“Personal income tax as a tool for implementing state social policy”

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ARTICLE INFO
Liliia Barannyk, Olena Dobrovolska, Victoria Taranenko, Tetyana Koriahina and Ludmyla Rybalchenko (2021). Personal income tax as a tool for implementing state social policy. *Investment Management and Financial Innovations, 18*(2), 287-297. doi:10.21511/imfi.18(2).2021.23

DOI
http://dx.doi.org/10.21511/imfi.18(2).2021.23

RELEASED ON
Friday, 18 June 2021

RECEIVED ON
Thursday, 20 May 2021

ACCEPTED ON
Wednesday, 16 June 2021

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JOURNAL
"Investment Management and Financial Innovations"

ISSN PRINT
1810-4967

ISSN ONLINE
1812-9358

PUBLISHER
LLC “Consulting Publishing Company “Business Perspectives”

FOUNDER
LLC “Consulting Publishing Company “Business Perspectives”

NUMBER OF REFERENCES
50

NUMBER OF FIGURES
0

NUMBER OF TABLES
5

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PERSONAL INCOME TAX AS A TOOL FOR IMPLEMENTING STATE SOCIAL POLICY

Abstract

Personal income tax (PIT) is one of the most important taxes in Ukraine due to its economic, social and political role. With its help, one can regulate the investment process, the level of real incomes and maintain stability in society. However, the potential of this tax in Ukraine is not fully used. The purpose of the study is to identify the main problems of PIT and further directions of its implementation as an instrument of social policy. Laffer’s tax theory, on the dependence of economic efficiency of taxation on lower tax rates and the degree of progressiveness of taxes, was taken as a conceptual line of research. Consideration of world trends in the practice of PIT allowed tracing its evolution and choose the methods of its optimization that are acceptable for Ukraine. The use of comparative and statistical analyses, grouping, structural modeling method, index method and systematization of results allowed formulating the author’s version of the income taxation reform in Ukraine. The introduction of a progressive taxation scale should take into account the quality of tax administration, the availability of tax benefits, deductions and loans, the amount of fines, and public perception of the tax system in addition to quantitative results. The proposed family taxation, based on the differentiation of taxpayers by their marital status, actual solvency through the introduction of family rates and the establishment of progressive rates of personal income tax, will fully implement the principle of social justice in the distribution of income.

Keywords taxation in Ukraine, personal income tax, progressive scale, social function of tax, income level, family taxation, wage reform, fairness of taxation

JEL Classification H20, H21, H24

INTRODUCTION

The effectiveness of taxation is generally manifested in the positive dynamics of tax revenues to the budget. The solution to this problem in Ukraine is impossible without further reforming of income taxation system, including personal income tax (hereinafter referred to as PIT), which is one of the most important taxes. In terms of filling the State Budget of Ukraine (11.01%), it ranks second after value added tax (Ministry of Finance of Ukraine, 2019). However, the potential of PIT in Ukraine is not fully used, as evidenced by the large-scale evasion of its payment. In other words, it does not fully perform both fiscal and social functions. In many developed countries, where the revenue side of the budget largely depends on income tax revenues, it is given special importance in solving social problems. By regulating the rate of this tax, it is possible to influence both the investment process and reduce income inequality between social groups, thereby preventing the emergence of social conflicts. Many countries are looking for ways to motivate payers to pay it. To this end, they switched to a progressive recovery scheme, which is more in line with the principle of social justice. Moreover, in some countries, such as France, tax payment is quite individualized depending
on different social criteria. In many countries, information about the receipt of funds from this tax has been made public, and the public is involved in discussions about their planning and use. Thus, this tax is an important tool of social policy.

1. LITERATURE REVIEW

Many scientists have devoted their work to studying the theoretical and practical aspects of personal income taxation, including in the context of economic efficiency and social justice. Historically, A. Smith, D. Ricardo, A. Wagner and some other luminaries of economic thought, developed the fundamental principles on which any tax system should be based. If A. Smith and D. Ricardo created a classical understanding of taxes in the theory of tax neutrality (simplified taxes to one of the types of state revenues, due to which it is withheld), then A. Wagner (1958), formulating his view of the fiscal economy, made a significant step forward for his time, which is still relevant.

The scientist revealed not only the fiscal, but also the social function of taxation. A. Wagner paid an important place among the principles of building an effective taxation system to the issue of fairness in the distribution of the tax burden.

The key historical issue in income taxation, which has not lost its relevance so far, is the question of a fair determining of the object of taxation, in this case – the income of an individual. The main feature of PIT is that, largely than in any other tax, the basic requirements of fair taxation can be implemented. Within the classical financial school, there are two main concepts of income such as the theory of sources and the theory of net increase in property value (the theory of receipts of actual property) (Blankart, 2011).

The theory of sources was presented by the concept of sources of income B. Fusting, proposed in the XIX century. The author considered income as the sum of cash and commodity flows that regularly come to an individual from constant sources. According to this concept, any one-time or temporary income (income from the sale of property, inheritance, gifts, etc.) is not considered income, therefore, is not included in the tax base. A significant objection to this concept, which does not give a chance for its practical application, is that the exclusion from the tax base of temporary or one-time revenues, despite their size, does not meet the requirements of social justice, and therefore unjustified (Maiburov & Sokolovskaya, 2015).

Schanz’s (1896) theory of the net increase in the value of property takes into account the solvency of individuals to the greatest extent. The scientist argued that an indicator of the solvency of the individual could only be the total income from all sources. Haig (1921) and Simons (1938) later supplemented this concept. It is now customary to speak of the Schantz-Haig-Simons model. This model corresponds to the understanding of income as a real net increase in the value of property over a period calculated as the sum of real current consumption and real net property growth. In the financial literature, the Schantz-Haig-Simons model is also called the complex income model.

In the 20th century, another concept of income as an object of taxation appeared and became widespread in financial science. The theory of market income, proposed by Ruppé (1979), and then supplemented by his colleagues (Tipke & Lang, 1973; Tipke & Bozza, 2000; Wittmann, 1992) explains the concept of tax income as “the result of the paid sale of services (goods or services) in the market”. The wording “participation of the recipient of income in the formation of the national product” or “use of markets open by the legal community” is also used. Income should only be an increase in wealth generated in the context of profit-oriented employment. This means that the definition of income in market income theory is broader and easier to define than in source theory. Unlike the theory of access to net wealth, it excludes capital gains not produced in the market, such as capital gains achieved through gifts, inheritance, lottery wins, or government transfers (Theory of market income, 2017). It should be noted that there is still no single, generally accepted definition of income in economics. Moreover, there is no generally accepted scheme in this matter (even in EU, which are trying to unify the tax legislation of the alliance). The authorities of each country, guided by
its own fiscal and humanitarian goals, decide for it what types of income should be included in the total income of the individual to be taxed (Taxation Papers, 2017).

The economic situation constantly changes influenced by many factors that significantly affect both the needs of the state and the capabilities of taxpayers. In search of a way to comply with the principle of fairness in taxation, modern scholars have significantly expanded the tax issue, where social aspects have become the most important.

The method of the economist Laffer (1979) should be mentioned who proved the constant dependence between tax revenues and tax rates. Using a graphical method (a curve named after him), the scientist showed the existence of an optimal level of taxation at which tax revenues reach their maximum. One of the important results of Laffer's teaching was the transition to progressive taxation in many countries. Progressive income taxation is in line with the principles of social justice, as it reduces social and property inequality in society, and is fiscally efficient, as evidenced not only by economic thought (Musgrave, 1948; Suits, 1977; Moyes, 1988), but also the practice of its application by many countries, as evidenced by numerous scientific publications (Sabirianova, 2009; Szarowská, 2014; Volkova, 2014; Bikas et al., 2014; Popescu et al., 2019; Kimberly, 2020; Zhuravka et al., 2020). According to Kimberly (2020), a progressive tax means a higher rate for the rich than for the poor, and therefore helps lower-income families pay for the basics of life, such as housing, food, transportation, and thus spend more of their income for a decent life.

Bikas et al. (2014) prove that progressive taxation of individuals is stimulating. The results of the study showed a significant economic impact of tax incentives applicable in Lithuania.

Szarowská (2014) points out that personal income taxation is often used as a redistribution policy tool. She argues that in the practice of taxation, the progressive impact of cash payments tends to increase with low- and middle-income levels. Flat rates tend to reduce the progressivity of the tax system.

Implementing the concept of the welfare state in Germany, the Germans were among the first to study the principle of family taxation and included it in the tax legislation of their country (see Tipke, 1983; Lang, 1983; Wendt, 1995). Moreover, research to improve this practice is still relevant, especially now because of the pandemic (OECD, 2021).

Ukraine has not yet introduced a progressive scale of taxation or family taxation. Although research has been ongoing recently. Schwabiy (2009) conducted a fundamental study of the methodology and theoretical principles of personal income taxation, key issues of the theory of optimal personal income taxation in Ukraine, as well as some aspects of international and domestic experience of personal income taxation and reform practices.

Chugunov and Ihnatenko (2006) made a comprehensive analysis of the tax burden on the economy, factors of production and individual economic agents in Ukraine. Ivanov et al. (2011) explore the relationship between personal income tax, payroll and economic growth, resulting in an unsatisfactory state of personal income taxation due to “high tax burden that exceeds the optimal level”.

Modern reality and the growing demand of the population for social justice require a revision of the general ideology of taxation with a shift from the predominantly fiscal to the social function of the tax, as evidenced by numerous publications (Barannyyk, 2013; Rainova, 2019; Sidelnykova & Naïdenko, 2017; Sokolovska & Rainova). An important trend in Ukraine’s development has been its European choice, which has affected research in the field of taxation, including PIT and various social aspects of the tax process (Barannyyk et al., 2018; Sokolovska & Koshchuk, 2012; Sokolovska & Rainova, 2014).

Characterizing the income taxation system in Ukraine, scientists note that this system “does not allow us to fully implement the principle of social justice because in many cases it does not take into account the solvency of taxpayers” (Naïdenko, 2019); “the problem of social injustice of PIT remains unresolved, which negatively affects the income of citizens, the level of welfare of the population of Ukraine and ensuring social living stan-
dards” (Martynets, 2015); “the function of social justice is not always fulfilled”, because there is no progressive taxation of income of individuals (Kurinnyi, 2019). So, let’s see how fair these estimates are.

2. METHOD

The study is based on the scientific hypothesis of the need to introduce progressive taxation in Ukraine and the principle of family income taxation. The historical-logical method is used to study the theoretical heritage of this problem. Comparative and statistical analyzes were used to calculate the main indicators of living standards in Ukraine, grouping – to classify the population by social status, the structural modeling method – to construct the version of family taxation in Ukraine and move to a progressive scale of taxation. The index method of analysis is applied in terms of studying the dynamics of indicators. When systematizing the results, to determine the directions of reforming the personal income taxation system in Ukraine, the methods of scientific generalization, analysis and synthesis were chosen.

3. RESULTS

Since taxes perform not only a fiscal but also a regulatory function, tax policy, as a means of direct and indirect influence on citizens, plays a special role in the implementation of the state’s social function. The ILO Convention No. 117 (Social Policy Convention, 1962) states that all policies should, above all, be aimed at achieving the wellbeing and development of the population, as well as at encouraging its desire for social progress.

In the context of this ILO message, it is noted that one of the current trends in the development of national tax systems of developed countries is the acquisition of tax policy features of socially oriented policy. This means that taxes are increasingly becoming social regulators. It should be noted that socially oriented tax policy creates the preconditions for attracting more and more citizens to entrepreneurial activity, forms the basis for intensive development of production and, therefore, contributes to the growth of tax revenues. In other words, by pursuing such a policy, the state creates a powerful basis for economic transformation, thereby influencing social development.

The methods of collecting taxes and their amount should not create a desire to avoid payment, and significantly reduce the standard of living of the taxpayer and his family. The tax status should take into account the social status of a payer: the number of dependents, the nature of work, health status, income, availability of real estate, etc. Such individualization in practice is quite difficult, but it is the consideration of the “tax capacity” of the population, group of people, a particular taxpayer is an integral feature of socially oriented tax policy.

PIT is a direct tax that must be paid throughout the country and is levied on citizens’ incomes. Therefore, the payment of this tax depends on the state of its tax base, namely the income of the population. According to paragraph 3 of Article 163 of the Tax Code of Ukraine, when determining the tax base, all the income of a taxpayer, received by him in both monetary and non-monetary forms, is taken into account (Tax Code of Ukraine, 2021). Incomes of the population include wages, income from property, income from entrepreneurial activities, social benefits, other income received in cash and in kind. In Ukraine, in 2019 (State Statistics Service of Ukraine, 2021, March), the largest type of household income is wages (47.0%). Other types of income account for a much smaller share. For social benefits and other received current transfers – 31.8%, for income and mixed income – 18.1%, for property income – 3.1%. This means that the main taxpayers are wage earners. Incidentally, in a market economy, the main type of income should be income from entrepreneurship; taxpayers should be mostly entrepreneurs. In the structure of the economic hierarchy, it is small and medium-sized businesses that make up the middle class of society.

Unfortunately, it is small and influential in Ukraine. Out of 16.5 million employees in Ukraine, about 1.5 million employees receive a minimum wage (hereinafter – MW). For a long time in Ukraine, the MW was below the living wage (hereinafter – LW). Over the past five years, the government has increased it, and as of January 1, 2021, the MW is UAH 6,000. The dynamics of LW, MW and av-
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Average wage (hereinafter – AW) during 2016–2020 indicates an increase in all indicators and a significant increase in the ratio of “minimum wage” and two other indicators (Table 1).

Still, the current level of MW in Ukraine is more than 15 times lower than in industrialized countries. The conclusion is that the larger the amount of income, the greater will be the contributions to the budget. However, increasing MW is not the only solution to this problem. It is known that the process of reforming wages in Ukraine began in 1991, with the adoption of the Law of Ukraine “On Enterprises in Ukraine”. According to this law, enterprises got the right to establish the forms, systems and amounts of remuneration, other types of employee incentives, as well as to determine the wage fund without restricting its growth by government agencies themselves. The difficulties of economic development in the 1990s affected the fact that wage reform was largely stabilizing. Today, the global new challenges and problems of the country’s development require a reform of the incentive wage policy. Other scientists (Grishnova et al., 2019) express a similar opinion.

Such an approach should have a positive effect on the growth of labor productivity and wages in general, and, at the same time, a differentiated approach to income taxation should be introduced. It is time to return to a progressive scale of PIT in Ukraine and exempt from tax citizens whose incomes are within the subsistence level. It should be noted that in the practice of Ukrainian taxation until 2004, a progressive scale of personal income tax was used. Tax revenues in the Consolidated Budget from this tax amounted to 27%. In the same year, in an attempt to increase the fiscal efficiency of this tax, the government switched to a proportional tax scale, but did not produce the expected results. According to Naidenko (2019), the share of PIT revenues in the Consolidated Budget revenues of Ukraine ranged from 2004 to 2018 from 15.3% to 19.4%.

The possible scale of progressive taxation of income of individuals, taking into account the value of LW and MW in Ukraine, is presented in Table 2. At the same time, the minimum PIT rate is 0% (in relation to income within the LW), and the maximum is 40%. In total, six groups of taxpayers are proposed in terms of profitability and nine tax rates with a gradation, depending on the amount of declared income.

### Table 2. The proposed scale of personal income taxation in Ukraine

| Payer category | Income                  | Rate, % |
|----------------|-------------------------|---------|
| Poor           | Within the value of LW  | 0       |
| Low-income     | Above LW to the level of MW | 5       |
| Medium-income  | More than 1 MW to 3 MW  | 12      |
| Wealthy        | More than 3 MW to 6 MW  | 15      |
|                | More than 6 MW to 8 MW  | 18      |
|                | More than 8 to 10 MW    | 20      |
| Rich           | More than 10 MW to 15 MW | 20      |
|                | More than 15 MW to 20 MW | 25      |
|                | More than 20 MW to 35 MW | 35      |
| The richest    | More than 35 MW         | 40      |

Source: Developed by the authors.

LW (UAH 2,189) and MW (UAH 6,000) installed in Ukraine from January 1, 2021. The proposed progressive income taxation of individuals is calculated (Table. 3). According to the calculations obtained, citizens who fall into the category of “poor” and “low-income” in terms of income must pay PIT in a smaller amount than at the current flat rate of 18%.

<http://dx.doi.org/10.21511/imfi.18(2).2021.23>
Reducing the tax burden on poor categories of the population will give them the opportunity to direct the released funds to address the most important issues for them (treatment, education, etc.). Wealthy categories of the population will pay a higher tax. This will increase budget revenues and establish the principle of fair taxation, as there will be a redistribution of the tax burden towards the wealthy. Ukraine’s modern tax system is characterized by an increased tax burden on the poor, who make up 50% of taxpayers. They account for about 22% of PIT payments. In the United States, for example, in 2016, the top 50% of all taxpayers paid 97% of all individual income taxes, and the bottom 50% paid the remaining 3%. The highest 1% paid 37.3% of the PIT, while the lower 90% combined – 30.5% (Bellafiore, 2018).

The proposed approach “fits” into the world PIT practice, where the maximum income tax rate reaches 40-45%, and the average rate – 33.48%. Theoretically, progressive personal income taxation in an economy characterized by a steady widening gap between the poor and the rich should help shift more of the tax burden to higher-income citizens. At the same time, the fairness of progressive income taxation will be ensured if the following conditions are met: first, low inflation, which does not automatically include middle- and low-income citizens in the tax progression; secondly, high efficiency of PIT tax administration; third, the availability of information on citizens’ incomes, taking into account all sources, not just wages; and fourth, strict restrictions on the capital outflow abroad.

Another important area of strengthening the efficiency of taxation in the context of the mentioned “socialization” is the introduction of family taxation of income. What are the advantages? In foreign practice, in the case of family taxation, the income of the family or the head of the family acts as a tax base, given the expenses incurred and legally established within the relevant limits. The latter include the cost of educating children; on voluntary pension, medical insurance, life insurance of a taxpayer and family members; for the maintenance of disabled members of his family; for charity; for the protection of private property.

Taking into account foreign experience, it is expedient for Ukraine to legislate the possibility of calculating income tax to reduce the level of PIT, as well as to provide for the possibility of applying the personal or family income tax scheme, giving the taxpayer a choice. The introduction of family taxation

### Table 3. Calculation of the tax base and PIT according to the proposed PIT scale

| Payer category | Income, UAH | Rate, % | The amount of tax on the proposed scale, UAH | The amount of tax on the current scale of PIT (18%), UAH | Deviation of the proposed option from the current flat PIT scale, UAH |
|----------------|------------|--------|---------------------------------------------|------------------------------------------------|------------------------------------------------------------------|
| Poor           | Up to 2,189| 0      | 0                                           | 394.02                                             | -394                                                            |
| Low-income     | More than 2,190 to 6,000 | 5 | 109.50                                      | 394.02                                             | -284.70                                                         |
| Medium-income  | More than 6,001 to 18,000 | 12 | 720.12                                      | 1,080.18                                          | -360.06                                                         |
| Wealthy        | More than 18,001 to 36,000 | 15 | 2,700.15                                     | 3,240.18                                          | -540.03                                                         |
|                | More than 36,001 to 48,000 | 18 | 6,480.18                                     | 6,480.18                                          | 0                                                              |
|                | More than 48,001 to 60,000 | 20 | 12,000.00                                    | 10,800.00                                         | 1,200.00                                                        |
| Rich           | More than 60,001 to 90,000 | 20 | 12,000.20                                    | 10,800.18                                         | 1,200.02                                                        |
|                | More than 90,001 to 120,000 | 25 | 22,500.25                                     | 21,600.00                                         | 8,400.00                                                        |
|                | More than 120,001 to 210,000 | 35 | 42,000.35                                     | 21,600.18                                         | 20,400.17                                                       |
|                | More than 210,001.00         | 40 | 84,000.40                                     | 37,800.18                                         | 46,200.22                                                       |

Source: Developed by the authors.
will significantly simplify the procedure for providing property and social contributions, since when filing “family declaration”, the deductions will be provided to whole family, regardless of which of its members the documents were issued to.

The experience of France is interesting. Here, to identify the actual ability of an individual to pay tax, taking into account his marital status and the number of dependent children, a system of “family coefficients” is used (Table 4).

Its essence is that the total taxable family income is divided by the statutory family rate, depending on the family composition, to determine the number of taxable shares. Then the appropriate progressive rate is applied to the share and multiplied by the same factor. Let’s make a calculation for the poorest family to show the advantage of family taxation. For example, the combined taxable family income is UAH 7,000, the coefficient to which the family is entitled is 3 shares. The combined taxable income of the family is divided by the coefficient to determine the share:

$$ \frac{7000}{3} = 2333.3 \text{ (UAH.)} $$

In accordance with the scale of income tax, can determine the amount of tax, which falls on one particle. At the specified estimated rates, this amount will be UAH 245 (2333.3 \times 0.105). Multiplying the result by a factor of 3, the result will be so - the value of the tax liability of an individual family equal to UAH 735 (245 \times 3). Let’s compare the result obtained in terms of “family” taxation and without it. At the current rate of 18%, the PIT from UAH 7,000 will be UAH 1260. This is UAH 525 more (1260-735). In other words, family taxation will save UAH 525 monthly and UAH 6300 per year. Thus, family taxation based on taxpayer differentiation, taking into account their marital status and actual solvency through the introduction of a system of family coefficients and the establishment of progressive PIT rates, allows the most complete implementation of the principle of fairness in taxation and income distribution.
4. DISCUSSION

Naidenko (2019) gives his version of the introduction of a progressive PIT scale. The version in this study is more realistic, since six groups of taxpayers are proposed by income level and nine tax rates with a gradation, depending on the amount of declared income of citizens. Actual social standards, in particular MW and LW, have been taken, and the tax base and PIT have been calculated according to the proposed scale. In addition, it is shown that the principle of progressiveness should be combined with the principle of family income taxation. Of course, there can be many scientific versions.

It is also necessary to resolve the question of what income (salaries, income from self-employment, inheritance, gifts, etc.) should fall under the progressive scale. Another question is who should be considered wealthy by today’s standards in Ukraine? These are quite complex and controversial questions. In addition, the last question is whether the government will do it, since such a step would mean some oppression of wealthy citizens, including high-ranking officials. Currently, many scholars fear that the transition to the principles of progressive taxation will lead to another attempt by people with large fortunes to “go into the shadows.”

It is hard to agree with Rainova (2019) that the introduction of progressive PIT in Ukraine is currently untimely due to the still high scale of the use of undeclared work and non-compliance with the principle of inevitability of penalties for tax evasion. Today, the scale of the shadow economy in Ukraine is truly impressive, but population inequality is no less a disaster. Therefore, the study offers a deep individual approach to the collection of PIT. Rainova believes that a transitional measure may now be the introduction of a differentiated non-taxable minimum income, which is a compromise of providing basic benefits in the context of ensuring compliance with social justice and fiscal efficiency. This idea deserves attention. Income at the subsistence level should not be taxed at all. Of course, such important political decisions require the determination and political will of the authorities. Otherwise, not all the proposals of scientists and scientific discussions will make sense.

CONCLUSION

Thus, the study of scientific sources on the taxation of individuals, and relevant practices in some foreign countries have shown that to solve problems related to the effective and fair taxation of citizens’ personal income, some transformations are needed. It is necessary to start with the reform of the incentive wage and strengthen the fight against wages in envelopes. Introduction of a progressive tax scale and the principle of family taxation, as shown in the article, will reduce property inequality in society. Improvement of PIT administration should take place towards applying the non-taxable minimum for the subsistence minimum. The tax should not affect the income that ensures the minimum standard of living of a payer and his family. Their implementation will contribute to strengthening economic efficiency and social justice in the field of taxation, improving the level and quality of life of the population, solving the problem of income differentiation. The calculations presented by in this article confirm that the transition to family taxation can significantly increase the welfare of citizens; in particular, it is quite important for low- and middle-income families. The released funds can be used to increase consumption, savings and to raise children. All this will ultimately contribute to both the growth of individual welfare and the development of the national economy as a whole. Thus, PIT is one of the important levers of social policy.

AUTHOR CONTRIBUTIONS

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REFERENCES

1. Barannyk, L. В. (2013). Sotsialno-ekonomichni aspekty podatkovoyi vosproizvodnosti v rynkivii ekonomit [Socialization of taxes as a principle of effective tax regulation in a market economy]. Formuvannia rynkovykh vidnosyn – Formation of Market Relations, 9, 15-20. (In Ukrainian). Retrieved from http://nibuv.gov.ua/UIRN/ frvu_2013_9_6.

2. Barannyk, L. B., Aleksandriuk, T. Yu., & Dulik, T. O. (2018). Pespevky podatkiv yak opredylennya faktychnykh osob u systemi finansovo-ekonomichnoho rehuliuvannia [Personal income tax in the system of financial and economic regulation]. Finansy Ukrainy – Finance of Ukraine, 4, 3-14. (In Ukrainian).

3. Bellafiore, R. (2018). Summary of the Latest Federal Income Tax Data, 2018 Update. FISCAL. FACT, 622. Retrieved from https://taxfoundation.org/summary-latest-federal-income-tax-data-2018-update/

4. Bikas, E., Subačienė, R., Astrauskaitė-Bužienė, L., & Keliutėte-Staniuliene, G. (2014). Evaluation of social, economic and fiscal impact on incentives of personal taxation in Lithuania. Journal of Security and Sustainability Issues, 4(1), 79-95. Retrieved from https://www.lituanistika.lt/content/60721

5. Blankart, Ch. B. (2017). State finances in the minds of democracy: Entry to financial science (9th ed.). (In German). https://doi.org/10.15358/9783800653485

6. Chuhunov, I. & Ihnatenko, A. (2006). Podatok z dokhodiv fizychnykh osob u systemi finansovo-ekonomichnoho rehuliuvannia [Personal income tax in the system of financial and economic regulation]. Finansy Ukrainy – Finance of Ukraine, 4, 3-14. (In Ukrainian).

7. Grishnova, O., Cherkasov, A., & Brintseva O. (2019) Transition to a new economy: transformation trends in the field of income and salary functions. Problems and Perspectives in Management, 17(2), 18-31. http://dx.doi.org/10.21511/ppm.17(2).2019.02

8. Haig, R.M. (1921). The Concept of Income – Economic & Legal Aspects in the Federal Income Tax (pp. 1-28). In R. M. Haig (Ed.). NY: Columbia University Press.

9. International Labour Organisation. (n.d.). C117 – Social Policy (Basic Aims and Standards) Convention, 1962 (No. 117). Retrieved from https://www.ilo.org/dyn/normlex/en/PS=NORMLEXPUB;121000;NO;P12100_ILO_CODE;C117

10. Ivanov, Yu. B. (Ed.), Tyshchenko, O. M., & Hrachov, O. V. (2011) Sotsialni aspekty podatkovoi polityky [Social aspects of tax policy] (304 p.). Kharkiv: KhNEU. (In Ukrainian).

11. Kimberly, A. (2020). Progressive Taxes with Examples. How a Progressive Tax System Helps the Economy. Updated October 28. Retrieved from https://www.thecbalance.com/progressive-tax-definition-examples-4155741

12. Koretska, S. O. (2011). Analiz podatkovoj systemy Fantsii [Analysis of the French tax system]. Ekonomika ta derzhava – Economics & State, 12, 27-29. (In Ukrainian). Retrieved from file:///C:/Users/ASUS/Downloads/ ecde_2011_12_9.pdf

13. Kurinny, V. H. (2019). Aspekty rozvytku podatkovoj systemy Ukrainy. Ekonomika ta upravlinnia [Aspects of development of the tax system of Ukraine. Economics and Management]. In K. O. Bila, Perspektivy integratsii ta innovatsionnoho rozvytku [Prospects for Integration and Innovative Development], 8, 48-49. Dnipro. (In Ukrainian). Retrieved from http://concontact.com/2019-ekonomika-i-menedzhment/ELM_2019_tom8.pdf

14. Laffer, A., & Seymour, J. (1979). The Economics of the tax revolt: A reader Paperback – Harcourt Brace Jovanovich (138 p.). Retrieved from https://www.goodreads.com/book/show/436944-the-economics-of-the-tax-revolt

15. Lang, J. (1983). Family Taxation. Taxes and Economy, 60, 103-125. (In German). Cit. from: Seiler Ch. Constitutional and systemic taxation of marriage and family. Retrieved from https://link.springer.com/article/10.1007/978-3-8350-5512-4#citeas

16. Martynets, I. H. (2015). Fiskalna efektyvnist podatkiv na dokhodiv fyzychnykh osob u systemi priamohoho opodatkuvannia krainy [Fiscal efficiency of personal income tax in a system of direct taxation of the country]. Mizhnarodna torhivlia: Ekonomika, Finansy, Zakon – Foreign Trade: Economics, Finance, Law, 2, 114-124. (In Ukrainian). Retrieved from http://zt.knute.edu.ua/files/2015/1(79)/ uazt_2015_2_15.pdf
17. Mayburov, I., & Sokolovskaya, A. (2015). Nalozovaya teoriya. Uglihennyy kurs [Tax theory. Advanced course] (592 p.). Moscow: UNITA-DANA. (In Russian). Retrieved from https://rucont.ru/edl/352658

18. Ministry of Finance of Ukraine. (2019). Dokhody gosudarstvennogo biudzheta Ukrainy po dokhodam 2019 [State budget revenues of Ukraine by income 2019] (In Russian). Retrieved from https://index.minfin.com.ua/finance/budget/gov/income/2019/

19. Ministry of Finance of Ukraine. (n.d.). Official website. (In Ukrainian). Retrieved from http://www.minfin.gov.ua

20. Ministry of Finance of Ukraine. (n.d.a). Minimalnaya zarabotnaya plata v Ukraine [The minimum wage in Ukraine]. (In Russian). Retrieved from https://index.minfin.com.ua/labour/salary/min

21. Moyes, P. (1988). A note on minimally progressive taxation and absolute income inequality. *Social Choice and Welfare*, 5(2-3), 227-234. Retrieved from https://link.springer.com/article/10.1007/BF00735763

22. Musgrave, R. A., & Thin, T. (1948). *Income Taxation: The Definition of Income as a Problem of Fiscal Policy* (296 p.). Irpin: National University of DPS of Ukraine. (In Ukrainian). Retrieved from http://ir.nusta.edu.ua/jspui/bitstream/16 June 2021.

23. Naidenko, O. (2019) Justification of tax regulation tools to support the poor. *Economics of Development*, 18(3), 45-57. http://dx.doi.org/10.21511/ed.18(3).2019.05

24. OECD. (2021). *Tax Policy Reforms 2021: Special Edition on Tax Policy during the COVID-19 Pandemic* (Report). Retrieved from https://www.oecd.org/tax/tax-policy/tax-policy-reforms-26173-433.htm

25. Popescu, M., Militaru, E., Stanila, L., Vasilescu, M., & Cristescu, A. (2019). Flat-Rate versus Progressive Taxation? An Impact Evaluation Study for the Case of Romania. *Sustainability*, 11, 6405. Retrieved from https://www.mdpi.com/catalogue/3a1fa61d-6eea-3807-817c-a36db2e1fa1/

26. Rainova, L. B. (2019). Opodatkuvannia dokhodiv fizycznykh osib u konteksti sotsialnoi spravedlivosti ta efektyvnosti [Taxation of income of individuals in the context of social justice and efficiency] (Dissertation) (298 p.). Kyiv: DNNU Academy of Financial Management. (In Ukrainian). Retrieved from https://afu.kiev.ua/getfile.php?page_id=1003&num=2

27. Ruppe, H. G. (1978). Possibilities and limits of the transfer of income sources as problem of the allocation of income. In K. Tipke (Ed.), *Transfer of sources of income in tax law* (pp. 7-40). Cologne: Otto Schmidt. (In German). Retrieved from https://www.digit.de/sites/default/files/anylink/108863-9783504620011.pdf

28. Sabirianova, K. P., Buttrick, S., & Duncan, D. (2009). Global Reform of Personal Income Taxation, 1981–2005: Evidence from 189 Countries (IZA Discussion Paper No. 4228). Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1423344

29. Schanz, G. (1896). Income realized and the income tax law. *FinanzArchiv / Public Finance Analysis*, 13(1), 1-87. https://www.jstor.org/stable/40904651 Accessed 16 June 2021.

30. Shvabiy, K. I. (2009). Opodatkuvannya prybutku problem nasyku ta praktyky [Income taxation: problems of science and practice] (296 p.). Irpin: National University of DPS of Ukraine. (In Ukrainian). Retrieved from http://ir.nusta.edu.ua/jspu/bitstream/doc/1220/1/1301_IR.pdf

31. Sidelnykova, L. P., & Naidenko, O. Ie. (2017). Implementation of the principle of social justice in the taxation of individuals. *Development Economics*, 2, 86-96. Retrieved from file:///C:/Users/ASUS/Downloads/eco_2017_2_12.pdf

32. Simons, H. C. (1938). *Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy* (238 p.). Chicago, IL: University of Chicago Press.

33. Sokolovska, A. M., & Koshchuk, T. V. (2012) Podatkovaya politika v Ukraini v kontekstsi tendentsii podatkovoi reform v YEES [Tax policy in Ukraine in the context of trends in tax reform in the EU]. *Finansy Ukrainy – Finanse of Ukraine*, 1, 94-115. (In Ukrainian). Retrieved from file:///C:/Users/ASUS/Downloads/Fu_2012_1_9.pdf

34. Sokolovska, A. M., & Rainova, L. B. (2014). Sotsialna spravedlyvost v protsesi yevropeiskoi integratsii [Modernization of the financial system of Ukraine in the process of European integration]. In 2 parts. Kyiv: DNNU Academy of Financial Management. (In Ukrainian).

35. State Statistics Service of Ukraine. (2021, March). *Dokkhody ta vytraty naselennia [Incomes and expenditures of the population]*. (In Ukrainian). Retrieved from http://www.ukrstat.gov.ua/express/exp2021/03/37.pdf

36. State Statistics Service of Ukraine. (n.d.). Official website. (In Ukrainian). Retrieved from http://www.ukrstat.gov.ua/

37. Suits, D. B. (1977). Measurement of Tax Progressivity. *American Economic Review*, 67(4), 747-752. Retrieved from https://www.jstor.org/stable/1813408?seq=1

38. Szarowska, I. (2014). Personal income taxation in a context of a tax structure. *Procedia Economics and Finance*, 12, 662-669. https://doi.org/10.1016/S2212-5671(14)00391-8

39. Tax Code of Ukraine. (2021, January 1). (In Ukrainian). Retrieved from https://zakon.rada.gov.ua/laws/show/2755-17#Text

40. Taxation Papers. (2017). Literature review on taxation, entrepreneurship and collaborative economy. Luxembourg: Publications Office of the European Union. Retrieved from https://ec.europa.eu/taxation_customs/sites/taxation/files/taxation_paper_70.pdf

41. Theory of market income. From 26 January 2017. [Wikipedia page]. (In German). Retrieved from https://de.wikipedia.org/wiki/Markteinkommenstheorie
42. Tipke, K. (1983). Reorganization of family taxation. *Tax Advisors Congress – Report, 21*, 39-64. (In German). Retrieved from [https://suche.thulb.uni-jena.de/Record/491992785](https://suche.thulb.uni-jena.de/Record/491992785).

43. Tipke, K. (1984). On the reform of family taxation. *Taxes and Economy, 61*, 127-128. Cit. from: Schlee H. Income tax treatment of transfer payments. P.239. (In German). Retrieved from [https://library.oapen.org/viewer/web/viewer.html?file=stream/handle/20.500.12657/26952/1003085.pdf?sequence=1&isAllowed=y](https://library.oapen.org/viewer/web/viewer.html?file=stream/handle/20.500.12657/26952/1003085.pdf?sequence=1&isAllowed=y).

44. Tipke, K., & Bozza, N. (2000). *Taxation of Income* [Steuerrecht]. Berlin: Dunker & Humboldt. (In German). Retrieved from [https://www.sack.de/tipke-bozza-besteuerung-von-einkommen/9783428099535](https://www.sack.de/tipke-bozza-besteuerung-von-einkommen/9783428099535).

45. Tipke, K., & Lang, J. (n.d.). *Tax law* [Steuerrecht]. (In German). Retrieved from [https://docplayer.org/113561250-Tipke-lang-steuerrecht.html](https://docplayer.org/113561250-Tipke-lang-steuerrecht.html).

46. Volkova, O. V. (2014). International experience of personal income taxation in the context of modern tax reform in Ukraine [Mizhnarodnyi dosvid opodatkuvannia dokhodiv hromadian v konteksti suchasnoi podatkovoi reformy v Ukraini]. *Biznes Navigator – Business Navigator, 3*(35), 128-135. (In Ukrainian). Retrieved from [http://nbuv.gov.ua/UJRN/bnav_2014_3_24](http://nbuv.gov.ua/UJRN/bnav_2014_3_24).

47. Wagner, A. (1958). *Three Extracts on Public Finance (Nature of the Fiscal Economy)*. In R. A. Musgrave & A. R. Peacock (Eds.), *Classics in the Theory of Public Finance* (pp. 1-15). London: Macmillan.

48. Wendt, R. (1995). Basic questions of family taxation. (In German). Retrieved from [http://wendt.jura.uni-saarland.de/Prof.Dr.Wendt/Haupt.htm](http://wendt.jura.uni-saarland.de/Prof.Dr.Wendt/Haupt.htm).

49. Wittmann, R. (1992). *The market income: a structural concept under simple law and a constitutionally directed link to income tax?* (132 p.). Augsburg: Wittmann. (In German). Retrieved from [https://www.econbiz.de/Record/das-markteinkommen-einfach-gegesetzlicher-strukturbegriff-und-verfassungsdirigierter-ankn%C3%BCpfungsgegenstand-der-einkommenssteuer-wittmann-rolf/10004142574](https://www.econbiz.de/Record/das-markteinkommen-einfach-gegesetzlicher-strukturbegriff-und-verfassungsdirigierter-ankn%C3%BCpfungsgegenstand-der-einkommenssteuer-wittmann-rolf/10004142574).

50. Yefimenko, T. I., & Sokolovskaya, A. M. (Eds.). (2013). *Dynamika podatkovoho navantazhenia v Ukraini v kontekstiv provadzhennia podatkovykh reform [Dynamics of the tax burden in Ukraine in the context of the implementation of tax reforms]* (492 p.). Kyiv: DNNU Academy of Financial Management. (In Ukrainian). Retrieved from [https://afu.kiev.ua/getfile.php?page_id=450&num=5](https://afu.kiev.ua/getfile.php?page_id=450&num=5).