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The Prospects for Reforming the State Fiscal Policy

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ABSTRACT

Currently, developing the tax system and improving financial relations between the state and taxpayers are rather important aspects of reforming the economic situation and are relevant to this study. The purpose of this article is to substantiate the scientific approaches to the reform of modern tax systems and to identify effective directions for their practical implementation. This study focuses on an analysis of the history and the current state of the tax system in Ukraine, the identification of existing deficiencies in the Ukrainian tax system, a comparative analysis of the foreign tax systems, and an evaluation of the tax experience of developed countries in the context of its implementation in Ukrainian economic reality. This study is based on the following current scientific conceptions and methods: fiscal methods to defend the state's interests; theory, methodology and practice of budget-forming tax use, in particular, various types of tax rates (proportional, progressive, and regressive); constructive-critical analysis of tax policy development and the ways to reform it; and theoretical approaches to the definition of tax administration and directions for reforming and improving its efficiency. The following research results have been substantiated and proposed for implementation: the use of preventive taxation aimed to avoid tax evasion and to provide effective protection of the fiscal interests of the state; the reform of the corporate income tax by transition from a proportional rate to a regressive rate; the abandonment of the proportional rate and the use of a less harsh progressive rate of the personal income tax; the shift in priority in tax control from planned continuous tax audits to tax investigations; and the introduction of direct methods for determining tax liabilities into tax administration practice.

KEY WORDS: State taxation policy, tax evasion, progressive taxation, fairness in taxation, tax administration

JEL Classification: E620, H21, H260, H300

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1. Introduction

Currently, the political and economic situation in Ukraine requires the government and public attention to consider

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the problem of the effective formation of budget revenues and the appropriate management of national loans. According to the data presented in Table 1, Ukraine is raising significant amounts of external and internal loans, so the problem of management and redemption is thus relevant not only for national policy makers and financiers but also for the total representative lenders, including the European Union, foreign governments, international organizations, and donor institutions.

Table 1. Indicators of the state budget of Ukraine, in percentages

Indicator	Indicator of value annually				
	2015	2016	2017	2018	2019
1. The share of tax revenues in the state budget revenues	79.30	82.66	81.70	82.79	84.21
2. The share of debt financing in total financing	191.31	98.92	79.00	69.73	81.87
3. The ratio of loans to the state budget revenues, including:	76.78	35.86	24.75	25.27	34.31
- external	55.46	19.67	11.28	11.79	14.27
- internal	21.32	16.19	13.47	13.48	20.04
4. The share of official transfers from the European Union, foreign governments, international organizations, and donor institutions in the special fund of state budget revenues	6.43	17.00	2.60	3.16	2.01
5. The ratio of loan repayment to the state budget revenue, including:	48.67	22.24	16.80	19.14	27.00
- external	23.90	2.28	4.01	6.72	12.08
- internal	24.77	19.96	12.78	12.42	14.92

Source: Calculated by the authors according to the annexes to the Laws of Ukraine "On the State Budget of Ukraine" (Verkhovna Rada of Ukraine)

According to the data in Table 1, tax revenues comprise the bulk of budget revenues, which increases the importance and actualizes the tax policy reform in Ukraine to improve its business environment and guarantee timely debt settlement to reputable creditors.

According to Vasil S. Petkov (Petkov, 2014), the global economic crisis of 2008 posed serious challenges to the economy of the European Union, which were reflected in worsened macroeconomic indicators. Under such crisis conditions, maintaining fiscal stability and protecting state interests is a high priority for any country.

Michał Konopczyński (2013) has shown the long-term impact of fiscal policy on economic growth under the conditions of an economic and monetary union (EMU).

Khatai Aliyev and Ilkin Gasimov (Aliyev & Gasimov, 2018), who were concerned with the problems of reforming Azerbaijan's tax system, studied the global importance of fiscal policy for the country's development in the current conditions. In evaluating the effectiveness of fiscal policy, the authors state that "the

effectiveness of fiscal policy tools can be investigated by examining their contributions to primary macroeconomic indicators" (p. 90).

The provision and protection of state tax revenues are relevant to all civilized countries and have long been the focus of scholars and fiscal experts globally (Alstadsæter, Johannesen & Zucman, 2017; Célimène, Dufréno, Mophou & Guérékata, 2016; Escobari, 2005; Sikka, 2018; Terzi, 2017; Todorović, Stanković, & Ljajić, 2017; Alstadsæter, Johannesen & Zucman, 2017; Yoon, 2014). For example, according to Māris Jurušs (2017), "there are significant losses in tax revenues across the European Union (EU). National governments lose billions of euros in the revenues from nonpaid taxes and other illegal activities" (p. 102). Jurušs even points out the existence of so-called "tax terrorism" to emphasize the significance of the problem under investigation. The same opinion is expressed by another researcher, Prem Sikka (2018):

Tax avoidance is a matter of public concern, as it disables the capacity of democratically elected governments to meet policies mandated through

the ballot-box, including the mandate to invest in social infrastructure and redistribute income and wealth to secure social stability. Due to secrecy and opacity, the amount of tax avoided/evaded is hard to know. In all, 28 member states of the European Union (EU) are estimated to be losing around one trillion euros each year (p. 9).

Even the Roman Catholic Church paid attention to this problem and qualified tax evasion as a sin, which, for example, was revealed in Robert W. McGee's work (1998).

Different approaches to classifying the causes and conditions of tax evasion are currently being developed in tax theory (for example, a generalized and rather up-to-date classification is presented in the research of Todorović et al., 2017). Therefore, it can be acknowledged that there has been some progress in this field, and it is necessary to focus on avoiding and preventing tax evasion.

Thus, Todorović et al. (2017) indicate that "a study into tax evasion is a major challenge for a researcher because it is a complex issue and can be seen from different aspects: legal, economic, financial, social, political, psychological, etc." (p. 162). To have a more holistic and realistic view of the problem of tax evasion and to obtain reliable scientific results, there is need for cooperation between experts from several research areas (disciplines, Todorović et al., 2017). We fully agree with this thesis because the behavior of taxpayers depends on the above factors.

However, it is advisable not to digress from the essence of the research subject to expand the scientific area. For example, such digression can be traced in the work by V. Vishnevsky and O. Gurnak (2015), who define the main idea of their research as follows: "The pivotal idea of this paradigm is the idea of tax populations, whose habitats may fall beyond the state borders, as the latter are historically contingent and often unite people who belong to different genetic and sociocultural communities. The priority for further research is to identify correctly such tax populations and to define the limits of their habitats" (p. 117). In their work, the authors pay substantial attention to the so-called tax population and rank taxpayers according to 19 different criteria, among which are the following: the level of economic development of the country, the amount of

public debt in the percentage of GDP and the amount of budget deficit in the percentage of GDP, the level of tax burden shown in the tax rate, which is measured as the ratio of total tax revenue (including social security fees) to GDP, the number of tax payments (total tax payments), the time for fulfilling (complying with) tax obligations, and so forth, which, of course, should be approved and supported (p. 120). However, among the indicators, the authors also suggest climate factors (the average temperature of the cold and hot months) and the dominant religion, which can hardly be regarded as factors that influence the tax behavior of the population. We disagree with Vishnevsky and Gurnak (2015) in the following way: the word population is perceived in a somewhat disparaging manner when it refers to modern intelligent, IT-literate people because such an approach can make the reader think of animal populations. The authors are not concerned with the fact that there are different groups among taxpayers, such as legal and physical persons, residents and non-residents. Therefore, which populations do the authors refer to? In general, the idea of this research could have been historically relevant several centuries ago, when taxpayers did not have to be mobile, did not organize transnational corporations, did not have their business in foreign countries, and did not receive their income over the Internet, that is, when modern integration and globalization processes had not begun. Even the use of cluster analysis by Vishnevsky and Gurnak does not provide answers to our question. In our opinion, the main drawback of Vishnevsky and Gurnak's research is as follows: the behavior of taxpayers as economic entities is primarily due to their economic interests, which the authors of this work practically neglected.

Considering the tax problems in Ukraine, we can point out that the economic interests of taxpayers have been neglected for a long time. Unfortunately, in Ukraine, fiscal trends dominated in taxation for a long time period, and little attention was paid to the regulatory function of taxes. The main reasons for this phenomenon are considered to be the following: a lack of experience in tax collection in the first years of the state's independence; the desire of the authorities to form the state budget in the best way possible, according to their opinion; the functioning of the state apparatus during a period shorter than the corresponding taxpayer's reciprocal reaction to changes in

tax legislation; the distorted tax morality and culture in the society, and the low efficiency of fiscal control in the country.

Therefore, defining the ways to improve tax policy is a relevant topic; in particular, improving tax policy is justified regarding the areas and limits of applying preventive, progressive, and regressive taxation.

2. Methods for the Experimental Research

The research was conducted by applying a number of modern methodological concepts and theories as follows:

- the protection of state fiscal interests and the prevention of tax evasion by taxpayers (Alstadsæter et al., 2017; Célimène et al., 2016; Draft Law of Ukraine No. 6481, 2017; Escobari, 2005; Jurušs, 2017; McGee, 1998; Pirttila, 1999; Sikka, 2018; Terzi, 2017; Todorović et al., 2017; Vishnevsky et al., 2015; Yoon, 2014);

- the foundations of development and positive reformation of tax policy and the tax system (Barannyk, 2018; Chistiakov, Andersen & Vishnevskii, 2015; Draft Law of Ukraine No. 6481 (2017); Lysiak & Suk, 2018; Melnyk & Koshuk, 2016; Todorović et al., 2017; Tomkiewicz, 2016; Vishnevsky & Gurnak, 2015; World Atlas of Data, 2019);

- the theory, methodology, and practice that uses the system elements of budget-forming taxes, in particular, various types of tax rates (proportional, progressive, and regressive), their advantages and disadvantages, and their application areas and impact (Barannyk, 2018; Chistiakov et al., 2015; Khomutenko & Bohatyrova, 2015; World Atlas of Data; 2019);

- constructive-critical analysis and understanding of the practice and experience of tax policy development and its reform in Ukraine and other countries, current domestic and foreign tax legislation, and analytical materials of official international institutions and organizations, in particular, the Organization for Economic Cooperation and Development (OECD/G20) and the International Monetary Fund (IMF, Ministry of Finance of Ukraine, 2013; Base erosion and profit shifting; BEPS Actions; National Institute for Strategic Studies, YEAR; Draft Law of Ukraine, 2017; Klitnyi, 2017; International Monetary Fund, 2016; Melnyk & Leshuk, 2015; Legislation of Ukraine, 2018; Legislation

of Ukraine, 2017; Legislation of Ukraine, 2000; Verkhovna Rada of Ukraine, 2011; World Atlas of Data, 2019);

- the principles of the formation of tax systems in light of the economic interests of taxpayers and ensuring taxation equity, which stipulates the relevance of developing appropriate economically efficient factors of taxpayer interest in independent voluntary tax payments, particularly income tax (Alstadsæter et al., 2017; Chistiakov et al., 2015; Hofmann, Hoelzl & Kirchler, 2012; Melnyk & Koshuk 2016; Todorović et al., 2017; Tomkiewicz, 2016; Vishnevsky et al., 2015);

- theoretical approaches to the definition of tax administration and the directions of reforming and improving its efficiency in Ukraine and other developed countries around the world (Base Erosion and Profit Shifting; National Institute for Strategic Studies, YEAR; Klitnyi, 2017; International Monetary Fund, 2016; Lysiak & Suk 2018; Melnyk & Leshuk, 2015; Todorović et al., 2017).

The scientific and methodological basis of our research is determined by the logic and content of the study. The basis of our research is selected to implement the tasks and achieve the aim of our work. Thus, the study is based on the following scientific approaches and methods:

- the system approach, which involves considering the research subject as a set of interconnected structural elements. From our perspective, the system approach is applied to analyze the links between direct and indirect taxation, with a further justification of the conclusion regarding the systemic impact of these taxes on the size of the personal tax burden within a single tax system, as well as to consider the systemic relationship between enterprise direct taxes and personal taxes (property and income taxes);

- the dialectical approach, which requires knowledge of the historical background, and an analysis of historical preconditions and changes in the development of tax systems, and identification of recurring problems and prospects of their elimination on this basis;

- the comparative method, which allows us to make a constructive comparison of the taxes under study in Ukraine and in other countries (the USA, Germany, France, Italy, Great Britain, Japan, Sweden, Israel,

Greece, Poland, Slovenia, Canada, Austria, and the Russian Federation) in the context of the issues raised in this study;

- the causal (factor) method, which allows conducting qualitative and/or quantitative evaluations of the influence of factors on the resulting given tax indicator. In our study, this method has been used for the following:

- to substantiate the introduction of preventive taxation of enterprise assets considering the proposed factor calculation of the size of property taxes, depending on the average annual value of the enterprise assets and the average asset profitability;
- to develop the factor model to change the regressive rate of income tax, depending on the changes in the taxpayers' asset profitability and the average asset profitability;
- to develop the scale of complex progression and to set tax rates on the personal income tax in accordance with the monthly income of individuals;
- to formalize the evaluation of tax administration efficiency considering the dependence of the efficiency indicator on factors such as additional tax liabilities of taxpayers; and
- to combine theoretical studies with an analysis of current practice and put forward predictions for the formation of tax systems and mechanisms of tax administration. This approach provides conditions for the practical realization of the authors' theoretical positions in the context of the tax aspects under study;
- to make substantiated inferences and conclusions, to provide logical integrity and structuring of the research, and to develop specific options and proposals for the constructive development and improvement of tax policy, tax system, and tax administration on the basis of methods of formal logic that allow us to investigate basic scientific approaches and previous research findings.

The purpose of our study is to propose our own approaches to the systemic reform of tax policy in Ukraine and to justify specific mechanisms for the introduction of preventive, regressive, and progressive taxation and indirect methods of determining tax liabilities. These approaches are based on a comprehensive study of the history and the current state of the

taxation system in Ukraine, taking into account the positive experience of tax systems and tax administration in developed countries.

The purpose of this study is achieved by setting and solving the following tasks:

- to analyze the history and current state of the tax system in Ukraine, to identify existing problems and to specify these problems in the context of the current tax law (tax code) in the country;
- to study the concepts of and approaches to the constructive reform of tax policy, in particular, innovations regarding the application of preventive property taxation, corporate profit taxation (corporate taxation), personal income taxation (population), and the indirect setting of tax obligations for taxpayers;
- to analyze the experience of other countries (the USA, Germany, France, Italy, Great Britain, Japan, Sweden, Israel, Greece, Poland, Slovenia, Canada, Austria, and the Russian Federation) in the context of the issues in question and to conduct a comparative analysis of the tax experience in these countries;
- to substantiate the expediency of the preventive approach to the taxation of enterprise assets that, in our opinion, will help stop current tax evasion;
- to study the current options of corporate income (corporate tax) and to develop an economically efficient mechanism for its regressive variant and a formalized regressive tax rate model to prevent tax evasion;
- to identify the causes, conditions and consequences of violations of the classic principles of taxation, in particular, the inclusion of taxpayers' economic interests and the principle of equity in the taxation of personal income (population); to develop our own approaches to ensure the parity of the economic interests of the subjects of tax relations (the state and taxpayers) due to the application of regression in corporate income taxation and the approaches to restore equity in personal income taxation through the introduction of a less harsh, complicated tax progression; and
- to identify the essence and to develop our own analytical model for evaluating the effectiveness of tax administration by outlining the place and role of indirect methods for establishing tax obligations for taxpayers and substantiating the relevance of their application in tax operation of the state fiscal authorities

3. Results of the Experiment

Tax theory and tax law apply the presumption of guilt to the taxpayer because a tax is imposed on any income (or potential source of income) of the taxpayer. This approach is directly related to prevention in taxation. In general, the term preventive means forestalling and prophylaxis; preventive taxation creates cardinal and effective measures to prevent tax evasion in the state. Therefore, in the past and in modern taxation practice, prevention is traditionally used in property taxation in the following way. Property tax is calculated depending on the volume of the taxation object and does not depend on the actual income that the owner gains or can gain from the taxable property. Therefore, in addition to the intentional artificial preclusion of tax reduction, such a preventive approach has a significant advantage. For the payer, the tax is a conditionally fixed expenditure, and therefore, it creates a positive stimulating effect on the efficiency of property use. According to the Ukrainian national accounting standard, assets “are resources controlled by the enterprise as a result of past events, the use of which is expected to result in future economic benefits” (The national standard of accounting 1, 2013, art. 1). Consequently, if the owner of the property considers it to be an asset and expects economic benefits, the state will receive a share of these benefits in the form of a corresponding tax. The return (in the form of income or profit) from the use of assets depends on the characteristics of each industry (which affect the average industry return on assets) and the efficiency of the economic activity of a particular company in a particular area. It is proposed to consider the tax base as the multiplication of the average industry return on assets (\dot{D}) and the average value of the company assets ($\dot{B}\dot{A}$). In this case, the enterprise tax (T_a) is calculated by multiplying the tax base by the tax rate R_a asset taxation:

$$T_a = R_a \times \dot{D} \times \dot{B}\dot{A} \quad (1)$$

Among the whole system of corporate taxes, the regulatory function is more or less fulfilled (or should be) by the income tax. Indeed, this tax is intended to distribute profits between the state and its payer, while the net profit, which is the financial goal of the owners of an enterprise, is significantly affected by income taxation, which can either stimulate or slow the enterprise

business activity of enterprise-taxpayers.

Traditionally, the proportional rate was used in profit taxation in Ukraine (currently, in 2018, the base rate is 18%, Verkhovna Rada of Ukraine, 2011, art. 136), which was neutral to the amount of taxable profits. The proportional rate has its advantages, namely, it can be considered neutral and fair, and it is calculated quite simply in tax administration.

However, there are different approaches to income taxation, and the choice of the approach will be influenced by the state tax policy and its desire or reluctance to stimulate certain actions of taxpayers.

Some Ukrainian economists are trying to justify the need for a cardinal step – the elimination of income tax. Such an approach to taxation has even been officially initiated by the President of Ukraine and supported by the Committee on Taxation and Customs Policy and other committees in the Draft Law on amendments to the Tax Code of Ukraine regarding the tax on withdrawn capital No. 8557 dated July 5, 2018 (Legislation of Ukraine, 2018). When quoting the explanatory note to this draft law, we indicate a fixed number of shortcomings in the income tax, namely, the following (Legislation of Ukraine, 2018):

complex rules for calculating the object of taxation (the financial result as a benchmark for the calculation of the object of taxation, with subsequent adjustment for the difference, is a constant risk of claims regulatory institutions); the need for separate accounting for tax depreciation; problems with the accumulation of losses; and aggressive tax planning schemes used by individual companies to avoid taxation, which leads to excessive tax pressure on conscientious taxpayers (explanatory note to the law, art. 1).

In addition, the Draft Law of Ukraine No. 6481 dated May 22, 2017 “On establishing the limit value of corporate income tax and personal income tax in Ukraine” also referred to the reduction of the income tax rate (even when it was applied without the capital withdrawal tax, Draft Law of Ukraine No. 6481, 2017). The explanatory note to this law states as follows:

There are countries where the income tax is much higher than in Ukraine. In the United States, the

Table 2. Corporate income taxation in the United States

Taxable profit, in US dollars	Tax calculation
Less than 50,000	15%
50,001-75,000	\$7,500 + 25% of profit more than \$50 thous.
75,001-100,000	\$13,750 + 34% of profit more than \$75 thous.
100,001-335,000	\$22,250 + 39% of profit more than \$100 thous.
335,001-10 mln.	\$113,900 + 34% of profit more than \$335 thous.
10,000,001-15 mln.	\$3.4 mln. + 35% of profit more than \$10 thous.
15,000,001-18.33 mln.	\$5.15 mln. 38% of profit more than \$15 thous.
More than 18,330,001	35%

Source: Translated from Lysiak and Suk (2018).

income tax is 40%, in Germany 29.6%, in Italy 31.4%, in Belgium 34%, and in Japan 35.65% (explanatory note to the law, art. 1).

However, in this regard, it is incorrect to compare only the tax rates, because tax pressure also depends on the methodology for calculating taxable profits; in most countries, this profit either does not include retained earnings, or a much lower tax rate is set on its undistributed share. Consequently, in both of these options, the average rate (for all profit received by the payer) will be less than the rate indicated in the explanatory note. At the same time, it is necessary to agree with the rather fair idea of the initiators of the Draft Law that it is currently more appropriate for Ukraine to focus on other countries that charge taxes that do not destroy business but that help the state budget.

In addition, the experience of foreign countries shows that income tax has been successfully applied for many decades. Thus, the share of income tax in the structure of tax revenues in economically developed countries remains stable at the level of 8-9%. According to Lysiak & Suk (2018), corporate income tax in the United States is approximately 10% of federal budget revenues. Income tax is charged according to the 8-rank progressive scale of taxation shown in Table 2.

With such an approach to the progressive corporate income taxation in the United States, the state tries

to regulate the structure of business in the economy. The progressive tax rate of income tax positively influences the development of small and large taxpayers. That is, on the one hand, a relatively low tax rate on the profit of small enterprises is introduced to support small businesses, and on the other hand, an increase in tax rates is used to restrain the monopolization of the economy (mergers, acquisitions, the creation of large corporations), which contributes to the development of competition in the market.

The American experience of applying progressive income taxation is a very significant leverage on the economy, but in our opinion, it is absolutely impossible in Ukraine, where the most important problem is the struggle with the shadow sector, and progressive taxation will only increase the level of tax evasion.

In the study on fiscal policy reform in Egypt, Israa A. El. Husseiny (2018) points out that:

More specifically, given that tax bases should expand during economic expansions and shrink during recessions, a decline in the tax revenues-to-GDP ratio during expansions should be derived by one of the three following scenarios: a) a fall in tax rates that is sufficient to offset the increase in tax bases, which would lead to lower tax revenues; b) a fall in tax rates that is proportional to the tax bases' increase, which would

Table 3. Experimental calculations of applying the regressive rate of income tax

Enterprise	R_t	R_{t-1}	T	C_{t-1}	C_D	C_t
PC "Ukrtelecom"	0.1896	0.1992	-0.0482	0.18	0.9773	0.1885
PJSC "Kyiv Confectionary Factory "Roshen"	0.0424	0.0412	+0.0291	0.18	0.4711	0.1775
PJSC "VF Ukraine"	0.3291	0.2899	+0.1352	0.18	1.0000	0.1556
PJSC "Kyivoblenergo"	0.0777	0.0278	+1.7950	0.18	0.9593	0.0000
PC "Naftogas Ukraine"	0.0646	0.0752	-0.1410	0.18	0.7975	0.2002

Source: Calculated by the authors according to the annual financial statements of enterprises during 2016-2017

keep overall tax revenues unaffected; and c) a constant or a marginal increase in tax rates that goes in parallel with the tax base increases (p. 112).

Considering the need to ensure the state fiscal interests and the current state of the Ukrainian economy, it should be noted that the best option for tax reform should be option (b), or at least option (a) in the cited edition (Husseiny, 2018).

Therefore, in further discussion, we propose an alternative version of tax reform to strengthen the incentive role of income tax and to improve the economic method of taxing illegal profits.

In this case, it is worth considering the following tax rate calculation:

$$R_t = R_{t-1} \times (1 - A \times C_D) \quad (2)$$

where R_t , R_{t-1} are the income tax rates in the reporting and previous periods ($R_t \wedge R_{t-1} \geq 0$, respectively).

A is the accession rate of the taxpayer's asset profitability in the reporting period (R_t) compared to the previous period (R_{t-1}), in fractions, such as $A = R_t / R_{t-1}$.

C_D is the deceleration coefficient used by the state to regulate the regressive reduction of the tax rate ($0 \leq C_D \leq 1$).

After analyzing the operations of well-known and typical enterprises in Ukraine, we performed experimental calculations of the regressive change in the income tax rate (see Table 3).

Another significant budget tax in Ukraine, as in other countries, is the personal income tax (PIT), which

cannot be considered either fair, from the point of view of tax studies, or effective, from a fiscal point of view.

The justice of taxation has been successfully analyzed from different angles in the research (Hofmann et al., 2012). While considering tax justice as ensuring an equal pay burden for different personal incomes, it is essential to first study the distribution of household income by the Gini coefficient, which, in the period of 2000-2016, according to the data (World Atlas of Data, 2019), was as follows: in range of 40.40-41.50 in the US; in 28.80-31.70 in Germany; 41.40-42.50 in Israel; 32.30-34.40 in the UK; 33.80-35.20 in Italy; 29.80-33.70 in France; and 26.50-29.20 in Sweden. The minimal Gini index during this period was officially recorded in Slovenia, and the Gini coefficient was in the range of from 24.60 to 26.20. In Ukraine, the Gini coefficient ranged from 25.00 to 29.00. These data show that income is distributed unfairly among different sections of the population, and Ukraine is not at the bottom of this list of countries.

However, the current proportional direct personal income tax in Ukraine distorts this picture and reduces the possibility of equity. This effect can be explained by the fact that individuals whose income is higher are charged with lower taxes because they do not spend all their income on consumption (indirect taxes are consumption taxes), and accordingly, they have the financial ability to save money or engage in entrepreneurial

activity by investing a share of their income in their own business.

Moreover, when an individual earns a higher income, the share of this income spent on consumption is smaller, that means that indirect taxes are regressive even at a proportional interest rate and, primarily, render pressure on the lower-income population. The following is stated by Barannyk (2018): "In Ukraine, tax evasion has become a norm; honest taxpayers are in a disadvantaged position. The current government allows oligarchs not to pay taxes on their profits. Instead, the tax burden is completely shifted to ordinary citizens" (p. 35). This phenomenon is graphically illustrated in Figure 1, where B, BIT, BDT, and BA are the tax burden, the tax burden of indirect taxes (i.e., excise taxes), the tax burden of direct taxes (i.e., personal income tax), and the average tax burden, respectively, and I is the amount of personal income.

Therefore, the need to restore tax equity and provide tax opportunities for establishing and developing the middle class in Ukrainian society justifies the refusal of proportional taxation on individual incomes.

The progression in the taxation of personal incomes has to restore tax equity, since the proportion of non-consumption-related income, which is not imposed on indirect taxes, would be taxed at a higher, progressively increasing rate of direct income tax. This situation is graphically presented in Figure 2.

At present, according to the Tax Code of Ukraine (TCU), a proportional rate of 18% is applied to the personal income in Ukraine (Verkhovna Rada of Ukraine, 2011, art. 167). That is, the need for progressive taxation of personal income is ignored by legislators, which does not compensate for the regressive reduction of indirect taxes for wealthy citizens and, therefore, violates one of the basic principles of taxation – equity.

Other Ukrainian tax specialists also note this problem and express the same view that the unified rate of income tax contradicts the requirement of increased equity in taxation (Melnyk & Koshuk, 2016). Poland, like Ukraine, is also considering this problem (Tomkiewicz, 2016):

In the case of indirect taxes, regressivity is due to taxpayers' diminishing marginal propensity to consume. The part of income spent on consump-

tion decreases in reverse proportion to the level of income; therefore, the higher the income, the lower the amount spent on consumption and indirect taxes. The amount of VAT and excise duty calculated as a percentage of the taxpayer's revenue diminishes as the income increases (p. 115).

The relevance of this is also confirmed by the explanatory note to the Draft Law of Ukraine No. 6481 "On the establishment of the limit value of corporate income tax and personal income tax in Ukraine" dated May 22, 2017, which states that progression in personal income taxation is applied in many countries of the world, for example, in Italy (at rates of 10, 22, 26, 33, 40, 45, and 50%), Israel (at rates of 10, 20, 30, 45, and 50%), the USA (at a slow progression from 25 to 50%), Japan (from 10 to 50%), Germany (from 14 to 45%), Spain (from 21 to 52%), and Poland (from 18 to 32%). Consequently, the world community either already uses progression in personal income taxation or intends to implement it.

However, it should be noted that some scholars notice a certain negative trend in progressive taxation. Thus, according to the research on offshore evasion schemes, due to tax progressivity, the rich have especially strong incentives to understate their resources (Alstadsæter et al., 2017).

However, tax evasion is a completely objective phenomenon because under all conditions, taxpayers will always seek ways to reduce their tax burden while protecting their economic interests. In addition, opponents of progressive personal income taxation must be reminded that there is a system of taxes; therefore, one tax cannot be considered apart from the rest. Moreover, as has been proven, the progressive growth of direct income taxation of individuals is offset by a decrease in the pressure of indirect taxes on the incomes of wealthier citizens.

The progression under study should relate to the minimum wage or to the subsistence minimum by carefully increasing the tax rates, for example, by setting the minimum rate at 5%. If income increases by one minimum wage (or subsistence minimum), the tax rate must be increased by 3 or 5%. A similar opinion on the introduction of a complex progression in personal income taxation is also expressed by the scientists of the Odessa National Economic University

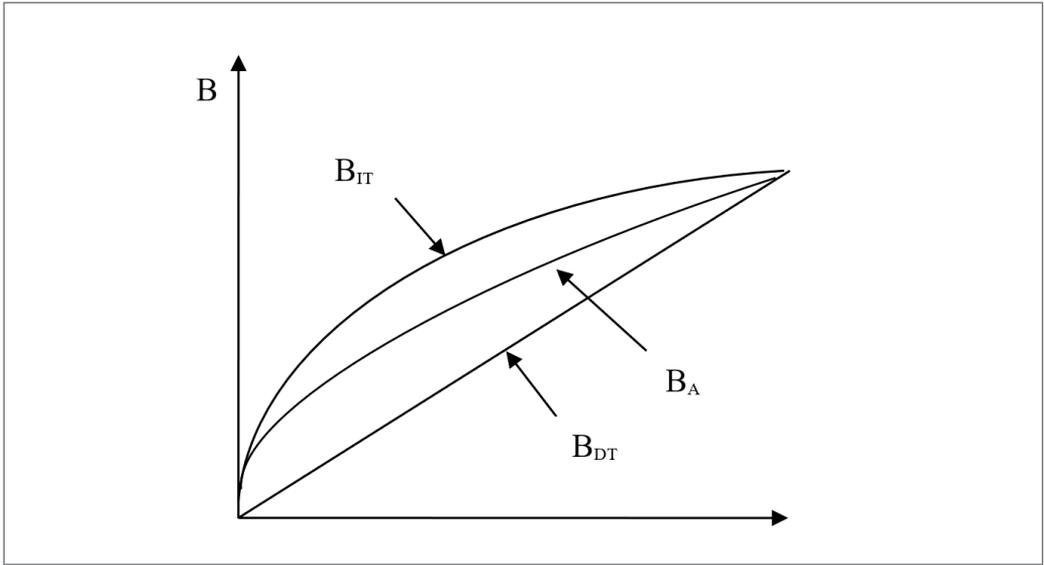


Figure 1. Tax burden conditional on the proportional taxation of personal income

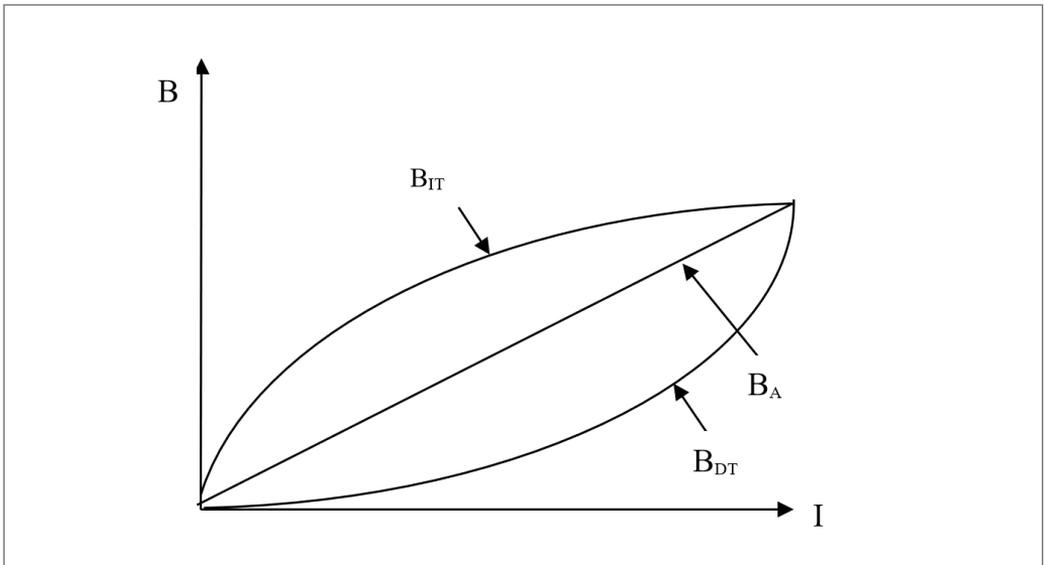


Figure 2. Tax burden conditional on the progressive taxation of personal income

Table 4. The model for changing the rates of personal income tax in Ukraine

Monthly taxable income in the form of wages	Rate
Subsistence minimum	Not taxed
From 1 to 5 subsistence minimum	10%
From 5 to 10 subsistence minimum	15%
More than 10 subsistence minimum	25% (of the sum exceeding 10 subsistence minimum)

Source: Kniazkova and Serhienko (2015)

Table 5. The authors' model of changes in the rates for personal income tax in Ukraine

Population distribution (%) *			Personal income tax rate, % **	Population distribution (%) *			Personal income tax rate, % **
By the level of per capita equivalent of total income per month		01.01.2018		By the level of per capita equivalent of total income per month		01.01.2018	
UAH	USD			UAH	USD		
Less than 1920.0	Less than 68.41	6.9	0	3720.1–4080.0	132.55–145.37	9.3	10
1920.1–2280.0	68.41–81.23	7.7	5	4080.1–4440.0	145.38–158.19	6.3	12
2280.1–2640.0	81.24–96.95	11.0	5	4440.1–4800.0	158.20–171.02	6.4	12
2640.1–3000.0	96.96–106.89	11.0	8	4800.1–5160.0	171.03–182.84	5.1	15
3000.1–3360.0	106.90–119.71	10.7	8	More than 5160.0		14.8	15
3360.1–3720.0	119.72–132.54	10.8	10				

* Source: State Statistics Service of Ukraine (2019). Retrieved from http://www.ukrstat.gov.ua/operativ/operativ2007/gdvdg_rik/dvdg_u/roz2010_u.htm.

** Source: Proposed by the authors of the personal income tax rate

V.P. Khomutenko and Y.M. Bogatyryova (2015), who propose the following progression that we strongly support (see Table 4). However, we believe that the progression should be less harsh (see Table 5).

Along with the change in the functioning of taxes, it is necessary to pay attention to the mechanism of their administration. The essence of tax administration is interpreted quite differently, for example, as regulated organizational and administrative activities of authorized state bodies in the field of tax management (Proskura, 2014) or as a set of interrelated procedures, functions,

operations, and methods aimed at motivating the impact on taxpayers and the staff of institutions responsible for tax operation (Kniazkova & Serhienko, 2015). Unfortunately, scientists still do not have a shared view on the essence of tax administration, and some narrow the concept: tax administration cannot be reduced to tax debt repayment or tax collection under constraint. Moreover, this contradicts the current trend of reforming the way of working with taxpayers to motivate them to pay taxes on their own. The variety of scientific views on tax administration resulted in an absence of the concept's definition

in the Tax Code of Ukraine (Verkhovna Rada of Ukraine, 2011) until 2013, but the legislators were not interested and even introduced a section devoted to the uncertain tax administration (Section II TCU).

The question of tax administration is quite broad, complex, and diverse, and, thus, this publication focuses on one of its aspects, namely, the use of indirect methods to charge taxes. This problem is important and relevant, first, because of the domestic problem of tax evasion in Ukraine and second, because of the need to improve the external image of Ukraine as a state which aims at European integration and maintaining its creditworthiness to repay IMF loans and other creditors. The interest of the IMF is confirmed by the fact that, for example, in 2016, in the framework of cooperation, a memorandum was signed that indicated the necessity to introduce indirect methods in the legislation of Ukraine to obtain a tranche: authorize the SFS to use indirect measurement (i.e., to use indirect measurement methods to determine the correct amount of tax and the social obligations of any taxpayer) (Melnyk & Leshuk, 2015).

The Ukrainian experience of applying indirect methods to determine payers' tax obligations is not widespread and effective. This inexperience is due to the fact that these methods have not been applied since 2005, and there is no methodology of their use in the tax legislation of Ukraine. Former attempts of their practical introduction into the tax operation of fiscal authorities caused quite pretentious complaints of taxpayers. For more than 14 years, the absence of indirect methods has provoked the negative spread of tax evasion and has had a detrimental effect on the formation of the state budget.

In justifying the need for legislative consolidation and the introduction of these methods to tax administration, it should be noted that these methods will contribute to improving the efficiency of fiscal authorities' work. This efficiency (E) is proposed to be evaluated through the following formula:

$$E = \frac{(A+S) \times P_D \times P_B}{ETA}$$

where A is the additional charge of the tax carried out by the fiscal authorities; S is the sanctions (fines and penalties) on the violators of tax legislation; P_D and P_B are the probability of detecting the tax law violation and bringing the taxpayer to responsibility, respectively; and ETA is the tax audit expenditure (tax administration).

Indirect tax administration methods affect the increase of all indicators in the numerator of Formula 4, which ensure the efficiency of tax administration.

4. Analysis of the Experimental Results

After analyzing the results of the research, we focus on some of its essential aspects, ensure comments on the justification of the advantages of our approaches and proposals, and outline the main prospects for their practical implementation.

While proving urgency and the current expediency of implementing such approaches into the transformation of tax policy in Ukraine, we emphasize that these types of taxation will help to overcome tax evasion by increasing the economic interest of taxpayers to make a self-evident voluntary tax payment and by strengthening the regulatory function of taxes.

Regarding the feasibility of applying the industry average profitability to the tax calculations, it is appropriate to refer to the current provisions of paragraph 39.3.2.5 of Article 39 of the Tax Code of Ukraine and the "Procedure for determining the average weighted value of the profitability indicator for a comparable legal entity for the purpose of transfer pricing" (Legislation of Ukraine, 2017; similar approaches also occur in other countries), according to which the price or profitability in a controlled operation and the prices or profitability indicators of several uncontrolled transactions or legal entities should be compared (Verkhovna Rada of Ukraine, 2011, subclause 39.3.2.2). Therefore, we believe that there are definite grounds and experience to apply a preventive comparative approach to taxation.

However, in any case, it is not advisable to take thoughtless action in taxation, especially by introducing new taxes or increasing the tax burden in another way because such actions can either surprise or frighten taxpayers. In addition, with the rapid introduction of tax-tested innovations in practice, legislators may inadvertently make methodological errors or omit some "loopholes" for tax evasion in the legislation, which are not visible at the stage of the adoption of tax regulations. Later, taxpayers can find these "loopholes" and use them to evade taxes. The explanation for the activity of the taxpayer is very simple: they are looking for the most affordable ways to protect their economic interests.

In general, any changes in taxation should be carefully implemented. Taking into account the economic situation in Ukraine and the fact that there is a significant proportion of receivables in the assets of enterprises, it is advisable that the proposed tax rate should not exceed 5%. If the tax rate is higher, it can provoke negative consequences, such as the worsening of the financial position of enterprises, attempts to evade this tax, problems in the formation of the state fiscal revenues, need for increased tax control, and worsening of the tax climate in general. Caution in this case is caused by preventing an unjustified increase in tax burden, but the necessity of imposing such taxes is justified by the following reasons: first, this percentage and the profitability indicator will encourage payers to use their property more productively, which can improve payment discipline and reduce debts; second, preventive taxation will provide the state with guaranteed tax revenues and simplify taxation.

By examining the options for reforming income tax, we have provided a reference to the Draft Law on Amendments to the Tax Code of Ukraine regarding the tax on the withdrawn capital No. 8557 dated July 5, 2018 (Legislation of Ukraine, 2018), but it is necessary to give the following essential remarks.

- First, the complexity of the tax calculations on the profit tax is currently not as significant as it was in the period when there were fundamentally different systems of accounting and taxation. The taxpayers (or rather their accountants) have long mastered the procedures for calculating tax differences, which should be calculated only if the payer's annual income (net of indirect taxes), as determined by the accounting rules for the last annual report (tax period), exceeds twenty million hryvnas.

- Second, on the contrary, the fundamental change in the taxation system proposed in Draft Law No. 8557 will create a new complexity of the transition to a new tax, which is not very simple and clear at the first reading; this tax is imposed on much more taxable transactions than income tax presupposes. In addition, the withdrawal of capital from Ukraine can be carried out by foreign legal and natural persons (they have such a right, and they should be thanked for investing in the economy of our country). Moreover, it will be comparatively more difficult for foreign investors to understand the difficulties of Ukrainian domestic tax

legislation; consequently, such fluctuations in the tax arena in Ukraine can simply discourage them.

- Third, regarding the existing complexity in the separate accounting for tax depreciation, we can object to the authors of the explanatory note in the following way: according to art. 25.5 of the current Standard of accounting 7 "Property assets" (Legislation of Ukraine, 2000), depreciation can be charged by considering the minimum allowable value-added use of fixed assets prescribed by the tax law (except for the production method). Therefore, the overwhelming majority of accountants apply the tax method of calculating amortization expenses.

- Fourth, the tax rates on capital withdrawal and its equivalent operations are 5%, 15%, and 20%, which is a rather tangible tax burden on withdrawn funds or property; therefore, we can predict the objective reduction of the investment interest of foreign partners.

One can only agree with the comments of the authors of the explanatory note on the problems of the artificial accumulation of losses and the presence of tax evasion. However, this does not mean that to solve these problems it is necessary to abandon the profit tax in general, because this tax can be reformed in order to strengthen its stimulating role in entrepreneurial activity and to extract tax from shadow activity, which will be discussed further. Therefore, it is inappropriate to simply replace hidden profits with a new tax; the idea of introducing two taxes (income tax and the capital withdrawal tax) can be suggested to stop capital withdrawal violations and to encourage preserving the hidden profits of the profit tax in the domestic economy. The rates for these taxes may be much lower than the existing or proposed rates in the TCU, for example, 5% or 8%. However, if the tax rates are at the level indicated in the proposed Draft Law (i.e., 5%, 15%, and 20%), this will increase the tax pressure and provoke taxpayers to find new options and schemes for new tax evasion. Thus, the state may not receive the desired fiscal revenues.

With an adequate well-founded regression, this would be a significant economic incentive for taxpayers to derive profits from the shadow sector. However, to make this incentive effective in practice, it is necessary to apply the mathematical dependence of the regressive tax rate on the growth rate of the taxpayer's asset profitability. In this case, the budget loss due to

the rate reduction will be compensated by an increase in tax revenues due to the growth of declared profits. In general, tax revenues in the budget will depend on the elasticity between the taxable profit and the tax rate. It is very difficult to predict such elasticity; therefore, to prevent unpredictable fluctuations in tax revenues, it would be expedient to implement a slow regression, at least in the first stage of the transition to regressive income taxation.

Some of the following aspects of regressive calculations should also be taken into account.

First, if $R_{t-1} = 0$, in the next period, R_t is taken at the rate level in the previous until the $(t-1)$ -th period (i.e., instead of R_{t-1} , R_{t-2} is used; then, provided that $R_{t-2} = 0$, the indicator R_{t-3} is added to Formula 2 instead of R_{t-1} , and so on). This approach aims to prevent the payer from artificially manipulating the financial indicators to obtain a tax advantage in the form of a tax rate reduction.

Second, as has been mentioned, A takes into account the growth (decrease) in the efficiency of the enterprise and is calculated depending on the achieved positive values of the payer's asset profitability levels in the reporting and previous periods. However, in the case of enterprise losses, Formula 2 requires correction: if in the reporting period, $R_t > 0$, and in the previous period, $R_{t-1} < 0$, R_t is taken at the base rate level in accordance with the current tax legislation (18%, or in the case of introduction, 5% or 8% in addition to income tax and the capital withdrawal tax).

Third, the asset profitability as the main indicator of measuring the effectiveness of taxpayers' activity with respect to the average asset profitability has already been discussed above. We suggest to calculate the C_D coefficient as follows:

$$CD = \frac{Rt-1}{Rt-1}$$

where R_{t-1} and R'_{t-1} are the rates of the return on assets of the taxpayer and the average asset profitability in the previous period, respectively.

The calculations of a regressive change in the tax rate (see Table 3) clearly indicate that for the enterprises that have increased the efficiency of their activities, the rate is reduced accordingly. For the enterprises where the activity has worsened compared to the previous period, the rate is increased to stimulate them to seek some reserves to improve their economic activity. Concerning the results

of the calculation for PJSC "Kyivoblenergo", where the value of R_t , as calculated by Formula 2, is $-0,1299$, and, considering the infeasibility of its negative value, this indicator is zero. This also makes economic sense, because the excessively high assets increment of this enterprise ($T = +1,7950$) shows that either successful restructuring, crisis recovery, or using hidden reserves should have positive consequences for the enterprise.

Since it is urgent to fight tax evasion and to ensure the voluntary return of profits from the shadow sector, it is worthwhile to implement the regression. In addition, Russian scientists also note the prospects of this step by considering the need to solve the same problems with excessive tax pressure and the extent of tax evasion in the Russian Federation (Chistiakov et al., 2015): "A regressive profit tax related to profitability can be used as a government motivation tool for productive productivity growth" (p. 4202). Fundamentally, the attention of scholars to the income tax regression is, of course, a positive fact. However, the previous approaches of scholars differ from our version of regression. Thus, Russian scientists (Chistiakov et al., 2015) apply a profitability indicator in their model of regressive taxation. In contrast to our proposal to use the return on assets, we think that product profitability has a somewhat narrowed approach, at least because the enterprise does not receive profits only from the sale of products. Moreover, the product profitability can be significantly and artificially changed by the enterprise. In addition, these researchers (Chistiakov et al., 2015) use a powerful mathematical device that makes their model scientifically significant, but it reduces the prospects of its practical application. By comparing the regressive income tax models (namely, the model proposed by the authors in this publication and the Russian model), we hope that the proposal in this publication is more appropriate and practically acceptable.

The current proportion in the taxation of individual incomes in Ukraine is not only unfair in terms of the tax burden distribution, but is also distorting the structure of society, preventing it from developing a middle class and, as a consequence, hindering the country's economic development.

Presently, it is absolutely necessary and extremely important to replace the current personal income taxation with justified complex progression in Ukraine. Progressive tax rates (especially after prolonged application of the proportional personal income taxation in Ukraine)

should be carefully charged due to large amounts of undeclared income received by the payers and a variety of illegal schemes for obtaining these revenues in the Ukrainian economy. In addition, as it has already been mentioned, less harmful and, conversely, a gentler progression will provide better conditions for the formation and further development of the middle class in Ukraine, which is vital for the economic well-being of Ukraine.

According to Michał Konopczyński (2014), a rather high individual income tax has a negative impact on investment in human capital and on the economic development of the country in general. We believe that moderate progressive taxation will contribute to positive developments towards stimulating the development of human capital.

Reducing the tax burden on individuals with higher income is an economic factor in fighting the shadow schemes for tax evasion and paying hidden wages. This approach can also solve the problem of supporting the middle class.

The analysis of existing scientific approaches to define tax administration reveals a wide range of different positions of scholars regarding this issue.

Without laying claim to absolute wording, we provide the following definition: tax administration refers to a set of special techniques, measures, and procedures of state bodies authorized to manage state tax revenues (tax revenues at all levels of the budget or targeted state funds).

Tax administration is the most important and effective factor in the implementation of tax policy, even when comparing administration with tax system composition; if the tax system is static in its composition of a set of different taxes, the administration of these taxes should be considered as the dynamics (process) of their functioning to generate public revenues. Therefore, the effectiveness of the state collection of fiscal revenues depends on tax administration to a greater extent.

As we have noted above, the use of so-called indirect methods of tax liabilities is of particular importance in tax administration. It should be added that according to A. Klitny (2017), the use of indirect methods is a very common world practice. Indirect methods are used in Germany, France, the USA, Great Britain, Greece, Italy, Austria, and other countries. For example, the selection of materials for tax audits in France is carried out not only on the basis of studying the tax statements of payers but also on received external information (which is a source

for the application of indirect methods, International Monetary Fund, 2016, p. 217). The grounds for tax audits in the US are, among others, also information received by the inspector-controller from paid informants (Melnyk & Leshuk, 2015), which are called whistles.

In general, the practice of indirect taxation is formally enshrined in the Plan for Combating the Tax Base erosion and profit shifting (BEPS; Base Erosion and Profit Shifting; BEPS Actions), which consists of fifteen steps to fight tax evasion. The steps were recommended by the OECD/G20, and four of the steps are classified as minimum standards of implementation, including “counteracting harmful tax practices more effectively, [and] taking into account the principles of transparency and essence” (National Institute for Strategic Studies, 2017). The interpretation of this measure (step) in the plan refers to the essence of business operations, which is often distorted by taxpayers due to inaccurate tax information. Therefore, the restoration of the transparency of this entity (that is, its reflection in a documentary form) requires the practical application of indirect methods of taxation if the available documentation of such payers cannot disclose the essence of their activities. Consequently, the OECD/G20 notes, albeit not literally, the need to introduce indirect methods for determining the size of taxes.

Generally, we believe that effective tax administration should be linked more to tax investigations rather than to planned tax audits. Moreover, in our opinion, comprehensive planned tax inspections (for all taxpayers without exception) in Ukraine are nothing more than a corrupted inheritance of the state-planned economy (a former socialist one), which was too ineffective and was essentially abandoned. However, unfortunately, the principles of ineffective planning still remain in tax administration. Thus, for example, Canadian tax authorities conduct annual inspections of approximately 2% of taxpayers (Melnyk & Leshuk, 2015), and in Germany, this also includes a relatively small number of business entities (Lysiak & Suk, 2018).

5. Conclusion

Financial theory claims that the state tax policy is a significant factor that affects all economic and social processes in society; therefore, taxation is the most relevant contemporary issue of scientific discussions, workshops, and legislative and creative searches.

The problem of tax evasion is a global economic

phenomenon that has now become of paramount importance in the context of the study of public finances. In our research, we have proved the expediency of introducing preventive taxation of taxpayers' assets.

Prevention provides protection of the state fiscal interests and simplifies tax operation. Prevention also encourages enterprises to search and actualize their reserves to increase the efficiency of their activities. Therefore, we consider it to be relevant and timely to impose a tax on the assets of enterprises with a simultaneous reduction of the tax rate on profit, especially since the taxation of profits encourages payers to artificially hide it.

We support the position that it is not absolutely necessary to abandon corporate income taxation. The state has the best opportunities to regulate the activities of enterprises through this direct tax – the income tax. This income tax is especially necessary and demanded in light of a significant share of the shadow sector in the Ukrainian economy, which the state has long been trying to overcome. Unfortunately, this process has not been sufficiently effective. However, given the need to reduce the tax burden, it is advisable to revise the rates of this tax. Therefore, it is rational to reduce the rate of income tax in Ukraine to 3% and 7%, as this will ensure the development of business and a reduction of the shadow economy (Draft Law of Ukraine, No. 6481, 2017). In our opinion, this idea deserves the attention of specialists and should be supported and approved by the Committee on Taxation and Customs Policy.

However, we suggest the idea of not simply reducing the income tax rate, which is an appropriate conclusion *per se*. In this context, it would be interesting to consider the prospects of introducing a regressive corporate income tax, which would enable payers to apply a lower interest rate, provided that the amount of the declared profit increases over time. In general, such regressive corporate income seems to be relevant for our country, given its current problems and prospects. In addition, regressive taxation is a peculiar economic protection against crises and their negative effects and should alleviate the tax burden for enterprises in times of crisis.

Consequently, the regressive taxation of corporate profits seems to be a very attractive lever of influence on the activities of enterprises and their behavior as taxpayers. However, it should be noted that the transi-

tion from the usual, traditional proportional taxation to the proposed regressive taxation requires determination and courage from the government because such tax changes do not refer to the short term, but to strategic government tasks. Such strategic tasks are needed because in the short term, this transition may provoke a certain drop in fiscal revenues to the state budget, as taxpayers' reaction to tax changes is delayed in time. Therefore, at this point, the state should find alternative sources of budget revenues. Unfortunately, due to the current economic situation, there are no such alternatives in Ukraine. In addition, the delay in the taxpayers' response may be greater than the period during which the tax regression is implemented by the authorities in power; that is, if the government changes, the positive effects of regressive taxation can be obtained not by those who introduced it but by their political opponents, who will replace them during regular (or special) elections. For this reason, with political fluctuations and changes, the government will try to solve short-term tasks first and neglect strategic, even promising reforms. Such fears about the loss of state revenues, given the attitude of the government to the described regression, also discourage native scholars from studying this question.

The advantage of the regressive taxation under study is the use of the deceleration indicator, which takes into account the ratio between the return on assets of the taxpayer and the average profitability of assets, which makes such a regression more reasonable and adequate and reduces the possibility that the payer will artificially falsify tax rates.

The taxation of individuals should be consistent with the principle of justice (which is guaranteed by constitutional rules to prevent any discrimination among members of society), although the notion of justice is rather arbitrary and not clearly defined. Unfortunately, it is necessary to acknowledge a deficiency of justice: in the current system of personal income taxation, the tax burden distribution is not proportional according to the taxpayers' material security and, moreover, does not take into account the additional pressure of indirect taxes.

According to tax theory, to eliminate such imbalances and restore fairness in the taxation of personal incomes, it is necessary to use a complex progression, in which individual income is subdivided into legally

established ranges, and increasing rates are applied to each following range. It should be noted that the progression must be constructed in such a way that it has reasonably slow growth and does not hurt taxpayers as it has in the history of Ukraine: The first attempt to tax personal incomes presupposed the application of the maximum tax rate at an extremely high level of 90%, and the after-tax income was insufficient for an individual to survive.

Thus, we have proposed specific variants for changing the priorities in the state tax policy and reforming the Ukrainian tax system. Although the ideas of introducing preventive, regressive, and progressive taxation are somewhat debatable, they deserve the attention of experts and scholars. The practical elaboration and implementation of the proposals presented in this paper will certainly help improve the tax situation in the country.

To ensure the regular formation of the state budget, active tax administration must be introduced to prevent tax evasion. The importance of this issue is also confirmed by the fact that experts associate tax evasion with corruption and terrorist financing (for example, Escobari, 2005; Jurušs, 2017; Pirttila, 1999). Unfortunately, these negative manifestations of modern reality (at the least, corruption has reached enormous proportions) are present in Ukraine, which, in turn, greatly increases the importance of solving the issue of tax evasion.

Thus, it is absolutely necessary to agree with the IMF's demand for the return of indirect methods to tax administration in Ukraine but based on a fundamentally new legal platform on the condition of adequate financial justification.

Consequently, by considering the reform requirements in terms of the efficiency of tax administration, it is expedient and fundamentally necessary to abandon the tax audits of all taxpayers without exception and, instead, to pay attention to the taxpayers who require a thorough analytical study according to specific tax investigations. Certainly, such an approach to tax control requires appropriate qualifications and professionalism and the responsibility of tax officials. However, Ukraine is already beyond these early stages; Ukraine has already chosen and is confidently introducing a civilized effective tax administration.

The proposals on reforming tax policy and chang-

ing the tax system with the introduction of preventive, progressive, and regressive taxation and the introduction of indirect methods of tax determination will contribute to improving the tax climate in the state economy and increase the efficiency of fiscal administration. We believe that the main advantage of this study, compared to the previous literature, is that the following are substantiated: (a) particular ways to implement a genuine reform of the tax system by considering the economic interests of taxpayers due to the proposed reduction of tax pressure; (b) effective variants of the legalization of hidden profits in the conditions of the proposed regressive taxation; (c) restoration of the principle of equity in personal income taxation; and (d) measures for elimination of tax evasion by applying preventive property taxation and introducing into the tax practice indirect methods for determining tax liabilities. In general, such proposals, once implemented, will improve the tax environment in the country and ensure the effective functioning of the taxation system.

References

- Aliyev, K. & Gasimov I. (2018). Fiscal policy implementation in Azerbaijan before, during and after the oil boom. *Contemporary Economics*. 12(1). 81-94. doi: 10.5709/ce.1897-9254.265.
- Alm, J. (2012). Measuring, explaining, and controlling tax evasion: Lessons from theory, experiments, and field studies. *International Tax and Public Finance*, 19(1) 54-77. doi: 10.1007/s10797-011-9171-2.
- Alstadsæter, A., Johannesen, N. & Zucman, G. (2017). Tax evasion and inequality. CEPI Working Paper. 03/17. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3109300.
- Barannyk, L.B. (2018). The main determinants of tax policy in Ukraine in the context of its economic security. *Taxation and economic security of the state in the period of degradation: A Collection of Materials for a Scientific and Practical Round Table. Irpin University of DFS of Ukraine* (pp. 33-36). Retrieved from <https://www.nusta.edu.ua/wp-content/uploads/2016/11/Збірник-матеріалів-круглого-столу-23.02-1.pdf>.
- Base Erosion and Profit Shifting. BEPS Actions. OECD. Retrieved from <https://www.oecd.org/ctp/BEPSActionPlan.pdf>
- Célimène, F., Dufréno, G., Mophou, G. & Guérékata, G. (2016). Tax evasion, tax corruption and stochastic

- growth. *Economic Modelling*, 52, Part A, 251-258. Retrieved from <https://www.sciencedirect.com/science/article/pii/S0264999314004192?via%3Dihub>.
- Chistiakov, S.V. Andersen, A.A. & Vishnevskii, E.V. (2015). A game-theoretic model of a regressive profit tax. *Applied Mathematical Sciences*, 9, 85, 4201-4209. Retrieved from <https://www.m-hikari.com/ams/ams-2015/ams-85-88-2015/p/anderse-nAMS85-88-2015.pdf>.
- Draft Law of Ukraine (2017). No. 6481. "On the establishment of the limit size of enterprise income tax and personal income tax in Ukraine". Retrieved from https://search.ligazakon.ua/l_doc2.nsf/link1/GH50100A.html.
- Escobari, D. (2005). Tax evasion and the remuneration of tax auditors in a corrupt tax administration. Retrieved from <https://ssrn.com/abstract=924066>
- Gosstat of Ukraine. (2019). 1998-2018 Retrieved from http://www.ukrstat.gov.ua/operativ/operativ2007/gdvdg_rik/dvdg_u/roz2010_u.htm.
- Hofmann, E., Hoelzl, E. & Kirchler, E. (2008). Preconditions of voluntary tax compliance: Knowledge and evaluation of taxation, norms, fairness, and motivation to cooperate. *Journal of Psychology*, 216, 209-217. doi: 10.1027/0044-3409.216.4.209.
- Husseiny, I. A. El. (2018). On the cyclical behavior of fiscal policy in Egypt. *Contemporary Economics*, 12(1), 95-124. doi: 10.5709/ce.1897-9254.266.
- National Institute for Strategic Studies (2017). International experience in combating tax evasion and tax evasion: Conclusions and recipes for Ukraine. Analytical note. Retrieved from https://www.niss.gov.ua/content/articles/files/mizhnar_dosv-1761d.pdf.
- Juruš, M. (2017). Criteria for defining tax evasion as tax terrorism. *Economics and Business*, 30, 102-112. doi: 10.1515/eb-2017-0009.
- Khomutenko, V.P. & Bohatyrova, Y.M. (2015). Strategic guidelines of the tax reform in Ukraine in terms of European integration. *Effective Economy*, 10. Retrieved from http://www.economy.nayka.com.ua/pdf/10_2015/82.pdf.
- Klitnyi, A. (2017). Application of indirect taxation methods in Ukraine: Historical aspect. *Entrepreneurship, Economy and Law*, 2, 203-208. Retrieved from http://nbuv.gov.ua/UJRN/Pgip_2017_2_40.
- Kniazkova, V.Ya. & Serhienko, L.K. (2015). Features of tax administration in conditions of development of market relations in Ukraine. *Foreign Trade, Economics, Finance, Law*, 1(78), 58-65. Retrieved from [http://zt.knteu.kiev.ua/files/2015/%E2%84%961\(78\)/uazt_2015_1_8.pdf](http://zt.knteu.kiev.ua/files/2015/%E2%84%961(78)/uazt_2015_1_8.pdf).
- Konopczyński, M. (2013). Fiscal policy within a common currency area – growth implications in the light of neoclassical theory. *Contemporary Economics*, 7(3), 5-16. doi: 10.5709/ce.1897-9254.86.
- Konopczyński, M. (2014). How taxes and spending on education influence economic growth in Poland. *Contemporary Economics*, 8(3), 329-348. doi: 10.5709/ce.1897-9254.149.
- International Monetary Fund (2016). Letter of intent. Memorandum of economic and financial policies, and technical memorandum of understanding. Retrieved from <https://www.imf.org/external/np/loi/2016/ukr/090116.pdf>.
- Legislation of Ukraine. (2017). On approval of "Procedure for determining the average weighted value of the profitability indicator for a comparable legal entity for transfer pricing purposes". Resolution of the Cabinet of Ministers of Ukraine No. 191. Retrieved from <https://zakon.rada.gov.ua/laws/show/191-2017-%D0%BF>.
- Legislation of Ukraine. (2000). On approval of the standards (standard) of accounting 7 "fixed assets". Order of the Ministry of Finance of Ukraine No. 92 dated 27.04.2000, as amended. Retrieved from <https://zakon.rada.gov.ua/laws/show/z0288-00>.
- Lysiak, L.V. & Suk, M.T. (2018). Tax policy of developed countries and the possibilities of its adaptation in Ukraine. *Eastern Europe: Economics, Business and Management, Issue 4*(15), 210-225. Retrieved from http://www.easterneurope-ebm.in.ua/journal/15_2018/38.pdf.
- McGee, R.W. (1998). Is tax evasion unethical? *Policy Analysis Paper*, 11. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=74420.
- Melnyk, V.M. & Koshuk, T.V. (2016). Tax policy of Ukraine in the implementation of the Association Agreement with the European Union. *Finance of Ukraine*, 7, 7-25. Retrieved from https://finukr.org.ua/docs/FU_16_07_007_uk.pdf.
- Melnyk, M.I. & Leshuk, I.V. (2015). Tax control in Ukraine: Problems and priorities for efficiency. State University "Institute for Regional Studies M.I. Dolishni NAN of Ukraine".

- Ministry of Finance of Ukraine, (2013). About the national accounting (standard) of accounting 1. General requirements for the financial statements. Order of the Ministry of Finance of Ukraine. No. 73 of 07.02.2013. Retrieved from http://vobu.ua/ukr/documents/item/nakazom-ministerstva-finansiv-ukrajini-07-02-2013-73?app_id=23.
- Petkov, V.S. (2014). Advantages and disadvantages of fiscal discipline in Bulgaria in times of crisis. *Contemporary Economics*, 8(1), 47-56. doi: 10.5709/ce.1897-9254.130.
- Pirttila, J. (1999). Tax evasion and economies in transition: Lessons from tax theory. *BOFIT Discussion Paper*, 2. doi: 10.2139/ssrn.1016663.
- Proskura, K.P. (2014). Tax administration in Ukraine in the post-crisis period: efficiency and directions of modernization. Retrieved from <https://ir.kneu.edu.ua/handle/2010/5035>.
- Sikka, P. (2018). Combating corporate tax avoidance by requiring large companies to file their tax returns. *Journal of Capital Markets Studies*, 2(1), 9-20. doi: 10.1108/JCMS-01-2018-0005.
- Terzi, S. (2017). Model for determining subjective and objective factors of tax evasion. *Notitia - Journal for Sustainable Development*, 3, 49-61. Retrieved from <https://hrcak.srce.hr/file/283621>.
- Todorović, M., Stanković, I. & Ljajić, S. (2017). Tax audit as a significant factor in suppressing tax evasion. *Economic Themes*, 55(2), 161-178. doi: 10.1515/et-hemes-2017-0010.
- Tomkiewicz, J. (2016). Tax system in Poland – Progressive or regressive? *Journal of Management and Business Administration. Central Europe*, 24(2), 107-122. doi: 10.7206/jmba.ce.2450-7814.172.
- Verkhovna Rada of Ukraine. (2011). Tax Code of Ukraine. Law of Ukraine No. 2755-VI dated 2.12.2010, as amended and supplemented. Information from the Verkhovna Rada of Ukraine, 2011. No. 13-14, No. 15-16, No. 17. Retrieved from <http://sfs.gov.ua/nk/>.
- Verkhovna Rada of Ukraine. (2018). On amendments to the Tax Code of Ukraine as regards the tax on the withdrawn capital. Draft Law No. 8557. Retrieved from https://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=64356.
- Vishnevsky, V.P. & Gurnak, A.V. (2015). Taxation, evolutionary economics and tax populations. *Journal of Tax Reform*, 1, 113-132. doi: 10.15826/jtr.2015.1.1.008.
- World Atlas of Data. (2019). World and regional statistics, national data, maps and ratings. Gini coefficient. (World Bank estimate). Retrieved from <https://data.worldbank.org/indicator/SI.POV.GINI?view=map>
- Yoon, Oh. (2014). Tax avoidance and tax evasion through tax haven entities. *Journal of IFA. Korea*, 30(1), 137-177. doi: 10.17324/ifakjl.30.1.201402.004.