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**RATING OF REGIONAL DEVELOPMENT EFFECTIVENESS  
UNDER CONDITION OF LIMITED FINANCIAL RESOURCES**

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**Abstract**

The article is devoted to the problem of regional development under the condition of financial resources deficit. It is proposed to use the rating to evaluate the effectiveness of funding at the regional level. The analysis showed that existing ratings and evaluations are not enough to determine the actual level of development of the region with the financial position of all the sources. New rating which will show the financial attractiveness of the regions and federal districts has been proposed. Having used the proposed method, the rating of the financing efficiency of federal districts and different regions of the Russian Federation for the period 1990-2013 was formed. The results show that the policy of government financing at the sub-federal level has formed a huge disparity in living conditions and business activity in various regions of Russia; and more than that - the division of the country into federal districts is arbitrary and does not lead to any growth of efficiency in government funding management. The main reason of this situation is not in the amount of allocated funds, but in the wrong approach to the implementation of government funding. Developed rating allows assessing the performance of the federal districts and regions executives on the basis of changes in the level of efficiency during their leadership, as well as defining the most problematic areas and implementing its targeted project government funding.

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**Keywords:** Financial effectiveness; regional development; region's rating, government financing

## 1. Introduction

In condition of a crisis, the most important objective of economic research is to choose the right mechanism of government funding, which will allow sending limited resources to the key, nationally significant development projects.



The problem of distribution of financial resources and the role of finance in economic development is studied from different perspectives. For example, Noyer (2012, 2013) supposed that, despite the wish of countries to bring public finances on a sustainable development path, in most of them, there is no institutional framework for the implementation of such intentions, and, according to Krugman (2012), uncontrollable social processes are the main reason for modern financial crisis. The most drastic view on the impact of finance on the economic cycle is inherent to the neoclassical approach, which points to the uselessness and ineffectiveness of monetary and fiscal policy, arguing that "if all markets are efficient, then allocation of resources does not influence the ways of financing" see Wray (2011). Hence, the idea of deregulation of the financial system and the neutrality of money and finance occurs. Modern studies tend to focus on behavioral aspects of finance (Plikert, 2013) or on the impact of the instinctive behavior of participants (Fontan, 2013). Besides, these studies focus on the necessity to apply econometric techniques, which do not consider specific features of different countries or stages of their socio-economic development. At the same time, some authors tend to believe in a possibility of the financial systems combination (Samuelson, & Nordhaus, 1985), while others argue that contradictable national finances negatively impact on the economic development (Rajan, 2012; Borio, & Disyato, 2011; Ramos-Talladza, 2011).

## **2. Problem Statement**

We have considered several ratings which could be used to some extent in the implementation of government funding.

The first rating is called "An efficiency of regional executive authorities in the Russian Federation". The originator of the ranking is a Ministry of Regional Development (now abolished as superfluous). The ranking used 12 indicators: demographic situation, population, real sector of economics, small and medium enterprises, the amount of tax and non-tax revenues of the consolidated budget of regions of the Russian Federation, labor and employment, social policy, housing policy, health care, education, evaluation of activities of the executive power of different regions of RF by population, the prevention of child abandonment. The disadvantage of this rating is that there is no common index, which would consider aggregating data, so it is impossible to compare regions with each other. In our view, such rating that does not contain a general indicator, which aggregates considered data and can be hardly applicable for practical purposes, including the determination of directions of government funding at the sub-federal level in the context of limited financial resources.

The next rating is "An integral rating of governors". This rating is prepared by the Fund of Civil Society Development. The rating uses six thematic sections: basic (up to 75 points), a ratio of money incomes and expenditures of the population in a specific region (up to 5 points), a position of the region in the rating of social well-being of Russian regions (up to 5 points), the results of the questionnaire of "Public Opinion" Foundation (up to 5 points), a ratio of positive and negative information in media on the activity of the particular region head (up to 5 points), expert assessment of the effectiveness of regional heads (up to 5 points). Advantages of this rating include the presence of an aggregation rating index and a possibility of ranking all the regions, however, the rating is based on a subjective expert approach and has a significant political orientation.

The third rating that we have considered is "Creditworthiness rating of regions" which is prepared by the rating agency "RAEX" ("Expert Rating Agency"). For the purposes of this rating, each region is assigned to one of 4 types of forecasts (positive, negative, stable or growing). The procedure, in accordance with which the region (municipality) gets its creditworthiness rating assignment, includes an analysis of three blocks: socio-economic risks - the size and the structure of the economics, demographics, characteristics of the labor market, an infrastructure development level and a geographical location, investment climate; financial risks - balance of a budget and debt load; political risks. This rating gives us an opportunity to assess solvency of the region from the standpoint of attracting investment, but it is not applicable for the assessment of government financing.

The last one of the reviewed rating is an analytical study "Rating of investment attractiveness of Russian regions", which is also prepared by the rating agency "RAEX" ("Expert Rating Agency"). This rating uses two relatively independent characteristics: investment potential and investment risk. The investment potential of the region is made up of nine private potentials: natural resources, labor, production, innovation, institutional, infrastructural, financial, consumer, travel. The investment risk is determined on the basis of economic, financial, social, environmental, criminal and administrative risks. This rating focuses mainly on the external investor, and there are also no indicators for the integrated development of the regions.

The analysis showed that the ratings of regions compiled at present do not currently have a link with public funding, as to the directions of its implementation, as to determination of its effectiveness. Already existing ratings and evaluations are not enough to determine the actual level of development of the region from the financial position of all the sources.

From our point of view, it is necessary to evaluate not the competitiveness of the region, but the effectiveness of funding at the regional level, which in turn will form the financial attractiveness of the region in the future and will allow one to successfully implement targeted projects.

### **3. Research methodology**

We propose a new rating which will form the financial attractiveness of the region in the future and will allow one to successfully implement targeted projects. The procedure of this rating consisting of several steps has been developed.

Stage 1 - the selection and formation of indicators.

When choosing indicators, we were guided by the following principles:

- The availability and transparency of information;
- The exclusion of subjectivity in the assessment;
- Coverage of all components of the integrated development of the region;
- An equal quantity of indicators in each direction;
- The possibility of linking the areas of public finance and a specific indicator.

Six groups of indicators were identified on the basis of these principles:

Group 1: Demographic and labor indicators (total fertility rates, general mortality, infant mortality rates, life expectancy at birth, the ratio of marriages and divorces, migration growth rates; the level of economic activity of the population, the unemployment rate, the number of unemployed registered in

public institutions employment services, per one declared vacancy, the number of reported crimes per 100 thousand inhabitants).

Group 2: Social indicators (coverage of children with pre-school education institutions (EI), the average class size in the state and municipal daytime EI; graduation of skilled workers per 10 000 employed people; the number of students of state and municipal secondary vocational education institutions per 10 000 people; the number of students of high professional institutions per 10 000 people; the number of hospital beds per 10 000 people; capacity of medical outpatient clinics for 10 000 people; the number of doctors per 10 000 people; the number of middle medical personnel per 10 000 people; sickness rate per 1000 people).

Group 3: Economic indicators (GDP per capita; the index of the physical volume of a GRP product; the actual final consumption of households per capita in the Russian Federation subjects; the cost of fixed assets per capita; the degree of depreciation of fixed assets; the indices of industrial production; production indices by the type of economic activity "mining"; a production index by the type of economic activity "manufacturing"; indices of production by the type of economic activity "electricity production and distribution, gas and water"; agricultural production indices).

Group 4: indicators of living standards (income of the population per capita; the average monthly nominal wage of employees of organizations; the average size of pensions; the number of people with incomes below the subsistence level; average consumers spending per capita; the number of own cars per 1000 people; the total living area per 1 inhabitant; the number of viewers of theaters per 1000 people, the number of visits to museums per 1000 people; the publication of newspapers per 1000 people);

Group 5: Indicators of infrastructure development (density of railways for general use; the density of public paved roads; the proportion of paved roads in a total length of public roads; the number of road accidents and victims; the proceeds of communication services per capita; availability of residential PSTN telephones per 1000 people; the number of personal computers per 100 employees, the number of personal computers per 100 employees with Internet access, the retail trade turnover per capita, volume of paid services per capita.

Group 6: financial and investment indicators (input of dwelling houses per 1000 people; the specific weight of houses built by people at the expense of own and borrowed funds in the total input of housing; the specific weight of loss-making companies; investments in fixed capital per capita; the index volume of investments in fixed capital; consumer price indices; the price indices of industrial products producers; price indices of agricultural products and the purchase of goods and services of agricultural organizations; the producer price index in construction; the indices of tariffs for cargo transportation).

Stage 2. At this stage, we made a comparison of nationwide indicator and the indicator of a particular Federal district or of the federation subject and the value of 1 or 0 is given.

Comparison is performed using the function:

IF (log;[value\_if\_true];[value\_if\_false])

This function is used in two ways:

if the indicator has a positive value:

=IF (nationwide indicator <= Federal District indicator;1;0)

if the indicator has a negative value:

= IF (nationwide indicator >= Federal District indicator;1;0)

Stage 3. Formation of the final data for the period of 1990-2008 for each indicator separately, and then for each indicator from the selected areas.

Stage 4. Determination of the effectiveness of financing at the subnational level of the Russian Federation.

Stage 5. Forming the rating of the effectiveness of financing at the subnational level of the Russian Federation.

#### **4. Findings**

With the use of the developed method, we defined efficiency of the financing in federal districts of the Russian Federation for the period of 1990-2013 and formed the rating of districts (Table 1). For the calculation of the indicators, we used statistical data, published in a collection of Regions of Russia, Socio-economic indicators for the period of 2001-2015. Taking into account that the North-Caucasian and Crimean Federal Districts existing relatively to the starting date of the conducted analysis for a short period of time, then the North Caucasian Federal District is considered as a part of the Southern Federal District (since exactly in this district, all the subjects of the Federation were taken into account and separated then into two districts), and the Crimean federal District was not included in the analysis, since the Russian Federation had no relation to its financing until 2014.

**Table 1.** Rating of financial efficiency of FD for period of 1990-2013

Federal district	Demography	Social sphere	Economy	Standard of living	Infrastructure	Financial	Total score
Central	105	74	63	114	106	64	526
Northwestern	74	77	61	108	79	64	464
Far Eastern	49	83	61	55	70	92	410
Uralian	77	59	49	57	54	80	375
Siberian	41	94	38	18	42	80	312
Privolzhskiy	88	52	21	3	50	84	298
Southern	85	30	41	3	53	64	276

The leaders of the rating are the Central and Northwestern Federal Districts, the outsiders - Privolzhskiy and Southern Federal Districts, moreover the effectiveness of their funding differs almost two times, leading to social tension and negative economic consequences for the country as a whole. This indicates that equal economic and social conditions of living and doing business for Russian citizens in the various districts cannot be provided now. The main reason for this situation is not the amount of allocated funds, but the wrong approach to the implementation of public funding. Data on the effectiveness of the Central Federal District show that the greatest impact on the total number of points had Moscow city (547 points), the nearest subject of the Federation - Moscow Oblast had (391 points) and lag behind by nearly 30%, and Kostromskaya oblast lags behind more than two times.

Next, let us consider the effectiveness of financing in the Siberian Federal District (Table 2), which value as a source of natural resources cannot be overestimated, taking into account the modern structure of Russian exports.

**Table 2.** Comparison of effectiveness of funding for period 1990-2013 in Siberian Federal District

	Demography	Social sphere	Economy	Standard of living	Infra structure	Finance	Total score
Siberian Federal district	41	94	38	18	42	80	312
Altai Republic	55	75	36	16	22	74	278
Buryatia Republic	48	55	41	16	43	69	271
Tyva Republic	50	79	25	18	30	78	281
Hakasia Republic	43	57	31	43	18	69	261
Altai region	49	39	45	14	38	60	246
Zabaykalsk region	49	69	34	17	31	80	280
Krasnoyarsk region	52	92	44	81	62	73	404
Irkutskaya oblast	42	74	43	51	28	67	304
Kemerovskaya oblast	52	51	35	33	29	73	272
Novosibirskaya oblast	60	92	56	48	60	66	383
Omskaya oblast	78	72	39	22	23	67	301
Tomskaya oblast	59	81	59	51	47	71	367

The rating results show that there is a very wide gap - about 40% between the Altai region with its 246 points and the Krasnoyarsk Territory with 404 points, which certainly reflects the existing differences in the effectiveness of public financing aimed at the alignment of conditions of citizens living in its various regions. We believe that the formation of the development center is taking place in this macro-region, known as Krasnoyarsk region, which will contribute to an outflow of resources, including financial, to the current subject of the Federation.

## 5. Conclusions

The results of the proposed method applying show that the policy of government financing at the sub-federal level has formed a huge disparity in living conditions and business activity in various regions of Russia and more than that - the division of the country into federal districts is arbitrary and does not lead to any growth of efficiency in government funding management. All this indicates the fact that currently it is not possible to provide equal economic and social conditions of living and doing business for Russian citizens in different regions. The main reason of this situation is not in the amount of allocated funds, but in the wrong approach to the implementation of government funding. Thus, the efficiency of funding in some federal districts can be twice as much as in others, which leads to social tension and negative economic consequences for the country as a whole. In our opinion, this will lead to a further growth in

internal migration and transfer of a production from peripheral regions to central ones, especially to Moscow. So, we can see the formation of a closed cycle - the effectiveness of funding is caused by significant amount of financial resources and a previously created socio-economic base. As a result, the most comfortable conditions for living and conducting business are formed. Therefore, there is economic growth and economic development. This leads to a further increase of the financial resources accumulated in the budget of the city of Moscow. Then, the financial cycle repeats. It formed a self-reproducing financial system, a source of resources for which is the economics of the rest of the country.

In addition, the method, which has been developed, allows assessing the performance of the federal districts and regions executives on the basis of changes at the level of efficiency during their leadership, as well as defining the most problematic areas and implementing project financing to solve these problems.

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