

Fiscal Decentralization and Incentives of Local Authorities in the Russian Federation

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Abstract

This article examines the impact of intraregional fiscal decentralization on fiscal incentives for local governments in the Russian Federation. It is expected that decentralization contributes to the economic development of territories through two channels: 1) a higher level of budgetary (tax) decentralization gives more opportunities to local authorities to realize the economic potential of the territory; 2) stable decentralization of revenue sources preserves incentives for local authorities to realize such opportunities. In comparison with the widespread approach to measuring these incentives in terms of gross regional product, the author uses indicators of entrepreneurship, the development of which is mostly within the competence of local authorities. As a measure and stability of decentralization, the norms for deducting revenues to local budgets are used. No clear and conclusive evidence of the impact of decentralization is found: due to the low financial security of subnational budgets as a whole, the transfer of standards can rather be understood as financial assistance to the lower budget, in particular because the size of the average transferred standard grows with the level of subsidies in the region. At the same time, there are certain positive results: the very fact of the transfer of the revenues levied in connection with the application of the simplified taxation system is accompanied by an increase in entrepreneurial activity in the region. A similar effect is exerted by the stability of the revenues on personal income tax and corporate property tax. In general, it can also be pointed out that local authorities have low indicators of the level and stability (rigidity) of budget decentralization.

Keywords: fiscal decentralization, hard budget constraints, soft budget constraints, fiscal incentives, local governments, entrepreneurship

JEL: H61, H70, H71

Introduction

Over the past 50 years, fiscal decentralisation has been one of the key elements of reforms in both developing and developed countries of the world. From 1985 to the present, all member states of the Council of Europe (47 countries, including the Russian Federation - since 1996.) signed the European Charter of Local Self-Government, according to which the local authorities of the countries should receive administrative, financial and political independence. According to classical views, such decentralisation is conditioned not only by the goals of increasing the efficiency of the public sector of the economy, improving the quality of local public services, as well as private services provided in a public way [Oates W., 2005], but also by creating conditions conducive to the emergence of incentives for subnational governments to support economies in their territories in order to accelerate economic growth [Martinez-Vazquez J., McNab R., 2003].

According to the data for 2016, the fiscal decentralisation of local budgets in OECD countries relative to Russia was higher: their share in the tax revenues of the state was 10.8%, and the level of independence in regulating rates and tax bases was 81.0%, while in Russia the significance local budgets in tax revenues turned out to be almost two times lower. Nevertheless, both in

Russia and on average across the OECD countries, local budgets are much less important in comparison with regional ones: the share of the regional budget level in the tax revenues of the state, on average for the federal OECD countries, is 2.2 times higher than the share of local budgets, and in Russia, this difference reaches 6.9 times.

At the same time, the authorities of the regions of the Russian Federation have the right to transfer part of the revenues to local budgets not only through interbudgetary transfers, but also through tax standards. In this paper, we focus on studying the relationship between the level / stability of intraregional decentralisation through the specified norms and incentives of local authorities, an indicator for which is entrepreneurial activity in the region. It is the development of entrepreneurship that largely depends on the interest of local authorities, which is also confirmed in empirical studies of budget decentralisation (Smith H. J. M., 2010).

Theory and empirical research

The basic ideas of decentralisation and inter-budgetary relations are described by the long-established principles of budgetary federalism: subsidiarity [Boadway R., Shah A., 2009; Oates W. E., 1999], compliance [Oates W., 1972], taxation of benefits [Oates W. E., Schwab R. M., 1988] and economies of scale [Olson M., 1969]. However, today there are also more complex ideas and are developing, which include the theory of “Market-preserving federalism” and the concept of “hard” budget constraints, which are a solution to the problem of “soft” budget constraints.

In [Lavrov A. M., 2019], “soft” budget constraints mean “the ability and interest of regulators” (“principals”), on the one hand, to seize financial results of activities in their favor, for example, additional income or cost savings” subordinate “to them, formally or in reality,” administrators (“agents”), and on the other hand, to provide them with non-formalized and non-transparent financial support in the event of their ineffective activity.” In a narrower sense, the term is set forth in [Vigno M. et al., 2006], where the situation of “soft” budget constraints implies “that initially a fixed budget constraint was set for the actions of an economic agent, but additional financing not provided for by the initial conditions leads to a change budget constraints - to mitigate it”. One way or another, these definitions reflect the essence laid down by Y. Kornai, the author of the problem of “soft” budget constraints, which consists in the loss of incentives for agents, or in the case of local authorities, in the loss of interest in making effective decisions [Kornai Y. et al., 2004].

The theory of “Market-preserving federalism” is more supportive of considerations of “efficiency” and emphasizes the ability of the federal government to limit the confiscation of wealth of subnational governments, followed by increased competition between them to attract investment and increased interest of regional authorities in pursuing policies oriented towards economic reform and promoting economic growth. According to [Weingast BR, 2009], “market-preserving federalism” must satisfy the following conditions: (1) clear delineation of powers, (2) autonomy of fiscal policy of subnational authorities, (3) powers to control the common market at the national level, (4) “Hard” budget constraints, limited distribution of income between levels of government, (5) stable distribution of powers. From the above points, it follows that a higher and more stable decentralisation (autonomy) should contribute to the emergence of incentives for local authorities to develop.

There are a number of works, to one degree or another, related to the study of Russian budgetary federalism from the point of view of the problems at hand.

The study [Enikolopov R., Zhuravskaya E., 2007] confirms the hypothesis that fiscal decentralisation leads to more efficient management, better public goods and higher economic growth. The results [Alexeev M., 2016] show that decentralisation of expenditures is positively associated with regional economic growth in Russia, which suggests that Russian regions could benefit from further transfer of expenditures to municipalities. The work [Deryugin A. N. et al., 2017] notes that budget decentralisation, in which lower levels of government have a significant number of powers due to efficiency and flexibility, as well as openness to reforms, promotes investment and an increase in the quality of human capital. In addition, using the example of Russia, it is shown that a large volume of interbudgetary transfers and a low dependence of local budget expenditures on local tax potential underestimate the effective level of local budget decentralization [Timushev E.N., 2018]. The lack of independence of regional and local authorities in the implementation of expenditure powers and the tendency of the fall of local budget decentralisation in Russia in 2009–2016 additionally weaken the fiscal incentives of the local economy development available to the authorities of the regions and municipalities.

The work [Alexeev M. et al., 2019] revealed that the increased dependence of municipal budgets on transfers from the regional government leads to an increase in the deficit of the consolidated regional budget, which supports the logic of “soft” budget constraints. The study [Sinelnikov-Murylev SG, et al., 2006] examines hypotheses about the presence of "soft" budget constraints in Russian regions through the analysis of accounts payable, which has a positive effect on the amount of federal financial assistance, which indicates the presence of "soft" budget constraints. The article [Kudrin A. L., Deryugin A. N., 2018] concludes that in the post-crisis period of 2008-2009 (under conditions of softer budget constraints) medium-income regions without sufficient income potential increased their debt burden to a greater extent than this was done by regions with high and low budgetary security. This is due to the fact that underdeveloped regions traditionally attract more attention from the federal center and have stricter legislative restrictions (including in terms of deficit and debt burden), while highly developed regions have more financial resources to go through such periods.

In the more fundamental work of A. Lavrov (2019), along with the criteria related to interbudgetary transfers (prevention of "dependency" in the equalization of budgetary provision and the absence of informal financial support), the stability of income standards for local budgets is also considered. Based on the totality of the criteria, it is concluded that “in general, local budgets, to an even greater extent than regional budgets, are in conditions of “soft” budget constraints, which has led to quite expected negative consequences for them and for the entire budget system” [Lavrov A. M., 2019, p. 163]. The results of the study [Bukharskiy V.V., Lavrov A.M., 2020] showed that the regional authorities in Russia are unstable in terms of the norms of deductions to the budgets of urban districts enshrined in regional regulatory, however, the link with incentives is not confirmed.

Study of local government incentives

The problem of incentives for local authorities can be viewed from different positions, but in recent years, as an element of effective decentralization in the Russian Federation, more and more attention has been attracted by the norms of deductions from federal and regional taxes and fees established by the state authorities of the constituent entity of the Russian Federation. In the Methodological Recommendations of the Ministry of Finance of Russia, the transfer of income to the local level in this way (through additional standards) is also considered as the best choice in terms of stimulating the development of municipalities. According to the results of individual studies, such a position is related to both uniform and differentiated standards [Arlashkin I. Yu.,

2020], but according to the results of others, differentiated standards can be considered rather as financial assistance or the remainder of "regulatory" taxes [Lavrov A. M., 2019, p. 106]. Nevertheless, in practice, the constituent entities of the Russian Federation most often combine these types of standards. This is due, for example, to the fact that the use of a differentiated personal income tax rate does not always allow achieving the required minimum rate of 15% for the region, since the largest volume of revenues is collected from non-subsidized territories. The use of a differentiated personal income tax rate can also be considered as a solution to the problem associated with the payment of this tax at the place of work, and not at the place of residence, when there is a territorial unevenness of its distribution [Lavrov A. M., 2019, p. 111].

One way or another, in our study, the transfer of these standards is considered as an indicator of budgetary decentralization within the region. The chosen approach makes it possible to reduce the impact on the results of the dynamics of local budget revenues associated with the difference in the structure of the revenue base of municipalities in the regions. In addition to the mandatory requirement of the personal income tax standard, the RF BC also includes a minimum standard (10%) for receipts from excise taxes on motor and straight-run gasoline, diesel fuel, motor oils for diesel and (or) carburetor (injection) engines produced in the Russian Federation. Tax revenues from this source must be spent on the road facilities of the municipality, which, to a lesser extent, correlates it with autonomy. For the rest of tax revenues, the regional authorities do not have regulations of a similar nature.

The increased attention to the transferred standards is also due to the fact that the Ministry of Finance of Russia includes the indicator "Ratio of tax revenues of local budgets received according to uniform and additional standards of deductions from federal and regional taxes and fees established by state authorities of the constituent entities of the Russian Federation" (hereinafter referred to as the revenues of local budgets for the unified taxation system) in Monitoring the financial position and quality of financial management of the constituent entities of the Russian Federation and municipalities, which should contribute to the expansion of the use of the transfer of revenue standards to the local level.

In fact, the dynamics of this indicator on average across regions shows a slight increase from 12.8% in 2010 to 15.4% in 2018, while in 28 regions this indicator decreased (by more than 40 percentage points in Krasnoyarsk Territory, Magadan Region and the Republic of Khakassia). A relatively stable positive practice of transferring income to the local level according to the standards has developed in the Republic of Altai, Khanty-Mansiysk Autonomous Okrug, Republic of Adygea (the share of local tax revenues generated from deductions according to regional standards on average for 2010-2018 was more than 40%), and relatively low standards were observed in the Pskov region, the Republic of Mordovia and the Jewish Autonomous Region (less than 0.5%).

If we consider precisely the standards themselves, which are transferred to the local level, then there is a general decrease, which is associated, among other things, with a reduction in the minimum standard for personal income tax in 2014 by 5 pp. Thus, a decrease in the average rate of deductions to local budgets in the regions for personal income tax decreased from 41.7 to 31.5% over the period 2010-2018. There was also a decrease in corporate income tax (-1.5 percentage points), corporate property tax (-2.7 percentage points) and transport tax (-22.4 percentage points). The share of income transferred under special regimes has generally decreased, but the tax rate levied in connection with the application of the simplified taxation system showed a positive trend (+3.5 percentage points).

Table 1

Indicators characterizing the revenue of local budgets transferred from the level of the federal subjects of Russia according to the standards

| Наименование | 2010 | 2012 | 2014 | 2016 | 2018 |
|---|------|------|------|------|------|
| Revenues of local budgets according to the Ministry of Finance | 12,8 | 7,8 | 12,5 | 12,4 | 15,4 |
| The personal income tax standard | 41,7 | 40,8 | 32,6 | 31,7 | 31,5 |
| The standard of corporate income tax | 1,7 | 0,7 | 0,5 | 0,3 | 0,3 |
| The standard for the property of organizations | 6,4 | 3,5 | 3,2 | 3,3 | 3,7 |
| The standard of taxes on total income (entrepreneurship) | 57,4 | 49,0 | 47,7 | 46,7 | 45,1 |
| including the tax levied in connection with the application of the simplified taxation system | 25,0 | 19,4 | 20,7 | 22,3 | 28,5 |
| The standard of the transport tax. | 25,5 | 6,6 | 3,5 | 3,0 | 3,1 |
| The total standard of deductions to local budgets for the reduced taxes | 25,3 | 23,4 | 19,8 | 18,6 | 17,8 |

Source: author's calculations based on the data of the Ministry of Finance of the Russian Federation.

According to clause 1.1 of Art. 58 of the Budget Code of the Russian Federation, if the law of a constituent entity of the Russian Federation establishes that draft budgets of municipal districts, municipal districts, urban districts, urban districts with intracity division, intracity districts are drawn up and approved for a period of three years (the next financial year and planning period), is not allowed reduction of the established unified standards for deductions to the budgets. This condition is an element of stability, but, as can be seen from the table above, in general, the standards are quite volatile, not only in the long-term horizon. From our point of view, the level and volatility of the standards under consideration has a significant impact on the incentives of local authorities, which is also noted in the Methodological Recommendations of the Ministry of Finance of Russia. In particular, "the advantages of securing additional standards for deductions for a long time are:

- the ability for local governments to independently forecast their own income for a long period and, therefore, implement long-term development programs;
- increasing incentives to increase the collection of tax and non-tax revenues and to develop the revenue base available in the territory of municipalities.

The question arises as to how to see the named incentives. In most studies, fiscal incentives are mainly correlated with indicators of GRP or budget revenues. The idea behind this study is that local authorities in the Russian Federation have generally little ability to influence the economic growth of the territory in such indicators. This is also confirmed by the relatively low aggregate estimates of the autonomy of subnational governments in the country. At the same time, the work [Escaleras M., Chiang E. P., 2017] shows that decentralization is an additional channel linking entrepreneurial activity with growth. It has been found that financial decentralization has a positive effect on the ease of starting a business, especially in developing territories. From the results of the work [Yakovlev E., Zhuravskaya E., 2013] it follows that more decentralized governments will implement business regulation reforms that will reduce the time, costs and complexity of regulatory processes at the stage of business creation. Empirical studies confirm the role of local government policy for the development of entrepreneurial activity in a territory in which their fiscal and political autonomy also has a certain value [Smith H. J., 2010]. In the Russian Federation, the indicator of SME development is also included in the list of indicators for assessing the performance of local self-government bodies in urban districts and municipal districts, based on the results of which local bodies can receive incentive grants.

A preliminary analysis of the data on the distribution of values of the level of development of entrepreneurship (organization of small business per capita of the economically active population) by groups of regions, depending on the size of the average standard of deductions to local budgets and its stability, suggests the following”.

First, regardless of the group of regions in terms of the size of the standard and its stability, on average, there is a decrease in the level of SMEs with an increase in the share of subsidies in the consolidated budgets of the constituent entities of the Russian Federation. Second, the level of development of SMEs increases with an increase in the size of the standard deductions to local budgets only for a group of regions with a low share of subsidies in income; no such connection can be traced across the totality of regions. Third, the most stable (tough) indicators of deduction rates are not a guarantee of growth in the level of SMEs: only in half of the cases, the condition of high stability of standards increases the level of development of SMEs at a given rate. At the same time, the average stringency of standards in about 80% of cases contributes to an increase in the level of development of SMEs, and a low level in 2/3 of cases is accompanied by a decrease in the level of development of entrepreneurship at a given standard of deductions to local budgets. A similar situation can be seen when comparing the dynamics of development of SMEs: an ambiguous effect in the case of the most stable standards, rather a positive effect with an average stability of the size of the standard and a predominantly negative effect with a high volatility of standards. These results can be correlated with the study [Besfamille M., Lockwood B., 2008], where it was shown that excessively tight budget constraints can also lead to the fact that local authorities are afraid to take risks and introduce new projects, as a result of the possible failure of which they do not will be supported by higher authorities.

Table 2

Comparison of business development with the parameters of regional budget decentralization and its stability (strictness)

| Group of subjects of the Russian Federation by the size of standards * | Number of SMEs per capita of the economically active population by group (level / dynamics)** | Group of subjects of the Russian Federation on the hardness of standards *** | Number of SMEs per capita by group (level/dynamics) |
|---|---|--|---|
| Subjects of the Russian Federation with a low share of subsidies in the consolidated budget revenues **** | | | |
| High standard | 37,8/131,5 | High hardness | 60,0/136,9 |
| | | Medium hardness | 26,0/137,5 |
| | | Low hardness | 27,3/119,9 |
| Average standard | 34,8/155,1 | High hardness | 28,3/154,4 |
| | | Medium hardness | 39,3/144,8 |
| | | Low hardness | 34,5/171,3 |
| Low standard | 31,3/143,2 | High hardness | 28,4/144,3 |
| | | Medium hardness | 33,5/153,7 |
| | | Low hardness | 32,9/135,8 |
| Subjects of the Russian Federation with an average share of subsidies in the consolidated budget revenues | | | |
| High standard | 29,5/ 45,9 | High hardness | - |
| | | Medium hardness | 29,5/145,9 |
| | | Low hardness | - |
| Average standard | 27,3/142,4 | High hardness | 29,4/157,3 |
| | | Medium hardness | 28,5/141,8 |
| | | Low hardness | 24,8/134,6 |
| Low standard | 34,0/143,5 | High hardness | 32,4/139,8 |
| | | Medium hardness | 35,6/147,2 |
| | | Low hardness | - |
| Subjects of the Russian Federation with a high share of subsidies in the consolidated budget revenues | | | |

| Group of subjects of the Russian Federation by the size of standards * | Number of SMEs per capita of the economically active population by group (level / dynamics)** | Group of subjects of the Russian Federation on the hardness of standards *** | Number of SMEs per capita by group (level/dynamics) |
|--|---|--|---|
| High standard | 18,7/124,7 | High hardness | 19,6/134,4 |
| | | Medium hardness | 24,3/151,2 |
| | | Low hardness | 14,0/98,8 |
| Average standard | 22,7/144,3 | High hardness | 20,5/137,1 |
| | | Medium hardness | 23,7/155,9 |
| | | Low hardness | 21,5/119,0 |
| Low standard | 17,4/117,0 | High hardness | 17,4/117,0 |
| | | Medium hardness | - |
| | | Low hardness | - |

* Division of the subjects of the Russian Federation into groups according to the size of the standard: high (more than 23%), medium (from 19 to 23%), low (less than 19%). The size of the standard was calculated as the ratio of the transferred volume of income for the selected taxes (personal income tax, income tax, corporate property tax, tax on total income, transport tax) at the municipal level to the volume of receipts to the consolidated budget of a constituent entity of the Russian Federation on average for 2010-2018.

** The level of development of SMEs is defined as the number of small enterprises (including micro) per capita of the economically active population (or per capita of labor force) in the constituent entity of the Russian Federation in 2018. Dynamics is calculated as the ratio of this indicator in 2018 to the level of 2010 (%).

*** Division of the subjects of the Russian Federation into groups according to the stability (rigidity) of the standard size: high (standard deviation coefficient for the standard size in 2010-2018 - less than 2.8), medium (standard deviation coefficient - from 2.8 to 4, 3), low (standard deviation coefficient - from 4.3).

**** Dividing the subjects of the Russian Federation into groups according to the share of subsidies in CB revenues: low (less than 5%), medium (from 5 to 15%), high (more than 15%).

Source: compiled by the author.

The above analysis requires clarification, since, for example, in the highly-subsidized group of regions with an average standard, regions with a higher proportion of urban population were selected than in the group with a high standard, which probably contributes to the difference in the development of SMEs. The study [Barinova V. A. et al., 2018] notes that a comprehensive model of the econometric study of SMEs has not yet been developed, but it is advisable to take into account the basic factors of entrepreneurial activity in it:

- the availability of human capital (the unemployment rate), which, "on the one hand, indicates poor economic conditions and a higher risk of failing in business, and on the other hand, indicates the availability of free human resources to engage in entrepreneurship, most often forced" [Barinova V. A et al., 2018].;
- the level of economic development (gross regional product (GRP) to the population), which "as an indicator of the standard of living, the solvency of the population and the volume of consumer markets contributes to the development of entrepreneurship" [Barinova V. A et al., 2018];

- agglomeration effects (population density and urban population share), which, on the one hand, guarantee high demand and provide access to sales markets, and on the other hand, due to higher concentration and appropriate competition, can create barriers to market entry;
- features of the structure of the economy (the share of the extractive industry in GRP), which may consist in the presence of a significant raw material sector, which, on the one hand, may lead to monospecialization and a decrease in the density of economic activity, and on the other hand, the purchasing power may be higher in raw material regions, which stimulates the development of entrepreneurship.

By adding the variables of interest to the approach under consideration (the level and dynamics of standards), we can find a more accurate connection with the development of entrepreneurship. We formalize our hypotheses.

1. Higher standards of deductions of tax revenues transferred to the local level contribute to higher incentives for local authorities to pursue an effective economic policy, which has a positive impact on the level of SME development.
2. The transfer of the norms of deductions of tax revenues to the local budget level on a more stable basis contributes to the preservation of higher incentives for local authorities to pursue effective economic policy, which has a positive impact on the level of SME development.

To study this relationship, we will use the panel data model (1) for the subjects of the Russian Federation for the period 2010-2018, while excluding federal cities from the sample due to the different system of local self-government, as well as regions with extremely high values of some budgetary and economic indicators that stand out strongly against the background of the general sample.

$$EA_{it} = \text{const} + \alpha_1 \text{GRP}_{it} + \alpha_2 \text{Unempl}_{it} + \alpha_3 \text{POPdensity}_{it} + \alpha_4 \text{Citizens}_{it} + \alpha_5 \text{ExtractIND}_{it} + \alpha_6 \text{TestVariables}_{it}, \quad (1)$$

where: i – the subject of the Russian Federation; t – the time period (year); EA – entrepreneurial activity (the number of small (including micro) enterprises in the region per 1 thousand economically active population (labor force) of the subjects of the Russian Federation); GRP – the level of regional development (GRP taking into account interregional differences in the price level) to the population, rubles per person); $Unempl$ – the availability of labor resources for entrepreneurship (the unemployment rate according to the ILO methodology on average for the year, %); $POPdensity$ – agglomeration effects associated with the concentration of economic activity (population density, people per 1 km); $Citizens$ – agglomeration effects associated with the concentration and diversification of economic activity (the share of the urban population in the total population, %); $ExtractIND$ – features of the structure of the regional economy (the share of the extractive industry in GRP , %); $TestVariables$ – the studied (tested) variables: $Perstax/PerstaxSD$ – the standard of deductions to local budgets from personal income tax / its standard deviation for the period; $Corpptax/Corpptaxfact/CorpptaxSD$ – corporate property tax / its presence / its standard deviation for the period; $Specialtax/SpecialtaxSD$ – total income tax standards / its standard deviation for the period; $Simpltax/Simpltaxfact/SimpltaxSD$ – the standard of tax levied in connection with the application of the simplified taxation system / its presence / its standard deviation for the period; $Transptax/Transptaxfact/TransptaxSD$ – the standard for transport tax / its presence / its standard deviation for the period; $Alltaxes/AlltaxesSD$ – the total standard for the transferred taxes / its standard deviation for the period; $Sharegrants$ – the share of subsidies in the budget of the region.

In the analysis of panel data, regression models with fixed effects (FE) were used using robust standard errors.

The results of modeling the dependence of entrepreneurial activity on the size of the transferred standards are presented in Table. 3. In this case, data for every second year from the period 2010-2018 were used in six specifications of the model (1). The basic control variables (GRP, Unempl, POPdensity, Citizens, ExtractIND) and the additional control variable (Sharegrants) were alternately added variables characterizing the standard of deductions for certain taxes, while the integral standard (Alltaxes) is considered in the model (1). In the case of the study of the impact of the standards for the corporate property tax (Corpptax, model 3), the tax levied in connection with the application of the simplified taxation system (Simpltax, model 5), as well as the transport tax (Transptax, model 6), the corresponding variables characterizing the very fact of the presence of the standard of deduction for these taxes (Corpptaxfact, Simpltaxfact, Transptaxfact) were simultaneously included.

The results of modeling the dependence of entrepreneurial activity on the stability of the transmitted standards are presented in Table. 4. In this case, data on the stability of standards for two periods were used: 2010-2014 and 2014-2018, for which the corresponding values of the standard deviation (SD) were calculated. The level of entrepreneurial activity was measured at the end of each of the periods. In the six specifications of the model (1), variables characterizing the stability of the deduction rate for certain taxes (models 8-12) were alternately added to the basic control variables (GRP, Unempl, POPdensity, Citizens, ExtractIND), while in model 7 the stability of the standard for the entire set of taxes (AlltaxesSD) is considered.

Table 3

Assessment of the impact of the standards' size on the business activity level (EA dependent variable)

| Модель | (1) | (2) | (3) | (4) | (5) | (6) |
|-----------------|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| const | 8,63 (20,1) | 18,7 (18,0) | 4,07 (21,8) | 10,4 (20,9) | 4,55 (21,7) | -1,29 (21,1) |
| GRP | 1,72e-05*** (6,22e-06) | 1,66e-05** (6,82e-06) | 2,42e-05*** (6,68e-06) | 2,46e-05*** (5,88e-06) | 2,51e-05*** (6,81e-06) | 2,33e-05*** (6,93e-06) |
| Unempl | -0,045 (0,196) | -0,139 (0,186) | -0,190 (0,214) | -0,069 (0,188) | -0,198 (0,219) | -0,191 (0,223) |
| POPdensity y | -0,057 (0,298) | -0,150 (0,286) | -0,184 (0,321) | -0,006 (0,307) | -0,196 (0,325) | -0,175 (0,317) |
| Citizens | 0,354 (0,295) | 0,277 (0,266) | 0,348 (0,328) | 0,219 (0,302) | 0,341 (0,326) | 0,423 (0,327) |
| ExtractIND | -0,275** (0,087) | -0,216** (0,083) | -0,300*** (0,098) | -0,293** (0,078) | -0,297*** (0,088) | -0,277*** (0,090) |
| Sharegrants | -0,142* (0,084) | -0,183** (0,076) | -0,119 (0,083) | -0,144* (0,076) | -0,131 (0,081) | -0,127 (0,078) |
| Alltaxes | -0,364*** (0,107) | - | - | - | - | - |
| Perstax | - | -0,246*** (0,068) | - | - | - | - |
| Corpptax | - | - | -0,102* (0,052) | - | - | - |

| | | | | | | |
|---------------------|-------|-------|-------------------|----------------------|-----------------------|-------------------|
| Corpntaxf act | - | - | -0,051 (2,170) | - | - | - |
| Specialtax | - | - | - | -0,080*** (0,021) | - | - |
| Simpltax | - | - | - | - | -0,0440*** (0,014) | - |
| Simpltaxfa ct | - | - | - | - | 1,88** (0,845) | - |
| Transptax | - | - | - | - | - | 0,0132 (0,020) |
| Transptaxf act | - | - | - | - | - | -2,59 (1,560) |
| n | 390 | 390 | 390 | 390 | 390 | 390 |
| Adj. R ² | 0,378 | 0,368 | 0,339 | 0,362 | 0,339 | 0,334 |

Note: Robust standard errors are indicated in parentheses.

* Indicates significance at the 10% level.

** Indicates significance at the 5% level.

*** Indicates significance at the 1% level.

Source: author's calculations.

Table 4

Assessment of the impact of the standards' stability on the business activity level (EA dependent variable)

| Модель | (7) | (8) | (9) | (10) | (11) | (12) |
|-----------------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| const | 70,6*** (15,4) | 87,7*** (15,8) | 70,9*** (15,5) | 70,5*** (15,7) | 70,3*** (15,6) | 69,8*** (16,8) |
| GRP | 1,86e-05* (9,47e-06) | 1,31e-05* (6,58e-06) | 2,07e-05** (8,80e-06) | 1,97e-05** (9,45e-06) | 2,00e-05** (9,67e-06) | 1,86e-05* (1,01e-05) |
| Unempl | 0,0371 (0,497) | 0,140 (0,509) | -0,0350 (0,480) | -0,155 (0,478) | -0,166 (0,482) | -0,101 (0,538) |
| POPdensity | 0,493 (0,426) | 0,701** (0,333) | 0,344 (0,448) | 0,234 (0,495) | 0,229 (0,490) | 0,241 (0,524) |
| Citizens | -0,922*** (0,343) | -1,230*** (0,300) | -0,879** (0,360) | -0,811** (0,387) | -0,810** (0,386) | -0,805* (0,416) |
| ExtractIND | -0,278* (0,141) | -0,280** (0,118) | -0,274* (0,138) | -0,260* (0,148) | -0,257* (0,145) | -0,253* (0,148) |
| AlltaxesSD | -0,471* (0,262) | - | - | - | - | - |
| PerstaxSD | - | -0,577*** (0,157) | - | - | - | - |
| CorpntaxS D | - | - | -0,197* (0,099) | - | - | - |
| SpeciltaxSD | - | - | - | -0,0379 (0,074) | - | - |
| SimpletaxS D | - | - | - | - | -0,0162 | - |

| | | | | | | |
|---------------------|-------|-------|-------|-------|---------|---------|
| | - | - | - | - | (0,038) | - |
| TransptaxS | - | - | - | - | - | -0,0300 |
| D | - | - | - | - | - | (0,027) |
| n | 156 | 156 | 156 | 156 | 156 | 156 |
| Adj. R ² | 0,206 | 0,306 | 0,219 | 0,178 | 0,177 | 0,187 |

Note: Robust standard errors are indicated in parentheses.

** Indicates significance at the 10% level.*

*** Indicates significance at the 5% level.*

**** Indicates significance at the 1% level.*

Source: author's calculations.

The results of modeling the dependence of entrepreneurial activity on the size of the transferred standards indicate a negatively significant effect in the case of personal income tax (model 2), corporate property tax (model 3), tax on total income in general (model 4) and tax levied in connection with the application of the simplified taxation system (model 5), as well as in general on the total standard of the taxes under consideration (model 1). This connection can be explained in two ways: either local authorities, receiving additional income in the current circumstances, lose incentives for development, or these regulations are passed as necessary assistance and can hardly be considered as a real grant of autonomy. In fact, there is a stable relationship between the level of subsidization of the region and the size of the transferred standards (the correlation coefficient is 0.569), as well as the share of the urban population and the size of the transferred standards (the correlation coefficient is -0.422). This indicates that the regional authorities use these standards more often as assistance to local budgets and practically do not use them in the case of cities where the main business activity is concentrated, thereby leaving significant tax sources for themselves. The desire to leave more revenue sources at the regional budget level, apparently, is due to the fact that the regions as a whole are experiencing "a steady, turning into a chronic budget deficit" [Alyokhin B. I., 2020], despite the fact that the main spending powers are assigned to regional, not local authorities.

At the same time, the very fact of using the transfer of income from the tax levied in connection with the application of the simplified taxation system has a positive effect, which, despite its relatively small significance in local budget revenues, confirms its meaning and justifies the expediency of its transfer even according to minimum standards. The tax on the property of organizations as a whole is transferred according to even lower standards and has less significance for filling local budgets, but some authors consider property taxes as optimal for transfer to the regional and especially municipal levels [Slack E., Bird R. M., 2014]. Apparently, in the current conditions, it also plays a supporting role.

The results of modeling the dependence of entrepreneurial activity on the stability of the transferred standards show that the high volatility of personal income tax and corporate property tax corresponds to a lower level of entrepreneurial activity (models 8-9). Such an effect is not observed either for the tax on total income in general (model 10), or for the tax levied in connection with the application of the simplified taxation system (model 11) in particular. This can be explained in two ways: either even with a reduction in the standard for taxes related to small businesses, local authorities do not reduce the motivation for its development, since revenues from it remain at some level, or the change in these revenues is really insignificant, since it also does not worsen the relationship between the volatility of the aggregate standard and entrepreneurial activity. In general, despite the fact that the transferred standards can be

considered both as assistance and as granting autonomy, their volatility has a negative impact (model 7), which is generally consistent with the theory.

Conclusion

The results of the study showed that the impact of intraregional budget decentralization on the economic incentives of local authorities in the Russian Federation has an ambiguous interpretation. Regional authorities use the transfer of standards rather to support local budgets, that is, the highest standards more often correspond to highly subsidized regions with a low level of entrepreneurial activity, which can hardly be considered an additional autonomy. Apparently, this practice is generally associated with a lack of budgetary resources at the subnational level and a broader list of powers at the regional level.

Considering the volatility of the norms for deducting taxes to local budgets, we not only check the work of the theory in its classical sense, but also clarify it: in the primary understanding, subsidies or tax benefits were related to fiscal methods of easing budget restrictions [Kornai Ya. et al., 2004]. In addition, the classics pointed out: "...if the possibility of providing assistance cannot be foreseen in advance, then there is no special reason to attribute it to the MBO", but in the case of manipulation of the deduction standards by the regional authorities, their unpredictable dynamics also contributes to a decrease in the economic incentives of local authorities. This was demonstrated in a preliminary analysis: if high rigidity does not always unambiguously affect the level of entrepreneurship in the regions of Russia, then high volatility is more often accompanied by lower business activity and its weak dynamics. The analysis of panel data indicates a significant impact of personal income tax and corporate property tax on entrepreneurial activity.

In general, we can notice a general trend of a decrease in the regional practice of transferring income to local budgets through tax standards and a general low level of standards. It seems that in order to stimulate further real intraregional decentralization, it is necessary to solve the problem of the lack of budget revenues at the subnational level as a whole.

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