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International Scientific Conference**BUDGET EXPENDITURES ON SOCIAL SPHERE AND SOCIO-ECONOMIC STATUS TERRITORIES OF THE RUSSIA**Olga Tishutina (a)\*, Maria Solomko (b)  
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**Abstract**

Budget expenditures are one of the main instruments of financial policy that public authorities use to influence the dynamics of socio-economic development. The review of scientific works has shown the ambiguity in estimates of the impact of budget expenditures on the parameters of the socio-economic development of territories. Since the regional aspect of this problem has not been sufficiently studied, the goal of the research was to identify the relationship between the dynamics of budget expenditures of the constituent territories of the Russian Federation and their socio-economic situation. The choice of social expenditures as the object of research was determined, firstly, by their significant share in the structure of territorial budget allocations, and secondly, by their potential impact on the level and quality of life of the population. The theoretical basis of the research is the works of Russian and foreign economists. The analysis of inter-regional differences in the structure and dynamics of social budget expenditures is carried out. The main factors that determine the differentiation of regions in terms of budget expenditures on the social sphere are defined. It is shown that in the medium-term period there is no significant relation between the dynamics of social expenditures and changes in the socio-economic situation of the regions. At the same time, it is confirmed that regions with consistently high indicators of socio-economic development are characterized by higher rates of growth in the social sphere. This aspect in the medium-term period can provide a positive economic effect.

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*Keywords:* Budget of the constituent territory of the Russian Federation, expenses, social sphere

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## **1. Introduction**

At the present stage, there are different approaches to assessing the effectiveness of budget policy and its individual tools. According to one of them, a budget policy can be considered effective if it contributes to the achievement of strategic goals of socio-economic development of the state (Kudrin & Knobel, 2017). For most countries of the world, including the Russian Federation, these goals are to maintain economic stability and ensure high rates of economic growth.

One of the main tools of budget policy is budget expenditures (Balaev, 2018; Gemmell et al., 2016; Zyablitskiy, 2020). By allocating budget funds, the state can contribute to the growth of not only physical but also human capital. According to many researchers, in the medium and long-term period, the development of human capital will remain the basis for economic growth, and the state's competitiveness in world markets (Kuznetsov et al., 2017).

## **2. Problem Statement**

The reproduction of human capital is closely related to the efficiency of social spending. In many countries of the world, including the Russian Federation, a large part of these expenditures is spent at the expense of regional and local budgets. In turn, in the structure of expenditures of territorial budgets, social expenditures constitute about half of the total budget allocations. This fact underlines the importance of their assessment, including their impact on the reproduction of human capital and economic development of the territory. An additional argument in favor of the relevance of research in this area is the need to develop and implement measures aimed at unlocking the economic potential of regions and creating a sustainable basis for their self-development.

In accordance with the above, the analysis of regional features of budget allocation and the relation between the volume and structure of expenditures, on the one hand, and the parameters of socio-economic development of territories, on the other, is presented as a significant research task.

## **3. Research Questions**

In this work, the following research questions are formulated.

3.1. What are the differences in the volume and structure of budget expenditures of social orientation? What is the reason for these differences?

3.2. Do the constituent territories of the Russian Federation, leading in terms of socio-economic development, pursue a more active budget policy aimed at the reproduction of human capital?

3.3. Does the steady growth of social expenditures contribute to positive changes in the dynamics of the socio-economic development of the regions?

## **4. Purpose of the Study**

Goal of research is the identification of the relation between the dynamics of expenditures of the budgets of the constituent territories of the Russian Federation on the social sphere and indicators of their socio-economic development.

## 5. Research Methods

Methods of comparative analysis (comparison of rating data of the socio-economic situation of the constituent territories of the Russian Federation and indicators of expenditures of their budgets), grouping (grouping regions based on common trends in socio-economic development and expenditure structure) and statistical analysis (in particular, structural analysis and analysis of indicators of variation) are used in this work. The information base of the research was presented in accordance with data from reports on the implementation of consolidated budgets and ratings of socio-economic development of the constituent territories of the Russian Federation.

## 6. Findings

6.1. For the period 2015 – 2019, expenditures of the consolidated budgets of the constituent territories of the Russian Federation as a whole increased by 43%, and their share in GDP over this period increased from 11.4% to 12.3%, reflecting the increasing role of regional budgets in the redistribution of added value. The average growth rate of consolidated budget expenditures in the regions of the Russian Federation is noticeably lower – 137.5%. This fact is explained by the large scale of variation in indicators for the constituent territories of the Russian Federation. For example, the budget expenditures of the Chukotka Autonomous Okrug and the city of Sevastopol increased more than twice, while in some regions (Sakhalin Oblast, Republic of Mordovia) there was a reduction in expenditures.

The dynamics of budget revenues of the constituent territories of the Russian Federation, their deficits, as well as sub-federal and municipal debt, indicate that the increase in expenditures was mainly based on the increase in tax revenues (Minakir & Leonov, 2019; Sheremeta, 2020). However, despite the common stabilization of the situation, the opposite trend was observed in some regions in the sphere of regional finance. It was the conservation or enhancement of the dependence of budgets on intergovernmental transfers from the Federal budget and the involvement of borrowed funds in order to ensure financing of socially significant obligations. According to the approaches recognized in the Theory of Public Finance, when analyzing the factors and consequences of increasing budget expenditures, it is important to consider not only the absolute and relative changes in indicators but also the sources of funds for increasing budget allocations.

6.2. Social expenditures, that included expenditures (for the research purposes) on education, health, physical culture, sports and social policy, increased to a lesser extent than expenditures in other areas. The average increase of consolidated budgets of the constituent territories of the Russian Federation was about 33% (the median value amounted to 30.6%, i.e. more than half of the regions had the rate of growth below the average value).

In contrast to the total amount of budget expenditures, social expenditures increased in the budgets of all constituent territories of the Russian Federation without exception. The lowest increase was 7.4% (Republic of Mordovia), and the highest increase was 86% (Tyumen Oblast).

The share of social expenditures averaged to 60% in the structure of expenditures for the consolidated budgets of the Russian Federation's constituent territories. In 2015, the value of this indicator varied from 26.8% (Sakhalin Oblast) to 76.1% (Chechen Republic); in 2019, the range of values slightly

expanded from 21% (Chukotka Autonomous Okrug) to 74.7% (Chechen Republic). The change in the variance of the indicator (from 55.78 to 71.95) also characterizes the increased differentiation of the constituent territories of the Russian Federation according to the peculiarities of the structure of budget expenditures. We believe that the obtained indicators of variation can be explained mainly by multidirectional trends in the socio-economic development of regions and the resulting priorities in the distribution of budget funds.

An analysis of indicators per capita can provide a more accurate assessment of regional differentiation in terms of social expenditures (Table 01).

**Table 1.** Dynamics of Indicators of Variation in Budget Expenditures on the Social Sphere in 2015-2019

Indicator	2015	2019
Lowest value, RUB	21 705,13	28 518,74
Highest value, RUB	232 980,05	249 741,25
Average value, RUB	42 778,82	57 228,5
Median value, RUB	31 342,48	41 672
Ratio between medium 10% of RF constituent territories with highest indicators and ratio between medium 10% RF constituent territories with lowest indicators	5,61	5,83

According to the table, the consolidated budgets of the constituent territories of the Russian Federation differ significantly in the amount of social expenditure per capita. Changes in the concentration coefficient (the ratio of the average values of groups of regions with the highest and lowest amount of expenditure per capita) indicate an increase in differentiation in the medium term. According to data for 2015, the most numerous group was one of the constituent territories of the Russian Federation with indicators of unit expenditures in the range from 20 to 30 thousand rubles per capita (37 regions). In 2019, the majority of these regions moved to the group of constituent territories of the Russian Federation with expenditures in the amount of 30 to 40 thousand rubles. Only three constituent territories of the Russian Federation had specific social expenditures with an amount of less than 30 thousand rubles. The list of the constituent territories with the highest unit expenditures, including their ranks, has not changed for the period 2015 – 2019. The constituent territories of the Russian Federation that are included in the group with the highest social expenditures are fully or partially related to the regions of the Far North. This fact largely explains the noticeable excess of their specific budget expenditures over the average indicators for the regions of Russia. Natural and climatic characteristics, as well as the related specifics of population settlement, the status of the road network and the duration of the heating season are the factors of an objective increase in the cost of state and municipal services. This aspect can be illustrated by the values of the budget expenditure index (Distribution of subsidies..., 2019). For example, according to data for 2019, the budget expenditure index of the Chukotka Autonomous Okrug was 14.716 (the highest value for both the group of regions studied and the entire population of the Russian Federation) and the budget expenditure index of the Khanty-Mansi Autonomous Okrug was 1.539 (the lowest value in the group). At the same time, within the analyzed group of regions, there is no significant relation between the value of unit expenditures and the index of budget expenditures.

Along with objective factors (geographic position, the relation of cost of a fixed set of goods and services in the region to the average in the Russian Federation, the ratio of wage level in the region to the average in the Russian Federation, etc.), the amount of budget expenditures is influenced by the priorities of the state policy of the constituent territory of the Russian Federation.

6.3. Having described the general trends illustrating the dynamics and structure of social expenditures, we will test the hypothesis about the relation between the level of socio-economic development of the constituent territories of the Federation and the level of socially oriented expenditures.

For these purposes, we will rank the constituent territories of the Russian Federation by two indicators: the place in the rating of socio-economic development and the place in the list of regions in terms of specific social expenditures.

In 2019, according to the «RIA Rating» agency, the leading RF constituent territories in terms of socio-economic development are Moscow, Saint Petersburg, Khanty-Mansi Autonomous Okrug, Moscow Oblast, Republic of Tatarstan, Yamalo-Nenets Autonomous Okrug, Sverdlovsk Oblast, Krasnodar Krai, Leningrad and Tyumen Oblast (Rating of the socio-economic situation of the regions, 2019; Rating of the socio-economic situation of the RF subjects, 2016). All these constituent territories of the Russian Federation, with the exception of Krasnodar Krai, are characterized by expenditures of the consolidated budget of social orientation in the amount above the median value. The group of regions that took the lowest positions in the rating of socio-economic development includes the constituent territories of the Russian Federation that differ in the amount of specific social expenditures. On the one hand, this group includes 4 constituent territories with expenditures below the median value, including the Kabardino-Balkar Republic, which ranks 84th in terms of social expenditures. On the other hand, the two regions that received the lowest ratings (Chukotka Autonomous Okrug and Kamchatka Krai) have some of the highest specific social expenditures.

A more accurate assessment of the relation between the socio-economic situation of the region and budget expenditure indicators is provided by calculating the Spearman's rank correlation coefficient. According to the results of calculations, its value was 0.17. This value indicates an extremely low dependence on the studied parameters. In all groups of regions (leaders, outsiders, and regions with average indicators), there are constituent territories of the Russian Federation that have both relatively high and relatively low social expenditures. At the same time, it is reasonable to conclude that it is more common for economically prosperous regions to allocate significant funds for the provision of education, health, and social services, that is, to invest in the development of human capital. For the constituent territories of the Russian Federation with low values of socio-economic development, a high level of socially oriented expenditures is often related to objectively increased costs for the provision of public goods. At the same time, it cannot be denied that for the regions of this group, the increase in human capital can serve as a priority goal, the importance of which increases in the context of the outflow of the working-age population to more prosperous regions.

6.4. The final issue studied in this paper is the assessment of the impact of social budget expenditures on improving the parameters of socio-economic development. We compared the changes in the positions of the constituent territories of the Russian Federation in the rating of socio-economic development and the dynamics of socially oriented expenditures of their consolidated budgets.

The constituent territories of the Russian Federation were divided into three groups depending on the nature of changes in their socio-economic situation. A comparison of the ratings of the Russian regions compiled by the «RIA Rating» agency based on the results of 2015 and 2019 showed that 36 regions have worsened their positions, the socio-economic situation of 38 regions has improved, and the positions of 11 regions (including six constituent territories of the Russian Federation with the highest values) have not changed. The calculation of the average growth rate of social budget expenditures for each group of regions showed that there is no significant relation between the dynamics of socially oriented expenditures and changes in the socio-economic status in the five-year interval. At the same time, the regions that consistently occupy leading positions in the rating were characterized by higher average growth rates of socially oriented expenditures than for other groups of the constituent territories (+40.1%). Similar results were obtained based on the results of calculating the growth rate of expenditures separately for the social sectors of health and education.

## 7. Conclusion

The following conclusions can be drawn.

1. The analysis has shown that social expenditures remain a priority area in the distribution of funds for most constituent territories of the Russian Federation. At the same time, in a number of regions, their growth rates are extremely low. This aspect does not contribute to improving the quality of social services and negatively affects the standard of living of the population, consequently, the reproduction of human capital.

2. The analysis of costs for social trends per capita allowed defining the main factors that explain the high level of variation: natural and climatic peculiarities of territories, level of prices, tariffs and wages in the region, specifics of the socio-economic policy in the constituent territory of the Russian Federation, state budget revenue base.

3. The conclusions drawn from the results of comparing indicators that characterize the socio-economic situation of regions and the expenditures of their consolidated budgets are ambiguous. On the one hand, there was no stable significant relation between the studied parameters, on the other hand, the grouping of regions showed that the concentration of budget funds in such areas as education, health, social security and public services, along with other factors, contributes to maintaining a favorable socio-economic situation in the region.

A high level of social spending in the budgets of the constituent territories of the Russian Federation with low values of socio-economic development can be considered as an indicator of the policy aimed at improving the quality of life and securing the population in the relevant territory.

The ambiguity of the defined trends indicates the need to deepen research in this subject area. Promising areas may include correlation analysis of individual parameters of socio-economic development and budget expenditures; assessment of the impact of expenditures on the dynamics of socio-economic development using dynamic models of the budget multiplier and others.

## References

- Balaev, A. I. (2018). Vliyaniye struktury byudzhetykh raskhodov na ekonomicheskiy rost Rossii [Influence of the structure of budgetary expenditures on the economic growth of Russia]. *Economic policy*, 6, 8-35. <https://doi.org/10.18288/1994-5124-2018-6-8-35> [in Russ.].
- Distribution of subsidies for equalizing the budgetary provision of the constituent entities of the Russian Federation for 2019. (2019). [http://www.minfin.ru/common/upload/library/2018/12/main/FFPR\\_2019\\_-2021.pdf](http://www.minfin.ru/common/upload/library/2018/12/main/FFPR_2019_-2021.pdf)
- Gemmell, N., Kneller, R., & Sanz, I. (2016). Does the Composition of Government Expenditure Matter for Long-Run GDP Levels? *Oxford Bulletin of Economics and Statistics*, 78(4), 522-547.
- Kudrin, A. L., & Knobel, A. Y. (2017). Byudzhetnaya politika kak istochnik ekonomicheskogo rosta [Budgetary policy as a source of economic growth]. *Economic Issues*, 10, 5-26. [in Russ.].
- Kuznetsov, S. V., Rastova, Y. I., & Rastov, M. A. (2017). Reyting kak mera otsenki kachestva zhizni v rossiyskikh regionakh [Rating as a measure of the quality of life in Russian regions]. *Economy of the region*, 13, 137-146. <https://doi.org/10.17059/2017-1-13> [in Russ.].
- Minakir, P. A., & Leonov, S. N. (2019). Gosudarstvennyy regional'nyy dolg: tendentsii i osobennosti formirovaniya [State regional debt: trends and features of formation]. *Economic and social changes: facts, trends, forecast*, 4, 26-41. <https://doi.org/10.15838/esc.2019.4.64.2> [in Russ.].
- Rating of the socio-economic situation of the regions. (2019). <https://riarating.ru/infografika/20200602/630170513.html>
- Rating of the socio-economic situation of the RF subjects. Results of 2015. (2016). [http://vid1.rian.ru/ig/ratings/rating\\_regions\\_2016.pdf](http://vid1.rian.ru/ig/ratings/rating_regions_2016.pdf)
- Sheremeta, S. V. (2020). Analiz regional'nykh finansov Rossii i ustoychivost' dolga regionov [Analysis of regional finances of Russia and the stability of the region's debt]. *Problems of Economics*, 2, 30-58. <https://doi.org/10.32609/0042-8736-2020-2-30-58> [in Russ.].
- Zyablitskiy, I. E. (2020). Otsenka fiskal'nykh mul'tiplikatorov v rossiyskoy ekonomike [Assessment of fiscal multipliers in the Russian economy]. *Economic Journal of Higher School of Economics*, 2, 268-294. <https://doi.org/10.17323/1813-8691-2020-24-2-268-294> [in Russ.].