Principle of Tax Rate Equilibrium and its Application in the Tax System of the Republic of Armenia

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Currently, the tax rates in developing countries, including the Republic of Armenia, create a suboptimal burden for economic entities. From the state's perspective, this situation also contributes to the issue of tax non-collection. This study may hold significant importance for other developing countries as well, as its primary objective is to determine the optimal tax burden on entrepreneurship through mechanisms for reducing tax rates. To achieve the set goal, general scientific methods were applied (analysis and synthesis, generalization, logical-structural, etc.). The article presents a methodological approach to assessing tax efficiency by analyzing comparative data on the burden of a unified tax rate and applying the principle of tax rate equilibrium. The application of the "50% Balance" principle is considered a key aspect of this research, which is fundamentally based on Arthur Laffer's concept of the relationship between progressive taxation and government tax revenue, commonly known as the "Laffer Curve". According to this concept, as marginal tax rates increase, there is a proportional expansion in the shadow economy due to increased tax evasion by taxpayers. This approach is based on the idea of achieving "maximum benefit" for both the state and business entities in the context of taxation. However, in this case, the most stable outcome is considered to be the minimal overall result from which neither side can gain more without changing the strategies of the other sides. Applying the stated principle, strategies were selected in the

final stage of the research that correspond to the minimum values of overall benefit for each group of tax rates, such as "profit tax – Value added tax (VAT)", "income tax – social contribution", and "turnover tax", where the state's benefit is minimized compared to the benefit of the business entity, taking into account the shares of individual taxes in the tax revenues collected in the state budget.

Keywords: *Tax burden; tax rate; Nash equilibrium; minimum overall benefit; profit tax; value added tax; business taxation.*

Research Problem Formulation

Tax burden is a comprehensive indicator that describes the role of taxes in the life of a country's population and is defined as the ratio of the total amount of collected taxes to the value of the Gross National Product. This research examines the tax burden, considering that the tax system of a developing country, such as the Republic of Armenia, is characterized as stable and evolving if the tax burden is distributed primarily based on the principles of fairness and efficiency. When one of these principles becomes somewhat preferential, disrupting the balance, the possibility of fully applying the other principle decreases. Notable are the views expressed by A. Smith and J. M. Keynes on the issue of tax burden in the field of economics. Smith emphasized fairness and equality in the distribution of the tax burden, while J. M. Keynes assessed efficiency as the main goal of tax policy implementation.

The level of the tax burden depends on the tax policy adopted by the state. As is well known, there are several forms of implementing tax policy, including: Rational tax policy, which is characteristic of periods of economic growth and aims to address fiscal-budgetary, economic, and social aspects. Adaptive tax policy, which is focused on increasing economic stability during periods of economic downturns and crises, depending on specific socio-economic conditions. Maximum revenue policy, which is characterized by reducing tax benefits, increasing rates, and other similar measures. Within the framework of this research study, the primary fiscal aspect of a prudent tax policy characteristic of periods of economic growth will be discussed.

It should be borne in mind, the issue of evaluating the effectiveness of taxation has not yet received a definitive resolution. That is, there are numerous approaches and hypothetical calculations regarding which part of the taxpayer's income collection is effective. Some authors propose calculating the tax burden in absolute terms, which is the ratio of the total collected taxes to the output from a specific sector of the economy. However, the types and proportions of these taxes vary depending on the sectors and objectives involved. Of course, in this case, the practical use of the absolute tax burden is limited due to the lack of analytical possibilities to compare and contrast its value with that of other organizations and states. Nevertheless, for the entire economy, the relative tax burden is more commonly assessed quantitatively. This is determined by the ratio of total tax revenues to the Gross Domestic Product (GDP), for an organization, the assessment is made based on the percentage ratio of planned or actual taxes paid to gross income.

However, the dynamics of tax revenues, as well as the tax burden in relation to aggregate demand, allow us to conclude that a significant increase in the tax load

on the economy has, to some extent, led to a reduction in tax collection.

According to data for 2023, the Gross Domestic Product (GDP) of Armenia's economy was 9,453.2 billion AM drams (23,633.0 million US dollars), while the tax revenues of the state budget amounted to 2,221.9 billion AM drams (5,554.75 million US dollars) [1]. Thus, based on the official figures provided, the ratio of "collected taxes/GDP" was 23.5 percent.

However, in our observation, it is also necessary to discuss the following issue, namely: when performing calculations using the mentioned approach, it is not possible to reflect the actual state of taxation if the potential of tax arrears, which serve as a reserve for tax revenues, is not included in the calculation. Accounting for this and making international comparisons could significantly alter the picture.

As of January 1, 2024, the amount of unpaid or unsettled taxes or payments (arrears) under the supervision of the tax authority for entities operating in Armenia totals 189.4 billion AM drams (473.5 million US dollars). Of this amount, the majority – approximately 136.4 billion AM drams (341 million US dollars) – is attributed to taxpayers who have been declared bankrupt, while 53.0 billion AM drams (132.5 million US dollars) in tax liabilities are attributable to taxpayers who are actively conducting business. When adding the aforementioned latest data to the tax revenues of the state budget, the relative tax burden indicator for 2023 amounts to 24 percent.

In the Republic of Armenia, the main reason for tax evasion under the current economic conditions is the high tax rates on entrepreneurial activity. This is because the capacity of the production base was not taken into account when determining them. The tax rates were set at levels close to those in other countries, but the socio-economic conditions of those countries, particularly the population's standard of living, were not considered.

J. A. Mirrlees [2], in his 1971 paper "An Exploration in the Theory of Optimum Income Taxation", proposed a model in which tax policy must account for the possibility that citizens may hide their true incomes or deliberately reduce their efforts if tax rates are too high. From our perspective, this approach is a very important impetus in the formation of fiscal policy. The model addresses optimal taxation, taking into account income concealment and changes in individuals' efforts in response to high tax rates. This paper is a key work in which J. A. Mirrlees develops ideas related to optimal taxation and information asymmetry. Mirrlees' optimal tax system is one that collects the necessary revenues for the state without suppressing economic activity and societal productivity. He proposed a tax policy that would provide the government with adequate revenue while avoiding major economic distortions. In practice, this requires a delicate balance between: equity (redistribution of wealth and reduction of inequality) and efficiency (maintaining incentives for work, entrepreneurship and investment) [3].

It can be assumed that high tax rates perform their functions quite effectively on a regular basis in a society with a high level of welfare. However, it should be noted that

1 Annual Report of the Activities of the State Revenue Committee of the Republic of Armenia for 2023 / State Revenue Committee of the Republic of Armenia : web. URL: https://www.src.am/en (date accessed: 30.08.2025).

2 James A. Mirrlees is a British economist, a representative of Neo-Keynesianism, and the recipient of the 1996 Nobel Prize for his research in the field of information asymmetry.

3 Mirrlees J. A. An Exploration in the Theory of Optimum Income Taxation. *The Review of Economic Studies.* 1971. Vol. 38. Is. 2. Pp. 175–208.

in many countries, including Armenia, they do not correspond to relatively narrow tax bases.

Regarding the shadow economy, it is well-known that it comprises unregulated, untaxed, and illegal activities, and in our reality, it inevitably constitutes a certain part of global economic activity. The impact of the shadow economy on the reduction of tax revenues is unavoidable. As a short-term response to this situation, the state may increase tax rates; however, in the long term, this could have the opposite effect.

In reality, there are many reasons that encourage or force businesses to operate in the shadow economy. In other words, in many cases, this happens not by choice but out of necessity. Governments and organizations often engage directly with the shadow economy, leading to a whole range of ethical and political economic dilemmas. Nevertheless, it is important to understand what specifically drives businesses to operate in the shadow economy.

Table 1 below shows averaged data on the size of the shadow economy in different countries for comparison.

Table 1

Estimated Size of the Shadow Economy (as *a* Percentage of GDP) [4]

Country *	2025 (Forecast)	Average Value (2011–2025)
Australia	8.89	10.85
Azerbaijan	58.38	58.05
Brazil	34.2	34.69
Canada	13.8	14.3
China	9.9	10.12
Baltic States (Average)	24.34	25.89
Hong Kong	13.65	14.05
India	13.6	16.35
Indonesia	16.17	16.51
Italy	26.37	26.37
Japan	7.86	9.5
Russia	39.3	39.19
Singapore	14.06	12.86
Turkey	21.55	24.7
United Kingdom	10.83	11.33
USA	6.94	7.59
World	21.39	22.35

* Data related to Armenia are not included in this table.

As for the Republic of Armenia, then According to the IMF working paper, which summarizes statistical data on the shadow economies of 158 countries from 1991 to 2015, the average size of the shadow economy in Armenia as a percentage of GDP was 42.6 percent [5]. It should also be noted that according to estimates by various researchers, the average size of the shadow economy in Armenia for the years 2019–2023 fluctuates between 23 and 27 percent of formal GDP, which certainly speaks of a high shadow economy [6].

4 Emerging from the shadows the shadow economy to 2025 / ACCA : web. URL: https://www.accaglobal.com/gb/en/technical-activities/technical-resources-search/2017/june/emerging-from-the-shadows-the-shadow-economy-to-2025.html (date accessed: 30.08.2025).

5 Medina L., and Schneider F. Shadow Economies Around the World: What Did We Learn Over the Last 20 Years? *IMF Working Paper.* No. 2018/017, 2018. 76 p. DOI: 10.5089/9781484338636.001 (date accessed: 30.08.2025).

6 ՀՀ ստվերային տնտեսության գնահատումը հարկային համակարգի տեսանկյունից / «ԼՈՒՅՍ» հիմնադրամ : կայքէջ. 15 հունիսի 2020. URL: https://www.luys.am/index.php?m=publications&pid=155&lang=arm (date accessed: 30.08.2025) ; Մովսիսյան Ք. Հ. Հայաստանի Հանրապետության հարկային համակարգի արդյունավետության բարձրացման արդի հիմնախնդիրները : տնտեսագիտության թեկնածուի աստիճանի համար ատենախոսության ամփոփում. Երեվան, 2024. 22 էջ. URL: https://degrees.hesc.am/sites/default/files/2024-07/knkush-movsisyan.pdf (date accessed: 30.08.2025).

The reality is that in Armenia, a large number of economic entities, in each period, are objectively or not objectively unable to bear the existing tax burden (they hide taxes), which is why tax undercollection occurs. In practice, these entities have three options: either to engage in shadow transactions, to cease their operations, or to remain honest taxpayers but face bankruptcy due to accumulated tax liabilities. For the sake of fairness, it should be noted that there are also economic entities that are capable of bearing the full tax burden but choose not to do so. This reluctance may depend on the business psychology exhibited by these entities. It must be acknowledged that the development of a business is not only based on adherence to laws and principles that ensure economic progress; emotional and psychological factors of managers can also play a significant role [7].

The issue discussed in this study is arguably directly related to the bankruptcy processes of economic entities. From this perspective, it is essential to reference certain statistical indicators of the activities of the RA State Revenue Committee.

Table 2

Bankruptcy Applications Satisfied by the State Revenue Committee of Armenia (2021–2023) [8]

	Year-to-Date Growth (2021)		Growth Rate (%)	Year-to-Date Growth (2022)		Growth Rate (%)	Year-to-Date Growth (2023)		Growth Rate (%)
Decisions on Bankruptcy Applications Accepted by the State Revenue Committee of Armenia	Quantity	Amount (in million drams)		Quantity	Amount (in million drams)		Quantity	Amount (in million drams)	
	340	7,195.34	96%	328	6,063.01	84%	434	9,839.80	162%

According to the growth rate data presented in Table 2 above, the 2023 figures are somewhat discouraging, which is largely due to the increase in bankruptcy cases.

As is well known, fiscal policy can be either stimulating or restraining, depending on a country's development level. Specifically, to prevent economic downturns, a stimulating fiscal policy is implemented, which involves increasing government spending and reducing tax rates. In the case of reduced public expenditures and increased tax rates, a restraining fiscal policy leads to a restriction of economic growth. Thus, it is considered that one of the fundamental methods for combating the shadow economy is the significant reduction of the tax burden, which is manifested through the establishment of tax incentives and, primarily, through the reduction of tax rates. The question of determining the optimal tax burden for enterprises, using mechanisms to reduce tax rates, forms the basis of the objective of this research.

7 Mamikonyan K., Galstyan E. Psychology of Business: Or – New Business Rules in the Context of the Prevention of Economic Crimes. *ՀՀ ԳԱԱ Փորձաքննություն-ների ազգային բյուր ՊՈԱԿ-ի Դատական փորձաքննության և բրեագիտության հայկական հանդես.* 2023. Համար 10. Էջ 122–129. DOI: 10.53587/25792865-2023.10-122 (date accessed: 30.08.2025).

8 Annual Reports of the State Revenue Committee of the Republic of Armenia for 2022–2023 / State Revenue Committee of the Republic of Armenia : web. URL: https://www.src.am/en (date accessed: 30.08.2025).

Analysis of Essential Researches and Publications

As is commonly believed: Fiscal policy plays a significant role in ensuring economic growth in the country [9]. In the case of a reduction in government spending, there is a decrease in production volumes, which consequently leads to a reduction in GDP figures. Logically, by increasing government spending and reducing tax rates, the state stimulates GDP growth. In this regard, it is worth discussing the views of some economist authors below.

Thus, based on the results of conducted research, some authors, on the contrary, assert that public or government expenditures have a negative impact on economic growth [10]. Some authors demonstrate, based on findings with practical and research significance, that general government expenditure does not effectively contribute to positive fiscal impacts on the European economy. Therefore, policymakers could enhance economic growth by gradually reducing public spending and striving for balanced budgets to maintain macroeconomic stability. The reason, in particular, is the high share of social contributions, which is recognized as a factor hindering growth. G. Kutasi and A. Marton also considered that the high share of social contributions hinders the rate of economic growth [11]. In contrast to this, authors Jie Zhang and Junsen Zhang found that social contributions contribute to overall economic growth [12]. The co-authored work of M.-L. Th. Nguyen, N. Ph. Th. Hang and others has achieved great success in demonstrating the positive impact of tax revenue on economic growth in Vietnam. However, this impact has been considered negative, especially in the long term [13]. R. P. Pradhan, M. B. Arvin and others conclude in their co-authored research that both financial market development and taxation propensity stimulate economic growth in the long run. In contrast, the short-term results are not uniform and depend on the specific measure of financial market development used [14]. Other authors presents that no discernible patterns between tax indicators (level and structure) and economic growth indicators were identified through statistical analysis. In essence, it cannot be definitively concluded that reduced tax

9 Mose N. Do Fiscal Transfers Foster Regional Economic Growth? *Financial Internet Quarterly*. 2021. Vol. 17. Is. 1. Pp. 19–27. DOI: 10.2478/fiqf-2021-0003 (date accessed: 30.08.2025).

10 Vintilă G., Gherghina S. C., Chiricu C. S. Does fiscal policy influence the economic growth? Evidence from OECD countries. *Economic Computation and Economic Cybernetics Studies and Research*. 2021. Is. 2. Vol. 55. Pp. 229–246. DOI: 10.24818/18423264/55.2.21.14 (date accessed: 30.08.2025).

11 Kutasi G., Marton A. The Optimal Tax Structure from GDP-growth Perspective. *Finanzas* y *Política Económica*. 2024. Vol. 16. No. 1. Pp. 121–143. DOI: 10.14718/revfinanzpolitecon.v16.n1.2024.6 (date accessed: 30.08.2025).

12 Zhang Ji., Zhang Ju. How Does Social Security Affect Economic Growth? Evidence from Cross-Country Data. *Journal of Population Economics*. 2004. Vol. 17 (3). Pp. 473–500. DOI: 10.1007/s00148-004-0198-x (date accessed: 30.08.2025).

13 Nguyen M.-L. Th., Hang N. Ph. Th., Bui T. N., Ho H. Th., Thai T. D. The relationship between tax revenue and economic growth: an empirical study in Vietnam. *Afro-Asian Journal of Finance and Accounting*. 2023. Vol. 13. No. 4. Pp. 434–451. DOI: 10.1504/AAJFA.2023.132957 (date accessed: 30.08.2025).

14 Pradhan R. P., Arvin M. B., Nair M. S., Hall J. H. The dynamics between financial market development, taxation propensity, and economic growth: a study of OECD and non-OECD countries. *Quality & Quantity*. June, 2022. Vol. 56 (3). Pp. 1503–1534. DOI: 10.1007/s11135-021-01192-w (date accessed: 30.08.2025).

levels and/or increased indirect tax shares do explicitly foster national economic growth. Tax impact on economic growth varies significantly across developed and developing economies, presenting a complex and nuanced picture. The co-authored work by N. Balasoiu and others has shown empirical results indicating, that corporate income taxes significantly negatively impact economic growth for both clusters of high- and limited fiscal efficiency countries. Additionally, personal income tax was associated with lower economic growth for countries in the limited fiscal efficiency group. Thus, from the perspective of policymakers, lowering direct taxation can increase disposable income, stimulate consumption and economic growth, encourage investment leading to job creation, increase competitiveness, and reduce tax evasion and avoidance, thereby leading to a more efficient tax system [15].

Nevertheless, the bold idea proposed could, in some sense, also be considered a counterpoint to the aforementioned statements, suggesting that, in order to ensure stable long-term economic growth, it may not be necessary to exhibit flexibility in tax rates based on economic processes occurring in different phases of economic upturns or downturns. Instead, it is essential to develop and implement a strategy that establishes a balanced trajectory for tax rates, with the intention of keeping them unchanged in the long term.

In this case, it is important to refer to the following provisions in the Armenian government's program: *"The tax policy implemented by the state should aim at increasing the investment attractiveness of the economy and improving the level of economic activity, thereby creating stable conditions for export growth and long-term economic growth, redistribution of public goods, and strengthening fiscal stability. <...> To promote long-term economic growth,* a *reduction in direct tax burdens will be implemented at the expense of indirect taxes. This will enhance the competitiveness of the economy, leading to increased profitability and investment incentives in the export sector, which is crucial for future development"* [16].

Indirect taxation constitutes an advantageous solution towards externalities-mainly because of the fact that increasing indirect taxation implies the rising of prices followed by a reduction in consumption and also a lessening of the negative effects caused by the defective management of governments in applying fiscal policies [17].

Returning to the example of the Republic of Armenia, it is important to highlight the significant changes in tax rates implemented in the country in recent years. Specifically, as a result of changes in the Armenian Tax Code, the profit tax rate was reduced from 20% to 18% in 2020. Additionally, the progressive income tax system was replaced with a flat rate, which has been gradually decreasing each year, reaching 20% by 2023.

In the "Fiscal Policy" section of the Armenian government's program for 2021–2026, the main content of tax policy is defined, which should enhance the competitiveness of the business environment

15 Balasoiu N., Chifu I., Oancea M. Impact of Direct Taxation on Economic Growth: Empirical Evidence Based on Panel Data Regression Analysis at the Level of EU Countries. *Sustainability*. 2023. Art. 15(9):7146. DOI: 10.3390/su15097146 (date accessed: 30.08.2025).

16 Programme of the Government of Armenia 2019 – RA Government Decision No 65-A/2019 / Climate Change Laws of the World : web. URL: https://surl.lu/zvukae (date accessed: 30.08.2025).

17 Helbling Th. Back to Basics. What Are Externalities? What happens when prices do not fully capture costs. *Finance & Development*. Dec 2010. Pp. 47–49. URL: https://www.elibrary.imf.org/view/journals/022/0047/004/article-A016-en.xml (date accessed: 30.08.2025).

while also ensuring the tax revenues set by the state budget. Additionally, the creation of an environment that is perceivable, fair, and predictable from the investors' perspective is emphasized [18]. In contrast to the aforementioned, it should be emphasized that, as of January 2025, the tax rates for small and medium-sized enterprises (SMEs) in the Republic of Armenia have effectively doubled – thus creating the ground to bring or pull SME taxation into the general taxation at higher rates field in the future.

Research Methods

General scientific methods (analysis and synthesis, generalization, logical and structural, etc.).

Article Purpose

Primary objective is to determine the optimal tax burden on entrepreneurship through mechanisms for reducing tax rates.

Main Content Presentation

Methodology and Data

As presented regarding the aforementioned issue, the tax system of the Republic of Armenia requires the implementation of fundamental methods for optimizing tax burden management in combating the shadow economy. Among these methods, the proposed approach of "Tax Rate Equilibrium" could play a significant role. This concept may also serve as a strategic tool for ensuring GDP growth in the long run.

In the early 1950s, Nobel prize winner John Nash formulated his famous "Nash Equilibrium" concept in non-antagonistic games, which later became central to the entire theory of games. According to this concept, participants in a conflict should use an optimal strategy that leads to the creation of a stable equilibrium. It is advantageous for players to maintain this equilibrium, as any deviation would worsen their position.

The idea of balancing tax rates presented below is based on this very conceptual principle, according to which when the conflicting parties seek to achieve the 'maximum benefit,' the most stable outcome will be the one where none of the parties can gain further advantage without altering the strategies of others.

Nevertheless, within the framework of this research, it is necessary to identify the strategic points of tax rates where the minimum benefit for the State Revenue Committee (SRC) of Armenia corresponds to the minimum loss for the economic entities, as well as the points where the maximum benefit for the economic entities corresponds to the maximum loss for the SRC of Armenia.

It is worth noting that during the year 2023, the shares of specific tax types in the tax revenues of the state budget of the Republic of Armenia were as follows: Value added tax (VAT) – 35.6%, profit income tax – 14.9%, personal income tax – 25.7%, social contributions – 4.2%, and turnover tax – 2.4%. And it is important to emphasize that the above-mentioned shares of tax types will be used to make a specific selection among the tax rate strategies presented in this study.

As presented, it is fundamentally acceptable that, it has been fundamentally acknowledged that the current tax rates in Armenia create a non-optimal burden for businesses. From the state's perspective,

18 2022-2025 թվականների հարկային եկամուտների կառավարման ծրագիրը հաստատելու մասին ՀՀ կառավարության 12.08.2022թ.-ի N 919-Լ որոշում. URL: https://www.irtek.am/views/act.aspx?aid=117426 (date accessed: 30.08.2025).

this situation also contributes to the problem of tax undercollection.

Based on this consideration, three groups of tax burdens have been constructed below, reflecting strategies with decreasing trends in the current tax rates in Armenia (except the new turnover tax rates, which will be implemented starting in 2025).

Nevertheless, in the first group, the profit tax rate range is {16-19} percent, compared to the current 18 percent, and the VAT range is {18-20} percent, compared to the current 20 percent (that is, in this group, the minimum aggregate tax rate amounts to 18 + 16 = 34 percent). In the second group, the income tax rate range is {17-20} percent, compared to the current 20 percent, and the social contribution rate range is {3-5} percent, compared to the current 5 percent. In the third group, the rate range is {turnover tax on trade – 2, turnover tax on production – 1.5, turnover tax on other activities – 2, turnover tax on public catering – 2.5 from the lower limit to the upper limit starting from 2025: turnover tax on trade – 10, turnover tax on production – 7, turnover tax on other activities – 10, turnover tax on public catering – 12} percents.

It has also been accepted that tax burdens created by tax rates lower than the lower limits of the specified rates are unsuitable for planning the growth of tax revenues in the state budget of Armenia. Moreover, considering the comparative data presented below, it becomes evident that, in most developed and developing countries, no lower threshold applies than the corresponding tax rates in effect.

According to comparative data on the taxation of business activities in various developed countries and Armenia, Japan has the lowest burden with a combined tax rate of 33%, followed by Germany and Armenia with a combined tax burden of 38% (with a profit tax rate of 18% and VAT of 20%). In other countries, the burden from business taxation rates is higher, for example, the United Kingdom at 45%, the United States at 45%, France at 45%, Canada at 53%, and Italy at 46%, among others [19].

It should be noted that one of the main issues related to the transition to a unified general taxation system in the Republic of Armenia (profit tax and VAT) is the involvement of specialized (professional) skills required for tax accounting, particularly for calculating profit tax. This issue is especially problematic for small organizations. Moreover, the necessity of introducing alternative taxation systems, including the turnover tax system, has been justified by this issue. It should also be noted that the 20% standard VAT rate is the highest within the EAEU region and is applied in the Russian Federation, Belarus, and Armenia. Regarding the turnover tax, the main issue pertains to the principle of taxation, specifically which turnover threshold should be used as the dividing line between the general VAT and profit tax system and the simplified turnover tax system.

However, in the following, the lower limit for the combined profit tax and VAT rates in the 1st group of tax burdens in Armenia has been set at 34% (with a Profit Tax rate of 16% and a VAT rate of 18%).

In this study, within the framework of the methodological approach for determining the assessment of tax efficiency through the application of the tax rate equilibrium principle, in the first group

19 Մամիկոնյան Կ. Հ., Մելքոնյան Ա. Մ., Հարությունյան Ա. Հ. հայաստանի հանրապետություն ապրանքների ներմուծման դեպքում ԱԱՀ-ի հետադարձված հաշվառման մեխանիզմի կիրառման հիմնավորումը (փորձագիտական կարծիք). *ՀՀ ԳԱԱ Փորձաքննություն-ների ազգային բյուր ՊՈԱԿ-ի Դատական փորձաքննության և քրեագիտության հայկական հանդես.* 2024. Համար 11. Էջ 79—94. DOI: 10.53587/25792865-2024.11-79 (date accessed: 30.08.2025).

of tax burden presented below, the lower bound of the combined tax rate for corporate profit tax and VAT in the Republic of Armenia has been set at 34 percent (Profit tax – 16%, VAT – 18%, the sum of the minimum rates). According to A. Laffer, the optimal tax rate begins at 35 percent of income taxation (The "Discussions" section also presents some analyses regarding the Laffer Curve).

Results

The first group of tax burden strategies based on tax rates is presented below.

Table 3

Group of Strategies for Tax Burden Based on Profit Tax and VAT Rates

		Tax rates	Damage > 36.5*	Benefit < 36.5
1	1	*Profit Tax – 16%, VAT – 20%*		36
	2	Profit Tax – 16%, VAT – 19%		35
	3	Profit Tax – 16%, VAT – 18%		34
	4	Profit Tax – 17%, VAT – 20%	37	
	5	Profit Tax – 17%, VAT – 19%		36
	6	Profit Tax – 17%, VAT – 18%		35
	7	Profit Tax – 18%, VAT – 20%	38	
	8	Profit Tax – 18%, VAT – 19%	37	
	9	Profit Tax – 18%, VAT – 18%		36
	10	Profit Tax – 19%, VAT – 20%	39	
	11	Profit Tax – 19%, VAT – 19%	38	
	12	*Profit Tax – 19%, VAT – 18%*	37	
	Total		**226**	**212**

* Total value / number of strategies: 438 ÷ 12 = 36.5.

Above the resulting average will be considered a loss, and below will be considered a benefit.

In the first group, the rows selected from the Loss column are 4, 8, and 12, and from the Benefit column, the rows selected are 1, 5, and 9. Considering that VAT contributes a larger share to the tax revenue than profit tax, the line with the lower VAT rate from the selected rows for the benefit of the RA State Revenue Committee (in the Loss column) is line 12, and for the benefit of the business entity, the line with the higher VAT rate is line 1.

In the first group, the selected lines are:

- for the SRC benefit (loss column): Lines 4, 8, and 12;
- for the taxpayer's benefit (gain column): Lines 1, 5, and 9.

Considering that the share of VAT in tax revenues is higher than that of corporate tax, the selected lines are:

- for the SRC's benefit: Line 12, which has the lower VAT rate;
- for the taxpayer's benefit: Line 1, which has the higher VAT rate.

According to the "50% Equilibrium" principle, the minimum value of overall benefit in the group will be calculated as follows: (37 + 36) × 50% = 36.5%.

Here, it should be noted that the basis for the "50% Balance" principle is presented below in the "Discussions" section.

The second group of tax burden strategies based on tax rates is presented below.

Table 4

Group of Tax Burden Strategies Based on Income Tax and social charge

	Tax rates		Damage > 22.5 *	Benefit < 22.5
2	1	Income tax 20, social charge 5	25	
	2	Income tax 20, social charge 4	24	
	3	Income tax 20, social charge 3	23	
	4	Income tax 19, social charge 5	24	
	5	Income tax 19, social charge 4	23	
	6	Income tax 19, social charge 3		22
	7	Income tax 18, social charge 5	23	
	8	Income tax 18, social charge 4		22
	9	Income tax 18, social charge 3		21
	10	Income tax 17, social charge 5		22
	11	Income tax 17, social charge 4		21
	12	Income tax 17, social charge 3		20
	Total		**142**	**128**

* Overall Value / Number of Strategies = 270 ÷ 12 = 22.5.

Values above the calculated average of 22.5 are considered as "Damage," while those below this value are considered as "Benefit."

In the second group, the lines selected are:

- For the SRC benefit (loss column): Lines 3, 5, and 7.
- For the taxpayer's benefit (gain column): Lines 6, 8, and 5.

Considering that the share of income tax in tax revenues is higher than that of social contributions, the selected lines are:

- For the SRC's benefit: Line 7, which has the lower income tax rate.
- For the taxpayer's benefit: Line 6, which has the higher income tax rate.

According to the "50% Equilibrium" principle, the minimum overall benefit for the group will be: (23 + 22) × 50% = 22.5%.

The third group of tax burden strategies based on tax rates is presented below.

Table 5

Group of Tax Burden Strategies Based on Turnover Tax Rates for Economic Entities

	Tax rates		Damage > 24.3 *	Benefit < 24.3
3	1	Trade turnover tax – 10	39	
		Turnover tax from production activity – 7		
		Turnover tax from other activities – 10		
		Turnover tax from public food – 12		

Continue of table 5

	Tax rates		Damage > 24.3 *	Benefit < 24.3
3	2	Trade turnover tax – 9	34	
		Turnover tax from production activity – 6		
		Turnover tax from other activities – 9		
		Turnover tax from public food – 10		
	3	Trade turnover tax – 8	30	
		Turnover tax from production activity – 5		
		Turnover tax from other activities – 8		
		Turnover tax from public food –9		
	4	Trade turnover tax – 7	26.5	
		Turnover tax from production activity – 4.5		
		Turnover tax from other activities – 7		
		Turnover tax from public food – 8		
	5	Trade turnover tax – 6		23
		Turnover tax from production activity – 4		
		Turnover tax from other activities – 6		
		Turnover tax from public food – 7		
	6	Trade turnover tax – 5		19.5
		Turnover tax from production activity – 3.5		
		Turnover tax from other activities – 5		
		Turnover tax from public food – 6		
	7	Trade turnover tax – 4		16
		Turnover tax from production activity – 3		
		Turnover tax from other activities – 4		
		Turnover tax from public food – 5		
	8	Trade turnover tax – 3		12.5
		Turnover tax from production activity – 2.5		
		Turnover tax from other activities – 3		
		Turnover tax from public food – 4		
	9	Trade turnover tax – 2.5		10
		Turnover tax from production activity – 2		
		Turnover tax from other activities – 2.5		
		Turnover tax from public food – 3		
	10	Trade turnover tax –2		8
		Turnover tax from production activity – 1.5		
		Turnover tax from other activities – 2		
		Turnover tax from public food – 2.5		
	Total		**129.5**	**89**

* Total value / number of strategies = 218.5 ÷ 9 = 24.3.

Values above the calculated average will be considered a loss, while values below will be considered a benefit.

In the third group, row 3 from the Damage column and row 4 from the Benefit column have been selected.

Considering that the share of trade turnover tax in tax revenues is higher compared to other types of turnover tax, the group with the lower trade turnover tax rate has been selected from the Damage column for the tax authority's benefit (i.e., row 3), while the group with the higher trade turnover tax rate has been selected for the business benefit (i.e., group 4). According to the "50% equilibrium" principle, the minimum value of the overall benefit in the group will be (26.5 + 23) × 50% = 24.75 percent.

Discussion

As introduced above, according to John Nash's well-known conceptual principle of "Nash Equilibrium," it is necessary to select the lowest benefit points for the RA State Revenue Committee (SRC) in tax rate strategies, which will be considered the minimum loss points for the economic entity, as well as the maximum benefit points for the economic entity, which will be considered the maximum loss points for the RA SRC.

Following this logic, in the next phase of the study, it was necessary to set the lower limit of the combined tax rate for profit tax and VAT in the first group of the tax burden in the Republic of Armenia (a combined minimum rate of 16% for profit tax and 18% for VAT). In this case, since, according to A. Laffer, the optimal tax rate starts at 35% for income taxation, the combined lower limit for profit tax and VAT in this study has been set at 34%.

It should be noted that the aforementioned "50% equilibrium" principle is fundamentally based on the idea of the progressive nature of taxation and the relationship between budgetary tax revenues, which is known as the "Laffer Curve" [20]. According to this principle, the higher the marginal tax rates, the more likely taxpayers are to engage in tax evasion, leading to an expansion of the shadow economy [21]. The essence of this hypothesis is that the marginal tax rate for budget revenue collection should be equal to 30 percent of the income, while the optimal tax rate should range between 35 and 40 percent. It should also be noted that, according to the research by Yu. Ananiashvili and V. Papava, in economies where the actual average tax rate exceeds 30%, it is entirely acceptable for the optimal rate to be considered within the 35-37% range [22]. Under a tax rate of 40-50% for income collection, the growth of budget revenues begins to slow down. When the rate exceeds 50%, which is referred to as the "forbidden zone," there is not only a sharp decrease in budget revenues but also a decline in savings and investments. This means that up to a 50% tax rate, budget revenues increase, while exceeding this threshold leads to tax under-collection, even with an increase in the tax burden on the subjects of tax relations. When the tax rate exceeds 50%, which is referred to as the "forbidden zone," there is a noticeable sharp decline not only in budgetary revenues but also in savings and investments. That is, with a tax rate of up to 50%, budget revenues increase, while exceeding this threshold leads to tax under-collection, even with an increase in the tax burden on the subjects of tax relations.

20 Laffer A., Meiselman D. The Phenomenon of Worldwide Inflation. American Enterprise Institute, 1975. 218 p. URL: https://ideas.repec.org/b/aei/rpbook/725613.html (date accessed: 30.08.2025).

21 Laffer A. B., Moore S., and Tanous P. J. The End Of Prosperity: How Higher Taxes Will Doom The Economy – If We Let It Happen. New York : Threshold Editions, 2008. 352 p.

22 Ananiashvili Iu., & Papava V. Laffer-Keynesian Synthesis and Macroeconomic Equilibrium. New York : Nova Science Publ., 2014. 106 p. URL: https://www.academia.edu/36611975/Laffer_Keynesian_Synthesis_and_Macroeconomic_Equilibrium (date accessed: 30.08.2025).

According to A. Laffer, the Laffer Curve has been empirically confirmed in the United States at least three times over the past 100 years: during the Harding-Coolidge tax reform (in the mid–1920s), when tax rates were reduced under President Kennedy (in the mid–1960s), and during the tax reform [23] under President Reagan (in the early 1980s). In other words, the functioning of the Laffer Curve enhances the country's economic growth indicators. Besides the United States, this phenomenon was also observed in the United Kingdom in the 1980s, in Ireland in the 1990s, and so on.

According to proponents of the aforementioned theory, lower tax rates contribute to improved tax collection, the expansion of entrepreneurial activities, and an increase in investment activity [24]. However, critics argue that reducing the tax burden is meaningful only for the ongoing tax liberalization of economic agents, supporting them, and stimulating production activities, rather than for replenishing the country's budget. They claim that such reductions cannot, under any circumstances, ensure a proportional increase in tax revenues.

Conclusions

As a result of combining and generalizing the presented data, the following minimum and maximum values for damage and benefit in the group have been obtained:

Table 6

Damage and benefit in the workload groups by tax rates

Groups	Economic entity		SRC	
	Damage	Benefit	Damage	Benefit
1	37	36	36	37
2	23	22	22	23
3	26.5	23	23	26.5
Total	86.5	81	81	86.5
Total	**167.5**		**167.5**	

Thus, in the final stage, the strategies corresponding to the minimum values of total benefits obtained for each of the three groups were selected. These strategies were chosen based on the cases where the benefit of the tax rates for the State Revenue Committee of Armenia is the lowest compared to the benefit for the business entity, considering the share of individual taxes in the total tax revenues collected for the state budget:

for the 1st group, the strategy selected is the one with the lower VAT rate, which is "Profit Tax – 19, VAT – 18";

for the 2nd group, the selected strategy is the one with the lower income tax rate, which is "Income Tax 18, social charge 5";

for the 3rd group, the selected strategy is the one with the lower trade turnover tax rate, which is: "Trade turnover tax – 6", "Turnover tax from production activity –

23 President Ronald Reagan's Initial Actions Project / A. B. Laffer (introduction). New York : Threshold Ed., 2009. 114 p.

24 Becsi Z. The Shifty Laffer Curve. *Economic review (Federal Reserve Bank of Atlanta).* 2000. Art. 85 (Q3):53-64. URL: https://www.researchgate.net/publication/5025629_The_shifty_Laffer_curve (date accessed: 30.08.2025).

4", "Turnover tax from other activities – 6", "Turnover tax from public food – 7".

The practical significance of this study lies primarily in determining the optimal tax burden for business activity taxation in the Republic of Armenia, however, but it may also be of great importance for other developing countries, as the issue of determining the optimal tax burden for entrepreneurship through tax rate reduction mechanisms is relevant in the tax systems of all states.

Принцип рівноваги податкових ставок і його застосування в податковій системі Республіки Вірменія

Карен Мамиконян, Армен Сафарян

Сьогодні податкові ставки в країнах, що розвиваються, зокрема в Республіці Вірменія, створюють неоптимальне навантаження на економічних суб'єктів. У контексті державних інтересів така ситуація також спричиняє проблеми несплати податків. Результати цього дослідження можуть стати у пригоді іншим країнам, що розвиваються, оскільки воно має на меті визначити оптимальне податкове навантаження на підприємництво, послуговуючись механізмом зниження податкових ставок. Для досягнення поставленої мети застосовано загальнонаукові методи (аналіз і синтез, узагальнення, логіко-структурний тощо). Викладено методичний підхід до оцінювання податкової ефективності шляхом аналізування порівняльних даних щодо податкового навантаження від єдиної податкової ставки й застосування принципу податкової рівноваги. Застосування принципу 50-відсоткового балансу є провідним аспектом цього дослідження, яке випливає із концепції А. Лаффера про взаємозв'язок між прогресивним оподаткуванням і державними податковими надходженнями, відомої як «крива Лаффера». Відповідно до цієї концепції, зі збільшенням граничних ставок податку відбувається пропорційне розширення тіньової економіки через збільшення ухилення від сплати податків платниками податків. Здебільшого такий підхід послуговується забезпеченням «оптимальної користі» державі й бізнесу у сфері оподаткування. Однак у цьому разі найбільш стабільним результатом є мінімальний загальний результат, від якого жодна зі сторін не може отримати більше, не змінюючи стратегії інших сторін. На завершальному етапі дослідження обрано стратегії, які відповідають мінімальним значенням сумарної вигоди для кожної групи ставок податків, таких як «податок на прибуток — податок на додану вартість», «податок на прибуток — соціальні внески», «податок з обороту», де вигоду держави мінімізовано порівняно з вигодою суб'єкта господарювання з урахуванням частки окремих податків у податкових надходженнях до державного бюджету.

Ключові слова: *податкове навантаження; податкова ставка; рівновага за Нешем; мінімальна сумарна вигода; податок на прибуток; податок на додану вартість; оподаткування бізнесу.*

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