

# **Economic Inequality of the Regions and Imbalances of the Russian Budget System**

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#### ABSTRACT

In spite of economic and social progress economic and social inequality in the world still exists. It can be considered in different aspects: Between different population groups, countries, regions of the certain countries. Problems of economic inequality of the Russian Federation regions, as well as its conditioning factors are being reviewed in this article. Calculations proving that inequality in economic development of the Russian regions is decreasing insignificantly are listed here. This inequality causes differentiation of the taxable capacity and fiscal capacity that affect stability of the budget system of the Russian Federation. An alignment mechanism for the level of fiscal capacity based on the subsidies is being used in order to decrease the level of fiscal capacity of the Russian subjects. The calculations contained in the article demonstrate that alignment only minimizes this inequality. It is being proved that solution of the problem of differentiation of the regions' level of economic development is to be performed using set of measures decreasing these gaps.

Keywords: Economic Inequality, Russian Regions, Economic Development, Gross Regional Product, Taxable Capacity, Index of Budgetary Expenditures, Subsidies

JEL Classifications: I210, E660, H520

### **1. INTRODUCTION**

Russia is a Federated State consisting at the present time of 85 subjects of the Russian Federation in 9 Federal Districts. The subjects vary in the territories, population size and have valuable differences on their economic and taxable capacity. As a result, Federal Government has to adjust the level of fiscal capacity of the subjects of the Russian Federation. Present imbalances of the Russian Federation' budget system is determined by several factors. The first factor is historical, related to unequal location of the productive powers in the Soviet Union.

The second factor is an administrative-territorial division of Russia during the nineties of the XX century. This process was renovated, new subjects of the Russian Federation (hereinafter referred to as regions) were formed. These new regions did not have necessary economic strength for supporting own budgetary expenditures. The third factor is an economic policy of the Russian Government in the nineties of the XX century. As a result, many operating plants in the regions shut down and most of them could not recover afterwards.

It is clear that economic strength of the regions is primarily based on an industry that guarantees Gross Regional Product, employment of the population, tax revenue to the budget system of the government. Moreover, the industry always means specific infrastructure, not only social that also guarantees tax revenue to the federal, as well as to the regional, local budgets.

Economic inequality of the regions leads to the diversity in their taxable capacity. This problem in its turn impacts necessity of alignment of the regional budgets in order to guarantee minimal fiscal capacity of the regions. This issue is challenging for many federated states facing such kind of inequality.

In economic literature of Russia and other countries there are plenty of studies related to the problems of economic and social inequality between countries (Dorling, 2015), household income (Kundakchyan and Garifova 2014, Zhang, 2015), centralization and decentralization (Arcalean et al., 2010), regions (Panasiuk, 2008), state participation in minimization of the regions' economic inequality (Kioko and Martell, 2012), regions' taxable capacity development (Roschupkina, 2013), imbalances of the budget systems (Sabitova et al. 2015), inter-budget relations and alignment of the regions' fiscal capacity level (Velenteichyk, 2013) etc.

Supposedly, global economy growths, as well as economic and social progress are to reduce inequality problems. Nevertheless, the inequality does not decrease; governmental measures on reducing the inequality are not always effective.

## **2. METHOD**

Despite global economy growth the problem of economic inequality is still challenging. Problems of economic inequality related to people's income inequality are being studied mostly in economic literature. Nevertheless, some countries are facing the problem of income inequality between regions. This issue can determine significant social disparity. As known, unequal resource access is initially a basis for economic inequality.

Taking into account the oil and gas reliance of the Russian Federation budget system, the Russian regions are vivid example of that fact. In the early 2000's when the price for the oil started to increase all the regions involved in oil and gas extraction and processing found them in economic and taxable capacity optimum. At the same time there are regions with high economic capacity that does not associate with oil and gas extraction, e.g. Moscow, Saint Petersburg and some other regions. In order to illustrate economic inequality of the Russian regions we use current data of the Russian Statistical Yearbook on gross regional product allocation, territory and population size of the Federal Districts (Table 1).

The data demonstrates that the Central Federal District occupies 3.8% of the territory and is on the first place by the Gross National Product (its part is 34.9%) given that its population size is 27%. The smallest part of the Gross National Product - 2.4% - belongs to the North Caucasian Federal District that occupies 1% of the territory of the Russian Federation with 6.7% of the population. The Far Eastern Federal district is the most interesting regarding this matter. It occupies 36.1% of the territory of the Russian

Federation with 4.3% of the population whilst its Gross National Product is only 5.4%. Further comparative study on regions included to the Federal Districts will demonstrate that the differentiation is even more significant.

Thus, we can make a conclusion on unequal distribution of the Gross National Product between the Federal districts and the regions they consist of. This inequality shall affect their taxable capacity and, as a result, on the fiscal capacity level.

## **3. RESULT**

The Russian Federation Government formulates the problem of the regions development (Adigamova et al., 2014), first of all the territories of Siberia and Russian Far East, in order to decrease inequalities. Investments, e.g., s budget investments, are attracted for that purpose. Long-term inequalities can exert negative influence on capacity of the further development of the regions. Nevertheless, the calculations demonstrate that there are no significant changes that would prove decreasing of the inequalities.

Gross Regional Product index for 2005 and 2012 was used for dynamic comparison of the regions (Figures 1 and 2).

Thus, a structure of the Gross Regional Product allocation has not changed significantly during these 8 years. The major percentage in the Gross Regional Product is on the Central Federal District. It was 34.8% in 2005 and 34.9% in 2012. Therefrom a part of Moscow city was 22.9% in 2005 and 21.2% in 2012. Urals Federal District was on the second place in 2005; its part was 17.1%. Nevertheless, in 2012 its part amounted only to 14.2%. Volga Federal District was on the third place in 2005 with a part of 15.5% and moved to the second place in 2012 with a part of 15.9%. Same situation in the mentioned years applies to the Siberian Federal District. Its part in 2005 was 10.3% and increased up to 10.8% in 2012. A part of the Northwestern Federal District in the Gross Regional Product in 2005 was 10% and become 10.6% in 2012. The region that remains economically backward most of all is North Caucasian Federal District. Its part was 2% in 2005 and 2.4% in 2012.

Thus, this data demonstrates that in general inequality in economic development does not decrease and imbalance still exists.

Differences in gross regional product lead to the differences in taxable capacity of the regions which is estimated by the Ministry of Finance of the Russian Federation since 2005, it also shows the

Table 1: Comparative figures of the Russian Federation	'Federal Districts (percentage)
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Name	Gross regional product for 2012	Territory as for 01.01.2014	Population size as for 01.01.2014
Russian Federation - total, including	100	100	100
Central Federal District	34.9	3.8	27.0
Northwestern Federal District	10.6	9.9	9.6
Southern Federal District	6.3	2.4	9.7
North Caucasian Federal District	2.4	1.0	6.7
Volga Federal District	15.9	6.1	20.7
Urals Federal District	14.2	10.6	8.5
Siberian Federal District	10.3	30.1	13.4
Far Eastern Federal District	5.4	36.1	4.3

index of taxable capacity. This index is the basis for calculating the volume of subsidies allocated to the regions to adjust a minimum level of fiscal capacity. An index of taxable capacity over 1 indicates the adequacy of tax revenues to meet their expenditure obligations. Analysis of the taxable capacity index carried out since 2005 shows that generally the same regions have this index (Table 2).

It should be noted that in 2005 there were 89 subjects of the Russian Federation, in the coming years a number of regions were combined to 83. For instance, in 2007 the Kamchatka Krai emerged due to the annexation of the Koryak Autonomous District to the Kamchatka Region. Combination of the regions was made on the basis of one of the most successful ones; it was joined by the less affluent. In the calculation of the budget for 2005, 23 regions had the index of taxable capacity over 1, including the Central Federal District - 2, the Northwestern Federal District - 5, in the Volga Federal District - 3, the Urals Federal District - 3, the Siberian Federal District - 4, the Far Eastern Federal District - 5.

In the calculation of the budget for 2012 there were only 12 of such regions, but 14 regions have an index close to one (0.8 and 0.9), including in the Central Federal District - 1, and 2 more regions with index of 0.8 and 0.9; Northwestern Federal District - 3, and 3 regions with index of 0.8 and 0.9; Urals Federal District - 1, and 1 region with index of 0.8 and 0.9; Siberian Federal District - 2, and 2 regions with index of 0.8 and 0.9; Siberian Federal District - 2, and 2 regions with index of 0.8 and 0.9; Far Eastern Federal District - 5, and 2 regions with index 0.8 and 0.9.

But two things should be taken into account: The very method of calculation changed and the number of regions was reduced as a result of their combining. In the calculations of budgets for 2016 there are 21 regions, out of the 85, that have an index of taxable capacity greater than 1. In this case, another 14 regions have an index of taxable capacity of 0.8 or 0.9. In the Southern Federal

Table 2: Indices	of taxable	capacity of	certain	Russian
regions				

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Region	Year		
	2005	2012	2016
Moscow Region	0.7388	0.919	1.116
Moscow	1.9050	3.143	2.568
Komi Republic	1.8933	1.643	1.512
Leningrad Region	0.9302	0.905	1.184
Murmask Region	1.3792	1.300	1.522
Saint Petersburg	1.0968	1.466	1.550
Nenets Autonomous District	13.8708	-	5.154
Republic of Tatarstan	1.3224	0.989	1.015
Tyumen Region	1.4212	3.803	1.984
Khanty-Mansijsk Autonomous District	12.1727	-	2.825
Yamalo-Nenets Autonomous District	13.4429	-	5.405
Krasnoyarsk Krai	1.6593	1.500	1.290
Republic of Sakha-Yakutia	2.2201	1.436	2.126
Kamchatka Krai	0.9366*	1.202	1.456
Khabarovsk Krai	1.2322	0.957	1.150
Amursk Region	0.7770	0.805	1.096
Magadan Region	2.0089	1.740	2.544
Sakhalin Region	2.0503	3.034	2.958
Chukotka Autonomous District	2.8058	7.420	5.327
AL BOOST I I D C			

\*In 2005 Kamchatka Region

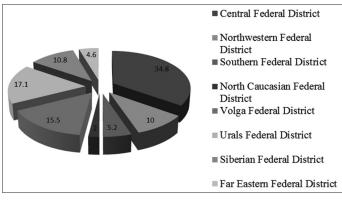
District and the North Caucasian Federal District there were not any regions and still no ones with an index of taxable capacity over one or 0.8 and 0.9.

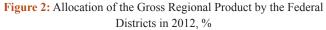
A huge gap in the index of taxable capacity of the regions indicates the significant imbalance. If, for example, we take only the budget estimates for 2016, the Republic of Ingushetia have 0.185 and the Chechen Republic - 0.213 as the minimum index of taxable capacity. The average index of taxable capacity in the North Caucasian Federal District is 0.3093 that includes 7 regions, all of them having this index of <0.5.

In the Central Federal District there are 2 regions that have the index <0.5, in the Southern Federal District - 2 regions, Volga Federal District - 3 regions, the Urals Federal District - 1 region, Siberian Federal District - 3 regions. There are no such regions in the Northwestern and Far Eastern Federal Districts. The highest index of taxable capacity in the calculation of budgets for 2016 belong to Chukotka Autonomous District - 5.327, and the Nenets Autonomous District - 5.154, Sakhalin Region - 2.958, the Khanty-Mansijsk Autonomous District - 2.825, the city of Moscow - 2.568. This gap in the indices of taxable capacity causes serious problems for the Russian Ministry of Finance while adjusting the level of fiscal capacity of the regions and distributing subsidies for these purposes.

While granting the subsidies to adjust the fiscal capacity of the regions of the Russian Federation, the Ministry of Finance







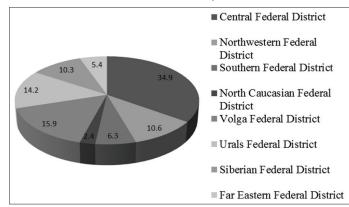


Table 3: Comparative data with the average indicators of the fiscal capacity from a perspective of the Russian Federation	
federal districts	

Federal district	Number of regions	Average index		regions Average index		Average level of	
				capacity			
		Of taxable	Of budgetary	Before allocating	After allocating		
		capacity	expenditures	subsidies	subsides		
Central Federal District	18	0.7940	0.8923	0.8864	0.9438		
Northwestern Federal District	11	1.3250	1.4843	0.9524	0.9915		
Southern Federal District	6	0.5693	0.8363	0.6823	0.7807		
North Caucasian Federal District	7	0.3094	0.8439	0.3664	0.6744		
Volga Federal District	14	0.6810	0.8844	0.7712	0.8331		
Urals Federal District	6	2.0660	1.3438	1.3648	1.4028		
Siberian Federal District	12	0.7240	1.2463	0.62625	0.7635		
Far Eastern Federal District	9	2.0333	4.0358	0.6537	0.814		
Republic of Crimea, Sevastopol	2	0.3025	0.7025	0.4335	0.6885		

calculates the index of budgetary expenditures and the level of fiscal capacity of regions before and after the distribution of subsidies. This takes into account population figures. As a result, for 2016 it is projected that out of 85 regions only 14 regions will not receive the subsidy, including 4 regions of the Central Federal District (Moscow, Yaroslavl Region, Moscow Region, Kaluga Region), 3 regions of the Northwestern Federal District (St. Petersburg, Leningrad Region, Nenets Autonomous District), 2 regions of the Volga Federal District (Republic of Tatarstan, Samara Region), 4 regions of the Urals Federal District (Tyumen Region, Sverdlovsk Region, the Khanty-Mansijsk Autonomous District, Yamalo-Nenets Autonomous District), 1 region of the Far Eastern Federal District (Sakhalin Region). All other regions will receive subsidies from the federal budget to adjust only to the minimum level of fiscal capacity, so the full alignment is not provided. Our calculations show that, with the help of subsidies, average level of estimated fiscal capacity goes up by federal districts: In the Central Federal District from 0.8864 to 0.9438, in the Northwestern Federal District from 0.9524 to 0.9915, in the Southern Federal District from 0.6823 to 0.7807, in the North Caucasian Federal District, from 0.3664 to 0.6744, in the Volga Federal District from 0.7712 to 0.8331, in the Urals Federal District from 1.3648 to 1, 4028, in the Siberian Federal District from 0.62625 to 0.7635, in the Far Eastern Federal District from 0.6537 to 0.814.

Thus, the highest average level of fiscal capacity before and after the allocation of grants belong to the Urals Federal District -1.3648 and 1.4028 respectively, while the North Caucasian Federal District has the lowest average level of 0.3664 and 0.6744 respectively (Table 3).

### 4. CONCLUSION

With account for the Russian huge land area, the issue of disparity in its territorial development cannot be resolved in a short time. These disproportions have been comprised not for the years, but centuries. It is unfortunate that they have slightly reduced within last 25 years. This issue is undertaken by the Russian Government, attempts to develop primarily the eastern territories are made. Nevertheless, their advancement is challenged by the absence of economic and social infrastructure there, as well as communication routes of proper quality. First of all, this requires federal funds which are insufficiently invested for these purposes.

The districts themselves lack such resources in view of the current fixing the taxes by the levels of the budget system. Oil and gas reliance of the Russian economy does not direct it to the development of the economic sectors, although at present there is understanding of this issue that is related to the oil price downturn. The share of oil and gas revenues to the federal budget in recent years were more than 50%, which allowed the federal government to carry out such large-scale flow of funds through the budget system and without the development of other sectors of the economy. Moreover, all oil and gas revenues go into the federal budget. It is therefore essential to develop other sectors, especially industry, that may result in regular income to the budgets of all levels of the Russian Federation, not just to the federal budget.

We also suggest that such a number of subsidised districts, as there are now, cannot exist. According to the data for the year 2016, the proportion is 71/14 which, in our opinion, should be reversing as 14/71. Most frequently it is proposed to revise tax laws to secure additional taxes to the districts. However, the most developed districts may benefit from this proposal as the legislation base is applied to all the districts. The Constitution of the Russian Federation and the budget legislation stipulate the rule of equal rights, including the budget ones. Since 2005, combination of more developed districts with the "adjacent," less developed ones, has begun, but it has been recently suspended. It is assumed that this process should continue. Although, due to the large number of national formations in the Russian Federation, the issue of combining the regions is not always clear (or unfeasible), this will enable reducing the number of subsidized regions and contribute to the successful development of greater quantity of the Russian regions.

#### REFERENCES

- Adigamova, F.F., Safiullin, M.A., Tufetulov, A.M. (2014), Mechanism of state tax regulation in the global economy. Mediterranean Journal of Social Sciences, 5(24), 193-199.
- Arcalean, C., Glomm, G., Schiopu, I., Suedekum, J. (2010), Public budget composition, fiscal (de) centralization, and welfare. Canadian Journal of Economics, 43(3), 832-859.

- Dorling, D. (2015), Data on income inequality in Germany, France, Italy, Spain, the UK, and other affluent nations, 2012. Data in Brief, 5, 458-460.
- Kioko, S.N., Martell, C.R. (2012), Impact of state-level tax and expenditure limits (TELs) on government revenues and aid to local 174 governments. Public Finance Review, 40(6), 736-766.
- Kundakchyan, R.M., Garifova, L.F. (2014), Quality of life as a factor of socio-ecological and economic assessment. Mediterranean Journal of Social Sciences, 5(18), 95-100.
- Panasiuk, L.V. (2008), Problems of levelling financial maintenance of regions. Actual Problems of Economics, 11, 204-213.
- Roschupkina, V.V. (2013), Modern concepts of formation and development of tax capacity of the region. Life Science Journal, 10(12s), 742-745.
- Sabitova, N.M., Shavaleyeva, C.M., Nikonova, E.N. (2015), Horizontal imbalances of Russian federation budget system. Asian Social Science, 11(11s), 248-252.
- Velenteichyk, N. (2013), Congruence of interests of the center and regions in the course of intergovernmental relations regulation. Economic 183 Annals-XXI, 5-6(2), 37-40.
- Zhang, C. (2015), Income inequality and access to housing: Evidence from China. China Economic Review, 36, 261-271.