Social Science
Finance and Accounting

Vol. VI, no. 3 (2023), pp. 68 - 76 ISSN 2587-3490 eISSN 2587-3504

https://doi.org/10.52326/jss.utm.2023.6(3).05 UDC CZU 336.22:334.7





ASSESSMENT OF THE TAX BURDEN IMPACT ON THE ENTITY'S FINANCIAL RESULTS: MICRO AND MACROECONOMIC ASPECTS

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Received: 08. 23. 2023 Accepted: 09. 21. 2023

Abstract. Taxes are costs for entities that significantly affect the financial results of the economic-financial activity. The level of fiscal burden imposed on taxpayers depends both on the external fiscal environment in which the entity operates and on the characteristics of its financial and economic activities, including its cost structure, sales revenue, income and other indicators. Therefore, to ensure efficient activity, it is necessary to carry out a comprehensive analysis of the impact of fiscal burden on the entity's financial results. The purpose of this research is to assess the level of fiscal burden and determine the degree of influence on some indicators that characterize the economic-financial activity of the entity. The study is based on the methods of assessing the fiscal burden applied in international practice at both the micro and macroeconomic levels. The study reveals that in order to determine the fiscal burden, especially at the microeconomic level, there is a need to combine several indicators, in accordance with the conceptual approach to the analysis of the tax system. Therefore, increasing the entity's financial results does not only involve reducing taxes, but creating an efficient system for managing and optimizing the entire taxable system.

Keywords: taxes, financial leverage, economic performance, gross domestic product, profit, rentability, fiscal system.

Rezumat: Impozitele sunt pentru entități niște costuri care afectează semnificativ rezultatele financiare ale activității economico-financiare. Nivelul presiunii fiscale impuse contribuabililor depinde atât de mediul fiscal extern în care își desfășoară activitatea entitatea, cât și de caracteristicile activităților sale financiare și economice, inclusiv de structura costurilor sale, veniturile din vânzări, profitul și alți indicatori. Prin urmare, pentru a asigura o activitate eficientă, este necesar să se efectueze o analiză cuprinzătoare a impactului presiunii fiscale asupra rezultatelor financiare ale entității. Scopul prezentei cercetări este evaluarea nivelului presiunii fiscale și determinarea gradului de influență asupra unor indicatori ce caracterizează activitatea economico-financiară a entității. Studiul se bazează pe metodele de evaluare a presiunii fiscale aplicate în practica internațională atât la nivel micro, cât și macroeconomic. Studiul relevă, că pentru a determina presiunea fiscală la nivel microeconomic este nevoie de a combina mai mulți indicatori, în conformitate cu abordarea conceptuală a analizei sistemului fiscal. Prin urmare, sporirea rezultatelor

financiare ale entității nu implică doar reducerea impozitelor, dar și crearea unui sistem eficient de gestionare și optimizare a întregului sistem impozabil.

Cuvinte cheie: impozite, pârghie financiară, performanță economică, produs intern brut, profit, rentabilitate, sistem fiscal.

1. Introduction

Tax system is a central element in the functioning of the economy. Taxation fulfills the functions of stability and stimulation of financial policies with well-defined objectives in three areas: the stability of the economy, the allocation of production factors and the redistribution of income. Fiscal policy is the basic tool for the implementation of economic and social objectives by determining the types and size of taxes, but also by defining precise principles, determining their object, the tax base, the ways of calculating them, the rates and scales of taxation and the system of tax exemptions [1, pp. 30-31].

There are at least two approaches to the concept of tax system. According to the first approach, tax system represents the totality of taxes in a state [2]. The second approach distinguishes the entire tax system by its defining elements, being characterized through the prism of the relationships between the system's component elements [3, 4]. The first approach seems to be quite concise, allowing a simpler pragmatic analysis of how a tax system is constituted and works, we consider the second approach more expressive.

Tax system must be a strong incentive for capital accumulation and influence of the mechanisms of resource allocation on different markets [5, 6]. Hence there appears the need to develop a tax strategy that ensures the long-term needs and opportunities of the national economy. In the Republic of Moldova, the first public policy strategy that included a comprehensive framework related to public finances was developed in 2013 for a period of 9 years, later being extended with the Public Finance Management Development Strategy for the years 2023-2030, which aims to public finance policy towards macroeconomic stability [7].

Budgetary discipline requires governments to maintain fiscal policies that favor macroeconomic stability and sustainable growth. This will lead to the accumulation of taxes and fees that will enable governments to respond to unexpected medium-term shocks and anticipated long-term pressures, such as those involved in population ageing [8, p. 77].

Taxation affects economic agents in a particular way. The influence of taxation on economic activity is constant, each business-related operation increases the tax and the agent gets the cost that is transferred to him by the tax administration through tax collection. The fiscal regime influences the value of investments and consequently the entire value of the entity [9, p. 6].

Tax burden expresses the intensity with which taxes are collected [10] and characterizes the fiscal impact on the socio-economic development conditions of the entity (microeconomic level) and the national economy (macroeconomic level) [11].

Fiscal burden is of great economic importance because it indicates the extent to which the incomes of economic agents are adjusted through taxation and, at the same time, it shows the extent to which the budget procures its revenues through taxation. From a statistical point of view, tax burden represents an intensity indicator, which reflects the number of monetary units taken from the budget through taxation, which return to a monetary unit of income [12, p. 110].

Taxes and fees borne by entities are costs that significantly affect the financial results of their activity. Therefore, the desire of payers to reduce the tax burden in order to increase

the income is natural. The level of tax burden imposed on payers depends on several factors, among which we highlight the external fiscal environment in which the entity operates, as well as the specifics of its financial and economic activities, including the composition and structure of its costs, sales revenues, etc. [13, pp. 126-127]. Thus, in order to ensure the adoption of correct management decisions, it is necessary to carry out a detailed analysis of the impact of tax burden on the financial results of entities, which constitutes the fundamental purpose of the given work.

2. Materials and Methods

In this research, we estimated the relationships between tax burden indicators (i.e. fiscal burden ratio) and economic-financial results of entities that offer construction services, renovation and interior finishing works.

The variables considered for the empirical analyzes were the following:

Return on Sales – expresses the relationship that exists between the financial result and sales revenue; it reflects the effectiveness of the entity's marketing activity.

Return on Assets – shows the level of income obtained from the means invested in the entity's circuit, regardless of their financing source, in order to assess the quality and efficiency of the economic entity management.

Return on Capital – measures the efficiency of the equity capital use, i.e. the entity's ability to use equity capital in order to obtain profit.

The data used to calculate the macroeconomic indicators were taken from the website of the International Monetary Fund.

In order to highlight more objectively the consequences of tax burden on the economic-financial activity at the entity level, analyzed entities were grouped according to the tax burden ratio. Only the entities that were profitable during the years 2015-2020 were subjected to grouping. The entities were grouped according to the amplitude of the variation of the tax burden ratio into 3 groups.

3. Results and Discussions

The level of tax burden affects the financial position of each taxpayer. That's why, this indicator is very important for any entity, especially for the one with complex or newly created corporate structures. The calculation of the tax burden is necessary to develop alternative management decisions within investment projects, the efficient location of production, to develop short- and long-term business plans, as well as to analyze the results of the economic-financial activity of the entity. It is extremely important to calculate this indicator in case of a change in tax legislation to determine the possible financial consequences [14, p. 44].

The characteristic indicators of tax burden can be determined both at the macroeconomic and microeconomic levels. The literature in the field [1, 4, 5, 10,] recommends assessing the tension of the tax system at the macro level by calculating the ratio of the tax amount charged in the budget to the gross domestic product (GDP) and the tax burden at the micro level as "the ratio between the total mass of taxes and taxes paid by the entity to the tax authorities, with performance indicators". [2, 3].

In international practice, one opts for calculating the tax burden based on GDP, because this indicator ensures comparability between countries with different levels of economic development. The gross national product (GNP) can also be used as a basis for calculating the tax burden at the macro level, but it also includes the income obtained by

national economic agents abroad, which respectively pay taxes in the country in which they operate [15, p. 215].

A high degree of general tax burden causes various problems, such as a reduction in the production and investment activity of entities. In countries with such taxation, the state budget has large financial resources to cover public expenses, but taxpayers have lower incomes, which prevents business development, investment and saving. Under these conditions, the phenomenon of tax evasion appears, as well as that of "capital flight" to other countries with a lighter tax system. Raising taxes causes prices to rise, which leads to a decrease in demand for goods and services, and as a result dampens economic development. On the other hand, moderate taxation boosts production activity, investment, demand for goods and services and stimulates economic growth [16].

As for the Republic of Moldova, it has a lower tax burden compared to other countries in Central and South-Eastern Europe. Thus, in 2021, the respective indicator reached the level of 31.99%, placing our country in position 11 (in descending order). The lowest level of tax burden (27.04%) is registered in Albania. The maximum level of this indicator is reached by Greece, being 48.92% (Figure 1).

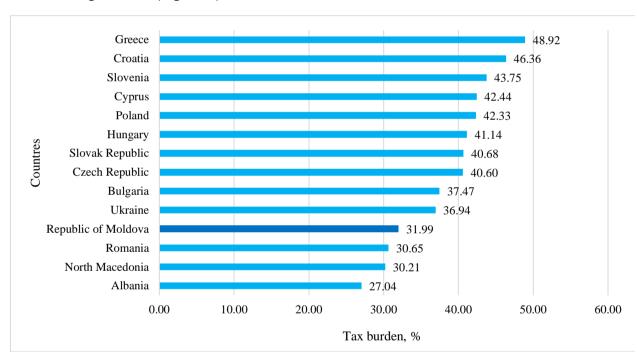


Figure 1. Tax burden at the macroeconomic level in the countries of the Central and South-Eastern European region, 2021 (%)

Source: developed by the author based on [17].

At the entity level, various methods or criteria for assessing the tax burden are proposed, which differ by [18, p. 232]:

- the types of taxes and fees included in the calculation of the tax burden;
- the status of taxes taken into account (paid or calculated);
- the integral indicator with which the amount of taxes is compared (revenues from sales, gross income, net income, profit of the management period before taxation, etc.).

According to the recommendations of the Organization for Economic Cooperation and Development (OECD), the tax burden at the entity level can be determined based on the following indicators [19, p. 16, 20]:

1) The effective marginal tax rate (EMTR) – expresses the extent to which taxation increases the cost of using capital and it is used if the entity obtains a minimum income to reach the profitability threshold, being calculated according to the following formula:

$$EMTR = \frac{Cost \ of \ capital - Real \ interest \ rate}{Cost \ of \ capital} \tag{1}$$

2) The effective average tax rate (EATR) – reflects the average tax contribution that an entity bears if it earns economic profits above zero. It is calculated as the difference between pre-tax and after-tax economic profit relative to pre-tax net income:

$$EATR = \frac{Economic profit pre-tax - Economic profit post-tax}{Net income pre-tax}$$
 (2)

The calculation of these indicators is carried out separately for different types of assets and sources of financing, which is a disadvantage, because it does not provide complete information at the entity level.

The methodology proposed by the OECD provides for the determination of the tax burden based on net income. Another criterion for assessing the tax burden is based on the gross income [20, p. 37], which represents the sum of the income obtained by the entity from all sources within a certain fiscal period [21].

The tax rate (TBR) or the tension of the tax system per 1 leu of gross sales is determined according to the relationship:

$$TBR = \frac{Total\ amount\ of\ paid\ taxes\ and\ fees}{Gross\ Income} \tag{3}$$

Assessing the tax burden based on gross income allows for a multilateral and integrated examination of the tax burden, as well as the contribution of each type of tax in the creation and modification of the tax burden, Table 1.

Table 1

Dynamic analysis of tax burden at entity level*

Indicators	Amount, MDL
Gross Income	20,326,397
Taxes - total	2,976,243
including:	
Income Tax	64,256
Value Added Tax	2,898,358
Land Tax	4,406
Real Estate Tax	2,268
Other Taxes and Fees	6,955
The ratio of tax burden per 1 MDL of gross income	0.146
The ratio of income tax per 1 MDL of gross income	0.003
The ratio of value added tax per 1 MDL of gross income	0.143
The ratio of land tax per 1 MDL of gross income	0.0002
The ratio of real estate tax per 1 MDL of gross income	0.0001
The ratio of other taxes and fees per 1 MDL of gross income	0.0003

^{*}The presented data are the average of the values in the analyzed entities.

The obtained results show that the tax rate of the analyzed entities is 14.6%, which in our opinion is quite favorable. The largest share in the total amount of taxes belongs to value added tax, and its tax rate is 14.3%. A smaller, but essential, share belongs to the income tax, the tax rate calculated on its basis being 0.3%. The other types of taxes have an insignificant weight in their total value.

Today, in Moldova there is no single methodology for calculating both the absolute and the relative size of the tax burden on economic agents, there is a lack of a clear picture of the significance of these indicators both at the macro and micro level.

The indicator that fully characterizes the influence of the tax system on the economicfinancial activity of the entities is the fiscal burden ratio. The fiscal burden ratio expresses the degree of submission of the taxpayer to bear the fiscal burden established by law, that is, what percentage of the taxable income will be subtracted from his property and taken for the general needs of the society. An increase in the fiscal burden ratio indicates a relative decrease in disposable income, while a decrease in it signifies a larger income remaining at the entity's disposal [22, p. 135].

Of particular importance is the analysis of the dynamics of the fiscal burden ratio, as well as the way in which the two factors involved in defining the concept of fiscal burden – the size of the tax, on the one hand, and the size of the taxable matter, on the other hand, influence the variation of the fiscal burden ratio. Thus, when the fiscal burden ratio increases, while the taxable matter remains at a constant level, it means that there has been a change in the structure of the individual tax rates, which affects the economic activity, and vice versa, when there is a decrease or a maintenance of the fiscal burden ratio while the volume of taxable matter has increased, this situation is considered to be beneficial for the activity of economic units [23, p. 126].

The fiscal burden ratio is influenced by a number of factors specific to the tax system (number of taxes, tax rate, method of calculating taxable matter, type of taxation, etc.), as well as by other factors (gross domestic product, net sales, nature of political institutions etc.), Table 2.

The influence of tax burden on changing financial results

Table 2

Indicators	The groups of entities according to the fiscal burden ratio		
	< 0.6	0.6-0.9	0.9>
Number of entities	15	23	25
The fiscal burden ratio in the environment per group	0.536	0.803	1.000
Net Sales, thousand MDL	1,802.67	1,956.87	3,286.36
Net Current Assets, thousand MDL	2,892.67	3,025.09	4,351.48
Gross Profit, thousand MDL	215.27	254.39	545.80
Return on Sales, %	13.6	15.7	19.9
Return on Assets, %	1.3	7.0	3.8
Return on Capital, %	2.1	14.7	16.1

The analyzed entities were grouped according to the amplitude of the variation of the tax burden ratio.

The results of the calculations show us that the reduction of the tax burden influences the increase in sales volume, profit and profitability. In the first group, where the fiscal burden is 46.4%, the decrease in net sales and gross profit is respectively 154.2 and 39.12 thousand lei compared to the second group, where the tax burden is 19.7%.

The reduction of tax burden contributed to the increase in profitability indicators. Thus, in the second group, production profitability increased by 2.1 percentage points, economic profitability by 3.9 percentage points and the financial return by 12.6 percentage points.

In the entities from the third group, where the tax burden is equal to zero, the sales volume and gross profit increased by 1.68 and 1.12 times, respectively, compared to the second group. Production and financial profitability respectively increased by 4.2 percentage points and 1.4 percentage points. In this group, the reduction in economic profitability was conditioned by the increase in the permanent capital of the attracted sources. According to the calculations, their share was 76.1%. The attraction of borrowed sources caused the decrease of the profit of the management period before taxation by 10.4%.

Although it is not possible to establish unanimously accepted limits of the fiscal burden or to make calculations to establish its optimal level, the harmful influence on the development of the economy over time in the case of an irrational fiscal burden is known. Thus, tax evasion occurs by hiding real income by economic agents. It is only known that the greater the fiscal burden and taxes is, the greater is the desire to evade them [24, pp. 772-773].

The implementation of tax reduction policies can play a positive role in the financial performance of entities. At the same time, the implementation of the tax reduction policy significantly promotes the financial performance of both private and state entities [25, p. 9].

4. Conclusions

The main objective of fiscal policy is aimed at economic development and consolidation of economic growth. The effectiveness of the tax system is manifested through its consequences on economic activity. A fiscal system must stimulate the activity of economic agents and all the component parts of the country's national economy. The reduction of the fiscal burden can be considered as a successful compromise between the fiscal and incentive functions of this system.

The level of fiscal burden is difficult to fix between certain limits with precision, it being affected by certain random elements related to the diversity of levies, the nature of their insertion in prices, collection techniques, the level of economic development of the country, etc.

For a rigorous analysis of the fiscal burden, it is necessary to go beyond the numerical interpretation of the ratio between the taxes collected from taxpayers and the revenues obtained by them. It is important to assess the extent to which the entity's after-tax income meets subsistence and savings needs, that is, to consider the purchasing power of the after-tax income. The same level of fiscal burden may have different incidence on the economic activity of entities in different countries.

Thus, an optimal fiscal burden must ensure with financial resources the needs of the state, on the one hand, and on the other hand, it must ensure the stimulation of the economic development of the taxpayer for the activity of an entrepreneur. The fiscal burden indicator is an important criterion for evaluating the efficiency of the country's fiscal system.

Acknowledgments: This work was carried out within the institutional project "Development of modern analysis and financial forecasting tools in order to ensure informational support for the decision-making process" carried out in the period 2020-2023 within the Department of Accounting and Economic Informatics, Moldova State University.

Conflicts of Interest: The authors declare no conflict of interest.

References

- 1. Wołowiec, T. Economic effects of taxation by income taxes in European Union member states (outline of the problem). *International Journal of New Economics and Social Sciences* 2019, 1(9), pp. 29-49.
- 2. Setiawan, M.T. Measuring the Impact of Tax Inspection on Firms' Performance. *The Indonesian Journal of Development Planning* 2021, 2, pp. 195-204.
- 3. Streeter, J.L. *How do tax policies affect individuals and businesses?* Stanford Institute for Economic Policy Research (SIEPR). Available online: https://siepr.stanford.edu/publications/policy-brief/how-do-tax-policies-affect-individuals-and-businesses (accessed on 06.07.2023).
- 4. Vermeer, T. The Impact of Individual Income Tax Changes on Economic Growth. *Tax Foundation* 2022, 793, pp. 1-13.
- 5. Gale, W.G.; Samwick, A.A. Effects of Income Tax Changes on Economic Growth. *Economic Studies at Brookings* 2014, pp. 1-16.
- 6. Princen, S. Determining the impact of taxation on corporate financial decision-making. *Reflets et perspectives de la vie économique* 2012, 51(3), pp. 161-170.
- 7. Public Finance Management Development Strategy for 2023-2030. In: Official Monitor of the Republic of Moldova No. 75-78 art. 148 of 07.03.2023.
- 8. Hagemann, R. How Can Fiscal Councils Strengthen Fiscal Performance? *OECD Journal: Economic Studies* 2011, 1, pp. 75-98.
- 9. Nechaev, A.; Antipina, O. Analysis of the Impact of Taxation of Business Entities on the Innovative Development of the Country. *International Journal of Economic Perspectives* 2015, 9(3), pp. 5-8.
- 10. Brezeanu, P.; Damian, R.T. Analysis of the fiscal burden in the member states of the European Union. *Expertise and business audit*, 2017, 40. Available online: https://www.ceccarbusinessmagazine.ro/analiza-presiunii-fiscale-din-statele-membre-ale-uniunii-europene-i-a2670/ (accessed on 26.06.2023).
- 11. Bulgac, C. Efficiency of the entity's fiscal management in order to reduce fiscal burden. In: *International Scientific Conference Competitiveness and Innovation in the Knowledge Economy*, ASEM, Chisinau, 22-23 September 2017, pp. 137-144.
- 12. Maksimova, T.V. Raschet nalogovoy nagruzki khozyaystvuyushchego subekta: teoriya i praktika. *Vestnik YuUrGU. Seriya: Ekonomika i menedzhment*, 2015, 2, pp. 110-116 [in Russian].
- 13. Perciun, R.; Popa, V. Fiscal pressure an essential element in ensuring the financial stability of the state. *Annals of the Institute of Economics, Finance and Statistics*, Ed. 3, Chisinau, 2013, pp. 126-133.
- 14. Korostelkina. I.A. Metodika rascheta nalogovoy nagruzki ekonomicheskikh subektov. *Mezhdunarodnyy bukhgalterskiy uchet*, 2014, 32(326), pp. 41-50 [in Russian].
- 15. El-Khouri, S. Fiscal Policy and Macroeconomic Management. In: *Macroeconomic Management*. USA: International Monetary Fund, 2023, pp. 201-228. Available online: https://www.elibrary.imf.org/display/book/9781589060944/ch08.xml (accessed on 26.06.2023).
- 16. Giménez Roche, G.A. *Taxation and its negative impact on business investment activities*, 2015. Available online: https://www.institutmolinari.org/wp-content/uploads/2015/11/note0315 en.pdf (accessed on 23.06.2023).
- International Monetary Fund: Government revenue, percent of GDP. Available online: https://www.imf.org/external/datamapper/rev@FPP/USA/FRA/JPN/GBR/SWE/ESP/ITA/ZAF/IND/FAD_WORL D (accessed on 08.07.2023).
- 18. Samsonov, E. A. Metodicheskie podkhody k opredeleniyu urovnya nalogovoy nagruzki organizatsii kak pokazatelya otsenki rezultativnosti nalogovogo planirovaniya. *Izvestiya TulGU: Ekonomicheskie i yuridicheskie nauki* 2012, 1, pp. 232-240 [in Russian].
- 19. Corporate Tax Statistics. 1rd ed.; Publisher: OECD, France, 2022, 56 p.
- 20. Kisel. I.A. Metodika otsenki vliyaniya nalogovoy nagruzki na finansovye rezultaty deyatelnosti predpriyatiya v sisteme nalogovogo menedzhmenta. *Ekonomika i banki* 2013, 2, pp. 36-43 [in Russian].
- 21. Tax Cod of the Republic of Moldova No. 1163 of 24.04.1997. In: Official Monitor of the Republic of Moldova, No. 62 art. 522 of 18.09.1997.

22. Cucoșel, C. The Fiscal Pressure Endured by Trading Companies. *International Journal of Human Resource Studies* 2013, 3(1), pp. 134-141.

- 23. Balatskiy, E.V. Otsenka vliyaniya fiskalnykh instrumentov na ekonomicheskiy rost. *Problemy prognozirovaniya*, 2004, 4, pp. 124-135 [in Russian].
- 24. Červena, K., Románová, A. Economic-Political Causes of Tax Evasion (Theoretical Background). In: XVI International Scientific Conference "The Optimization of Organization and Legal Solutions concerning Public Revenues and Expenditures in Social Interest", Vilnius, 21-22 September 2017, pp. 767-779.
- 25. Dong, Y.; Liang, C.; Wanyin, Z. Research on the Impact of Actual Tax Bearing Rate on the Financial Performance of Enterprises. *Front Public Health/Health Economics* 2022, 10, pp. 1-11.

Citation: Zaharco, S. Assessment of the tax burden impact on the entity's financial results: micro and macroeconomic aspects. *Journal of Social Sciences*. 2023, 6 (3), pp. 68-76. https://doi.org/10.52326/jss.utm.2023.6(3).05.

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