explained by understanding the process of creation and change in private debt. Keen provides theoretical framework, concluding that private debt change influences employment, whereby the crisis begins when private debt to GDP starts declining, i.e. when private sector starts deleveraging and public debt starts growing as a response to rising unemployment (Pecaric *et al.*, 2018). According to Cecchetti *et al.*, (2011) hold that the high indebtedness may significantly increase the risk premium influencing the future financing activities. Kumar and Woo (2010) concluded that the negative influence of high government indebtedness can be linked to the decline in work productivity due to the decline of investment activities, i.e. the accumulation of fixed capital. In our opinion, for overcoming the fiscal breakdown and decrease deficit, more increase of tax burden can cause slowdown in economic growth, which will have negative impact on medium and long-term sustainability. In our opinion, we can consider optimal tax burden such conditions when favourable economic environment is achieved for the best functioning of economy and business building, i.e. tax shall be optimal both for the state in whole and for certain businessmen. Such level is the state of simultaneous growth of budget revenues and output and we consider, it is possible at 38.2% tax burden.

4 CONCLUSIONS

The budget planning is a complex process, determining the State Debt forecast parameters and maintaining them, helps with achieving a set of macroeconomic indicators. It is an important precondition for maintaining taken political course.

In the light of all above, the executive authorities of the country must address the debt only if the priority directions of the country are required to finance and if the mobilization of tax revenue is not sufficient for adequate financing of programs, sub-programs and measures. In addition, due to the specifics of the program budget, the operational balance of the state budget of the country is negative because of the need to first of all expenditures. This, in turn, requires mobilization of sources of financing, including taking a debt.

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