

# Assessment of Budget and Tax Conditions for Ensuring Sustainable Development of Regions

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**Abstract.** The study of aspects of ensuring security, stability and sustainability of development does not lose its importance. The relevance of the study is enhanced by the circumstances of force majeure in the form of the development of a coronavirus infection that has engulfed the whole world, as well as the aggravated geopolitical situation. In view of this, there is a transformation of conditions that change the trajectory of sustainable development. In the aggregate of factors affecting stable development, fiscal is of particular importance, since the revenues generated in the budget are the material basis for covering the costs of implementing national projects, state programs, projects for the development of educational infrastructure, healthcare, transport, etc. It is revealed that, despite fluctuations in revenues from the oil and gas industries, tax revenues demonstrate progressive dynamics and are of priority importance especially for regional budgets. In order to maintain and improve this trend, it is necessary to expand the tax base (revenue potential) by attracting investors to the regions, increasing wages, reducing unemployment, and improving the demographic situation. In addition, it is necessary to change the institutional limitations of the fiscal powers of the sub-federal level.

## 1 Introduction

The term "sustainable development" first appeared in nature management in the middle of the XX century and was mentioned by experts in the field of fishing regulation. However, as the authors note, the idea originated a century earlier – from German forestry experts. In both cases, this concept is based on the meaning of reproduction, which has a continuous cycle. Later, the development of the formulation "sustainable development" acquired global proportions and began to be investigated within the framework of the problems of world ecology, as in 1987. The International Commission on Environment and Development has prepared the report "Our Common Future" and formulated the definition: "Sustainable development is a development that meets the needs of the present, but does not jeopardize the ability of future generations to meet their own needs". In 1992, at the Conference on Environment and Development in Brazil, the term "sustainable development" acquired an expanded interpretation and began to be used in a broad context, outside of environmental

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problems [1]. Currently, the term "sustainable development" is used comprehensively and its interpretation is revealed depending on the systems under study.

2 Materials and Methods

When performing scientific research, general scientific and private methods of cognition were used: observation, analysis, synthesis, analogy, comparative, statistical method. The data of the Ministry of Finance of the Russian Federation, the Accounts Chamber of the Russian Federation and other departmental information, including regional level, were used in the work.

3 Results and Discussion

The region is a complex specific system, controlled both internally and externally. However, like any system, it must be holistic and unified, striving for independence and sustainable development. Sustainable development of the region is a large-scale concept and may include:

- balanced development of all spheres of society;
- growth of the main regional economic and social indicators;
- proportionate development of technological resources in relation to natural resources

that contribute to improving the quality of life.

Taking into account all the above and within the framework of this study, it should be understood that the sustainable development of the region is a stable, non-static, progressive process characteristic of all its constituent subsystems, without mutual damage. However, sustainable development will be considered as such if the impact of negative factors is minimal and the balance is maintained.

The state and level of development of the region are predetermined by the influence of various factors [2, 3, 4]. A lot of research has been devoted to their study. So, Kuznetsova M.N., Yakimchuk N.N. rightly distinguish external factors: geopolitical processes and institutional and legislative foundations and internal – resource and regulatory factors. The former are determined by its geographical location and bioresource potential, and the latter depend on the management decisions made. In addition, there is a classification of factors according to the spheres of development of directions and processes that ensure sustainable development: economic, socio-demographic, environmental [5].

Sustainable development is impossible without a solid financial foundation. At both the federal and sub-federal levels, such a basis is the budget, the structure of which should be balanced: the income at the disposal should be sufficient to fulfill expenditure obligations in order to avoid a budget deficit (Table 1).

**Table 1.** Performance indicators of the consolidated budget of the Russian Federation for 2017-2022, billion rubles.

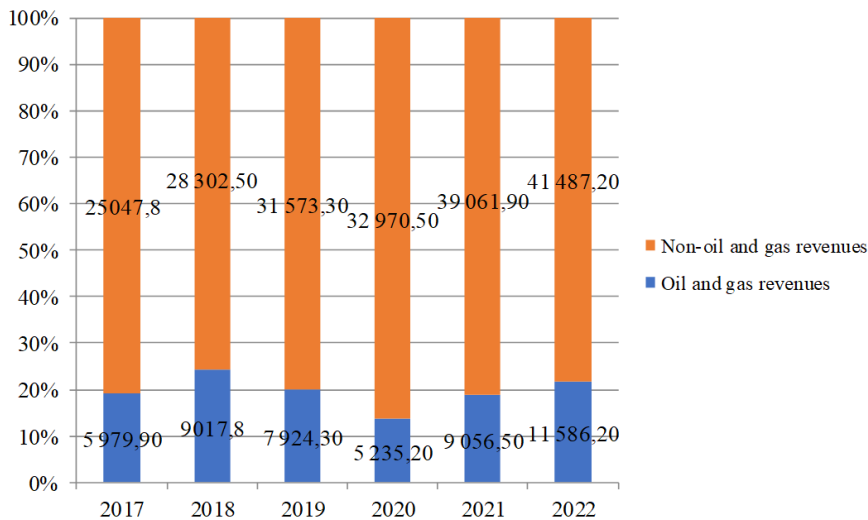
| Indicator                 | Execution for the period (year) |          |          |           |          |           |
|---------------------------|---------------------------------|----------|----------|-----------|----------|-----------|
|                           | 2017                            | 2018     | 2019     | 2020      | 2021     | 2022*     |
| Income, total             | 31,046.7                        | 37,320.3 | 39,497.6 | 38,205.7  | 48,118.4 | 53,073.8  |
| Expenses, total           | 32,395.7                        | 34,284.7 | 37,382.2 | 42,503.0  | 47,072.7 | 55,182.0  |
| Deficit (-) / Surplus (+) | - 1,349.1                       | 3,035.6  | 2,115.3  | - 4,297.3 | 1,045.7  | - 2,108.1 |

Source: compiled by the author according to [6].

\*Forecast values.

So, in the period from 2017 to 2022, there was a positive revenue trend. Revenues of the consolidated budget of the Russian Federation increased by almost 42% (22,027.10 billion rubles). A slight decrease is observed in 2020 compared to 2019, which is caused by the impact of "pandemic" shocks, stabilization in 2021 led to an increase in revenues by 9,912.7 billion rubles. The forecast values for 2022 also show revenue growth. At the same time, expenses are constantly growing, leading to a budget deficit.

The resource source of budget revenues is oil and gas and non-oil and gas revenues (Fig. 1).



**Fig. 1.** Revenue structure of the consolidated budget of the Russian Federation for 2017-2022, billion rubles (Source: compiled by the author according to [6]).

Analyzing the data on the revenue structure of the consolidated budget of the Russian Federation, we come to the conclusion that throughout the entire period under study (2017-2022), there is a positive continuous trend of growth in non-oil and gas revenues, in contrast to oil and gas revenues, which have an unstable revenue trend.

The consolidated budget of the Russian Federation is formed by the federal budget and the set of budgets of the subjects of the Russian Federation. It is in the federal budget revenues that oil and gas revenues accumulate (Table 2).

**Table 2.** Performance indicators of federal budget revenues for 2017-2021 and January-September 2022.

| Indicator                 | Execution for the period (year) |           |           |           |           |                             |
|---------------------------|---------------------------------|-----------|-----------|-----------|-----------|-----------------------------|
|                           | 2017                            | 2018      | 2019      | 2020      | 2021      | 2022<br>(January-September) |
| GDP, billion rubles       | 91,843.2                        | 103,861.7 | 109,193.2 | 106,606.6 | 131,014.0 |                             |
| Income                    |                                 |           |           |           |           |                             |
| billion rubles            | 15,088.9                        | 19,454.4  | 20,188.8  | 18,722.2  | 25,286.4  | 19,739.6                    |
| % of GDP                  | 16.4                            | 18.7      | 18.5      | 17.6      | 19.3      | 13.5                        |
| Oil and gas revenues,     |                                 |           |           |           |           |                             |
| billion rubles            | 5,971.9                         | 9,017.8   | 7,924.3   | 5,235.2   | 9,056.7   | 8,506.5                     |
| % of GDP                  | 6.5                             | 8.7       | 7.3       | 4.9       | 6.9       | 5.8                         |
| Non-oil and gas revenues, |                                 |           |           |           |           |                             |

| Indicator      | Execution for the period (year) |          |          |          |          |                             |
|----------------|---------------------------------|----------|----------|----------|----------|-----------------------------|
|                | 2017                            | 2018     | 2019     | 2020     | 2021     | 2022<br>(January-September) |
| billion rubles | 9,117.0                         | 10,436.6 | 12,264.5 | 13,486.9 | 16,229.9 | 11,233.0                    |
| % of GDP       | 9.9                             | 10.0     | 11.2     | 12.7     | 12.4     | 7.7                         |

Source: compiled by the author according to [7].

Federal budget revenue receipts in the period from 2017 to 2021 had a steady upward trend, decreasing slightly in 2020, which is also due to the weakening of business activity in 2020 due to covid restrictions. In 2021, oil and gas revenues increased by 42% compared to 2020 (from 5,235.2 billion rubles to 9,056.7 billion rubles). This was influenced by a number of factors: the change in the dollar against the ruble, world oil prices, the volume and structure of hydrocarbon production, etc. The share of oil and gas revenues has not exceeded 40% in the total revenue structure since 2019, falling below 30% in 2020. The tax on the extraction of minerals in the form of hydrocarbons occupies the main share in oil and gas revenues – 78.5%.

As for the expenditure part, social policy (27%), national economy (17.6%), national defense (14.4%) account for over 50% of federal budget expenditures.

Russia is characterized by a federal structure. The Russian Federation consists of 89 equal subjects of the Federation, including 24 republics, 9 territories, 48 regions, 3 cities of federal significance, 1 autonomous region, 4 autonomous districts. The subjects of the federation have their own administrative-territorial division. In addition, the subjects of the federation are united into federal districts (although this is not provided for by the Constitution of the Russian Federation) on the principle of territorial proximity.

The development of the subjects of the Russian Federation is uneven, since it depends on various factors: geographical, climatic, socio-economic, political, ethno-demographic, etc. Thus, in 2021, budget revenues of the constituent entities of the Russian Federation increased by 2,645.1 billion rubles (17.8%) compared to 2020. In comparison with the planned income indicators, the actual income received exceeded the planned indicators by 27.9% (Table 3).

**Table 3.** Execution of consolidated budgets of the subjects of the Russian Federation in 2019-2021, billion rubles.

| Subject of the Southern Federal District | Total income |          |          | Total expenses |          |          | Deficit / surplus |         |       |
|------------------------------------------|--------------|----------|----------|----------------|----------|----------|-------------------|---------|-------|
|                                          | 2019         | 2020     | 2021     | 2019           | 2020     | 2021     | 2019              | 2020    | 2021  |
| Russian Federation                       | 15,749.3     | 17,250.6 | 19,974.7 | 15,731.9       | 17,918.0 | 19,296.0 | 17.4              | - 667.4 | 678.7 |

Source: compiled by the author according to [6].

In general, during the analyzed period 2019-2021, positive income dynamics is demonstrated, which is observed in 83 subjects of the Russian Federation (for comparison, in 2020 – 80 regions). Thus, the Lipetsk Region (48.7%), Tyumen Region (42.8%), Vologda Region (38.9%), Kemerovo Region (38.2%), Belgorod Region (38.0%) became the leading regions.

In 2021, tax and non-tax revenues exceeded the indicators of 2020 and amounted to 13,649.7 billion rubles, which is 26.2% higher than planned (by 2,832 billion rubles), the dynamics was noted in 84 regions. The leading regions were: Lipetsk Region (74.1%), Kemerovo Region (62.9%), Vologda Region (62.5%), Belgorod Region (56.4%), the Republic of Khakassia (55.0%). However, only in the Chukotka Autonomous Okrug (-)8.6% there was a decrease in income (tax and non-tax).

In 2021 (compared to 2020), the share of tax and non-tax revenues in the revenues of the consolidated budgets of the subjects of the Russian Federation increased by 5.3% and amounted to 77.8%. Moscow, St. Petersburg, Yamalo-Nenets Autonomous Okrug, Tyumen Region, Khanty-Mansi Autonomous Okrug, Sakhalin Region, Moscow Region, Leningrad Region, Murmansk Region, and the Krasnoyarsk Territory generate their incomes by more than 85% due to tax and non-tax revenues. In 2021, tax revenues increased by 2,619 billion rubles (26.1%), and the growth was due to an increase in corporate income tax receipts by 1,602 billion rubles (4,529 billion rubles), personal income tax by 540,010.6 million rubles (4,791 billion rubles), excise taxes by 152,217.4 million rubles (950 billion rubles) and corporate property tax by 55,761.1 million rubles (965 billion rubles) [6].

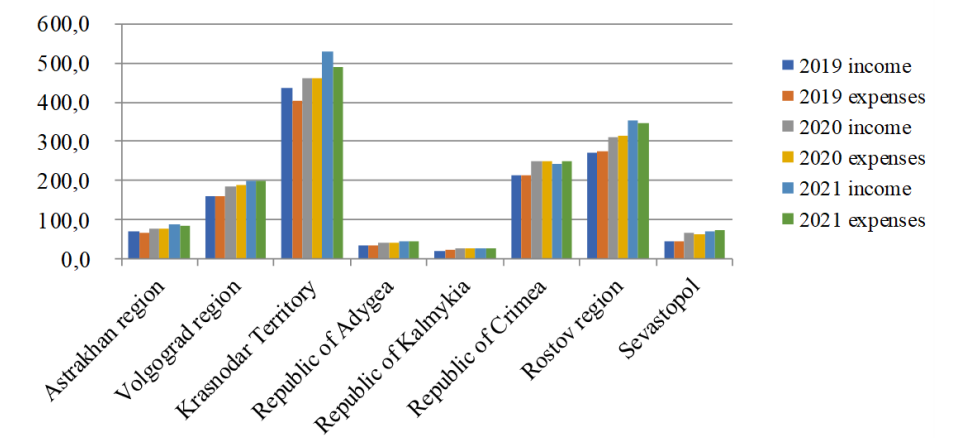
The Southern Federal District (SFD) is located in the south of the European part of the Russian Federation. The district includes: the Republic of Adygea, the Astrakhan Region, the Volgograd Region, the Republic of Kalmykia, the Krasnodar Territory, the Republic of Crimea, the Rostov Region, the city of Sevastopol. The administrative center is the city of Rostov-on-Don. According to Rosstat, the population is 16,635,215 people (almost 11.36% of the population of Russia), of which the economically active population accounts for 6,951,600 people, which is more than 9% of the economically active population of Russia, with most of the Krasnodar Territory and the Rostov Region.

**Table 4.** Key performance indicators of the consolidated budgets of the subjects of the Southern Federal District in 2019-2021, billion rubles.

| Nomination                | Total income |         |         | Total expenses |         |         | Deficit / surplus |      |      |
|---------------------------|--------------|---------|---------|----------------|---------|---------|-------------------|------|------|
|                           | 2019         | 2020    | 2021    | 2019           | 2020    | 2021    | 2019              | 2020 | 2021 |
| Southern Federal District | 1,253.2      | 1,414.8 | 1,559.6 | 1,221.3        | 1,423.5 | 1,517.3 | 31.9              | -8.7 | 42.3 |

Source: compiled by the author according to [6].

The revenues of the consolidated budgets of the subjects of the Southern Federal District over the past years (2019-2021) have demonstrated positive dynamics and different levels of income (Table 4, Fig. 2). However, there is also a trend in expenses, which leads to a deficit (2020). The leader in revenue is the Krasnodar Territory.



| Subject of the Southern Federal District | Total income |       |       | Total expenses |       |       |
|------------------------------------------|--------------|-------|-------|----------------|-------|-------|
|                                          | 2019         | 2020  | 2021  | 2019           | 2020  | 2021  |
| Astrakhan region                         | 71.3         | 77.4  | 89.3  | 66.3           | 79.2  | 86.1  |
| Volgograd region                         | 161.6        | 184.7 | 198.6 | 159.7          | 187.9 | 199.7 |
| Krasnodar Territory                      | 434.9        | 460.3 | 529.4 | 403.1          | 460.7 | 490.1 |

|                      |       |       |       |       |       |       |
|----------------------|-------|-------|-------|-------|-------|-------|
| Republic of Adygea   | 33.6  | 41.0  | 46.6  | 34.1  | 41.8  | 44.4  |
| Republic of Kalmykia | 21.6  | 26.4  | 27.2  | 22.0  | 28.4  | 28.4  |
| Republic of Crimea   | 215.4 | 249.5 | 243.9 | 214.2 | 248.7 | 249.4 |
| Rostov region        | 271.2 | 310.4 | 354.2 | 276.1 | 314.6 | 346.6 |
| Sevastopol           | 43.6  | 65.1  | 70.1  | 45.9  | 62.2  | 72.3  |

**Fig. 2.** Key performance indicators of the consolidated budgets of the subjects of the Southern Federal District in 2019-2021, billion rubles.  
Source: compiled by the author according to [6].

As for the execution of the budget of the Volgograd region, in 2021, as well as in 2020, it took place in difficult conditions due to the epidemiological situation of the pandemic and was adjusted, including taking into account in order to unconditionally fulfill obligations to provide medical care to the population.

In 2021, the consolidated budget of the Volgograd Region received 165.1 billion rubles of revenue, which is 8.3% more than in 2020. Tax and non-tax revenues were mobilized by 10.6% more. The increase in tax and non-tax income was mainly due to corporate income tax, excise taxes, as well as tax levied in connection with the application of the simplified taxation system (Table 5).

**Table 5.** Main indicators of the consolidated budget of the Volgograd region 2017-2021, billion rubles.

|                                  |       |       |       |       |       |
|----------------------------------|-------|-------|-------|-------|-------|
| Indicator / period               | 2017  | 2018  | 2019  | 2020  | 2021  |
| Income                           | 107.7 | 121.1 | 131.3 | 152.5 | 165.1 |
| including tax and non-tax income | 82.3  | 91.8  | 93.8  | 98.3  | 108.7 |
| Gratuitous receipts              | 25.4  | 29.3  | 37.5  | 54.2  | 56.4  |
| Expenses                         | 109.2 | 119.1 | 129.6 | 155.6 | 166.6 |

Source: [8].

In order to achieve national goals in 2021, 46 regional projects were implemented in the Volgograd Region as part of 11 national projects. Further strategic guidance is the preservation and further growth of the well-being of the residents of the region, the creation of comfortable living and working conditions, taking into account the needs of people in safety, comfortable housing, a high level of health and education, high-paying jobs, opportunities for self-development and self-realization, etc. [8]

4 Conclusions

Thus, assessing the fiscal conditions for ensuring sustainable development, it should be noted that the formation and execution of budgets took place in difficult conditions. Expenditure items in certain areas have increased: social policy, healthcare, defense, but this has not affected the fulfillment of expenditure obligations. The regions continue to develop federal and regional infrastructure projects. So, in particular, the following are being implemented: the national project "Safe and high-quality highways"; the national project "Ecology" ("Conservation of forests" and "Improvement of the Volga"); the subprogram "Energy conservation and energy efficiency improvement in the fuel and energy complex, agriculture and transport"; the program for the creation, development and maintenance of functioning systems for calling emergency operational services by a single number "112"; regional project "Formation of a comfortable urban environment"; regional project "Ensuring sustainable reduction of uninhabitable housing stock"; subprogram "Development of preschool, general education and additional education of children" of the state program "Development of education"; regional project "Promotion of employment" within the framework of the national project "Demography"; the subprogram "Support of

small business and development of agricultural consumer cooperation" of the state program "Development of agriculture and regulation of agricultural products, raw materials and food markets", including within the framework of the national project "Small and medium-sized entrepreneurship and support of individual entrepreneurial initiative; the regional project "Ensuring a qualitatively new level of infrastructure development in the field of culture" ("Cultural environment") and others. However, often the difficulties of implementing state programs are blocked not by the lack of financial opportunities, but by the complexity of competitive procedures or the irregularity of their implementation, violations by contractors of the deadlines for the execution of contracts, the lack of demand for social benefits, etc.

Budget and tax conditions make it possible to carry out planned projects, since the corresponding expenditure measures are provided with budget revenues. However, their implementation should be carried out not only with financial support, but also without harm to the environment and the population. So, in particular, during the implementation of large infrastructure housing projects, ecological and landscape conditions are violated (live plantings are cut down in order to clear the territory and install the foundation), transport accessibility of the population is limited during the formation and expansion of transport infrastructure.

Control over the expenditure of budget allocations is regularly carried out by the control and accounting bodies of the subject of the federation and municipalities, identifying shortcomings in implementation and financing. Despite the ongoing external challenges, the fiscal potential is increasing. State bodies monitor and optimize budget expenditures, identify reserves to increase revenue collection. However, the main global problem in providing income to the regions is the institutional limitations of the budgetary and tax powers of regional authorities and tax expenditures (falling tax revenues) [9], which is expressed in the lack of own revenue sources.

## References

1. Sustainable development: New challenges, Under the general editorship of V. I. Danilov-Danilyan, N. A. Piskulova, 336 (2015).
2. A. I. Ivolga, A. A. Chaplitskaya, Justification of the approach to the concept of sustainable development of the economy of the region, *Bioresources and nature management*, **6(1-2)**, 151-154 (2014).
3. R. R. Maksimovskikh, I. G. Piven, Factors of sustainable development of the region in modern conditions, *Economics and Business: Theory and Practice*, **9-1(67)**, 164-167 (2020).
4. N. L. Poltoradneva, D. A. Zavyalov, Development of the regional financial system as a factor of sustainable socio-economic development of the region, *Innovative economy and society*, **2(4)**, 80-85 (2019).
5. M. N. Kuznetsova, N. N. Yakimchuk, Factors influencing the sustainable development of the region, *Modern aspects of Economics. Collection of scientific articles*, 78-86 (2016).
6. Official website of the Ministry of Finance of the Russian Federation, <https://minfin.gov.ru/>.
7. Official website of the Accounts Chamber of the Russian Federation, <https://ach.gov.ru/>.
8. Volgograd region, <https://new.volgnet.ru/>.
9. N. Gorshkova, A. Dorzdeev, V. Ksenda, Reducing the Drop of Budget Revenues as a Factor of Sustainable Development of the Region, *Proceedings of the International*

Scientific Conference "Competitive, Sustainable and Secure Development of the Regional Economy: Response to Global Challenges" (2018).