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THE ROLE OF TAX POLICY IN THE DEVELOPMENT OF INNOVATIVE ECONOMY

Abstract: *This paper presents the role of the innovative economy, typical for the modern world, against the background of the global economy and the challenges existing in conditions of fierce competition, and tax mechanisms for stimulating innovation activity in Georgia.*

From the point of view of maintaining sustainable development of the economy, the stimulation of innovation activities by the state has acquired a special role. As the experience of countries with developed economies shows, stimulating an innovative economy can be result-oriented only if the regulatory mechanisms are used by the state in a coordinated manner, namely, both financial and credit and tax mechanisms will operate simultaneously, since only tax mechanism, despite its important place, cannot provide motivation for entrepreneurial entities to introduce innovations in products or services.

Promoting innovation is important for achieving competitive advantages and long-term development of strategic industries, therefore state support for innovation is especially relevant for developing countries.

The paper evaluates the tax policy instruments directly relating to the stimulation of innovative activity and successfully used in both developed and developing countries, reviews the norms supporting innovative activity in the tax legislation of Georgia, namely, the scientific-research, design and development service expenses related to the earning of gross income subject to deduction and investment tax credit, i.e. accelerated depreciation reducing the cost of purchasing new equipment.

In the study process, attention is focused on the extent to which the benefits related to the promotion of innovations provided by the tax legislation affect the activities of entrepreneurial entities. As a result of the analysis of relevant indicators, it is substantiated that the modernization of certain sectors of the economy is proceeding at a slow pace, which indicates the insufficient effectiveness of tax norms introduced to stimulate the development of an innovative economy.

In the current situation, when the tax legislation cannot properly provide stimulation of the innovative development of the economy and in this way gain a competitive advantage by the entrepreneurial entities, both in the domestic and international markets, it is appropriate to refine it for the accelerated modernization and development of the economic sectors.

The paper presents conclusions and recommendations on measures to be implemented by the state, which will promote the stimulation and development of innovative activities of entrepreneurial entities.

Keywords: *Innovative economy; Financial resources; Tax mechanisms; Exponential growth*

JEL classification: *O31; K34*

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საგადასახადო პოლიტიკის როლი ინოვაციური ეკონომიკის განვითარებაში

აბსტრაქტი: ნაშრომში განხილულია ინოვაციური ეკონომიკის როლი, თანამედროვე მსოფლიოსათვის დამახასიათებელი, გლობალური ეკონომიკისა და მწვავე კონკურენციის პირობებში არსებული გამოწვევების ფონზე და ინოვაციური საქმიანობის სტიმულირების საგადასახადო მექანიზმები საქართველოში.

ეკონომიკის მდგრადი განვითარების შენარჩუნების თვალსაზრისით, სახელმწიფოს მხრიდან ინოვაციური საქმიანობის სტიმულირებამ განსაკუთრებული როლი შეიძინა. როგორც განვითარებული ეკონომიკის ქვეყნების გამოცდილებით ირკვევა, ინოვაციური ეკონომიკის სტიმულირება შედეგზე ორიენტირებული მხოლოდ მაშინ შეიძლება იყოს, თუკი სახელმწიფოს მხრიდან მარეგულირებელი მექანიზმები კოორდინირებულ რეჟიმში იქნება გამოყენებული, კერძოდ ერთდროულად იმოქმედებს როგორც საფინანსო ისე საკრედიტო და საგადასახადო მექანიზმები, ვინაიდან ცალკე აღებული საგადასახადო მექანიზმი, მიუხედავად მისი მნიშვნელოვანი ადგილისა, ვერ უზრუნველყოფს სამეწარმეო სუბიექტების მოტივაციას, რომ განახორციელონ ინოვაციები პროდუქციაში ან მომსახურებაში.

ინოვაციების წახალისება მნიშვნელოვანია კონკურენტული უპირატესობის მისაღწევად და სტრატეგიული დარგების გრძელვადიანი განვითარების მიზნით, ამიტომ განვითარებადი ქვეყნებისთვის, ინოვაციური აქტივობის სახელმწიფო მხარდაჭერა განსაკუთრებით აქტუალურია.

ნაშრომში შეფასებულია საგადასახადო პოლიტიკის ინსტრუმენტები, რომელსაც უშუალო კავშირი აქვს ინოვაციურ საქმიანობის სტიმულირებასთან და წარმატებით გამოიყენება როგორც განვითარებულ ისე განვითარებად ქვეყნებში, განხილულია საქართველოს საგადასახადო კანონმდებლობაში ინოვაციური საქმიანობის ხელისშემწყობი ნორმები, კერძოდ გამოქვითვას დაქვემდებარებული ერთობლივი შემოსავლის მიღებასთან დაკავშირებული სამეცნიერო-კვლევითი, საპროექტო და საცდელ-საკონსტრუქტორო მომსახურების ხარჯები და საინვესტიციო საგადასახადო კრედიტი ანუ, დაჩქარებული ამორტიზაცია, რომელიც ამცირებს ახალი მოწყობილობების შეძენის ხარჯებს.

კვლევის პროცესში ყურადღება გამახვილებულია, თუ რამდენად აისახება სამეწარმეო სუბიექტების საქმიანობაზე, საგადასახადო კანონით გათვალისწინებული ინოვაციების ხელშეწყობასთან დაკავშირებული შეღავათები. შესაბამისი მაჩვენებლების ანალიზის შედეგად დასაბუთებულია, რომ ეკონომიკის ცალკეული დარგების მოდერნიზაცია ნელი ტემპით მიმდინარეობს, რაც მიუთითებს ინოვაციური ეკონომიკის განვითარების

სტიმულირების მიზნით შემოღებული საგადასახადო ნორმების არასაკმარის ეფექტიანობაზე.

შექმნილ ვითარებაში, როდესაც საგადასახადო კანონმდებლობა, სათანადოდ ვერ უზრუნველყოფს ეკონომიკის ინოვაციური განვითარების სტიმულირებას და ამ გზით სამეწარმეო სუბიექტების მიერ კონკურენციული უპირატესობის მოპოვებას, როგორც შიდა ისე საერთაშორისო ბაზარზე, მიზანშეწონილია მისი დახვეწა ეკონომიკის სექტორების დაჩქარებული მოდერნიზებისა და განვითარებისთვის.

ნაშრომში წარმოდგენილია დასკვნები და რეკომენდაციები სახელმწიფოს მხრიდან განსახორციელებელი ღონისძიებების შესახებ, რომელიც ხელს შეუწყობს მეწარმე სუბიექტების ინოვაციური საქმიანობის სტიმულირებასა და განვითარებას.

საკვანძო სიტყვები: ინოვაციური ეკონომიკა; ფინანსური რესურსები; საგადასახადო მექანიზმები; ექსპოტენციალური ზრდა

JEL კლასიფიკაცია: O31; K34

Introduction and review of literature:

The stable development of the economy is especially important for a developing country like Georgia, since it has become a country with a fragile economy, and any minor economic fluctuations immediately affect both the real sector and business entities of the service sector. Achievement of sustainable development of the economy requires effective use of regulatory mechanisms by the state to create new opportunities to enter the international market and return lost positions in the domestic market to economic agents operating in the country. The promotion and development of an innovative economy is considered one of these opportunities.

Under the conditions of a global economy and fierce competition, innovation is the only way for most developed countries to maintain sustainable economic development, while they are vital for developing countries (Bloom, N., Van Reenen, J., & Williams, H. 2019). Investments of an innovative nature at the enterprise level contribute to a reduction in the share of production costs and make exponential growth possible in the long term (Ferraro, D., Ghazi, S., & Peretto, P. F. 2020).

Worldwide, governments recognizing the need for technological changes for long-term economic growth are spending significant resources on tax subsidies for research and development (R&D). (Holt, J., Skali, A., & Thomson, R. 2021). For their part, entrepreneurial entities also have costs of an innovative nature. In developed countries, the purchase of new equipment, information technology and software makes up a significant share of the innovation costs of business entities.

Fiscal & budgetary policy has an important place in the implementation of investments in innovative development (Wen, H., Lee, C. C., & Zhou, F. 2022).

Tax incentives for innovative research can also have a significant impact on stimulating innovation in small businesses (Gale, W., & Brown, S. 2013). In the case of Georgia, such incentives will be useful for start-up companies.

In Georgia, the shortage of financial resources is considered one of the barriers to innovation activity, so it should be taken into account that tax cuts affect the quality of innovations for firms suffering from a lack of financial resources (Cai, J., Chen, Y., & Wang, X. 2018).

The tax legislation of Georgia provides for separate norms to stimulate innovative activities, for the expenses for scientific-research, design and development services, as well as in order to improve

the investment environment, exemption from tax on profits reinvested in the development of the company from January 1, 2017, and the liberalization of the tax system through substantive changes to the value added tax made within the framework of the Agreement on Deep and Comprehensive Free Trade Area (DCFTA) signed with the European Union and entered into force in 2020.

Despite the existing legal regulations, the vast majority of enterprises in Georgia are not motivated to carry out innovative activities, which is confirmed by the analysis of statistical data, namely, according to 2022 data, the share of enterprises cooperating with other enterprises in research and development is 7.8%, and in innovation activity - 6%. The share of enterprises having introduced delivery and distribution methods is 5.8%, and the share of those having introduced new or improved production methods is 8%. In the analyzed period, the share of enterprises having introduced innovations into production is very small; by 2016, the share of these enterprises varied between 13%-14%, and by 2022 it decreased to 6-7%. This indicates the existence of an uncertain, non-result-oriented innovation policy on the part of the state, although it should also be noted that economic entities are not properly aware of the importance of innovative development, which will help them to expand and find new markets.

In order to promote and develop innovative activities, it is advisable to revise the country's innovation policy and reflect in the tax legislation all the norms accumulated in the form of experience in the developed countries. This will promote the motivation of business entities to invest in innovation.

Aims of the study

The aim of the study is to assess the role of tax regulation in the development of innovative economy.

Methodology

The following methods are used in the study process: review of scientific literature, comparative analysis and synthesis methods, quantitative methods, and statistical grouping methods.

Results

The economy of Georgia has been facing significant challenges for the past three decades, which have especially intensified under the fierce competition caused by the global economy.

Innovation is the only way for the most developed countries to secure sustainable long-run productivity growth. For nations farther from the technological frontier, catch-up growth is a viable option. (Bloom, N., Van Reenen, J., & Williams, H. 2019).

Under the conditions of globalization, innovative development needs proper assessment and understanding by both the state and economic entities.

Innovation is the cornerstone of sustained economic growth and prosperity. In a globalised world, innovation is a key driver of competitiveness between businesses and it plays a critical role in the rapid growth of emerging economies. (Palazzi, P. 2011).

The formation of an attractive entrepreneurial environment and the innovative activity of entrepreneurial entities in the country's economy is largely stipulated by the effective use of regulatory instruments by the state, including the rightly selected tax policy, which ensures the rapid growth of the economy in the long term.

Innovative investments at the firm level contribute to the pool of public knowledge that benefits the final good sector via a reduction in unit production costs. This process is self-sustaining and generates exponential growth in the long-run when entry stops and the economy settles into a stable industrial structure. (Ferraro, D., Ghazi, S., & Peretto, P. F. 2020).

It is important that along with the tax policy, the budgetary policy should be also certain and established with respect to innovations. Fiscal policy is one of the most important measures for the Chinese government to support the development of target industries, and uncertainty of fiscal policy

could significantly affect the net cash flow of corporate innovation investment. (Wen, H., Lee, C. C., & Zhou, F. 2022).

According to international experience, tax policy instruments directly relating to the innovative activities are benefits for the, scientific-research, design and development works, which are also provided for by the tax legislation of Georgia, and tax cuts on income earned from intellectual property, which is not yet provided for by the tax legislation of Georgia

Lower taxes improve both the quantity and quality of firm innovation, and have a bigger impact on those firms that are either financially constrained or those that engage more in tax evasion. (Cai, J., Chen, Y., & Wang, X. 2018).

Tax incentives have a special role for small businesses engaged in innovative research.

Both the Research and Experimentation (R&E) tax credit and the Small Business Innovation Research (SBIR) may influence innovation among small businesses. (Gale, W., & Brown, S. 2013).

Investment tax credit, i.e., accelerated depreciation reducing the costs of purchasing new equipment, is also important among the tax instruments promoting innovative activity, which is also provided for by the tax legislation of Georgia, namely, pursuant to the Tax Code of Georgia:

- ❖ Taxpayers may apply an accelerated depreciation rate to the second and third groups but the rate shall not exceed double the amount of the respective rate provided for in the third paragraph of this article.
- ❖ A taxpayer may fully deduct the value of fixed assets, except for those contributed to the enterprise's capital, in the tax year in which the fixed assets are put into service. If a taxpayer exercises the right of full deduction of the value of fixed assets, the taxpayer shall apply the same method in respect of all subsequently purchased (manufactured) fixed assets.
- ❖ Scientific-research, design and development service expenses related to the receipt of gross income shall be deductible, except for the expenses related to fixed-asset purchases, installation and other capitalisable expenses.
- ❖ According to an object of taxation, the following shall be property tax exempt: scientific-research, educational, trial-selection, experimental and trial of breed land, used for scientific and educational purposes, where the activities are financed from the budget (Tax Code of Georgia 2023).

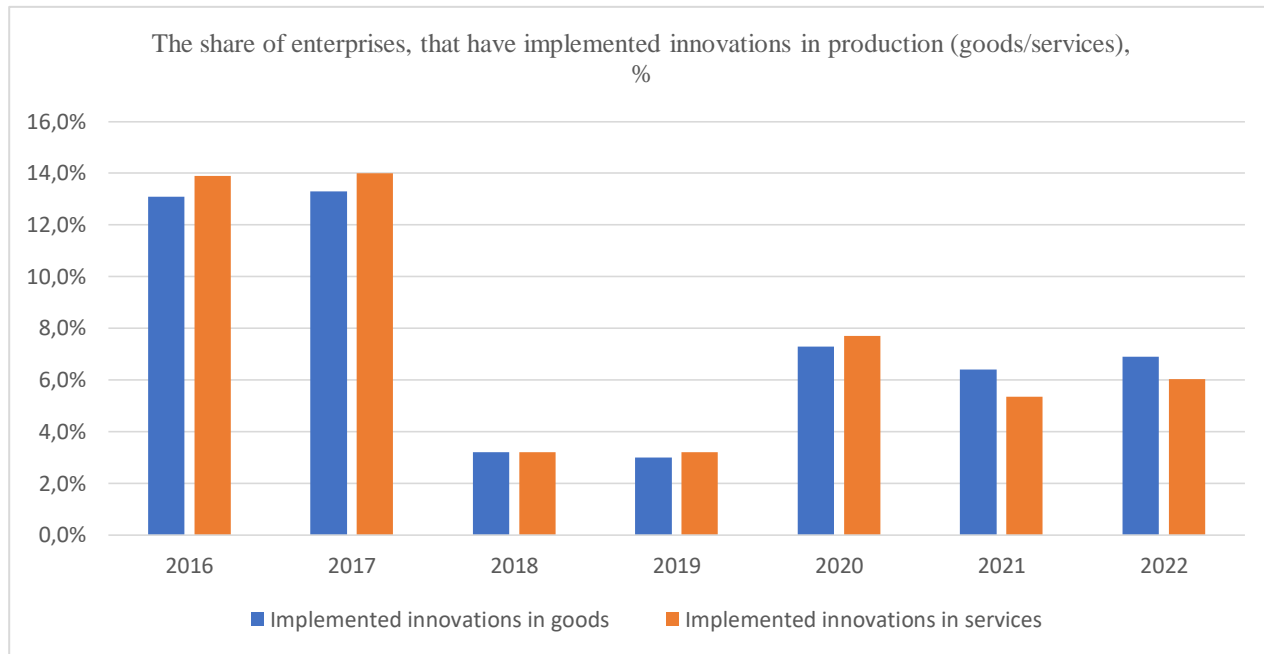
Innovative activity on the part of firms and individuals is viewed by most economists as a key driver of productivity and economic growth. (Hall, B. H. 2019).

In countries of the Organization for Economic Cooperation and Development, since the global financial crisis in 2009, businesses have accounted for nearly three quarters of total expenditure on R&D performance in the OECD area and have been leading OECD R&D growth. However, the business sector trailed other sectors in terms of R&D expenditure growth in 2020. R&D in the Higher Education sector rose by 2.4%, while R&D expenditures in the Government sector increased by 2.7%. R&D in the business enterprise sector still managed to grow by 1.5% despite the pro-cyclical nature of R&D and adverse economic conditions. (Development (OECD) Staff. 2022).

State support and promotion of innovative activity is considered as one way for sustainable and long-term development of the economy, it is important for achieving competitive advantage.

Recognising that technological change is the cornerstone of long-run economic growth, governments around the world spend considerable resources on tax-based subsidies for research and development (R&D). (Holt, J., Skali, A., & Thomson, R. 2021).

Figure 1



Source: National Statistics Office of Georgia. 2023

Around half of the persons employed in the business sector in the EU work in enterprises that have product innovations and develop them internally.

In the EU, innovative enterprises that have developed market novelties in-house account for more than a quarter of employment in the business sector. (Eurostat Statistics Explained. 2023).

The analysis of statistical data proves that, despite the incentives provided by the tax legislation of Georgia, the share of enterprises having implemented innovations in products is critically small. By 2016, the share of the above enterprises varied from 13% to 14% (Figure 1), and by 2022 it decreased to 6-7% (National Statistics Office of Georgia. 2023).

The share of enterprises having introduced innovations in business processes (Table 1), is particularly small; their specific share does not exceed 8% during the analyzed period. According to the 2022 data, the share of enterprises having introduced new or improved external relations organization business practices is 4.6%, new or improved logistics, supply/delivery and distribution methods - 5.8%, and new or improved goods production methods - 8%.

Table 1

The share of enterprises that have introduced innovations in business processes by methods

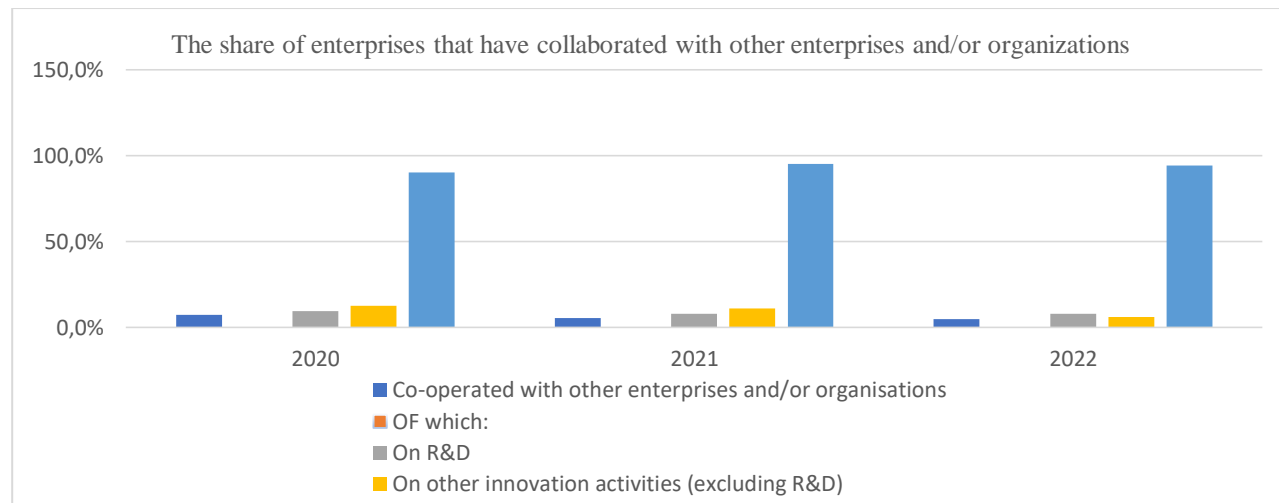
	2020	2021	2022
New or significantly improved methods for producing or developing goods or providing services	5,9%	5,5%	8,0%
New or significantly improved logistics, delivery or distribution methods	4,2%	4,4%	5,8%
New or significantly improved methods for information processing or communication	5,2%	5,8%	7,4%
New or significantly improved methods for accounting or other administrative operations	4,3%	6,6%	8,6%
New or significantly improved business practices for organising	2,8%	2,6%	4,6%

procedures or external relations			
New or significantly improved methods of organising work responsibility, decision making or human resource management	3,9%	5,3%	7,1%
New or significantly improved marketing methods for promotion, packaging, pricing, product placement or after sales services	4,9%	5,0%	7,2%

Source: National Statistics Office of Georgia. 2023

As of 2022, the share of enterprises cooperating with other enterprises is 4.9%, including 7.8% for research and development (Figure 2), 6% for innovative activities, and 94.3% for any other business activity.

Figure 2



Source: National Statistics Office of Georgia. 2023

The analysis of the presented statistical data shows that the vast majority of enterprises in Georgia are not motivated to carry out innovative activities, since some of them consider the lack of financial resources, difficulties in obtaining state grants or subsidies, and the difficulty of finding partners as the main barriers to the carry out innovative activities (National Statistics Office of Georgia. 2023), and most of the business entities are not properly aware of the importance of innovation under the conditions of globalization and do not have the ability to predict the future.

Conclusions

It is advisable to regulate in the tax legislation of Georgia such a form of promotion of innovative activities like reducing the tax rate on the income earned from the company's intellectual property.

It is desirable to refine the tax code's interest deductibility regulation and not apply it to loans taken for the purpose of innovative activities, to fully deduct the interest in expenses.

Tax, financial, and credit policies to stimulate result-oriented innovations should be developed.

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