УДК 338.22

А.Г. Галстян
Старший преподаватель кафедры экономики и финансов
МГОУ ВО «Российско-Армянский Университет»
кандидат экономических наук

АНАЛИЗ АНТИКРИЗИСНОГО ФИСКАЛЬНОГО И МОНЕТАРНОГО РЕГУЛИРОВАНИЯ НА ПРИМЕРЕ ЭСТОНИИ

Аннотация. Настоящее исследование направлено на выявление антикризисного фискального и монетарного регулирования в Эстонии. Первый вывод касается цикличности макроэкономического регулирования как в периоды кризиса, так и в периоды нормальной экономической активности до 2019 года. Более того, про-циклическая жесткая фискальная политика привела к более глубокой рецессии во время мирового финансового кризиса. Тем не менее, во время экономического кризиса, вызванного пандемией COVID-19, Эстония изменила свою политику антикризисного регулирования, введя смягчающие фискальные меры. Последнее способствовало более низкому экономическому спаду в 2020 году и быстрому восстановлению в 2021 году.

Ключевые слова: налогово-бюджетная политика, денежно-кредитная политика, экономический кризис.

A.H. Galstyan

ANALYSIS OF ANTI-CRISIS FISCAL AND MONETARY REGULATION: THE CASE OF ESTONIA

Abstract. The current study aims to discover the anti-crisis fiscal and monetary regulation in Estonia. The first conclusion is about a cyclical macroeconomic regulation both in periods of crisis and regular economic activity until 2019. Moreover, the cyclical strict fiscal policy led to a deeper recession during the global financial crisis. However, during the latest economic crisis caused by the pandemic COVID-19, Estonia changed its anti-crisis regulation policy by implementing fiscal stimulus packages to mitigate the economic shocks. The latter contributed to a lower economic downturn in 2020, with a quick recovery in 2021.

Keywords: fiscal policy, monetary policy, economic crisis.

Introduction

During the last two decades, the macroeconomic regulation policy, particularly anti-crisis fiscal and monetary policies, has been the focus of economic discussions. Chugunov et el. [5] state that economies can significantly benefit from efficient coordination between fiscal and monetary regulations through better welfare and living conditions leading to sustainable economic growth and development. Other authors emphasise the importance of monetary policy for reducing economic fluctuations and the importance of fiscal policy for ensuring economic stability [4]. Moreover, Bonga-Bonga argues that in the absence of coordination between macroeconomic policies, it will not be possible for the economy to overcome external shocks [3].

The literature review shows that there is an absence of an agreement on the nature of the economic effects of expansionary fiscal policy [1, 9, 12]. On the other hand, the literature mainly discusses the economic, political, institutional and social factors shaping the macroeconomic response to external shocks leading to the crisis [2, 13, 15].

Since the global financial crisis, the fiscal and monetary approaches to macroeconomic regulation have changed. Many countries with developed and emerging markets resumed economic stabilisation through expansionary fiscal policy, including introducing fiscal stimulus packages, disregarding debt stabilisation strategies. The global financial crisis also harmed the Estonian economy, which had the worst economic decline among EU member states. The Estonian case of anti-crisis macroeconomic regulation policy is unique. Unlike other countries, the country applied a fiscal consolidation instead of counter-cyclical expansionary fiscal policy.

Considering the situation mentioned above, the current study aims to analyse and discover Estonia's anti-crisis macroeconomic policy regulation. The main focus is the crisis after the collapse of the Soviet Union, the global financial crisis and the recent crisis caused by the COVID-19 pandemic.

Hypothesis

The main research hypotheses are as follows:

- Estonia applied pro-cyclic monetary and fiscal policies before, during and after the global financial crisis, changing its policy during the COVID-19 pandemic.
- The application of pro-cyclic policy led to a deeper economic downturn and slow recovery during the post-crisis period.

Methods

The research focuses on analysing macroeconomic regulation in Estonia during crises, discovering the nature of anti-crisis monetary and fiscal policies and the instruments applied for overcoming the negative impact of crises. In the framework of the current study, we have used the methods of statistical analysis, graphical analysis, structuring logical assumptions and deduction. The methodological basis of the study was the academic papers published in prestigious journals and working papers of international organisations.

The author has analysed a considerable amount of statistical data on the main macroeconomic indicators of Estonia: gross domestic product (GDP), economic growth, inflation, foreign direct investments (FDI), gross capital formation, government income, government expenses, and budget deficit, and public debt. The sources of statistical data are the databases of Eurostat, World Bank and International Monetary Fund.

Results and discussion

Following the collapse of the Soviet Union, the economy of Estonia was hit hard/ The newly formed government introduced several crucial reforms to resume the economic activity and recover the economic growth and development. The first step was the liberalisation of prices, as well as foreign direct investment and trade and transition to a market economy; it was followed by the introduction of the national currency of Estonia, the launch of the privatisation process. During the transition period, the primary goal of the fiscal and monetary policies, including foreign exchange rate regulation, was to achieve macroeconomic stability in the country. A high number of structural reforms characterises this period. A strict fiscal policy accompanied the early period of economic recovery.

On the other hand, the country adopted a fixed foreign exchange rate regime pegging the Estonian kroon to the German mark in 1992 and implementing a conservative external public debt policy [14]. Since 2001, the Estonian economy started registering steady economic growth rates, indicating the beginning of recovery growth. From 2001 to 2008, the average economic growth accounted for 7.7% (Figure 1).

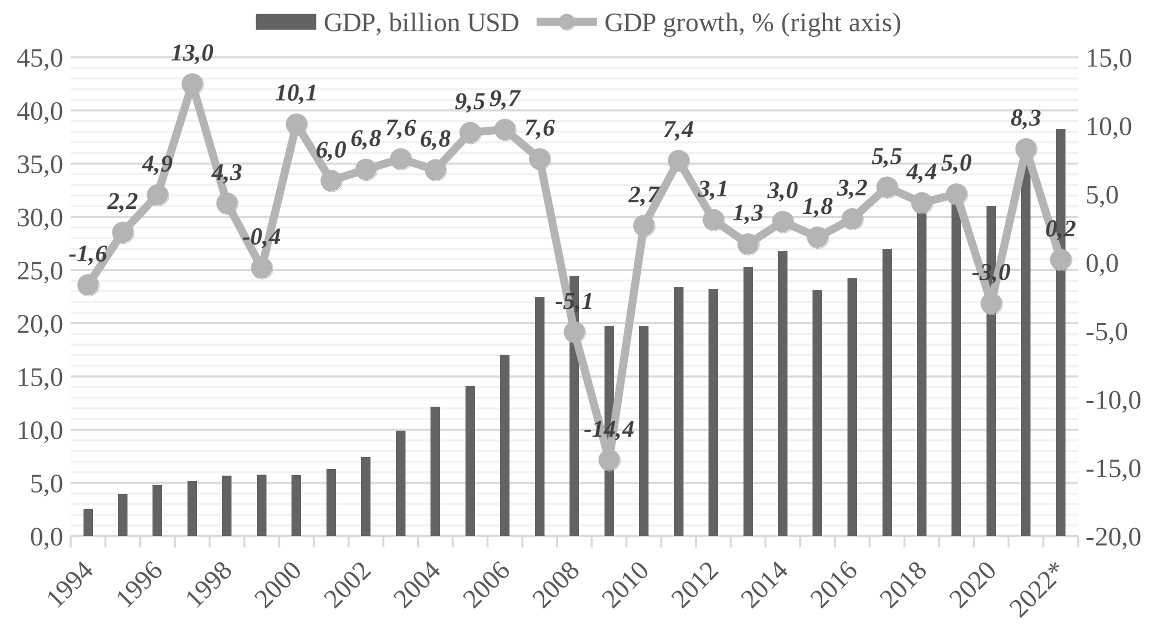

Figure 1. GDP and Economic Growth Rates in Estonia [10]
* forecast

In 2000, Estonia had a GDP per capita of about 4076 US dollars. Due to stable economic growth, the population's living standards improved rapidly. Already in 2008, the GDP per capita amounted to more than 18200 US dollars (Figure 2). However, the strong economic growth was accompanied by high inflation volatility, which peaked in 2008 at 10.6%. Moreover, Estonia's accession to the eurozone scheduled for 2008 was postponed until 2011 due to inflation rates above 3%.

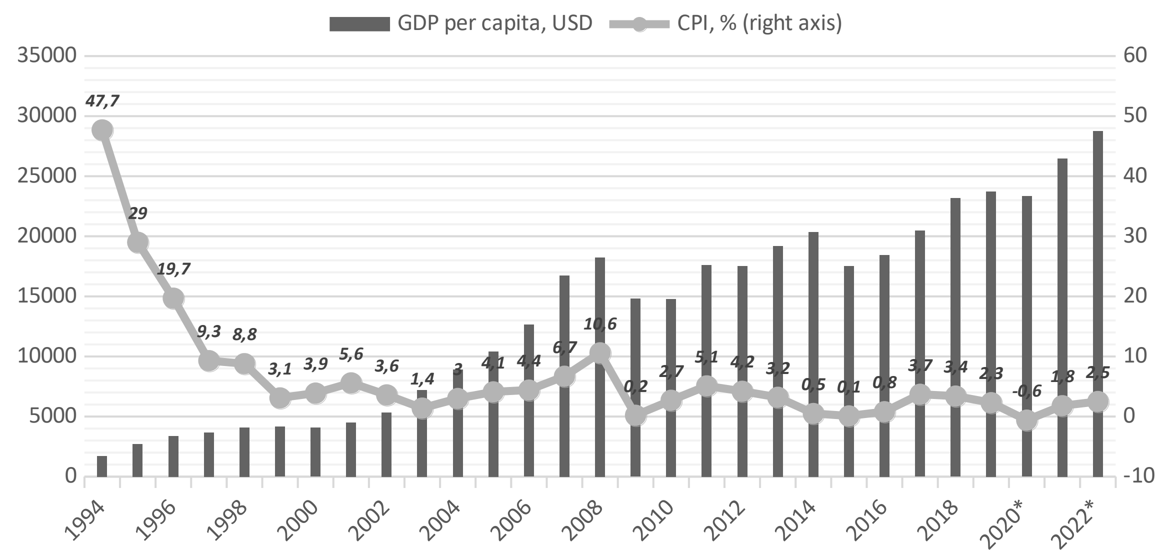

Figure 2. Inflation and GDP per capita in Estonia [10]
* Forecast

Following the strict fiscal policy at the beginning of the 1990s, Estonia continued conducting a pro-cyclical fiscal policy when the country started recording economic growth, which means that fiscal policy became expansionary. One of the crucial reforms within the fiscal regulation was the tax reform and introduction of the new tax code in 2000 [8]. The new legislation introduced a new form of profit tax according to which only the distributed profit was subject to income tax, while profit tax was equal to zero. The tax rate was set as 26/74 of the net dividends.

Thus, under the new legislation, enterprises were exempt from profit tax, whether it is reinvested or kept as retained profits. As there was no corporate profit tax as such, there was no need for amortisation benefits either. The income tax rate for individuals was set to 26%—such a taxation system aimed at attracting domestic and foreign direct investments instead of damaging the entrepreneurial spirit. In 2004, the income tax was reduced to 24%, after which it was reduced by 1% per year for the upcoming three years, reaching 21% in 2008.

Estonian macroeconomic policy successfully attracted foreign direct investments, which accounted for 21.2% of GDP in 2005, while the gross capital formation reached 3 billion USD, which is 32.9% of GDP (Figure 3). It is important to note that most of the investments were the profits reinvested in the companies showing the effectiveness of tax reform. The pillars of the new taxation system were investments in technological development training of human capital.

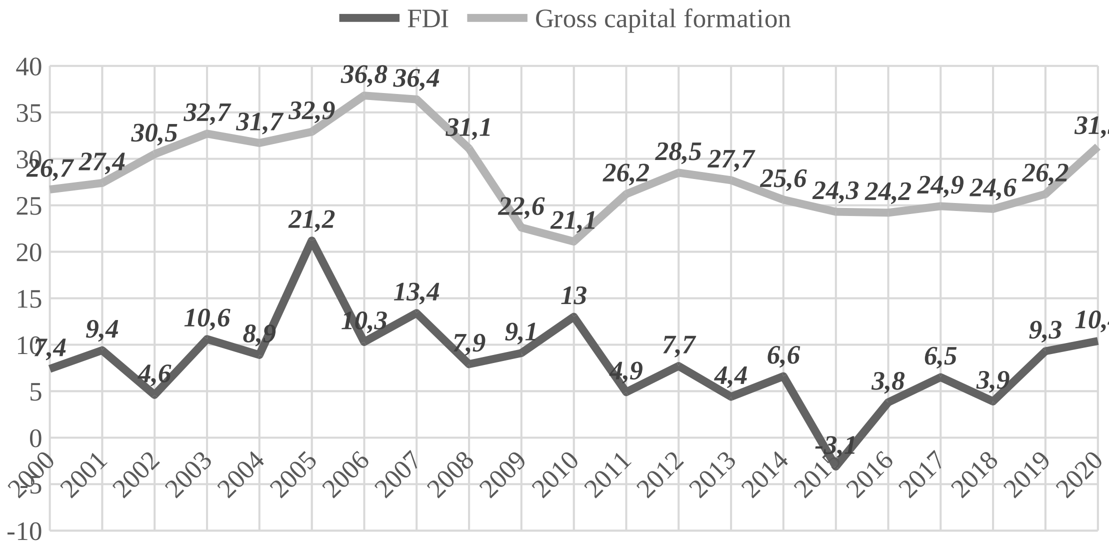

Figure 3. The net inflow of foreign direct investments and gross capital formation in Estonia, GDP % [6]

The primary goal of the Central Bank of Estonia was prices stability before joining the eurozone [11]. However, we should note that the Central Bank of Estonia was already a member of the European System of Central Banks, which was influencing its monetary regulation direction. The inflow of capital to the Estonian economy sharply declined. The Central Bank of Estonia switched to a pro-cyclical strict monetary policy in response to the financial crisis. Because of the anti-crisis monetary measures, financial markets were disrupted, credit requirements tightened, and stock markets became less accessible. The most affected economic sectors were construction, manufacturing and retail. The economic decline was 5.1% in 2008 and 14.4% in 2009 (Figure 1). The unemployment level sharply increased, reaching 16.7% compared to 4.6% in 2007 (Figure 4). The decline in unemployment in the following years was partly due to the high rates of emigration of the population from the country.

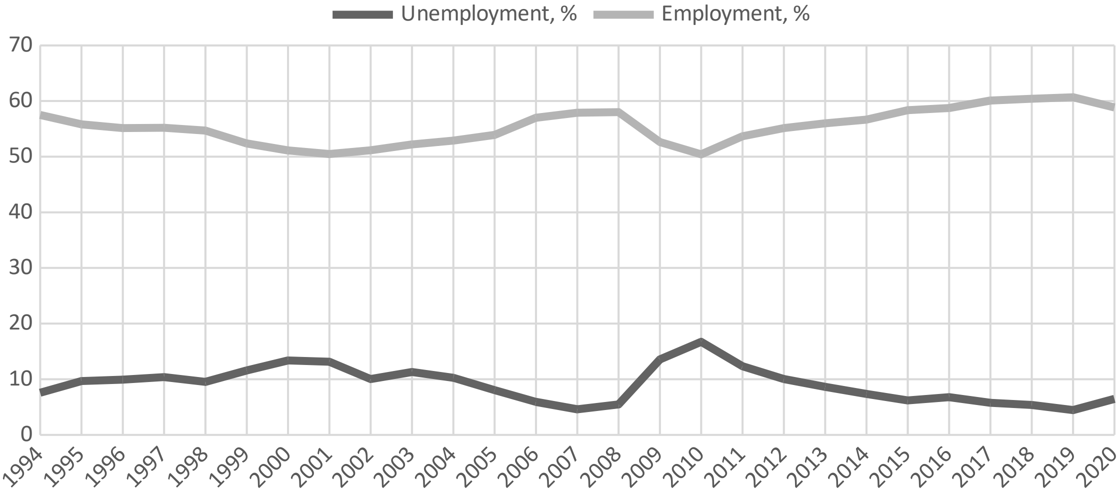

Figure 4. Unemployment and employment in Estonia [17]

As we have already mentioned, the monetary policy in Estonia was highly influenced by the European Central Bank through the ERM II fixed exchange rate system. As a result, the main instrument of macroeconomic regulation to overcome the global financial crisis was the fiscal policy. The literature review revealed that, in general, the anti-crisis fiscal policy presumes a counter-cyclical regulation, including an increase in the government expenditures and, therefore, an increase in the state budget deficit. Most of the European Union member states developed and applied various fiscal stimulus mechanisms or allowed automatic stabilisers to work. In the latter case, the government income decreases, leading to a larger budget deficit. However, the case of Estonia is different as its government chose to conduct a cyclical fiscal policy cutting the public spending and increasing taxes despite the country's high level of international reserves and low level of public debt. The state budget deficit was only 2.6% of GDP in 2009, and in 2010, the state budget was already in surplus [6].

Although the volume of economic recession was the third-highest in Estonia among EU member-states in 2009, the state budget deficit accounted for only 2.6% of GDP in the same year, and already in 2010, the state budget was in surplus (Figure 5). While other EU member states affected by the crisis resorted to affordable fiscal stimulus mechanisms or allowed automatic stabilisers to work, leading to larger expenditures and a larger budget deficit, the Estonian government chose a different path and applied a rather tight fiscal approach, including spending cuts and tax increases.

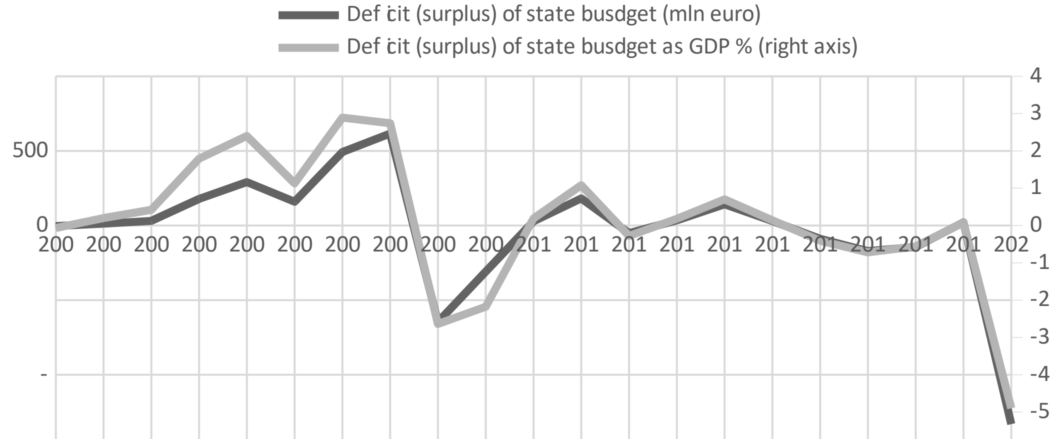

Figure 5. Deficit (surplus) of the state budget in Estonia [6]

During the crisis year 2009, Estonia's state budget was revised three times as part of austerity programs. Under the first round of tightening, the government spending was cut by 4.9%, and revenue cuts were projected at 9.8%. According to this change, the state budget should have remained in surplus. However, it became clear during the year that the economic downturn would be much deeper than the initially projected 3.5%. As a result, the state budget was revised a second time in June and once more in August, adopting new austerity packages [16]. In the end, there was a reduction in government spending by 12.8% (Table 1).

Table 1. Austarity programs in Estonia during global financial crisis [16]

	1-st program February 2009	**2-nd program June 2009**	**3-rd program August 2009**
Expected income before the adoption of the austerity package	*97.8*	*88.2*	*85.1*
Adjusted income according to the austerity package	*88.2*	*85.1*	*85.6*
Percent change to previous program	*9.8*	*3.5*	*0.5*
Expected spending before the adoption of the austerity package	*96.7*	*91.9*	*89.3*
Adjusted spending according to the austerity package	*91.9*	*89.3*	*87.2*
Percent change to previous program	*4.9*	*2.8*	*2.3*

The main directions for the reduction in spending were as follows [7]:

- Decrease in wages and employment in the public sector.
- Decrease in the state investments.
- Reduction of social programs.
- Mergers of schools and hospitals.
- Reduction of defence expenses.
- Reduction of subsidies in agriculture.

On the other hand, the Estonian government applied measures directed to stabilising the state incomes, including [7]:

- Increase of VAT from 18% to 20%, elimination of tax credits for student loans, an increase of excise taxes.
- Sale of shares of Estonian Telecom.
- Sale of pollution quotas and increase of pollution fees by 20%.
- Use of reserves accumulated in the pre-crisis years.

During crises, Estonia's pro-cyclical fiscal policy led to the lowest level of public debt in the EU, amounting to 8.4% of GDP as of 2019 (Figure 6).

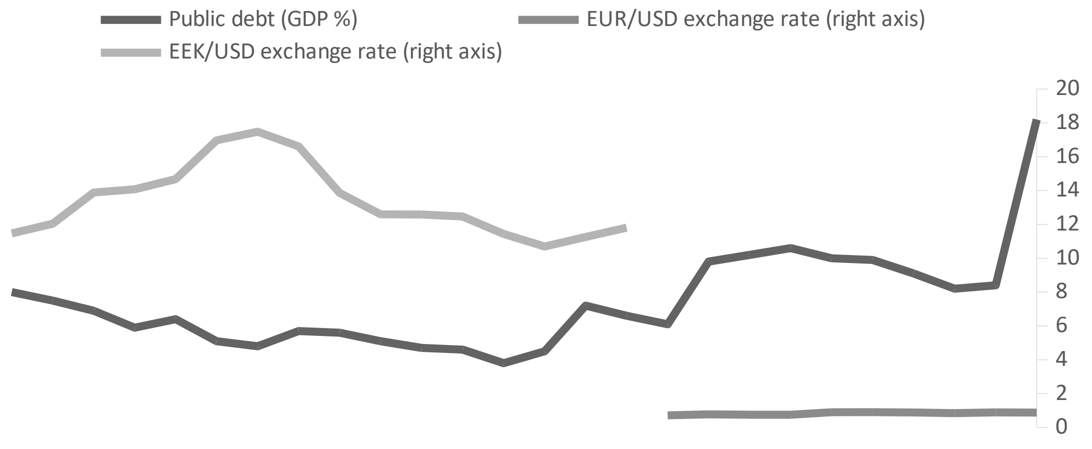

Figure 6. Public debt to GDP ratio and EEK/USD, EUR/USD exchange rates [6, 17]

The Estonian government's policy for containing the spread of the coronavirus at the beginning of 2020 was relatively successful, with the number of infections per capita lower than the average number in Europe. However, the economic crisis harmed also the Estonian economy, which experienced a 3% economic downturn in 2020, which is much lower than the decline in 2009. The economy quickly recovered in 2021, recording an 8.3% economic growth. The fiscal policy during the coronavirus crisis was different for the first time in three decades. Estonia switched to a counter-cyclical anti-crisis fiscal regulation developing and applying fiscal stimulus packages. The latter led to an increase in the state budget deficit, which was the largest in the last 20 years, reaching 4.9% of GDP [6], while the public debt reached 18.2% of GDP in 2020 compared to the 8.4% in 2019. The COVID-19 assistance package in 2020 amounted to 2.3 billion euros (about 8.5% of GDP) and was aimed at supporting the healthcare system, employees and enterprises.

To summarise the study, we can distinguish the following periods of macroeconomic regulation since Estonia's independence:

- ❖ 1992-2008 – the applied fiscal and monetary regulations (including tax reform liberation of financial markets) led to stimulating the attraction of foreign and domestic investment through tax reform. The latter contributed to stable economic growth since 2001.
- ❖ 2008-2019 – the applied anti-crisis regulation led to an increase in unemployment, high emigration rates, and a deep economic downturn of 14.4%. Only in 2013 was it possible to restore the pre-crisis level of GDP. Thanks to a pro-cyclical fiscal policy, Estonia's public external debt is the lowest in the EU.
- ❖ 2020 to present – the country applied fiscal and structural measures, accounting for about 2.3 billion euros. As a result, the economy started to recover already in 2021.

The analysis of anti-crisis fiscal and monetary regulation in Estonia showed that until 2019 both during the periods of crisis and regular economic activity, Estonian authorities were conducting cyclical macroeconomic policy. The cyclical fiscal policy led to a deeper recession during the global financial crisis. However, during the latest economic crisis caused by the pandemic, Estonia changed its anti-crisis regulation policy by implementing fiscal stimulus packages to mitigate the economic shocks. The latter contributed to a lower economic downturn in 2020, with a quick recovery in 2021.

References

1. Ardagna S. Financial markets' behavior around episodes of large changes in the fiscal stance. European Economic Review. 2009,53(1), 37–55.
2. Armingeon K. The politics of fiscal responses to the crisis of 2008–2009. Governance. 2012,vol. 25 No. 4, pp. 543-565.
3. Bonga-Bonga, L. Fiscal policy, Monetary policy and External Imbalances: Cross-country evidence from Africa's three largest economies (Nigeria, South Africa and Egypt). MPRA Paper. 2017;no79490.
4. Chowdhury, L. S., & Afzal , M. N. The Effectiveness of Monetary Policy and Fiscal Policy in Bangladesh. Journal of Applied Business and Economics. 2015;vol.17(1), 78-85.
5. Chugunov I., Pasichnyi M., Koroviy V., Kaneva T., Nikitishin A. Fiscal and Monetary Policy of Economic Development. European Journal of Sustainable Development. 2021;vol.10(1). https://doi.org/10.14207/ejsd.2021.v10n1p42.
6. Eurostat Database [электронный ресурс] // Eurostat [сайт]. URL: https://ec.europa.eu/ (дата обращения 10.01.2022).
7. Friedrich, P., Reiljan, J. Estonian Economic Policy during Global Financial Crises. CESifo Forum, 2015, no. 4/2015.
8. Funke, M. Determining the Taxation and Investment Impacts of Estonia's 2000 Income Tax Reform. Finnish Economic Papers. 2002,vol.15(2).
9. Furceri, D. and R. M. Sousa. The impact of government spending on the private sector: Crowding-out versus crowding-in effects. Kyklos. 2011, 64: 516-533.
10. IMF Database [электронный ресурс] // IMF [сайт]. URL: https://www.imf.org/ (дата обращения 19.01.2022)
11. Lipstok, A. Estonia's economic environment and central bank activities. BIS, 2009, Review 91/2009.
12. Mountford A, and H. Uhlig. What are the effects of fiscal policy shocks? Journal of Applied Econometrics. 2009;24(6), 960-992.
13. Raess, D. and Pontusson, J. The politics of fiscal policy during economic downturns, 1981–2010. European Journal of Political Research. 2015,vol. 54 No. 1, pp. 1-22.
14. Ratso, S. Miracle of Estonia: Entrepreneurship and Competitiveness Policy in Estonia. UNECE Palais des Nations, Geneva, 2005.
15. Raudla, R. and Kattel, R. Why did Estonia choose fiscal retrenchment after the 2008 crisis? Journal of Public Policy. 2011,vol. 31 No. 2, pp. 163-186.
16. Ringa, R., Rainer, K. Why Did Estonia Choose Fiscal Retrenchment after the 2008 Crisis?. Journal of Public Policy. 2011,vol.31, 163 - 186. 10.1017/S0143814X11000067.
17. World Bank Database [электронный ресурс] // The World Bank [сайт]. URL: https://databank.worldbank.org/ (дата обращения 12.01.2022).