

Transformation of Tax Incentives for Investments in Human Capital



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Abstract. The study analyzes the experience of tax support for investing in human capital in the Russian Federation, and also evaluates the effects of such support. We systematize tools for tax incentives aimed at the development of human capital by subject (organization and individual), type of taxes, and level at which they are introduced (federal, regional, local). We determine the amount of tax benefits aimed at investments in human capital per taxpayer and assess fiscal significance of the shortfall in budget revenues of Russia's budgetary system. We put forward directions to develop the system of tax support for investments in human capital in two aspects: classical and comprehensive. The classical aspect assumes parallel tax regulation of the parties to the investment process in human capital (individuals, organizations, infrastructure entities). The complex aspect assumes simultaneous tax regulation of the parties to the investment process in human capital through the system of state support for E-STEM education. The options for making up for the shortfall in budget revenues in connection with the expansion of the package of tax incentives are proposed. Such options, in particular, include: progressive taxation of personal income using indexed graduated scales, legalization of shadow income from renting real estate to individuals through tax deductions, establishment of joint and several liability in social insurance of employees and employers. Practical significance of the work consists in the possibility of using specific proposals to amend the legislation of the Russian Federation in the field of tax incentives for human capital by public authorities in the development of public policy measures aimed at economic growth.

Key words: tax benefits, non-profit organizations, shortfall in income, human resources, investments, federal benefits, regional taxes, tax support.

For citation: Tikhonova A.V. (2024). Transformation of tax incentives for investments in human capital. *Economic and Social Changes: Facts, Trends, Forecast*, 17(4), 193–211. DOI: 10.15838/esc.2024.4.94.11

Acknowledgment

The article used findings of research works carried out at the expense of budget funds under the state assignment of the Financial University.

Introduction

Tax incentives for the development of human capital (hereinafter – HC) in Russia can be characterized as multi-vector and multidirectional. This multidirectionality is manifested both by the subjects of incentives (organizations, individuals) and beneficiaries, and by the objects of incentives (education, health, pension provision, etc.). In this regard, the instruments of taxation of individuals are only a part of tax incentives for investments in the HC. Despite the fact that Russia belongs to developing economies, its system of tax incentives for human capital represents a certain “intermediate level” between similar systems of developed and developing economies, which is presented in more detail in our previous study (Tikhonova, Akulov, 2024). This arrangement of tax support for human capital creates an advantage of the national economy over other emerging economies.

Nevertheless, the presented system has a number of significant drawbacks. First, the use of tax benefits for individuals is limited by their marginal amount (e.g., personal income tax deductions and personal property tax deductions), which in some cases is not economically justified. Second, the relatively low size of personal income in Russia compared to developed countries reduces the effectiveness of incentives for HC. A significant part of tax benefits is often provided in the form of deductions from the taxable base or refund of part of the tax paid. However, if an individual’s income is low, the benefits may not have a significant impact on the financial situation of the citizen. In addition, when tax incentives are targeted at certain types of expenditures (e.g., home purchase or education), low-income individuals may be unable to afford such expenditures. In this regard, the research problem consists in the need to

simultaneously revise tax incentives for individuals and expand the scope of impact of tax incentives on legal entities – employers who provide funding for relevant investments, involving them directly in HC development process.

These circumstances determined the aim of the research, which is to substantiate and work out directions for transformation of the mechanism of tax incentives for the development of human capital contributing to economic growth. Scientific novelty of the article consists in the formation of a multivariant model of tax incentives for human capital, taking into account classical and modern approaches to the organization of the system of support for investment in human capital.

Literature review

A considerable amount of research emphasizes the paramount importance of human capital in the economic growth process. The theories of growth, more specifically formulated in the works of Solow (Solow, 1956) and Swan (Swan, 1956), originated within the neoclassical paradigm. Nevertheless, to date, the works of Russian and foreign scientists lack a clear understanding of the contribution of tax factors to HC development. The studies have substantiated that the effects of tax incentives in countries with various levels of economic development are different (Tian et al., 2022). It is necessary to assess the effects of tax incentives for human capital development both for the budget and for a particular taxpayer.

Research works, as a rule, reveal certain aspects of the impact of taxes on the elements of HC. For example, Chinese scientists have proved that tax incentives contribute to the development of R&D activities, positively affecting the structure of human capital (Zhao et al., 2024). Russian

authors emphasize the further development of tax support for increasing the level and stock of human knowledge, as well as protection of human health (Pyanova, Lavnik, 2016; Pinskaya, 2019). Studies substantiating the combination of tax incentives and strict administrative measures that contribute to the effectiveness of fiscal support measures stand out (Koryakina, Shuvaeva, 2022). But one way or another, almost all works consider incentives applied to individuals (Vasilchenko, 2024; Malkova, 2022; Meshkova, Topchi, 2018). Within the framework of scientific research, the tools to support investment in HC of business structures, organizations of the infrastructure sphere have not been properly developed.

Scientists pay special attention to the components of human capital. For instance, Nelson and Phelps emphasized the importance of education in the development of human capital (Nelson, Phelps, 1966). The emergence of endogenous growth theories emphasized the special role of human capital and education in promoting innovative ideas (Mankiw et al., 1992). In conceptualizing human capital, Schultz (Schultz, 1961) and later Becker (2009) agreed that health, education, training or experience were its fundamental components. Further foreign studies included additional elements such as culture and economic factors (Blanchard, Olney, 2017; Van Hoorn, 2019).

The works of Russian scientists also reveal the constituent elements of human capital. In particular, S.A. Dyatlov considers health, knowledge, skills, abilities, motivations as such elements (Dyatlov, 1994). E.A. Kuzmin distinguishes primary (person, health, education, professional skills, abilities and experience) and secondary (adaptability, social skills, leadership and management skills, creativity, corporate and organizational culture, aspect of freedom and cultural development, motivation, consumer activity) elements of human capital (Kuzmin,

2023). L.T. Snitko gives a similar characterization of HC, which includes general and professional education, health, mastery skills and other abilities (Snitko, 2009). A number of scholars add pension component as elements of human capital (Korob, 2015; Teterinets, 2022). However, the scientific uncertainty of the constituent elements of human capital does not allow clearly identifying the zone of impact of fiscal factors on human capital, which potentially reduces the targeting and effectiveness of fiscal policy measures.

Thus, the review of scientific literature has revealed the need to form a comprehensive approach to the tax incentives of HC, which would ensure equal development of all constituent elements and aimed at supporting all participants of the process of investment in human capital.

Research methods

The research concept includes three stages.

Stage 1: Theoretical analysis of tax incentives for human capital development is built on the basis of two theoretical positions.

First of all, it is necessary to systematize the entire set of tax benefits by elements of human capital, which will make it possible to assess the scope of application of this type of state support in Russia. The research theoretical framework is based on an approach that includes four elements identified in the course of the review of scientific literature: (1) education; (2) health care and physical condition of a person; (3) pension provision; (4) quality of life and general culture. Thus, tax incentives are further grouped according to these areas.

In the second turn, it is necessary to determine the subject composition of tax incentives aimed at the development of human capital. Currently it includes:

- directly individuals who are the carriers of capital;
- employers investing in the human capital of their current employees or potential employees;

– organizations providing infrastructure for human capital development and rendering relevant services (medical, educational, culture and sports, etc.).

Stage 2: Analysis of the effect of tax incentives for investment in human capital is based on the official statistical data of the Federal Tax Service of the Russian Federation (hereinafter – FTS of Russia) and Rosstat for 2021. This is the deadline period for which the final data on personal income tax, which is the main one in the system of measures of tax support of HC.

Stage 3: Transformation of the system of tax incentives for investment in human capital through the development of a multivariate model that takes into account all taxes of such a system and all subjects of support. This stage also includes an assessment of the potential budgetary effect from the implementation of the proposed measures.

Research results

Characteristics of the system of tax incentives for investment in human capital and its effects

The modern tax system has instruments that develop each element of human capital that we have previously emphasized (*Tab. 1*). These instruments are present in the majority of taxes levied in the country, and the subject of incentives and the beneficiary of benefits are far from always coinciding, especially when calculating indirect taxes.

Despite the extensive list of incentive instruments, most of them are established and regulated at the federal level, while the regulatory taxes themselves form the basis of regional and local budgets (for example, personal income tax (PIT) and corporate income tax (CIT)). The effect of application of these federal incentives remains rather low due to a number of circumstances. Let us analyze them by the example of particular taxes.

1. Personal income tax

The main incentive for personal income tax is tax deductions, the application of which is

significantly limited by the level of income of citizens. Personal income tax deductions reimburse only 13% of incurred expenses and only within the limits set by the Tax Code of the Russian Federation. For example, compensation for the cost of children's education in 2023 will amount to 6,500 rubles, while the average cost of higher education for the same period is 240,000–260,000 rubles per year¹; child maintenance costs – 182 rubles per month; costs for medical treatment, retirement benefits, physical fitness and recreational services – 15,600 rubles per year. Although the government has taken some promising measures in this area, in particular, from 2024 the amount of social deduction for children's education has been increased (from 50,000 to 110,000 rubles, the latter amount is still significantly lower than the average cost of paid education), as well as the aggregate of other social deductions (from 120,000 to 150,000 rubles – by 25%). This is the first increase in the limits of social deductions since 2008. For comparison, the cost of paid medical services increased only in 2022 compared to 2021 by 15%. The actual amounts of personal income tax deductions are lower than their limit values (*Tab. 2*).

The total amount of shortfall in income from the provision of tax deductions for personal income tax in 2021 amounted to 389.2 billion rubles, which is 8% of the volume of tax revenues on this payment for the same period. In comparison, the above amount is also 14% of the volume of disbursed funds under the program “Social Support of Citizens” in 2021 (2845.2 billion rubles).

The average actual value of a group of social deductions combined with a total limit of 120,000 rubles (for 2021) amounted to 176,496 rubles, which

¹ Institute of International Economic Relations. How the cost of higher education has changed in 2023. Available at: <https://imes.su/press-tsentr/stati/item/1573-kak-izmenilas-toimost-vysshego-obrazovaniya-v-2023-godu> (accessed: July 19, 2023).

Table 1. System of tax incentives for human capital development in Russia

No.	Tax	Summary of benefit	Incentive subject	Beneficiary of benefit
<i>Instruments of the system of taxation of individuals</i>				
Education				
1	PIT	Tax deduction for own training	Individuals	Individuals
2	PIT	Tax deduction for education of brothers, sisters, children	Individuals	Individuals
3	PIT	Tax deduction for an independent qualification assessment	Individuals	Individuals
Healthcare and physical condition				
4	PIT	Tax deductions for treatment of oneself and family members, including for expensive treatment	Individuals	Individuals
5	PIT	Tax deduction for fitness and recreational services	Individuals	Individuals
6	PIT	Exemption from taxation of the cost of medicines reimbursed by the employer (4,000 rubles per year per employee)	Individuals	Individuals
7	PIT	Exemption from taxation of amounts paid by employers for the provision of medical services to employees and members of their families and the cost of health resort treatment for employees and their children	Individuals	Individuals
Pension provision				
8	PIT	Tax deductions for expenses on voluntary pension insurance and non-state pension provision	Individuals	Individuals
9	PIT	Exemption from taxation of state pension pensions, insurance and funded pensions, social supplements to pensions, contributions to co-financing of pensions, employer's contributions to additional pension provision (12,000 per employee)	Individuals	Individuals
Quality of life and general culture				
10	PIT	Tax deductions for expenses for the purchase and construction of housing and for the payment of interest on mortgage loans and credits	Individuals	Individuals
11	PIT	Standard tax deductions for oneself, children, including disabled children	Individuals	Individuals
12	PIT	Tax deductions for charitable expenses	Individuals	Individuals
13	PIT	Progressive personal income tax rate	Individuals	Individuals
14	Personal property tax	Deduction from the tax base of a part of the cost of housing. Deductions in the form of an additional 5 (7) square meters per apartment (house) respectively for large families	Individuals	Individuals
15	Land value tax	Deduction in the amount of the cadastral value of 600 square meters of land for certain categories of citizens. Reduced tax rate (0.3%)	Individuals	Individuals
16	Transport tax	Regional tax benefits for certain categories of citizens	Individuals	Individuals
<i>Tools for taxation of organizations</i>				
Education				
1	Value added tax (hereinafter - VAT)	VAT exemption for educational services	Educational organizations	Individuals
2	CIT	Application of zero rate	Educational organizations	Educational organizations
3	CIT	Accounting for personnel training costs		Employers

End of Table 1

No.	Tax	Summary of benefit	Incentive subject	Beneficiary of benefit
4	Insurance fee	Exemption from the imposition of insurance contributions for the payment of tuition fees for an employee		Employers
		Healthcare and physical condition		
5	VAT	VAT exemption for medical services and a number of medicines (according to the list), physical education services	Medical and pharmaceutical organizations	Individuals
6	VAT	Application of reduced VAT rate for medicinal products	Medical and pharmaceutical organizations	Individuals
7	CIT	Application of zero rate	Medical organizations	Medical organizations
8	CIT	Accounting for expenses on voluntary health insurance (hereinafter – VHI) and voluntary retirement insurance (hereinafter – VRI) (subject to conditions)		Employers
9	Insurance fee	Exemption from insurance contributions for the cost of employees' VHI (subject to a number of services), the cost of health resort treatment of employees and their children		Employers
		Pension provision		
10	Insurance fee	Exemption from taxation of state pension pensions, insurance and funded pensions, social supplements to pensions, contributions to co-financing of pensions, employer's contributions to additional pension provision (12,000 per employee)		Employers
11	CIT	Accounting for expenses on additional pension insurance and non-state pension provision (under certain conditions)		Employers
12	VAT	VAT exemption for non-state pension provision services by non-state pension funds ("NSPF")	NSPF	Individuals
		Quality of life and general culture		
13	CIT	Exemption from taxation of earmarked funds received by non-profit organizations (hereinafter – NPO)		NPO
14	VAT	Exemption from VAT for services in the field of culture and art, rental of accommodation, ritual services, etc.	NPO	Individuals
15	Patent system of taxation (hereinafter – PSN), simplified taxation system (hereinafter – STS)	Tax vacations for individual entrepreneurs (hereinafter – IE) engaged in education; provision of social services without accommodation; nursing activities with accommodation; domestic services to the population		IE in the social sphere
16	CIT	Accounting for expenses on social protection of disabled persons by companies (if conditions are met), on additional payments to disabled persons		Employers
17	CIT	Application of zero rate		Organizations providing social services
18	Insurance fee	Application of reduced tariffs for socially-oriented and charitable NPOs on the simplified taxation system		NPO
19	Property tax	Exemption from taxation (full or partial) for public organizations of disabled persons, companies employing disabled persons		Employers
20	Property tax	Tax exemption (full or partial) for NPOs		NPO

According to: Tax Code of the Russian Federation.

Table 2. Statistics on the use of tax deductions incentivizing the development of HC by personal income tax, 2021

Deductions	Number of individuals who received deductions, thousand people	Amount of deductions received, million rubles	Average amount of tax deduction for the year, rubles
<i>1. Standard tax deductions (Article 218 of the Tax Code of the RF)</i>	15,461	329,912	21,338
<i>2. Social tax deductions (Article 219 of the Tax Code of the RF)</i>	3,939	218,684	55,515
Social tax deductions for their education (subparagraph 2, paragraph 1, Article 219 of the Tax Code of the RF)	391	19,670	50,259
Social tax deductions for medical treatment (item 3, paragraph 1, Article 219 of the Tax Code of the RF)	1,754	82,516	47,055
Social tax deductions for expensive treatment (subparagraph 3, paragraph 1, Article 219 of the Tax Code of the RF)	296	45,637	154,034
Social tax deductions for pensions and additional pension insurance, voluntary personal insurance (subparagraphs 4, subparagraph 5, paragraph 1, Article 219 of the Tax Code of the RF)	919	38,579	41,971
Social tax deductions for charity (subparagraph 1, paragraph 1, Article 219 of the Tax Code of the RF)	14	9,443	693,412
Social tax deductions for amounts paid for the full-time education of children (subparagraph 2, paragraph 1, Article 219 of the Tax Code of the RF)	565	22,823	40,416
Social tax deductions for expenses on independent qualification assessment (item 6, paragraph 1, Article 219 of the Tax Code of the RF)	0.4	15	37,211
<i>3. Property tax deductions (Article 220 of the Tax Code of the RF)</i>	6,017	2,445,483	406,462
Property tax deductions for expenses for the purchase of housing (subparagraph 3, paragraph 1, Article 220 of the Tax Code of the RF)	4,450	2,033,102	456,837
Property tax deductions for expenses in the form of mortgage interest (subparagraph 4, paragraph 1, Article 220 of the Tax Code of the RF)	1,481	373,080	251,902
Property tax deductions granted under the simplified procedure (subparagraphs 3, 4, paragraph 1, Article 220 of the Tax Code of the RF)	85	39,300	462,025
According to: official data of the Federal Tax Service of Russia.			

exceeds even the new limit of 2024. The average deduction for children's education amounted to 40,416 rubles in 2021 (with the limit of 50,000 rubles per child in this period). In many respects, the above situation is explained by the following shortcoming of the tax incentives for HC.

To receive any kind of incentives, a citizen is obliged to incur expenses from personal funds in advance (as opposed to directly receiving, for example, gratuitous services from the state or preliminary direct budget support) and to have taxable income from which personal income tax is reimbursed by the budget. The only way of "advanced" tax incentives is a tax credit, as it was noted when analyzing foreign experience (Tikhonova, Akulov, 2024), but this mechanism is not applied in Russia.

The size of property tax deductions is more significant for an individual (compensating 260,000 rubles from the value of real estate and 390,000 rubles from the amount of paid mortgage interest), but also not comparable with the sharply increased in 2020 value of real estate. The average cost of 1 square meter of residential real estate in June 2023 in Russia was 110,312 rubles (the cost of a one-room apartment of 40 square meters – 4.4 million rubles, which is twice the amount of the deduction)². In addition, the high refinancing rate and subsequent increase in mortgage rates for secondary housing significantly reduce demand for it and, accordingly, the demand for deductions for new taxpayers.

² Average cost of real estate in Russia. Available at: <https://gogov.ru/articles/average-property-prices> (accessed: July 19, 2023).

Taken together, these circumstances lead to the fact that the existing personal income tax deductions in Russia aimed at the development of human capital, as noted earlier, are regressive in nature and are not always available to the low-income population, which does not have the opportunity to improve the quality of its capital at its own expense.

2. Value added tax

VAT exemption for a number of social services (educational, medical, cultural) is aimed at reducing the cost of such services for end consumers (population). According to 2021 data, the aggregate amount of lost income from such exemption amounted to more than 607 billion rubles (or 59% of the volume of benefits granted under Article 149 of the Tax Code of the Russian Federation). This amount is equivalent to 6.7% of the amount of VAT payable for the same period of time, and therefore VAT exemptions have not only an important regulatory but also a fiscal role.

3. Corporate income tax and insurance fee

Corporate income tax benefits are divided into two groups:

1) for employers who invest in the development of human capital of their employees;

2) support for organizations (including NPOs) providing services that contribute to the development of human capital.

In this case, two types of incentives are used: application of a zero rate on NPOs and the possibility to take into account a number of socially directed expenses (*Tab. 3*).

The zero rate of corporate income tax is a significant tax incentive for medical, social and mixed-type organizations (engaged in both medical and educational activities), while the amount of income loss from its provision is only 0.6% of the amount of accrued NPOs. This benefit allows saving from 4.5 to 5.8 million rubles per taxpayer per year. At the same time, the incentive role of the zero rate for educational organizations is significantly lower (annual savings are 237 thousand rubles).

In 2021, the average amount of expenses accounted for by NPOs and aimed at the development of human capital amounted to 12.9 million rubles per payer, while the average amount of total expenses for the same period was 642 million rubles (2% of total expenses). At the same time, 7,705 organizations used the right to take into account such expenses. At the same time, the size of employers' expenditures on human capital development is lower (10.9 million rubles, or 1.7% of the total expenditures accounted for by NPOs).

Tax support of investments in human capital of legal entities is a priority area of tax policy development. First, the amounts of tax savings of

Table 3. Statistics of tax incentives for human capital development by corporate income tax, 2021

Type of tax incentive	Number of privileged payers, units	Amount of tax accrued to the budget in case of absence of exemption from taxation, thousand rubles	Average amount of tax benefit, rubles
Zero rate applied by organizations engaged in educational activities	17,159	4,065008	236,902
Zero rate applied by organizations engaged in medical activities	4,843	25,250566	5,213827
Zero rate applied by organizations engaged in educational and medical activities	284	1,659520	5,843380
Zero rate applied by organizations providing social services to citizens	94	429,096	4,564851
Total expenditures accounted for by NPOs and aimed at the development of human capital	7,705	9,988695	12,963231
including NPO expenses	416	20,408613	49,059166
employer costs	7,289	79,473082	10,903153
According to: official data of the Federal Tax Service of Russia.			

NPOs from CIT and insurance fees by virtue of the legislation are directed to the development of their statutory activities, which ensures the targeted nature of tax benefits of this type. Second, the conditions of application of the zero rate on NPOs for medical and educational organizations (in particular, a high share of revenue from core activities) also predetermine targeted investment of the released funds.

Tax incentives for the development of human capital at the territorial level are divided into three groups (Fig. 1).

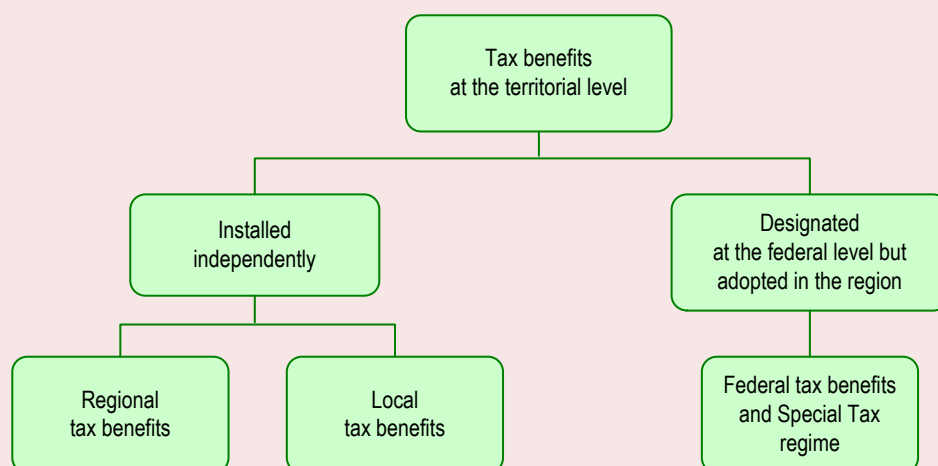
The first two groups represent regional and local tax incentives developed by federal subjects and municipalities. A review analysis of additional municipal benefits proves that single parents, orphans and owners of communal apartments are the persons most often established additionally as beneficiaries of tax incentives on personal property tax.

Within the framework of the land value tax levied on individuals, a completely different approach to spreading the scope of tax incentives is often applied. This is due to the fact that

paragraph 5 of Article 391 of the Tax Code of the Russian Federation provides for a reduction of the tax base by the amount of 600 square meters of area for certain categories of citizens (disabled persons of groups 1 and 2, veterans and participants in hostilities, Heroes of Russia and the USSR, pensioners, large families). At the same time, the additional benefit of municipalities, as a rule, is associated with full or partial (50%) exemption of these groups of taxpayers from taxation in respect of a single plot.

The list of transportation tax benefits for individuals is more varied, this is due to their absence in the Tax Code of the Russian Federation. In general, the regions include veterans of combat operations, disabled persons of groups 1 and 2, disabled veterans of combat operations, large families and single parents, military personnel, mobilized, pensioners to the privileged categories. Heroes of Russia and the USSR, persons exposed to radiation. In the list of specific benefits can be distinguished, for example, individuals who first acquired ownership of real estate in the territory of the Moscow Region (for the first two years)³.

Figure 1. System of regional and municipal tax incentives for human capital development



Source: own compilation.

³ On preferential taxation in the Moscow Region: Law of the Moscow Region 151/2004-OZ, dated November 24, 2004.

The latter incentive is interesting from the position of linking the taxation of real estate and vehicles, stimulating the inflow of human capital to the territory of the subject of the federation. However, this kind of incentive is applied only by one region.

To assess the fiscal role and significance of regional and local tax benefits for 2021, let us analyze the data in *Table 4*.

According to them, the currently provided benefits for regional and local taxes are fiscally insignificant for the budget. At the same time, additionally provided benefits for households are much less widespread than for legal entities (969 billion rubles vs 16,748 billion rubles, respectively). The shortfall in revenues from regional tax incentives amounts to slightly more than 1.7%, among which the main share (1.6%) is taken up by incentives for corporate property tax. From the position of assessing the volume and significance of fiscal incentives aimed at the HC development, the average amount of such incentives for individuals is extremely small: land value tax – 661 rubles per year per payer; property tax – 1,371 rubles; transportation tax – 1,667 rubles.

The second group of benefits, which are designated at the federal level but adopted in the region, is represented by two main types: tax vacations and the size of a number of personal income tax deductions. Tax vacations can be applied by individual entrepreneurs on PST and STS, carrying out socially oriented types of activities, only if the relevant decision is taken by the subject of the federation. As of January 1, 2024, 72 regions have established tax vacations. At the same time, tax vacations are unpopular from the position of demand from taxpayers (Pyanova, 2023). In most regions of the Russian Federation the laws establishing the zero rate were introduced in 2015–2016 for 2 years. According to the calculations of M.V. Pyanova, the dynamics of revenues for social services are no more than two percent, for household services to the population – no more than half a percent (Pyanova, 2022). In this regard, the effectiveness of this tool in the context of stimulating human capital development should be questioned.

In addition, regions may set the amount of personal income tax deductions within the limits

Table 4. Statistics on tax incentives for human capital development by regional and local taxes, 2021

Type of tax	Number of taxpayers who received benefits, units	Amount of lost income, thousand rubles	Average amount of benefit, rubles	Share of benefit in the budget revenues of the corresponding level, %
1. Land value tax from individuals (Ind.) (total number of taxpayers is 38,110128 persons)	18,510835	12,230593	661	0.221
2. Land value tax from legal entities (total number of taxpayers is 414,975 persons)	55,893	30,500332	545,691	0.551
3. Personal property tax (total number of taxpayers is 86,080644 persons)	31,672196	43,430142	1,371	0.785
4. Transportation tax from individuals (total number of payers is 37,562680 persons).	9,094742	15,161148	1,667	0.086
5. Transportation tax from legal entities (total number of taxpayers is 586,903 persons).	22,504	1,269070	56,393	0.007
6. Tax on property of organizations from legal entities (total number of payers is 381,863 persons).	39,809	284,645404	7,150278	1.623
According to: official data of the Federal Tax Service of Russia.				

defined in Chapter 23 of the Tax Code of the Russian Federation. In particular, regions have the right to increase up to 30 percent of the amount of income to receive a social deduction for charity (instead of the standard 25 percent). However, only the Moscow and Kurgan regions apply this possibility. Given that personal income tax is a budget-forming tax for the subjects, the increase in tax deductions is an extremely inefficient tool of tax incentives for the development of human capital, in which the territories are not interested, and the transformation of tax deductions makes sense only at the federal level.

Transformation of the system of tax incentives for investment in human capital

At present, Russian companies are more interested in investing in physical capital, thus, it is necessary to develop mechanisms that would allow

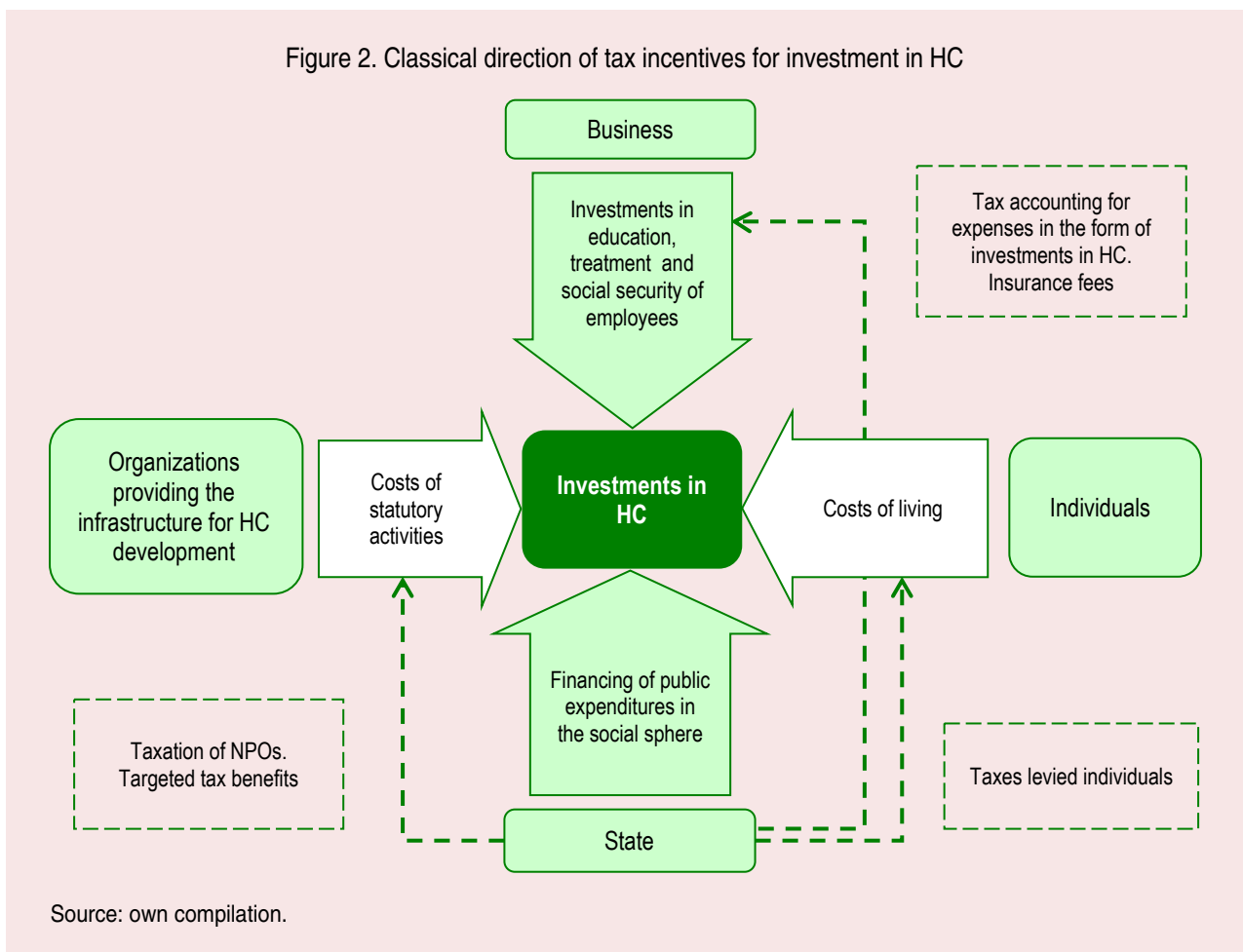
shifting the emphasis in the subject of investment of business structures. From the point of view of the development of investments in HC, it is advisable to form a multivariant model of tax incentives, including two directions: classical and complex.

The classical direction assumes parallel tax regulation of the parties of the investment process in HC (Fig. 2).

It implies independent taxation of participants of the investment process. Within the framework of the classical direction, we will present some options for improving taxation.

1. Organizations that provide infrastructure for the development of HC. Such entities include educational, medical companies; socially oriented non-profit organizations; organizations using the labor of disabled people; non-state pension funds, etc.

Figure 2. Classical direction of tax incentives for investment in HC



Source: own compilation.

We should note that the state has already taken a number of steps in this direction, in particular, within the framework of tax fine-tuning measures, the application of the preferential tariff of insurance contributions (7.6%) has been extended in 2024. In addition, one of the main tax incentives for this group is a zero rate of profit tax for educational and medical organizations (paragraph 1.1 of Article 284 of the Tax Code of the RF). In accordance with Article 284.1 of the Tax Code of the RF, an educational organization has the right to apply the zero rate only if the organization's income for the tax period from educational activities, as well as from the performance of research and (or) experimental development, taken into account in determining the tax base, is at least 90% of its income. At the same time, the tendency to search for additional sources of funding for educational organizations leads to the fact that it is practically impossible to meet the above criterion today; a significant share of revenues from commercial activities of educational organizations is occupied by the revenue from consulting and expert services, which are not included in the qualifying revenue. At the same time, a similar criterion for the IT sphere, radio electronics and agriculture is set at 70%. In view of the above, we propose to establish a similar criterion for the economic entities under consideration.

2. **Businesses and individuals.** The main issues of tax regulation of investments in HC are the necessity of financial participation of business in mandatory social insurance of socially unprotected groups of population through mandatory payment of insurance premiums, as well as the possibility of profit tax treatment of voluntary expenses in the form of investments in HC (within the framework of Articles 255 and 264 of the Tax Code of the Russian Federation).

From the point of view of tax promotion of economic growth, it is desirable to reduce the effective rate of insurance premiums burdening business, while it is necessary to develop a

mechanism to compensate for budget losses. In general, the idea of reducing the rate of insurance premiums for certain categories of payers (in particular, those participating in the E-STEM education scheme) seems positive and will be discussed in more detail below. At this stage, let us focus on the sources of replenishment of budget revenues. At present, the following can be considered as such sources.

1) Adopted progressive taxation of personal income. The most controversial element in the adopted scale is the upper income limit for the 13% rate – 2.4 million rubles (or 200 thousand rubles per month). The initiative of the Ministry of Finance does not provide for the adjustment of income limits taking into account the inflation rate, and therefore, if today the threshold of 200,000 rubles significantly exceeds the average monthly wage level in Russia (according to Rosstat, in March 2024 it amounted to 87,740 rubles), then in 5–7 years this difference will be insignificant, there is a risk to return to the problem of payment of the main part of personal income tax by the middle class. Thus, systematic indexation of the scale gradations seems necessary.

2) Legalization of shadow incomes. Today, the highest informal component is present in the real estate income of individuals (from rental housing). As of 2021, about 5 million apartments (9–10% of the housing stock) were rented out, with only 1/10th of them legally rented, due to which the state's losses were estimated at about 160 billion rubles in taxes⁴. In 2021, the share of the tax base in the form of rental income amounted to just over 5.5% (report 1-DDK), and the amount of tax paid – only 0.9%. At the same time, the number of taxpayers who reflected in their 2021 income tax returns the amount of tax payable on the results of property rental (89811 people) is comparable to the number of residential rental advertisements placed

⁴ How to bring the rental housing market out of the shadows. *Rossiiskaya gazeta*. Available at: <https://rg.ru/2021/12/21/kak-vyvesti-rynok-arendy-iz-teni.html> (accessed: August 10, 2023).

in only one Cian database in 12 major Russian cities. In 2023, the share of citizens who rent more expensive housing and rent low-budget housing, receiving income (their share is about 30% in Moscow)⁵ increased significantly. One of the current trends in tax administration of individuals is the introduction of other economic entities into the chain of relationships “individual – tax authority”. In particular, there is a transfer of calculation and information functions from the taxpayer to third data sources. This allows reducing the risks of tax evasion – in terms of providing information on income, risks of illegal tax refund – in terms of information on the expenses of individuals for the purposes of receiving deductions. We propose to extend a similar mechanism to rental income. In particular, the involvement of a lessee in the scheme of tax legal relations may contribute to bringing the market out of the shadows. When establishing a property deduction for the amount of the cost of rent, the consumer of rental services has an incentive to legalize income from rental of real estate in their own interests. Budget losses under this approach are excluded, as the tax deduction will be reimbursed at the expense of an additional paid legalized amount of personal income tax on rent. In addition to the above proposed mechanism of deductions in the “gray” intermediary zone may be added electronic sites that place advertisements for the lease of real estate, which should be obliged to provide information about the posted advertisement in the database of the Federal Tax Service in automatic mode with the uploading of relevant data into the digital portrait of the taxpayer – an individual. A similar digital portrait of a taxpayer is currently being formed by tax authorities for business entities.

3) Establishment of joint and several liability in social insurance of employees and employers. Social contributions are paid in many countries on the

⁵ Official website of RBK. Available at: <https://realty.rbc.ru/news/64d49fae9a7947a2438cd8e6> (accessed: August 10, 2023).

principles of joint liability of employee and employer. Establishment of solidary payment of contributions by individuals is one of the most common proposals to bring labor income into the legal field – the so-called economic approach of combating tax evasion (Panskov, 2023; Pochinok, 2013; Soboleva, 2017).

Another option to compensate for the losses from the reduction of insurance premiums is the growth of investments in the non-state pension system through tax support of individuals. It is important to note that this direction, among other things, stimulates investments in human capital. According to paragraphs 4 and 5, paragraph 1, Article 219 of the Tax Code of the Russian Federation, an individual may take a personal income tax deduction, the amount of which (together with other deductions) from 2024 should not exceed 150,000 rubles. According to 2021 data, deductions for pension insurance were the third most popular among social deductions (after deductions for medical treatment and expensive treatment). In this regard, in order to stimulate the system of non-state pension provision, it is proposed to deduct deductions under paras. 4 and 5 from the total limit of 150,000 rubles and set their own limit of 50,000 rubles (the amount is determined on the basis of the average amount of a deduction in 2021 for one recipient – 41,971 rubles).

In addition, the existing social tax deductions allow compensating part of the cost of direct education and medical treatment, however, the interest on the loan taken for these purposes is not included in the amount of the tax deduction. At the same time, this mechanism has been worked out within the framework of the tax deduction for the purchase of residential real estate. In many respects, the norm does not work due to difficulties in tax administration associated with the lack of targeted loans for medical treatment. It seems expedient to create in the domestic credit system targeted loans for medical treatment expenses, and subsequently to expand the composition of

expenses (subparagraph 8, paragraph 1, Article 219 of the Tax Code of the Russian Federation) for social deductions for education and medical treatment to the amount of interest on targeted loans without setting limits on the amount of these expenses.

The complex direction implies simultaneous tax regulation of the parties of the investment process in human capital through the system of state support for E-STEM education, discussed in more detail in the article (Tikhonova, Malkova, 2023) (Fig. 3).

A number of legislative changes are needed to stimulate business involvement. In particular, it is advisable to allocate as an independent in the Civil Code of the Russian Federation such type of contract as a simple partnership contract (joint activity agreement) in educational activities, as well as to fix a number of provisions of tax accounting for corporate income tax in Chapter 25 of the Tax Code of the Russian Federation.

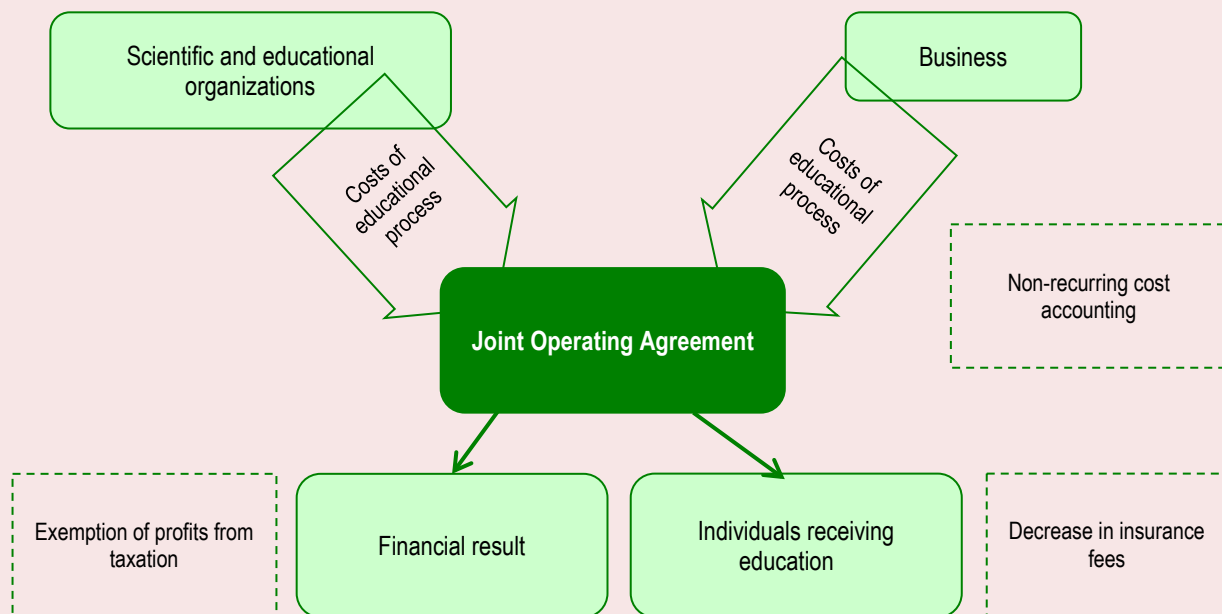
First, the interest of business in the implementation of such an agreement lies in two aspects – obtaining professional staff and possible profit

(if training is organized on a commercial basis). The desire to make a profit will be justified by the desire of companies to compensate for the investment costs of E-STEM projects, hence tax incentives should address the following aspects: (1) how to tax profits from such projects, (2) how to account for the costs of their implementation, (3) what fiscal incentives to apply for the subsequent employment of trained personnel.

As part of the first aspect, we propose to exempt the profit of business structures received under simple partnership agreements (joint activity agreement) in educational activities in the form of application of a zero rate of corporate income tax, for which it is necessary to make amendments to Article 284 of the Tax Code of the Russian Federation. The zero rate for other parties to an agreement is already provided for in legislation, and the criteria for its applicability are discussed above.

As part of the second aspect, it is necessary to determine the procedure for accounting for the costs incurred by companies in participating in a simple

Figure 3. Comprehensive direction of tax regulation of HC



Source: own compilation.

partnership agreement in educational activities. From the point of view of the economic sense of these transactions, these expenses represent deferred expenses. Taking into account the principle of temporary distribution of income and expenses, they should be distributed during the entire period of training of an individual. At the same time, we should note two important aspects. First, the trainee and the business investor are not employees and employers during the training period, and therefore investment expenses cannot be recognized as direct expenses under Article 318 of the Tax Code of the Russian Federation. Second, the reduction of the payback period of these costs significantly increases the interest of business involvement in E-STEM projects, in connection with which it is proposed to recognize these investment costs as other indirect costs and to take them into account in the tax base as a lump sum when incurred (except for the cost of purchasing fixed assets). For fixed assets purchased

and used in E-STEM projects, it is advisable to allow the application of an increasing coefficient 2 to the depreciation rate.

As part of the third aspect, it is possible to reduce the insurance contribution rate for employees who will be employed by the E-STEM project investor's company (at least 0.5 rate) after completion of the training process to 7.6%. The above proposal will stimulate the subsequent employment of personnel and increase the payback period of the E-STEM project.

Assessment of the effects of the proposed transformation directions of tax incentive system for investments in HC⁶

Under the conditions of budgetary constraints faced by the Russian Federation, the provision of additional tax incentives should have an economic assessment in the amount of preliminary shortfall in budget revenues and their replenishing capacity. *Table 5* presents the estimated amount of budget

Table 5. Budgetary effect of the proposed changes within the framework of transformation of tax incentives for human capital (complex approach)

Proposed action	Budgetary effect, million rubles	Notes to the evaluation
Decrease in the share of qualifying revenue of educational organizations (70%)	-6,823	Estimated the maximum fallout based on the amount of "education" income tax paid for 2023
Introduction of property deduction for personal income tax on rental housing	0	The amount of the deductions will be met by additional revenue from landlords
Allocation of "pension" social deductions into a separate group of social deductions	-1,646	According to the data for 2022, an estimate of the maximum deductible amount was made on the basis of the total number of taxpayers who received a deduction through an employer (5-PIT), 553,126 people. And independently (1-DDK) – 287,915 people, as well as the maximum deduction amount. $50 * (55,3126 + 287,915) - 12,979587 - 16,414738 = 12,657725$ thousand rubles (the amount of deductions granted under 1-DDK).
Provision of social deductions for targeted educational and medical loans	-4.9	To calculate the annual interest paid on targeted educational loans, the maximum amount of state subsidies was used – 1.2 billion rubles ⁶ , and the preferential rate is 3%. In this case, the marginal amount of deductions will be: 37,483 thousand rubles. Due to the absence of the concept of "targeted educational loan" and the official volume of lending to individuals in this area, it is impossible to estimate the additional deduction in the field of treatment
Participation in a simple partnership agreement in educational activities	-	A reliable estimate is impossible, but it is assumed that the budget losses will be fully covered by the additional income of the partnership participants according to the multiplier effect
Source: own compilation.		

⁶ RF Government Resolution 3623-r, dated December 14, 2023.

revenue shortfalls for a number of proposals that can be estimated on the basis of official statistical information.

Calculations have shown that the maximum amount of budget revenue shortfall from the implementation of proposals to develop tax incentives for human capital will be approximately 8.5 billion rubles, which is equivalent to 0.15% of budget tax revenues in 2023 and will be covered by additional revenues from the introduction of progressive personal income tax and the increase in the corporate income tax rate (the latter change will generate an additional 1.6 trillion rubles in 2025)⁷.

Thus, the establishment of income taxation progression, on the one hand, will make up for the budgetary losses of the Russian Federation, on the other hand, will strengthen the social effects of stimulating the development of HC. As it was shown in previous studies, one of the priority mechanisms of tax incentives for Human Capital Index in developed countries is progressive taxation (Tikhonova, Akulov, 2024). Despite the fact that progressive taxation is not directly aimed at stimulating highly skilled labor (rather, it is considered as a disincentive), its positive impact on economic inequality and human capital makes it an important tool in economies around the world (Le Caous, Huarng, 2020). The progressive taxation system allows redistributing resources in favor of the less well-off strata of the population through the financing of social programs and poverty reduction programs. Consequently, the progression introduced from 2025 will only strengthen the expected effects from the implementation of the proposed system of tax incentives for HCI.

Discussion

One of the most debatable provisions of the study is the proposal on the solidary liability of workers for social insurance. This direction can

⁷ Available at: <https://ria.ru/20240528/minfin-1949024014.html> (accessed: August 12, 2024).

indeed reduce the tax burden on labor, but its effectiveness in terms of legalization of hidden wages and focus on the development of HC is questionable for a number of reasons:

- first, reducing the burden on economic agents does not provide a high guarantee of legalization of labor income due to widespread opportunistic behavior of taxpayers; in particular, during the periods of the minimum tariff of insurance contributions in 2009 (26%) in the presence of a two-stage regressive tariff, the share of hidden wages was 28.4%; in 2010 with the same 26% rate of the unified social tax – the maximum value of 28.8%; in 2011 with the aggregate tariff of 34% – 28.3%; and a year later, when the tariff was reduced to the level of 30% – 28.5%; thus, the reaction of business to a reduction in the tariff of insurance contributions, as Russian history shows, is unpredictable;

- second, the establishment of joint liability for insurance contributions on employees and employers further violates the fairness of taxation of individuals; this innovation will increase the burden primarily on low-income and middle class strata of the population, which have the bulk of the tax base on active income; more importantly, it will lead to an increase in the regressive nature of taxation, as a significant part of the income of the wealthiest strata of the population does not fall under the object of taxation by insurance contributions. According to the Central Bank of Russia survey⁸, the share of passive income in the 10th decile is 22%, while, for example, in the 4th decile it is 8%.

Conclusions and suggestions

The system of fiscal incentives for human capital development includes support for all four

⁸ Bessonova E., Tsvetkova A. Analytical note of the Central Bank of the Russian Federation “Finances of Russian Households in 2022”. Available at: https://www.cbr.ru/Content/Document/File/146276/analytic_note_20230419_dip.pdf?utm_source=Rambler&utm_medium=finance&utm_campaign=transition (accessed: August 13, 2023).

elements and is aimed at the three groups of economic entities presented above (individuals, employers, and infrastructure organizations for human capital development). At the same time, the state fiscal support is most significantly aimed at incentivizing individuals and infrastructure companies. In this regard, the main emphasis in the transformation of fiscal incentives is placed on the involvement of business (employers) in the system of investment in HC.

The analysis of tax support for human capital development has shown that the most significant effect is provided by federal tax incentives. A significant package of regional and local tax benefits established by the Tax Code of the Russian Federation significantly reduces the regulatory potential of territories for the purposes of human capital development. In this context, work has been underway since 2011 to optimize the number of tax benefits. Article 381.1 of the Tax Code of the Russian Federation introduced the practice of applying tax benefits for regional and local taxes based on the “two-key” principle, but it was implemented only in the example of property tax on organizations and only in terms of a very limited list of benefits not related to human capital development.

Additional tax incentives for local taxes have a high degree of similarity in municipalities of one

subject of the federation, which actually indicates the lack of a differentiated approach to fiscal support at the lowest level of government. Among the whole variety of tax incentives, the most prioritized and frequently used is a full or partial exemption of certain categories of taxpayers from tax payment. There is no correlation of regional and local incentives with occupation, level of qualification. Reduction of rates is applied only in individual cases, which is often justified by the significant differentiation of regional and local tax rates at the federal level.

Taking into account the low fiscal significance and insignificant effect of regional and local taxes (except for personal income tax) to stimulate investment in human capital development, the proposed transformation of approaches to tax incentives for HC is presented in the form of a multivariant model: the first variant offers classical tax support in the form of individual tax incentives for all participants of investment in HC; the second variant is based on an integrated approach to tax incentives for E-STEM entities.

Practical significance of the work consists in the possibility of using specific proposals to change the legislation of the Russian Federation in the field of tax incentives for human capital by public authorities in the development of public policy measures aimed at economic growth.

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Received August 7, 2024.