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e-mail: makvknteu@gmail.com***INFLUENCE OF BUDGET POLICY ON ECONOMIC GROWTH OF THE COUNTRY**

Abstract. The article describes the essence of budget policy. Determined its role in ensuring macroeconomic stability and accelerating economic growth. The quantitative and qualitative impact of the budget regulation system on the economic environment has been characterized. It is substantiated that purposeful budget regulation allows accelerating or slowing social and economic processes, ensuring achievement of certain strategic goals and objectives. An estimation of the impact of budget policy on economic growth, in particular, on the justification of the interrelation of the share in the GDP of income, including direct and indirect taxes; expenses, including social protection and social security, economic activity; direct state and guaranteed debt with real GDP in Ukraine. For 2009—2019, the share of gross income and expenditure, deficit and debt in the countries of the European Union in the GDP was determined; income, expenses, deficit of the consolidated budget, direct state and guaranteed debt in Ukraine. The substantiation of the provision on the development of institutional foundations for fiscal policy-making based on the necessity of adapting the set of mechanisms of functioning of the budget regulation system to the conditions of development of the financial and economic environment and the cyclical nature of economic processes; the position regarding the formation of budget policy based on a forecast assessment of budgetary parameters, based on the projected macroeconomic indicators of socio-economic development of the country, tools and levers of tax policy. The priority directions of budget policy in the conditions of economic transformations are determined, in particular, to strengthen the investment and innovation budget component, to improve the structure of tax revenues, to maintain a safe level of public debt and budget deficit, to improve the quality of public debt management and to determine strategic guidelines for the structure of the debt portfolio.

Keywords: budget, budget system, budgetary regulation, budget policy, economic growth.

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e-mail: makvknteu@gmail.com***ВПЛИВ БЮДЖЕТНОЇ ПОЛІТИКИ НА ЕКОНОМІЧНЕ ЗРОСТАННЯ КРАЇНИ**

Анотація. Розкрито сутність бюджетної політики. Визначено її роль у забезпеченні макроекономічної стабільності та прискорення темпів економічного зростання. Охарактеризовано кількісний та якісний вплив системи бюджетного регулювання на економічне середовище. Обґрунтовано, що цілеспрямоване бюджетне регулювання дозволяє прискорити або сповільнити соціально-економічні процеси, забезпечити досягнення визначених стратегічних цілей і завдань. Здійснено оцінку впливу бюджетної політики на економічне зростання, зокрема в частині обґрунтування взаємозв'язку частки у валовому внутрішньому продукті доходів, у тому числі прямих і непрямих податків; витрат, у тому числі на соціальний захист і соціальне забезпечення, економічну діяльність; прямого державного і гарантованого боргу з реальним валовим внутрішнім продуктом в Україні. За 2009—2019 роки визначено частку у валовому внутрішньому продукті державних доходів і витрат, дефіциту і боргу в країнах Європейського Союзу; доходів, витрат, дефіциту зведеного бюджету, прямого державного і гарантованого боргу в Україні. Обґрунтовано положення щодо розвитку інституційних засад формування бюджетної політики виходячи із необхідності адаптації сукупності механізмів функціонування системи бюджетного регулювання до умов розвитку фінансово-економічного середовища та циклічності

економічних процесів; положення щодо формування бюджетної політики виходячи із прогнозованої оцінки бюджетних параметрів, яка базується на прогнозних макроекономічних показниках соціально-економічного розвитку країни, інструментів та важелів податкової політики. Визначено пріоритетні напрями бюджетної політики в умовах економічних перетворень, зокрема щодо посилення інвестиційно-інноваційної бюджетної складової, удосконалення структури податкових надходжень, підтримання на безпечному рівні державного боргу і дефіциту бюджету, підвищення якості управління державним боргом та визначення стратегічних орієнтирів щодо структури боргового портфеля.

Ключові слова: бюджет, бюджетна система, бюджетне регулювання, бюджетна політика, економічне зростання.

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Introduction. Budget policy plays an important role in stimulating economic processes by directing public financial resources to modernize the economy and its innovative renewal. The cyclical nature of economic processes necessitates the coordination and adaptability of long-term regulatory measures of budget policy to internal and external changes in the economic environment. In this regard, it is important to assess in a timely and balanced manner the impact of budget policy on macroeconomic stability and accelerating economic growth. At the same time, budget policy should be mutually consistent with the strategic goals of socio-economic transformations, aimed at creating appropriate conditions for deepening the interaction between the state and society, increasing the welfare of citizens. The transition to an innovative model of economic development, expansion, and deepening of integration can be successful only if it is based on the implementation of sound budget policy, taking into account the dynamism and cyclical nature of economic processes.

Research analysis and problem statement. Approaches to the impact of budget policy on economic growth, including its budgetary, tax, and government debt components, have been disclosed by many scholars. Mehdi Hajaminia, Muhammad Ali Fallahi point out that there is a nonlinear relationship between economic growth and the limits of its state regulation, which is usually similar to the inverted U-shaped curve, and it is used to determine the optimal share of government spending [1]. Dong-Hyun Kim, Yi-Chen Wu, Shu-Chin Linc believe that effective government regulation, in particular in the field of budget policy, helps to increase productivity and accelerate economic growth, while government regulation does not promote economic growth if it exceeds a certain limit level of state capital [2].

According to J. Keynes, budget policy can have a significant impact on aggregate demand and output in difficult economic conditions; its focus on comprehensive modernization of the domestic economy improves the investment climate. However, an important task is to clearly justify the role of public authorities to ensure the effectiveness of these measures [3]. I. Y. Chugunov and M. D. Pasichny note that the nature and extent of the impact of tax and fiscal instruments for economic development depends not only on the volume of GDP redistribution through public finance but also on a model of budget architectonics of the country [4].

For the first time, I. Y. Chugunov introduced the concept of «institutional architecture of the budget system», which is based on the system of budget regulation and takes into account the optimal relationship between the elements of the budget system and the cyclical nature of socio-economic development. The scientist has determined that the institutional architecture of the budget system determines the most optimal budget ratios, in particular, the share of budget revenues and expenditures, budget deficit (surplus), public debt to GDP, revenue structure, budget expenditures, public debt, sources of budget deficit financing, level budget centralization, coefficients of intergovernmental regulation [5].

Well-known scientist Desislava Stoilova argues that the model of an effective tax system and the share of tax revenues in GDP depends on many factors and differs depending on the country. According to her, government spending does not contribute to an increase in GDP growth in the EU-Member States-28, while the increase in tax revenues, fewer adverse impact on economic growth; taxes on products and imports have a more significant positive impact on economic growth, while VAT has a negative impact on the economies of the EU-Member States-28; real estate taxes

are neutral to economic growth, while personal income tax and social security contributions have a positive impact [6].

According to J. B. Robert and J. R. Charles, a change in the level of the tax burden can affect GDP mainly through substitution effects rather than wealth effects. If a significant level of defense spending coincides with a significant level of federal revenue, then in determining the marginal tax rates must take into account the negative tax factor, estimated at 1.1 [7].

Scientists Lance Taylor, Christian R. Proaño, Laura de Carvalho i Nelson Barbosa have argued that the level of the budget deficit reacts countercyclically to economic growth, which can have a positive effect on the deficit. It is noted that the great recession in the United States was atypical due to the weak countercyclical fiscal response [8].

C. Checherita-Westphal and P. Rother substantiate the impact of public debt on GDP growth per capita. According to them, the share of public debt in GDP at 90-100% has a negative impact on long-term economic growth. At the same time, scientists note that the negative effect of public debt growth may begin at about 70—80% of GDP [9]. Using nonlinear threshold models, Balázs Égert argues that finding a negative nonlinear relationship between public debt and economic growth is extremely difficult and sensitive to the choice of modeling and data coverage. Scientist has determined that a negative nonlinear correlation occurs at very low levels of public debt (from 20% to 60% of GDP) [10].

Markus Eberhard and Andrea F. Presbitero determine that there is a certain negative impact of a significant level of public debt on long-term economic growth in different countries, but in their opinion, the critical level is different for each country [11]. According to Tetsuo Onda and Yuki Uchida, the growth rate of debt financing is lower than in tax financing, and that debt financing creates a compromise between present and future generations. With debt financing, it is possible to achieve a higher level of economic growth than that which arises from the choice of social planning aimed at ensuring the welfare of all generations [12]. However, Ugo Panizza and Andrea Presbitero point out that there is no evidence that public debt growth negatively affects economic growth, because a negative correlation between debt and growth is sometimes used to justify policies that suggest that debt has a negative causal effect on economic growth [13].

Taking into account the achievements of previous research, at the same time, important issues are the development of new approaches to the formation of budget policy, the disclosure of its priorities, taking into account globalization processes, the assessment of its impact on economic growth.

Research results. Budget policy is a dynamic institutional process, which consists in the implementation of a set of appropriate forms of interdependence and interaction of economic, legal, political, institutional components of the budget space and the institutional environment of society in the budget formation and use of budget funds to achieve strategic goals and main objectives [14].

At the same time, budget policy determines the possibilities of quantitative and qualitative impact of the budget regulation system on the economic environment. Quantitative impact is characterized by the volume and proportions of mobilized and redistributed budget funds. Opportunities to expand production are formed depending on the amount and object of withdrawal of funds at the disposal of the state, the amount and structure of budget expenditures. Qualitative impact associated with specific opportunities to influence the type and structure of income and expenditure budget for the economic interests of economic entities and households. This impact contributes to the transformation of budget revenues and expenditures into incentives for economic development, diversification, and quality renewal of livelihood infrastructure. Purposeful budget regulation allows to accelerate or slow down socio-economic processes, to ensure the achievement of certain strategic goals and objectives.

It is necessary to distinguish two aspects of budget policy formation in the system of financial regulation: first, the state uses budget policy as a tool for managing the economy to influence the process of social production; secondly, the components of budget policy are the object of management. Assessing the impact of budget policy on economic growth is an important component in the process of substantiating the strategic objectives of the country's development. An

insufficient level of efficiency of budget management does not allow to ensure the effectiveness and efficiency of budget policy as a component of the socio-economic development of the country.

Modern economic processes necessitate the use of effective instruments of budget policy on budget revenues and expenditures, budget deficit and public debt, inter-budgetary relations. At the same time, effective decision-making on budget policy formation requires a forecast assessment of budget parameters, which is based on forecast macroeconomic indicators of socio-economic development of the country, instruments, and levers of tax policy.

Many of the problems that countries with developed economies have to solve in connection with financial and crisis processes that affect budgetary stability are similar to the problems that exist in emerging countries. In particular, the important tasks of the financial and budgetary policy of the EU-Member States are the need to take measures to accelerate economic growth, stimulate innovation, create a working environment more favorable for the development of small and medium-sized businesses.

Despite the differences in the structure of government revenues and expenditures between the countries of the European Union, there is a decrease in the average deviation in budget indicators, which indicates that the convergence process has a significant impact on budget policy (Table 1).

Table 1

Share of government expenditures and revenues of EU countries in GDP, %

Country	2009—2011		2012—2014		2015—2017		2018—2019	
	revenues share	expenditure s share	revenues share	expenditure s share	revenues share	expenditure s share	revenues share	expenditure s share
EU (28 countries)	43,63	49,47	44,97	48,47	44,67	46,33	45,10	45,80
Belgium	49,47	54,00	52,17	55,67	51,07	52,97	50,85	52,20
Bulgaria	33,43	36,47	36,37	38,43	36,77	36,90	38,45	36,45
Czechia	39,43	43,57	40,73	43,17	40,60	40,07	42,15	41,55
Denmark	54,03	56,53	55,17	56,33	53,17	53,43	52,35	50,25
Germany	43,70	46,53	44,43	44,33	44,77	43,83	46,60	45,00
Estonia	41,07	41,33	38,60	38,53	39,23	39,47	38,60	39,05
Ireland	33,30	52,83	34,00	39,90	26,67	27,57	25,30	25,05
Greece	41,33	53,57	47,53	56,07	48,50	49,90	47,80	46,60
Spain	35,73	45,73	38,37	46,17	38,03	42,30	39,15	41,80
France	50,37	56,80	52,83	57,17	53,40	56,67	53,00	55,65
Croatia	41,53	48,27	42,60	47,83	45,53	46,73	47,00	46,70
Italy	45,77	50,17	47,97	50,93	46,87	49,37	46,70	48,60
Cyprus	36,90	42,13	37,63	44,20	38,97	38,70	40,50	41,45
Latvia	36,00	43,40	36,67	37,93	37,03	37,67	38,70	39,20
Lithuania	34,90	43,23	33,30	35,40	34,20	34,03	34,90	34,45
Luxembourg	43,63	43,87	44,00	43,13	43,80	42,33	45,10	42,45
Hungary	44,93	49,73	46,57	49,13	46,00	47,93	44,25	46,40
Malta	38,70	41,40	39,40	42,00	38,93	37,80	38,40	37,20
Netherlands	42,50	47,43	43,33	46,33	43,30	43,57	43,60	42,05
Austria	48,50	52,60	49,47	51,73	49,07	50,20	48,90	48,45
Poland	38,47	44,90	38,77	42,63	39,20	41,30	41,30	41,75
Portugal	41,20	50,67	44,20	50,07	43,10	46,23	42,90	43,05
Romania	32,50	39,63	33,70	36,03	32,70	34,90	31,80	35,40
Slovenia	43,10	49,17	44,57	52,63	43,83	45,40	44,25	43,65
Slovakia	35,83	42,33	38,10	41,33	40,37	42,27	41,10	42,30
Finland	52,53	54,67	54,60	57,27	53,97	55,67	52,35	53,35
Sweden	50,93	51,27	50,13	51,47	50,50	49,53	50,20	49,55
United Kingdom	37,97	46,93	37,93	44,20	38,53	41,50	38,80	40,95
Iceland	38,33	46,47	41,50	43,33	46,63	42,77	42,00	42,10
Norway	56,50	44,93	55,30	44,23	54,90	49,83	57,65	50,50

Source: from data [15].

At the same time, an important task of the budget policy of the European Union is to reduce the level of economic volatility by taking into account when justifying the priorities of budget policy to use it for countercyclical purposes of the concept of GDP gap. If the GDP is negative, it is recommended to pursue a stimulating budget policy by reducing the level of tax burden and increasing government spending, with a positive gap — restraining budget policy by increasing the level of tax burden and reducing government spending.

The average share of government revenues and expenditures in GDP in the European Union in 2009—2019, respectively, is 44,63% and 47,77%, including in 2009—2011 — 43,77% and 49,63%, in 2012—2014 — 45,07% and 48,57%, for 2015—2017 — 44,73% and 46,43%, for 2018—2019 45,10% and 45,80%.

To ensure financial and budgetary stability of the EU countries, a mechanism is used to avoid and correct macroeconomic imbalances. Thus, considerable attention is paid to the issues of maintaining the budget deficit and public debt at an economically reasonable level. In particular, the average share of budget deficit and public debt in 2009—2019, respectively, is 3,16% and 82,16%, including in 2009—2011 — 5,87% and 77,53%, in 2012—2014 — 3,50% and 85,90%, for 2015—2017 — 1,73% and 83,60%, for 2018—2019 — 0.75% and 79,85.

It should be noted that the use of budget policy as an effective tool for economic growth is hampered by its cyclical asymmetry, which is exacerbated by changes in economic conditions. In this regard, the harmonization of budget systems remains an important task in this area. In general, at this stage, the specificity of the European model of budget policy is determined by the significant role of deep integration processes in ensuring its effectiveness.

In Ukraine, according to the Ministry of Finance of Ukraine, the gap in GDP since 2011 is negative. Losses of budget revenues from the cyclical component are estimated annually at 0.5 percentage points of GDP. Given the level of budget deficit, it can be argued about the countercyclical nature of budget policy, but based on the primary balance of the consolidated budget (excluding expenditures on public debt service), budget policy is pro-cyclical. Accordingly, there is a contradiction between the importance of implementing a restraining budget policy to reduce the level of public debt and the pro-cyclical nature of budget policy.

On average, the share of budget revenues and expenditures in GDP in Ukraine in 2009—2019, respectively, is 24,18% and 27,32%, including in 2009—2011 — 22,31% and 26,06%, in 2012—2014 — 22,83% and 27,11%, for 2015—2017 — 26,44% and 28,71%, for 2018—2019 — 25,59% and 27,45%.

With the increase in the expenditures share of the State Budget of Ukraine in the GDP by one percentage point for the period 2009—2019, the real GDP decreases by 0,22 percentage points. The linear regression equation is:

$$y = 105,07 - 0,22x. \quad (1)$$

At the same time, with the increase in the expenditures share on social protection and social security of the State Budget of Ukraine in the GDP t by one percentage point for the period 2017—2019, the real GDP **increases by only** 0,05 percentage points. The linear regression equation is:

$$y = 102,78 + 0,05x. \quad (2)$$

Whereas when the share of expenditures on economic activity of the State Budget of Ukraine in the GDP increases by one percentage point for the period 2017—2019, the real GDP increases by 3,35 percentage points. The linear regression equation is:

$$y = 97,24 + 3,35x. \quad (3)$$

This indicates the importance of strengthening the investment and innovation budget component, which involves improving the institutional environment for innovative development of budgets at various levels; raising the level of development of social infrastructure of society and communication tools to intensify the efforts of public administration to create innovative technologies, attract additional resources for research-based on public-private partnership; improvement of institutional support for scientific, technological and innovative development of territories; coordination of state and regional innovation policy, which provides for the improvement of existing and the formation of new tools and levers to support the innovative

development of territories; integration into the international innovation environment, which involves the use of mechanisms aimed at activating and improving the efficiency of innovation of micro, meso and macro levels; motivation of innovation activity for all participants of the budget process with the use of financial and economic mechanisms.

With the increase in the revenues share of the State Budget of Ukraine in the GDP by one percentage point for the period 2009—2019, the real GDP increases by 0,48 percentage points. The linear regression equation is:

$$y = 87,43 + 0,48x. \quad (4)$$

However, when the share of direct tax revenues of the consolidated budget in the GDP increases by one percentage point for the period 2017—2019, the real GDP increases by 1,18 percentage points. The linear regression equation has the form:

$$y = 95,41 + 1.18x. \quad (5)$$

Whereas when the share of indirect tax revenues of the consolidated budget in the GDP increases by one percentage point for the period 2017—2019, the real GDP decreases by 0.28 percentage points. The linear regression equation has the form:

$$y = 107,09 - 0.28x. \quad (6)$$

Thus, an important task of budget policy is to change the ratio between direct and indirect taxes in favor of direct taxes. The level of growth of direct taxes is proportional to the level of solvency of consumers and provides an opportunity to take full account of economic cyclicity. In particular, the highest level of elasticity of tax revenues is observed in those countries where government revenues are dominated by revenues from direct taxes.

An important task of budget policy at present is to reduce public debt. In particular, with the increase of the share of direct public and guaranteed debt of Ukraine in the GDP by one percentage point for the period 2009—2019, the real GDP decreases by 0,09 percentage points, including in 2009—2011 decreased by 2,42 percentage points (average the share of direct public and guaranteed debt in GDP is 43,39%), in 2012—2014 it decreased by 0,11 percentage points (the average share of direct public and guaranteed debt in GDP is 72,48%), in 2015—2017 it decreased by 0,41 percentage points (the average share of direct public and guaranteed debt in GDP is 86,69%), in 2018—2019 it decreased by 0,06 percentage points (the average share of direct public and guaranteed debt in GDP is 57,70%). This confirms the study of Markus Eberhard and Andrea F. Presbitero and suggests that the negative correlation between public debt and economic growth in different countries may occur at different levels.

Conclusions. An effective budget policy is an important tool for ensuring macroeconomic stability and accelerating economic growth. The basis of sound budget policy is budget forecasting, which determines the prospects for the formation and, accordingly, the use of financial resources of budgets of different levels. Achieving the strategic goals of the economic development of the country depends on the degree of consideration in the formation of the budget policy of cyclical economic processes. With a negative gap in GDP, it is advisable to conduct a stimulating budget policy, while in the context of economic transformation, the growth rate of the expenditure side of the budget should not exceed the growth rate of economic growth. With a positive gap in GDP, it is advisable to conduct a restraining budget policy while the coefficient of elasticity of indirect taxes should be equal to one, direct taxes more than one. Substantial task at present is to maintain a safe level of public debt and budget deficit, improve the quality of public debt management, and the definition of strategic guidelines for the structure of the debt portfolio. The importance of further research on these issues is due to the feasibility of improving the effectiveness of budget policy based on a comprehensive and rational approach.

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