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FISCAL POLICY AS THE TOOL OF MACROECONOMIC REGULATION

Urgency of the research. The need to ensure sustainable economic growth and social stability, increase competitiveness, and strengthen the integration economy processes put new challenges to have effective state regulation of socio-economic development, which is possible in the presence of an adaptive and balanced fiscal policy.

Target setting. It is important to increase the level of validity fiscal policy perspective directions considering the state of the economy and business activity levels.

Actual scientific researches and issues analysis. Development of approaches to formation an effective fiscal policy is devoted to the publication of many scholars, such as Sh. Blankart, J. Keynes, O. Vasilik, L. Lysiak, V. Oparin, V. Fedosov, I. Chugunov.

Uninvestigated parts of general matters defining. At the present stage of socio-economic development, the concept of fiscal policy as a tool of macroeconomic regulation remains poorly defined.

The research objective. To substantiate the position of fiscal policy as an instrument of macroeconomic regulation; to determine the ways of influencing fiscal policy on achievement of strategic goals and balancing the economy in conditions of its volatility.

The statement of basic materials. Fiscal policy is a tool for effective regulation of the economy. The formation of fiscal policy requires conformity with cyclical economic development and orientation towards ensuring the development of the real sector of economy on the basis of the endogenous economy.

Conclusions. Fiscal policy should be considered as a tool of macroeconomic regulation, which is a set of interconnected institutional components, the integrity of which will contribute to balanced socio-economic development.

Keywords: fiscal policy; macroeconomic regulation; endogenization, socio-economic development; strategic budget planning; cyclicality of the economy.

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ФІНАНСОВО-БЮДЖЕТНА ПОЛІТИКА ЯК ІНСТРУМЕНТ МАКРОЕКОНОМІЧНОГО РЕГУЛЮВАННЯ

Актуальність теми дослідження. Необхідність забезпечення стійкого економічного зростання та соціальної стабільності, нарощення конкурентоспроможності, посилення інтеграційних процесів в економіці зумовлює потребу в дієвому державному регулюванні соціально-економічного розвитку, що можливе за наявності адаптивної та виваженої фінансово-бюджетної політики.

Постановка проблеми. Важливим є підвищення рівня обгрунтованості перспективних напрямів фінансово-бюджетної політики з врахуванням стану економіки та рівнів ділової активності.

Аналіз останніх досліджень і публікацій. Розвитку підходів до формування фінансово-бюджетної політики присвячено публікації багатьох науковців, серед яких Ш. Бланкарт, Дж. Кейнс, О. Василик, Л. Лисяк, В. Опарін, В. Федосов, І. Чугунов.

Виділення недосліджених частин загальної проблеми. Разом з тим на сучасному етапі соціальноекономічного розвитку залишається недостатньо визначеним поняття фінансово-бюджетної політики як інструмента макроекономічного регулювання.

Постановка завдання. Обгрунтувати положення фінансово-бюджетної політики як інструменту макро-економічного регулювання; визначити шляхи впливу фінансово-бюджетної політики на досягнення стратегічних цілей та збалансування економіки в умовах її волатильності.

Викладення основного матеріалу. Фінансовобюджетна політика виступає інструментом регулювання економіки. Формування фінансово-бюджетної політики вимагає відповідності до циклічності економічного розвитку та спрямованості на розвиток реального сектору економіки на засадах ендогенізації.

Висновки. Фінансово-бюджетну політику доцільно розглядати як інструмент макроекономічного регулювання, що являє собою сукупність взаємопов'язаних інституційних компонентів, інтегративність дії яких сприятиме збалансованому соціально-економічному розвитку.

Ключові слова: фінансово-бюджетна політика; макроекономічне регулювання, ендогенізація; соціальноекономічний розвиток; стратегічне бюджетне планування; циклічність економіки.

Urgency of the research. In conditions of dynamic market transformation, the role of government regulation is quite important. One of the main tools of state regulation of socio-economic development is an adaptive and balanced fiscal policy that promotes sustainable economic growth and social stability, increases competitiveness, and strengthens integration processes in the state. The level of justification and balance of fiscal policy depends on the effectiveness of socio-economic policy and its influence on social development.

Target setting. The experience of developed states shows the feasibility of determining the impact of fiscal policy on the management of financial flows at the macroeconomic level, taking into account the cyclical nature of business activity and strategic priorities of social development. Therefore, it is important to increase the level of fiscal policy validity, taking into account the state of the economy and level of business activity; providing conditions for the integrated creation, implementation of fiscal policy and its focus on the achievement of strategic objectives that will contribute to the effective identification of areas of state spending.

Actual scientific researches and issues analysis. Numerous scholars, including S. Blankart, J. Keynes, A. Wasylyk, L. Lysiak, V. Oparin., V. Fedosov, I. Chugunov studied theoretical and practical aspects of fiscal policy to define its role in the context of macroeconomic regulation.

Uninvestigated parts of general matters defining. At the present stage of socio-economic development, the concept of fiscal policy as a tool of macroeconomic regulation remains poorly defined. Tools of macroeconomic regulation should be considered as a set of interrelated institutional components of the fiscal policy. It is advisable to strengthen the role and importance of fiscal policy in the process of economy indigenization that will increase the impact of economic reforms and improve standards of living.

The research objective. The goal of the study is to justify the provisions of fiscal policy as a tool of macroeconomic regulation, presented as a set of interrelated components of fiscal policy; to identify ways to influence fiscal policy in order to achieve strategic objectives and balance a volatile economy.

The statement of basic materials. Fiscal policy is a tool for effective regulation of the economy and an essential component of the socio-economic development of the state. Fiscal policy is a set of institutional principles, forms, mechanisms, and levers of management of financial flows at the macro-economic level according to the specific priorities of social development. It is meant to ensure a dynamic balance of the financial system, improve the efficiency of state governing, to increase the influence of endogenous factors on the performance of the economy.

Today in economics, there are different approaches to the definition of fiscal policy. John Keynes [5] for the first time in economic theory identified public finance as a tool of macroeconomic stabilization. He believed that the main objective of fiscal policy is regulating the processes of economic growth, and considered taxes as one of the most important fiscal tools. S. Blankart studied ways of regulating state's economy by changing government spending and tax policy [2].

Ukrainian scholar I. Y. Chugunov [9, p. 5-18] defines fiscal policy as one of the most important factors for the sustained economic development of the state because it has a significant impact on the mechanism of financial resources distribution and it ensures macroeconomic stabilization. L. Lysiak considers the fiscal policy as a tool of state regulation of the economy, which socio-economic purpose is manifested through the allocation of financial resources [7].

According to Y. Bagel fiscal policy is the process of formation of the state budget through the tax system and budget management for achieving certain goals [1, p. 3-17]. O. Vasylyk considers the fiscal policy as a set of the state's measures to regulate government spending and taxes for future economic growth. V. Fedosov and V. Oparin focus their studies of fiscal policies on the practical aspects of budgeting, reallocation of resources, the balance of intergovernmental relations [8, p. 3-21].

Fiscal policy is a tool of macroeconomic regulation of economic processes, integration, which enhances the effectiveness of economic reforms, improves living standards of the population, supports strategic goals and balances socio-economic development in a cyclical economy.

Fiscal policy contributes to an effective mechanism of economic, budgetary and tax regulation. Ukrainian scientist I. Chugunov states that the regulation includes the development of ways of budgetary funds accumulation and use to accomplish goals set by society [10]. Therefore, the main objective policy [10] is the set of the se

tives of fiscal policies should be focused on the extended social reproduction in conditions of an endogenic economy. In this context, use of strategic budget planning and forecasting is crucial.

In terms of economic reforms being carried out in Ukraine, debates regarding the influence of fiscal policies on the pace of socio-economic growth are common to find. The aim of the fiscal policy is to ensure an appropriate level of socio-economic development of society based on balancing public finances, which can be implemented in a favorable institutional environment of budgetary management and effective budgetary control [10]. In this case, establishing an effective mechanism of the gross domestic product (GDP) redistribution is essential. The redistribution of GDP should be well balanced and effective, and the level of GDP redistribution through the system of public finance needs to match the balance of interests of the state, society, and business. According to Eurostat, the share of consolidated budget expenditures in Europe's GDP was 48.4% in 2016. The rate of GDP redistribution through the consolidated budget of Ukraine is close to European models of economic development. In 2001-2016 the proportion of expenditures of the consolidated budget of Ukraine in GDP grew from 28.7% in 2001-2005 to 33.2% in 2011-2016, including due to the growth of expenditure on social protection and social security (Tab. 1).

Table 1 The proportion of main indicators of fiscal policy of Ukraine in GDP in 2001-2016 and projections for 2017-2019, %

	2001-	2006-	2011-	2001-	2017-
	2005	2010	2016	2016	2019
Revenues of the consolidated budget, including:	27.7	30.2	31.8	29.9	31.95
tax revenues	19.8	22.2	25.5	22.9	25.8
Expenditures of the consolidated budget, including:	28.7	32.9	33.2	32.0	33.5
on national functions	3.9	3.6	4.8	4.2	4.65
on defense	1.7	1.2	2.5	1.8	5.2
on social security	5.8	8.1	9.1	8.5	10.15
The consolidated budget deficit	1.0	2.7	3.3	2.4	2.5

Source: compiled by the authors based on data from state DKSU

In 2014-2016 budget expenditures grew at a lower rate (17,1%) than the consumer price index did (35,2%). That was due to the necessity of balancing the budget in terms of real GDP decline. The results of the author's econometric analysis in 2017-2019 project growth of expenditures in the consolidated budget of Ukraine up to 33,5 % GDP, which corresponds to forecast figure for the optimistic scenario designed by I. Chugunova (33,51%). According to the results of I. Chugunova's research, Ukrainian economy's growth in 2001-2100 will average 2.1% in the pessimistic scenario, and 3.4% in the neutral and 4.2% in the optimistic scenario. In 2011-2020, the share of consolidated budget expenditures in GDP is projected at the rate of 32.42% in the pessimistic scenario. In 2001-2100 the share of consolidated budget expenditures in GDP is forecasted not to be higher than 32,37%. There is a possibility of increasing this figure to about 40% in 2100[11, p. 64-77]. The researcher notes the feasibility of determining the state of economic processes that is influenced by the expenditure side of the budget, the external environment and the settlement of inter-budgetary relations. Let's upgrade the

equality with the impact of the index of an endogenic economy.
$$EP_t = [EP_{t-1} + K_{p_1}(1 - \frac{^{TR}t}{^{TR}t-1}) + K_{p_2}(\frac{^{BE}t}{^{BE}t-1} - 1) + K_{p_3}RIR + K_{p_4}WEU]^* I_e,$$

 K_p $_n$ - calculated coefficients, RIR - regulation of inter-budgetary relations,

WEU – external economic environment

TR - tax regulation

ΒE budget expenditures,

- index of endogenic economy

- state of economic processes in the state [10].

At the same time, the index of endogenic economy is an integrative indicator, which is determined on the basis of indexes of import-substituting goods and services volumes growth, changes in production volumes of the real economy sector and its financial support, an index of energy saving technologies growth and an index of external debt obligations reduction.

$$I_e = K_1^* I_{iz} + K_2^* I_{recon} + K_3^* I_{finz} + K_4^* I_{energ} + K_5^* I_{debt}$$

where

 I_{iz} - index of import-substituting goods and services volumes growth;

 I_{recon} - index of changes in production volumes of the real economy sector;

 I_{finz} - index of real economy sector's financial support;

 I_{energ} - index of energy saving technologies growth;

 I_{debt} - index of external debt obligations reduction.

The calculation of the indicator of economic processes and monitoring of its dynamics will contribute to the formation of fiscal policy approaches. According to Kondratiev wave, the world economy will be in declining state up to 2020-2025 [6]. The cyclical nature of economic growth should be taken into consideration when determining budget priorities, budget planning, and forecasting, forming a fiscal strategy that will enhance the effectiveness of state regulation. Improvement of the methodology of strategic planning will ensure the growth of efficiency of budgetary funds use and their redistribution will improve the validity of socio-economic indicators according to the strategic goals and objectives.

The priorities in fiscal policy should be aimed at ensuring endogenic economy, which includes creation of favorable conditions for strengthening the competitiveness of domestic producers, raising the level of living of the population with the transition to European standards, creation of favorable investment climate to attract the real sector of economy financial resources, intensifying and supporting formation of institutional environment of intellectualization of society, formation of a stable and balanced tax legislation, formation of sufficient level of financial resources for the development of the real sector, formation of a balanced external economic policy with a shift to the production of import-substituting goods. The significant endogenic direction of the economy is the formation of a fiscal policy aimed at reducing the volume of external borrowing and the implementation of investment cooperation between Ukrainian and international financial institutions [3, p. 34].

The development of the economy and fiscal policy are inextricably linked. The simulation of the impact of economic factors on the budget revenues of local governments in Vinnytsia oblast identified a number of factors, the growing influence of which will contribute to filling the budgets of territorial communities, improve financial security priorities, the balance of inter-budgetary relations and ensure effective economic regulation.

Panel data with fixed effects were used to simulate that economic model:

$$\mathbf{y}_{it} = \alpha_i + \sum_{i=1}^k \beta \mathbf{X}_{it} + \varepsilon_{it}$$

where

 y_{ij} – the dependent variable in period t for the i-th object;

 X_{it} – the vector of independent variables (regressors) in period t for the i-th object;

 α_i – crossing value, which is a fixed value for each object;

 β – the vector of unknown parameters with independent variables;

 $\varepsilon_{_{\it H}}$ – perturbations that determine the impact of all unaccounted factors in the model.

There was data for different time periods from 27 oblasts used (2004-2008 and 2009-2016) to build the model. Such factors as the volume of industrial products sold, the number of industrial enterprises, the average monthly wage in oblasts were used in order to build the model. The summarized results of



Table 2

ФІНАНСИ. БАНКІВСЬКА СПРАВА

the hypothesis testing are presented in Table 2. Having used the generalized data, a conclusion about the degree of influence of factors on a productive indicator, which is the level of revenues of the budget of the territorial community, can be made.

The parameters of the model, that were calculated based on data from 2004-2008 show that the growth in sales of industrial products for 1000 UAH, on average, increased revenues by 198,7 UAH. The increase in the average nominal wage for 1000 UAH increased additional revenues to local government budget by 14,6 million UAH. The creation of one business entity increased budget revenues by 295,7 thousand UAH.

Generalized statistical characteristics of models based on data from 2004 to 2008 and from 2009 to 2016

Indicators	2004-2008	2009-2016		
Const	-65,5379(-4,7226)***	-351,752(-2,1732)**		
Industrial_prod	0,19876(2,1968)**	data not available		
Amount_industri	-0,51446(3,0176)***	data not available		
Capital_investm	0,0652496(2,5958)**	0,016422(0,1928)		
Cost_fixed_asse	0,00709217(3,0749)***	data not available		
Amount_firms	0,295788(5,6843)***	0,384111(2,9596)***		
Salary	0,0146366(4,0048)***	-0,000116799(-0,0190)		
Foreign_investm	0,0644338(1,0195)	0,00198857(1,4199)		
Production_agry	0,0178501(0,4157)	0,0130807(0,6237)		
Production_build	-6,36553 (-0,1725)	-0,00209965(-0,7897)		
The number of observations	135	162		
R^2	0.9972	0.9931		

The value of *t*-statistics (Student's statistics) is reflected in parenthesis. ***, **, * - significance value of *t*-statistics respectfully 1%, 5% and 10%

Source: calculated by the authors

The value of t-statistics for 2009-2016 suggests that there is a significant influence of such factor as the number of business entities. During this period the marginal impact of this factor is increasing: when an additional entity is created, the budget revenues grow up to 384.1 thousand UAH per year. The simulation results show a significant

Components, tools and levers of fiscal policy should be aimed at ensuring the development of the real sector of the economy and entrepreneurship, and should base on endogenic development of the economy (including the development of the local economy of every community [4]), rational use of internal financial potential, which will contribute to macroeconomic stabilization of the economy as a whole.

Conclusions. Therefore, fiscal policy should be considered as a tool of macroeconomic regulation of economic processes, integration, which enhances the effectiveness of economic reforms, improves living standards of the population, supports strategic goals and balances socio-economic development in a cyclical economy. Taking into account such indicators as the inflation rate, the share of GDP redistribution through the consolidated budget, the level of real GDP, the budget deficit in the formation of fiscal policy will contribute to ensuring the balance of interests of the state, society, and business. The provisions concerning the definition of priorities and budget guidelines have a direct impact on the pace of socio-economic growth. The formation of fiscal policy requires conformity of cyclical economic development with business activity. According to Kondratiev wave, the world economy will be in a declining state up to 2020-2025 [6]. Considering cyclical economic growth during the formation of the budget strategy will enhance the effectiveness of state regulation.

The development of the economy and fiscal policy are inextricably linked. Using the model of panel data with fixed effects among the priorities of fiscal policy as a tool of regulation of the economy can help support small and medium-sized businesses to keep developing.

It is important to use fiscal policy to ensure processes of endogenization of the economy, especially in terms of economic reforms. Introducing an effective mechanism of indigenization of the economy

using the levers of fiscal policy is a relevant direction for future research. It is advisable to demonstrate the importance of this phenomenon in modern market conditions, which will ensure the balanced economic development of the state and its territorial units.

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