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NATIONAL BUDGET SUSTAINABILITY IN CHALLENGES OF THE PANDEMIC

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Abstract. Revenues from public finances and taxes are very important conditions for the country‘s economic policy. No state can exist without taxes, so taxes are one of the most important components of a state's fiscal policy, especially during a pandemic. Of course, it is especially important to collect enough tax revenue in the event of an emergency in the country. This is exactly the situation with a pandemic, especially in the case of the COVID19 virus development in 2020-2021. Taxes are the main source of revenue for the national budget, and redistribution accounts for government spending. Because the government does not create real products or services, the implementation of various state functions requires enormous resources. Taxes are therefore a really important and significant source of public finance revenue. The research problem may be a different tax burden in Lithuania during the pandemics. In addition, individual tax receipts and personal tax metrics may vary. The topic of the publication is the aspect of general and personal tax burden in Lithuania during the pandemic situation. The aim of this publication is to present the concept of individualized tax burden in modern times and restructural movements of the public finances. The main research methods used are: analysis of tax revenues in the scientific literature, data collection and systematization, comparative statistical data analysis, presentation of data, proportional analysis.

Keywords: public finance; national budget; public administration; pandemics

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1. Introduction

Public finance revenue and taxes are very essential conditions of the country‘s economic policy. Without taxation any state cannot exist, therefore taxes are one of the most important components of a state‘s fiscal policies especially during the pandemic period. Taxes are the main source of a revenue for the national budget and when redistributed it generates the public expenditure. Since the government does not create factual product or service the implementation of the various functions of the state requires immense funds. Therefore taxes are a really important and significant source of the public finance's revenue. There is a lot of attention to issues of collecting budget revenues in international scientific literature (e.g. Subačienė et al., 2019; Beretta, Cencini, 2020; Mazzanti et al., 2020; Bikas, Bagdonaitė, 2020; Čižo et al., 2020; Vasconcelos, 2021).

The research problem could be the contrasting tax incidence in Lithuania and in other EU countries. It is especially important to collect enough tax revenue in the event of a national emergency. This is the case with a pandemic, especially in the case of the development of the COVID19 virus in 2020. Taxes are the main source of national budget revenues, and redistribution is government spending. Since the government does not create real products or services, various government functions require more intangible goods. The other task of public finance is to reveal how public debt and public spending management could influence the issues of fiscal policy sustainability (Dubauskas, 2018).

Moreover different could be an individual tax revenue and what personal tax indicators can be used. The object of the publication is the aspect of the general and the personal tax burden in Lithuania. The aim of the publication is to imply a conception of an individualized tax burden in the present-day public finance. The main research methods that were used are tax revenue analysis in scientific literature, data collection and systematization, comparative statistical data analysis, graphical data representation, proportional analysis.

Discussion about national budget revenue and, certainly, taxes is quite partial without a concept of a personal tax burden and the state budget revenue. In economics, tax incidence or tax burden is the effect of a particular tax on the distribution of economic welfare. The introduction of a tax drives a wedge between the price consumers pay and the price producers receive for a product, which typically imposes an economic burden on both producers and consumers. The concept was brought to attention by the French Physiocrats, who argued that the incidence of all taxation falls ultimately on landowners and is at the expense of land rent. Tax incidence is said to “fall” upon the group that ultimately bears the burden of, or ultimately has to pay, the tax. The key concept is that the tax incidence or tax burden does not depend on where the revenue is collected, but on the price elasticity of demand and price elasticity of supply. All these theories have their actuality again during the period of Quarantine, when governments increase their expenditures to unbelievable scales. The examples from Lithuania are presented in this publication.

2. Financial situation

Budget execution data reveal to the public information on the collection of state budget revenues by types of taxes and other revenues and the use of funds in the implementation of planned programs. Financial data discloses information about the financial condition of the state, changes in the items of the financial statements that affected it, and operating results (Carlozo, 2020). The global Covid-19 crisis, unlike the financial crisis of 2008, is not leading to cutbacks and austerity. Instead, many governments are providing financial support to both individuals and businesses, while assistance is also being given to the banking sector (Cohen et al., 2020).

Moreover the banking sector activities have remained quite good. “In order to ensure the stability of the banking sector, the Bank of Lithuania eased certain capital requirements in 2020, on the condition that the released capital has to be directed to the amortisation of potential losses and boosting economic recovery. The sector has so far successfully withstood all challenges posed by COVID-19: the capital adequacy rate remains high, while the liquidity indicator at the end of 2020 was nearly 8 times higher than the minimum requirements” (Bank of Lithuania, 2021). With the onset of the global pandemic, there have been many concerns about further global financial coordination. This was particularly reflected in the appeal of the Director of the International Monetary Fund to the nations of the world “As everyone can see in the communique, we recognize that the global economy is on firmer footing. But we continue to face many challenges—many of which can only be met through *stronger international cooperation”* (IMF, 2021). Therefore the academic research on austerity and decline (Bracci et al., 2015) developed with regard to the financial crisis, seems only marginally relevant.
National and obviously state budget revenue consists of taxes paid by taxpayers, revenue from state property, the European Union and other international financial assistance, and other budget revenue, which is redistributed through the state budget and allocated for the performance of state functions in accordance with the planned programs. Revenues from taxes on goods and services account for the largest share of state budget revenues. A significant part of budget revenues comes from the European Union and other international support. However, the epidemic period changed many things quite abruptly. The surprise was high and the outlook for public finances was rather bleak. As Baker writes (2020) “Epidemics have plagued human societies since at least the earliest days of recorded history. This paper presents the first study of how consumption and debt respond to an outbreak using transaction-level financial data. As COVID-19 began to spread across the United States in March 2020, households were faced with drastic changes in many aspects of their lives. Large numbers of businesses were closed by government decree, and in many cities and states, Americans were advised under shelter-in-place orders to limit trips outside and their exposure to others” (Baker et al, 2020). Authors also write that the scale of the upheaval for both individuals and the economy as a whole has been unprecedented in recent times. All industries and cities are largely stagnant, and estimates of the economic downturn have reached

record highs. Policymakers at all levels of government and in a wide range of institutions work to reduce the economic damage to individuals and small businesses. However, the speed of economic shocks has made it difficult for policymakers to properly allocate fiscal incentives to individuals and lend to businesses. After all, little is known about how people change their spending habits during a pandemic on a scientific basis and more people and geographical regions. Such descriptions are appropriate for many parts of the world, but, perhaps, are more appropriate for industrialized countries.

3. Tax Revenues

In this section, we will analyze data on the state of public finances in Lithuania before and during the pandemic. Most of the revenue to the Lithuanian budget is collected from value added, personal income taxes and excise duties. Therefore, we will analyze these taxes in more detail. The first table presents data from the Lithuanian Ministry of Finance on the national budget revenues from tax sources in 2018, 2019 and 2020. Tax budget revenues undoubtedly remain the most important source of funding throughout those years. The most interesting changes in tax revenues are already in the pandemic year.

Table 1. Collection of tax revenue to Lithuania's National Budget in 2018, 2019, 2020.

	Tax Revenue (billion EUR)	European Union Funds (billion EUR)	Total budget revenue (billion EUR)
2018	6.77	2.0	8.77
2019	8.73	1.5	10.23
2020	8.7	2.3	11,0

Source: Lithuania's Ministry of Finance, 2021

The total tax revenue of the National Budget in 2020 decreased very little if compared to the year of 2019th. Support from European Union funds increased during the pandemic, but not as much as was announced during the first quarantine period. Support during the pandemic year from European funds was similar to the year 2018. Possibly the largest share of public sector expenditure was covered by borrowed funds on behalf of the state.

Table 2. Collection of revenue to Lithuania's State Budget, indirect taxes in 2018, 2019, 2020.

Year	VAT (billion EUR)	Excise duties (billion EUR)
2018	3.54	1.44
2019	3.78	1.49
2020	3.57	1.56

Source: Lithuania's Ministry of Finance, 2021

From Table 2 it is obvious that during the pandemic year of 2020 collection of revenues from the VAT decreased compared to the 2019th from 3.78 billion to 3.57 billion Euros. But despite this, it was not a decrease compared to the VAT revenue of 2018th. Even more, the collection of excise duties has been steadily increasing despite the effects of the pandemic. Revenues from excise duties increased from 2018 to 2019, and this is undoubtedly related to the overall growth of the economy, and partly to changes in the price index. However, the expected decline in revenue after the closure of the country's economy did not occur during the transition from 2019 to 2020. This can be partly explained by the impact of the global economic downturn on oil prices. During the first phase of the pandemic, oil prices fell, and with delays, fuel prices fell. As prices fell, potentially much more fuel was used, which accounts for the bulk of excise revenue. In addition, excise duties are paid on quantity purchased regardless of price. For instance "Law on Excise Duties of the Republic of Lithuania… Article 35. Excise duty rates on motor gasoline. The following rates of excise duty apply to motor gasoline: 1) for unleaded gasoline - 466 euros per 1,000 liters of product" (Law on Excise Duties of the Republic of Lithuania, 2020). This is in stark contrast to value added tax, where rising prices also increase the share of tax revenue collected.

Table 3. Collection of revenue to Lithuania's State budget from direct taxes in the years 2018, 2019, 2020.

	Income tax to the State budget (billion EUR)	Profit tax (billion EUR)
2018	0.314	0.691
2019	1.83	0.759
2020	1.89	0.779

Source: Lithuania's Ministry of Finance, 2021

The third table shows the revenue to the national budget from the personal income tax, which even increased if we compare 2019 with the 2020 pandemic year. It should be noted that in Lithuania the personal income tax is divided between the state budget and municipal budgets by about half. For example, 48 percent of personal income tax was allocated to municipalities in 2021. Officially it is declared in the "Law Of The Republic Of Lithuania On Approval Of Financial Indicators Of The State Budget And Municipal Budgets For 2021" in Article 2, "Financial indicators of municipal budgets of the Republic of Lithuania for 2021 and their preparation. 1. The following financial indicators of municipal budgets for 2021 are approved by this Law: 1) the share of personal income tax (in percent) falling on the budgets of all municipalities from the revenue of this tax to the consolidated state budget and municipal budgets - 48.19 per cent, of which the fixed part is 43.08 per cent, the variable part - 5.11 percent" (Law Of The Republic Of Lithuania On Approval Of Financial Indicators Of The State Budget And Municipal Budgets For 2021, 2020). Therefore, the relatively low collection of income tax in the state budget is related to the larger share allocated to municipalities in the year 2018th. As it is declared in the "Law Of The Republic Of Lithuania On Approval Of Financial Indicators Of The State Budget And Municipal Budgets For 2018" and this Law "approves the following financial indicators of 2018 municipal budgets: 1) the share of personal income tax (in percent) of all municipal budgets from the revenue of this tax to the consolidated state budget and municipal budgets - 82.82 per cent, which consists of a fixed part - 78; 45 per cent, variable part - 4.37 per cent, of which (per cent) the share of all municipal budgets from the revenues of this tax to the consolidated state budget and municipal budgets - 48.19 per cent, of which the fixed part - 43.08 per cent, variable part - 5.11 percent" (Law Of The Republic of Lithuania on Approval of Financial Indicators of The State Budget And Municipal Budgets For 2018, 2017) .

Table 4. Municipal budgets income tax revenue, 2018-2020

year	Income tax revenue planned (billion EUR)	Income tax revenue fulfilled (billion EUR)	Difference (billion EUR)
2018	1.505	1.526	+0.021
2019	1.538	1.620	+0.082
2020	1.716	1.630	-0.086

Source: Lithuania's Ministry of Finance, 2021

In the fourth table we see the collection of personal income tax in municipal budgets (of which there are 60 in Lithuania). Planned figures and actual budget collected are presented. We see that in 2019 and 2020, higher revenues were planned than actually received from the personal income tax. However, comparing the actual income from income tax they grew by ten million in the pandemic year.

However the collection of revenue from the direct profit and income taxes increased during the pandemic year (Table 3). Revenue from the income tax increased from 1.83 billion euros in 2019 to 1.89 billion euros in 2020. Significantly lower personal income tax revenues in the state budget in 2018 can be explained by the fact that in that year a larger part of personal income tax was allocated to municipal budgets. The specifics of personal income tax are such that part of the income tax is allocated to the state budget in accordance with the Law on the Approval of State and Municipal Budget Indicators of the Republic of Lithuania adopted every year (MOF, 2021). There are 60 municipalities in Lithuania, each with its own separate and independent budget, which is approved by the municipal council. Municipal budgets accumulate funds necessary for the performance of functions assigned by law and state functions delegated to municipalities by law. It is necessary to mention that a part of the personal income tax goes to municipal budgets. Besides the share of this tax is the largest part of tax revenues in municipal budgets.

Therefore initial warnings about a possible collapse of the public finance system was a little bit exaggerated. Predictions from several countries in the beginning of 2020 sounded very threatening. As an example, some news from the economic reports of Lithuania and Latvia that year are presented. The Lithuanian government's revenue last month fell 31.1 percent below target, Finance Minister says. To make up for the shortfalls and fund economic stimulus, the government has already borrowed 4.3 billion euros (BNS, 2020). In 2020 Latvia's State Revenue Service (VID) collected a total of EUR 9.863 billion for the state budget, which is EUR 640.423 million or 6.1% less than originally planned, according to information published by the service (BNN, 2021).

The Bank of Lithuania also confirms that expectations were much worse in the beginning "The ongoing pandemic has had its toll on Lithuania's economy and credit demand. Despite the fact that its implications on different economic sectors greatly vary, the overall economic impact of the second wave of COVID-19 tends to be less severe. Such economic resilience allows for an improved outlook for GDP growth: as compared to December 2020, it was increased by 1 percentage point, to reach 2.9 percent" (The Bank of Lithuania, 2021).

4. Conclusions

Although many economic and public finance publications examine the special impact of the COVID-19 epidemic on the world economy, this has not been a particularly painful case in Lithuania in terms of public finances. Comparing the number of public finance revenues in 2018-2020, only a decrease in 2020 due to the collection of indirect taxes is clearly visible, i.e. VAT revenues decreased from 3.78 to 3.57 billion. Meanwhile, direct taxes like income and income tax are increasing gradually from 2018, 2019 to 2020. Thus, it can be assumed that the impact of the pandemic in Lithuania was not as large as planned, i.e. there was no decrease in public finance revenues under the worst case scenario. Undoubtedly, costs have risen significantly and this has and will have an impact in the next few years. The purpose of this paper is to consider how public sector finance and budgetary systems are implicated in the development and implementation of pandemic policies. Also, it points to a range of issues that accounting researchers need to be contemplating on the subject of accounting for austerity. To summarize once again, it can be stated that during the first quarantine, widely disseminated forecasts about a possible special decline in economic development were not fully confirmed in the case of Lithuanian public finances.

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