ANALYSIS OF FISCAL EFFICIENCY OF TAXATION IN THE SYSTEM OF FILLING BUDGET FUNDS IN UKRAINE

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Abstract: The article aims to identify the analysis of the fiscal efficiency of income tax. The growth of public expenditures and the need to fill the budget leads to the need to ensure effective management of tax revenues. At the same time, the overall efficiency of the operation of the tax mechanism for corporate income tax involves the formation of an effective fiscal system. Since the management of tax revenues should provide a balance between the needs of the state in taxes and the need of enterprises to increase profits, it is necessary to develop effective approaches to the fiscal efficiency of income tax. It is determined that the peculiarities of the analysis of fiscal efficiency of this tax are specific efficiency criteria, which reflect different approaches to the principles of formation of public funds.

Keywords: Budget, Finance, Financial resources, Financial security, Fiscal efficiency, Taxation, Tax burden ratio, Tax policy.

1 Introduction

The issue of effective management of the accumulation of financial resources in the state centralized monetary fund becomes especially relevant in terms of ensuring the ever-increasing need to increase the level of public expenditures, the source of which is these funds [6]. This need is especially important in the context of crisis trends caused by the global downturn in economic activity due to unprofessional actions of governments in many countries around the world, aimed at limiting the functioning of the economy in the context of the fight against COVID-19.

As a result, the volume of public expenditures aimed at supporting the population and the sectors of the economy that have suffered the most from artificial bans is constantly growing. At the same time, there is a reduction in revenues from one of the key sources – corporate income tax. The reason for this is the same administrative restrictions on economic activity, which reduce cash flows in enterprises and, consequently, lead to a decrease in profitability, or vice versa – to unprofitable activities of economic agents [8].

At the same time, as world experience shows, one of the main methods of forming the necessary funds is the tax method. At the same time, it usually generates more than 70% of state budget revenues [36]. Thus, the overall fiscal efficiency of meeting the public need to finance state social expenditures depends on the effectiveness of the tax mechanism to ensure the collection of corporate income tax.

2 Literature Review

Many researchers have studied the problems of the efficiency of the tax mechanism, as well as the specifics of managing the fiscal system. In particular, scientists such as Agres [1], O. Apostolyuk [4], Dziamulych [7], Fedosov [10], Goryn [11], Krysovatyi [16], Melnyk [22], Shmatkovska [26], Sodoma [31], Sokolovska [32], Stashchuk [33], Tofan [35], Yakubiv [38], Yanyshyn [42], Yaroshevych [43], Zhurakovska [46] and others.

However, the intensive transformations taking place in the economic system of the country require the formation of new, effective approaches to ensure the effective functioning of the mechanism of corporate income taxation, which will stimulate the increase of its overall fiscal efficiency in modern conditions.

In general, the specialized scientific economic literature uses a significant arsenal of methods for assessing the effectiveness of the fiscal mechanism for corporate income tax [3, 9, 12]. However, there are problems in defining a clear sequence of actions to analyze the factors that affect this effectiveness.

The analysis of research on corporate income tax is limited to the use of static assessment without the use of various variations of economic-mathematical and statistical analysis of the dynamics of tax revenues. Thus, there is an objective need to generalize the existing approaches to ensure the fiscal efficiency of corporate income tax, as well as to develop a model for assessing and forecasting this efficiency, taking into account the impact of relevant factors.

3 Materials and Methods

Features of the analysis of the fiscal efficiency of corporate income tax are specific efficiency criteria that reflect different approaches to the principles of formation of public funds. At the same time, the method of analysis is significantly influenced by the tax system of the state and its specifics, in connection with which there are problems with the use of unified methods of analysis of tax efficiency in different countries [27, 45].

The criteria for determining the effectiveness of tax revenues are based on the fact that the fiscal principles of taxation are reduced to the elasticity of taxation, which includes the possibility of automatic change depending on the phase of the economic cycle and the adequacy of taxation to cover socially necessary expenditures [28].

The most common approach to assessing the effectiveness and efficiency of a particular type of tax and tax policy of the state, in general, is the use of specific rating indicators and coefficients that allow highlighting the level of the tax burden at the macro level [39].

The main indicator used to assess efficiency is the level of the tax burden on corporate income tax. Its calculation involves determining the ratio of tax revenues from income tax to gross domestic product (GDP) and is calculated by the formula:

 $L_{tb} = T_i \div GDP$, where: L_{tb} – the level of tax burden on the economy; T_i – income tax; GDP – Gross Domestic Product.

Another important criterion for assessing fiscal efficiency is the tax burden ratio, which is calculated by determining the ratio of tax revenues from income tax to corporate income:

 $R_{tb} = T_i \div I$, where: R_{tb} – tax burden ratio; T_i – income tax; I – income (tax based on tax reporting) [21].

The elasticity of the tax characterizes the relative change in the volume of its revenues under the same tax system relative to the percentage change in the tax base. The coefficient of elasticity (tax elasticity) shows how many percent increase or decrease tax revenues (tax group or individual tax) when the determining economic factor (GDP, household income, etc.) by 1% [14].

The calculation of the coefficient of elasticity of taxes is carried out according to the formula:

 $T_e=\Delta I \div \Delta GDP$, where: T_e – tax elasticity coefficient; ΔI – percentage change in income over time period; ΔGDP – percentage change in gross domestic product for the relevant period.

If the coefficient of elasticity is more than one, then the system of tax revenues is elastic, i.e. changes in the number of budget revenues occur at a higher rate than changes in the volume of gross domestic product. Under an inelastic system of tax revenues (the ratio is lower than one), a change in the volume of the gross domestic product does not affect the change in the number of tax revenues of the state [34].

4 Results and Discussion

The reform of tax legislation, which took place in Ukraine during 2015-2018, had a significant impact on the overall change in the procedure for collecting corporate income tax [2]. This has also resulted in a significant change in the fiscal value of this tax within the national economy. One of the most effective solutions in the process of tax reform should be noted the abolition of tax accounting, which functioned as a separate type at the same time as ordinary accounting [19, 23]. The reason for its introduction at one time was a more accurate definition of the object of income tax.

Therefore, the desire to simplify the taxation system and allow companies to move away from separate tax accounting has increased the overall efficiency of the tax system in Ukraine [13]. Besides, the abolition of tax accounting is in line with the practice of the European Union regarding the collection of income tax. It also allows Ukraine to deepen the overall level of integration of the national accounting system into the European and world systems.

However, one of the consequences of this reform, as well as the reduction of the income tax rate from 24 to 18%, has led to problems related to the reduction of the fiscal efficiency of the corporate income tax. The main reasons for this are the following:

- The problem of reliable calculation of the object of taxation, which is determined according to accounting data, as there are opportunities to adjust the final financial result of the enterprise at the end of the reporting period [20];
- Uneven distribution of the tax burden on taxpayers due to the introduction of tax control measures by the state [24].

Thus, to forecast the fiscal efficiency of income tax, it is necessary to assess its current state at the macroeconomic level.

As practice shows, the assessment of fiscal efficiency should be based on the analysis of GDP, state budget revenues, or the size and share of tax revenues. Therefore, it is necessary to assess the fiscal significance of corporate income tax (Figure 1).



Figure 1 – Dynamics of fiscal significance of corporate income tax in Ukraine in 2011-2019

Source: Calculated and constructed on the basis of official data of the Ministry of Finance of Ukraine.

As we can see, over the last ten years there has been a clear tendency to reduce the share of income tax revenues in both the total revenues of the consolidated budget of Ukraine (from 16.4% in 2011 to 10% in 2019) and GDP (from 4.1 to 2.7%). At the same time, the period of 2014-2015 was extremely critical,

when the share of income tax was only 7.7% of tax revenues and 2% of GDP. However, with the stabilization of the situation, these indicators increased in the following years. However, in general, it can be argued that there is a significant reduction in the fiscal significance of corporate income tax in Ukraine.

Currently, in Ukraine, the vector of reforming the mechanism of income tax collection is aimed at the transition from a purely fiscal to a stimulating system of corporate taxation [25]. The complexity of this process is exacerbated primarily by the fact that the reform is taking place in an economic crisis, which creates a shortage of public financial resources [41]. The reform resulted in a significant reduction in the fiscal significance of the income tax, which lost the status of the main budget-forming tax [37].

Note also that the fiscal-regulatory mechanism of direct taxes is implemented primarily through the differentiation of rates and benefits [29]. Reducing the level of direct taxes leads to an increase in net profit of enterprises and household incomes, increases incentives to increase investment, and revive economic activity. By changing tax rates, establishing or abolishing tax benefits, the state is able to create or weaken additional incentives for investment, and by changing the level of indirect taxes – to affect the consumption fund as a whole and the price level [21].

Characterizing the fiscal efficiency of corporate income tax in Ukraine, it should be noted that during the analyzed period there was a constant increase in the absolute value of revenues from this tax [30]. This was due, inter alia, to inflationary trends in 2014-2015.

However, there are practical problems with adjusting the value of real income or bringing it to comparison with the base year, as in the same period there was a threefold reduction in the tax rate [15]. Therefore, the calculations related to the assessment of fiscal efficiency definitely contain a certain methodological error associated with the assessment of the dynamics of the volume of revenues from this tax.

Accordingly, to assess the fiscal efficiency of income tax will need to be more reliable application not of the tax burden, and the coefficient of the tax burden on income tax, as its calculation is based on a comparison of the efficiency of enterprises (Table 1).

Table 1: Indicators of fiscal efficiency of corporate income tax in Ukraine for 2011-2019

	2011	2012	2013	2014	2015	2016	2017	2018	2019
The level of the budget tax burden, %	24.83	24.74	23.25	23.19	25.55	27.32	27.76	27.71	26.92
The level of the tax burden on corporate income tax, %	4.08	3.84	3.61	2.52	1.96	2.52	2.45	2.98	2.69
Coefficient of the tax burden on corporate income	1.31	1.26	1.27	0.90	0.70	0.89	0.88	1.06	1.02

Source: Calculated and summarized on the basis of official data of the Ministry of Finance of Ukraine.

As can be seen, since 2014, there has been a significant reduction in the tax burden on corporate income tax. In particular, its decrease from 1.31 to 1.02 for the analyzed period indicates an increase in the share of funds of enterprises that remain at their disposal and can be used to upgrade the production base or investment. Thus, the decrease in the share of income tax in the total tax burden was accompanied by an increase in its stimulating role in the development of production. Thus, it can be argued that the change in income tax leads to a change in the amount of net profit that remains at the disposal of the company and serves as a source of own funds for the expansion and development of the firm, including innovation. Therefore, by reducing the amount of income tax by reducing its rate, reducing the tax base, the state leaves the company with a

larger amount of profit and thus creates an opportunity for the company to increase the cost of innovative development.

The effective income tax rate, which fell from 24 to 18%, also depends on determining the gross expenditures of enterprises. The higher the costs, the lower the tax paid by enterprises. The problem is that a clear list of costs that can be included in gross is not clearly defined. This creates room for manoeuvre between businesses in the process of generating financial statements. As a result, the effective corporate income tax rate very often exceeds the nominal one, and such a gap between the nominal and effective income tax rates in Ukraine is the largest among the vast majority of European countries [5].

It should be noted that the downward trend in corporate income tax rates (corporate tax) has long been used in the European Union as an effective tool for economic incentives. But, as practice shows, this does not always reduce the fiscal efficiency of this tax. Thus, on average in 27 EU member states income tax rates for the period 2007-2012 decreased from 24.22% to 22.19%, with, especially, in Germany (from 38.36% to 30.0%) and in Italy (from 37.25 % to 27.50%) [17].

Thus, the assessment of the fiscal efficiency of corporate income tax necessitates the use of more reliable forecast calculations. In addition, it is necessary to take into account real indicators of the level of development of the tax system and the state of the economy. One of such indicators is the coefficient of tax elasticity, which shows how the number of tax revenues to the state budget changes, depending on the change in GDP (Figure 2).



Figure 2 – Dynamics of the coefficient of income tax elasticity in Ukraine in 2011-2019

Source: Calculated and constructed on the basis of official data of the Ministry of Finance of Ukraine.

The results of calculating the coefficient of elasticity of corporate income tax show that in general in Ukraine this tax is inelastic. Thus, only in 2016 and 2018, the value of the coefficient of elasticity exceeded one. Accordingly, only for these years, it can be argued that the change in budget revenues was faster than the change in GDP. In all other years, the change in GDP did not lead to a real increase in the level of tax revenues of the state. Accordingly, the calculations indicate the fiscal inefficiency of the current mechanism of corporate income taxation in Ukraine.

5 Conclusion

The practical use of the system of indicators of fiscal efficiency of taxes at the national level involves the reorientation of the state to an intensive path of development and achieve a higher level of efficiency in the dynamics; study of reserves for further improvement of financial and economic activities of enterprises on the basis of the introduction of scientific and technological progress, improvement of technology and improvement of production organization [40]; creation of an effective mechanism

for improving the efficiency of management in the field of taxation

The result of the analysis of fiscal efficiency of corporate income tax is that tax management under a certain system of implemented tax decisions deteriorates and the fiscal significance of corporate income tax in the budget and gross domestic product of Ukraine decreases, the real revenue from this tax is unstable. At the same time, the efficiency of the tax administration of corporate income tax is quite significant. The coefficient of elasticity of corporate income tax is unstable and in recent years has not had a pronounced upward trend, but fluctuations within its effective characteristics allow us to hope for a gradual increase in elasticity. Systematic fluctuations in corporate income tax revenues are not very significant.

The assessment of the effectiveness of corporate income tax on these indicators will more accurately plan the receipt of this tax in the budget [18], as well as contribute to the development of measures to improve the regulatory and fiscal effect of corporate income tax, eliminate shortcomings in its tax mechanism, the formation of a rational structure of budget revenues and effective tax policy [44].

In our opinion, it is expedient to ensure the transition of the fiscal system from a neutral income tax rate to a regressive one, when the tax rate should decrease as the object of taxation increases, which will reduce the tax burden on businesses. Moreover, it is necessary to reconsider tax instruments that allow the use of corporate income tax in order to regulate economic processes in society, in particular, to introduce tax holidays and tax credit for companies developing on the basis of investment and innovation.

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