Studying The Regional Features Of Socio-Economic Development The Stavropol Region.

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ABSTRACT

The current socio-economic situation of the Russian Federation is characterized by the presence of a number of negative trends and crisis phenomena that restrain the dynamic development and modernization of the country. These include regional differentiation and polarization, low rates of economic growth and incomes of the population, inadequate development of the market and social infrastructure, low investment activity, etc. All of these problems can not be effectively solved only at the federal level, an important role is assigned to the authorities of the constituent entities of the Russian Federation. It is in the regions that the economic, innovative, and human potential is created and reproduced. All this underlines the relevance of an effectively functioning system of regional governance. Overcoming the crisis in the country and its individual territories is impossible without eliminating the existing shortcomings and inconsistencies in the management system itself, manifested in the established sectoral approach to the formation of regional authorities, duplication of their management functions at hierarchical levels and ineffective interaction between them, insufficient competence of management personnel and, in general, the lack of a clear understanding of the functioning of the governance mechanism in federal districts. The aim of the work is to study and develop methodological and practical recommendations for improving the management of the socio-economic development of the region using the tools of analysis and forecasting.

Keywords: socio-economic development, dynamic assessment, Stavropol Region.

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INTRODUCTION

A very relevant research problem in the study of complex socio-economic systems is the improvement of methodological approaches to the management of various objects at appropriate levels of the economy. The diversity and lack of consensus about the need for their differentiated or integral application for the development and adoption of effective management decisions give particular importance to the integrated study of existing scientific approaches implemented in management [1].

Previously, scientists have formed various approaches, among which cybernetic (or systemic), synergistic, resource, structural, and reproductive-evolutionary [2] deserve special attention.

The essence of a systematic management approach is as follows:

Prioritization of the formulation of goals and the establishment of their importance for the management tasks;

- establishing in accordance with the results of a comparative analysis of alternative options, subject to the achievement of the maximum effect;
- the possibility of assessing the goals set and the means of achieving them on the basis of quantitative methods and criteria.

Currently, the result of scientific research and the development of a systems approach is a synergistic approach [3]. When solving organizational and management problems on the basis of a synergistic approach to the main tasks of the system transformation process, in a state with other qualitative properties, include:

- control of non-equilibrium parameters;
- creation of goal-oriented subsystems with signs of a new quality;

Stimulating the development of such subsystems to reach a critical level at which they acquire the ability for irreversible self-development;

- simultaneous suppression of growth or reorientation of anti-target subsystems;
- active structural and functional synchronization of subsystems of different hierarchical levels.

Another approach, which is no less important in solving problems of managing the development of socio-economic systems, is the structural approach [4]. The structural approach to management allows you to select a set of formal and informal, subordinate and coordination links, the amount of control and its models, various types of fragmentation of the system into separate parts and links. The use of this approach in managing objects at various levels involves taking into account and using internal potential to achieve goals, corresponding to the scale of centralization of management functions, a delegation of authority and responsibility [5].

The resource approach consists in the study of the object of management based on the synthesis of economic, organizational and managerial sciences; a distinctive feature is also the use of modeling methods to identify and describe general patterns for various processes characteristic of economic systems at various levels [6]. The practical implementation of this approach assumes that the effectiveness of the operation of the management object is influenced primarily not by the influence of factors of the external competitive environment, but by the use of management methods and corrective actions, their optimal combination [7].

At the basis of the reproductive-evolutionary approach lies the principle of dynamism of development, which involves the continuous improvement of the forms, methods, tools of systems management to meet changing market needs [8]. The reproduction approach to management allows us to more objectively determine priorities in the structure of the facility's operation, orient the mechanism of territorial management, calculate the need for material, financial and other resources [9, 15].

MATERIALS AND METHODS

In the process of studying the level of socio-economic development of the region, a methodology for systemic diagnosis of the effectiveness and efficiency of the socio-economic policy of the territories was tested, a distinguishing feature of which is the phased implementation in three main areas: economic, social and cognitive. One of the most essential tasks of the component assessment stage of the performance of the regional economy management system is to conduct a generalizing dynamic assessment of the Stavropol Region in terms of the level of development achieved.

For the practical implementation of the task, a system of indicative and factor indicators was formed in the context of the three studied areas (economic, social and cognitive), on the basis of which generalizing indicators of the development dynamics and efficiency of management of regional socio-economic systems were calculated.

The following system of indicative and factor indicators in the context of each of the three directions is proposed:

1. Economic direction.

The gross regional product per capita is used as a criterion indicator. GRP shows gross value added, calculated by excluding the volume of intermediate consumption from the total gross output. According to its content, it is a synthetic indicator characterizing the level of complex development of a region, therefore its value is influenced by many factors that are represented in the methodology under consideration by the following indicators: consumer price index, volume index of investments, receipts of taxes, fees and other obligatory payments , the coefficient of renewal of fixed assets, the proportion in the total structure of gross value added in industries such as agriculture, amplification of the manufacturing, wholesale and retail trade.
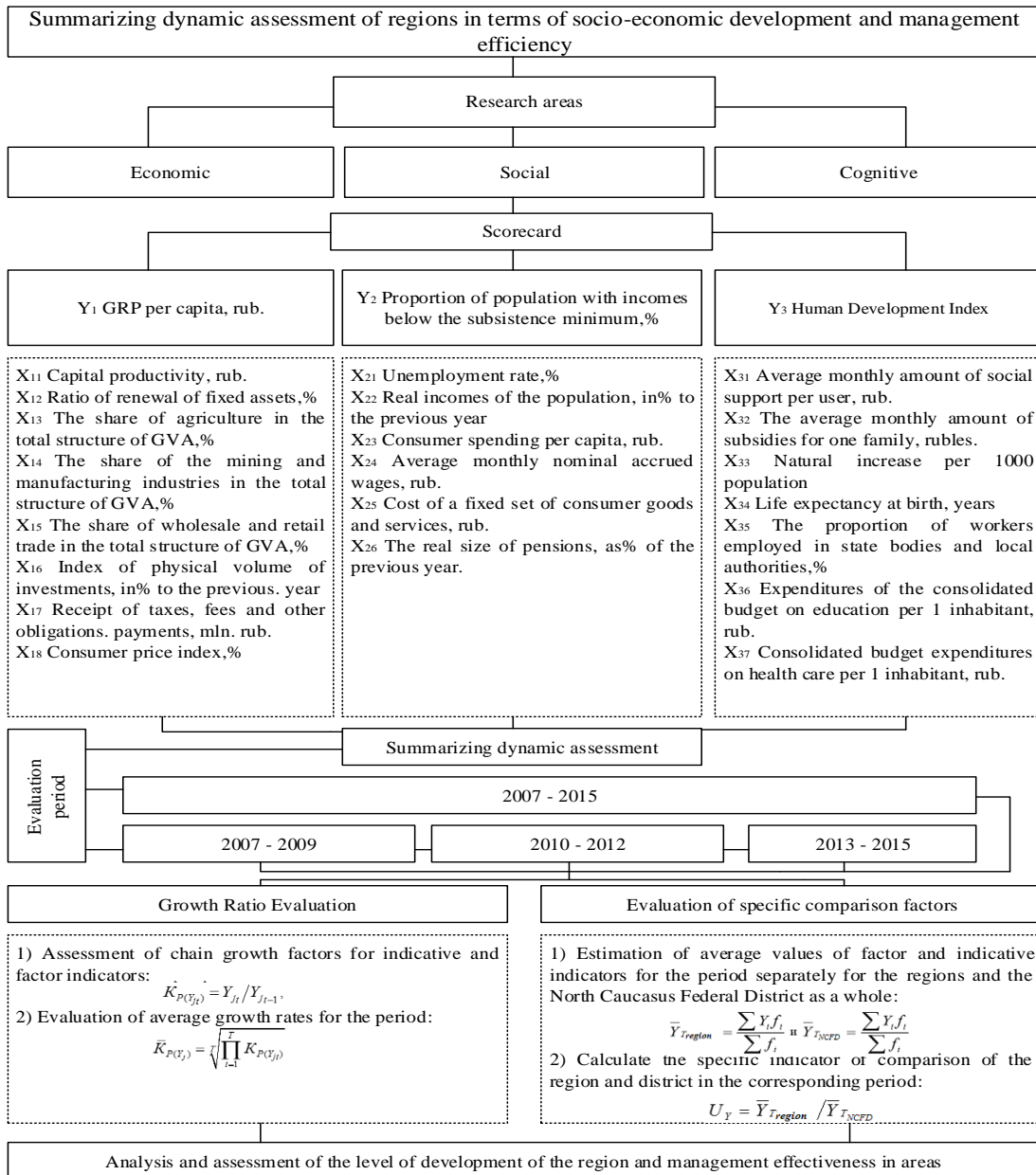
2. Social direction.

The indicative indicator is the share of the population with incomes below the subsistence minimum, as a generalizing indicator of the level and quality of life of the population of the region. The following indicators act as factor factors: unemployment, real pensions, real incomes of the population, average monthly nominal wages, consumer spending per capita, the cost of a fixed set of consumer goods and services.

3. Cognitive direction.

The human development index (HDI) is selected as an indicative indicator. The main factor indicators that determine the change in the value of this indicator include the following: the average monthly amount of social support per user, the average monthly amount of subsidies per family, the natural increase per 1000 population, life expectancy at birth, the proportion of government employees bodies and local governments, expenditures of the consolidated budget for education per capita, expenditures of the consolidated budget for health injury per inhabitant.

The algorithm of generalizing dynamic assessment of socio-economic development and management efficiency of the regions of the North Caucasus Federal District is presented in Figure 1.

Summarizing dynamic assessment of regions in terms of socio-economic development and management efficiency

Research areas

| Economic | Social | Cognitive |

Scorecard

| Y_1 GRP per capita, rub. | Y_2 Proportion of population with incomes below the subsistence minimum,% | Y_3 Human Development Index |

X_{11} Capital productivity, rub.
X_{12} Ratio of renewal of fixed assets,%
X_{13} The share of agriculture in the total structure of GVA,%
X_{14} The share of the mining and manufacturing industries in the total structure of GVA,%
X_{15} The share of wholesale and retail trade in the total structure of GVA,%
X_{16} Index of physical volume of investments, in% to the previous. year
X_{17} Receipt of taxes, fees and other obligations. payments, mln. rub.
X_{18} Consumer price index,%

X_{21} Unemployment rate,%
X_{22} Real incomes of the population, in% to the previous year
X_{23} Consumer spending per capita, rub.
X_{24} Average monthly nominal accrued wages, rub.
X_{25} Cost of a fixed set of consumer goods and services, rub.
X_{26} The real size of pensions, as% of the previous year.

X_{31} Average monthly amount of social support per user, rub.
X_{32} The average monthly amount of subsidies for one family, rubles.
X_{33} Natural increase per 1000 population
X_{34} Life expectancy at birth, years
X_{35} The proportion of workers employed in state bodies and local authorities,%
X_{36} Expenditures of the consolidated budget on education per 1 inhabitant, rub.
X_{37} Consolidated budget expenditures on health care per 1 inhabitant, rub.

Summarizing dynamic assessment

Evaluation period

2007 - 2015

| 2007 - 2009 | 2010 - 2012 | 2013 - 2015 |

| Growth Ratio Evaluation | Evaluation of specific comparison factors |

1) Assessment of chain growth factors for indicative and factor indicators:
$$\hat{K}_{P(Y_{jt})} = Y_{Jt} / Y_{Jt-1},$$
2) Evaluation of average growth rates for the period:
$$\bar{K}_{P(Y_j)} = \sqrt[T]{\prod_{t=1}^{T} K_{P(Y_{jt})}}$$

1) Estimation of average values of factor and indicative indicators for the period separately for the regions and the North Caucasus Federal District as a whole:
$$\bar{Y}_{T_{region}} = \frac{\sum Y_t f_t}{\sum f_t} \text{ и } \bar{Y}_{T_{NCFD}} = \frac{\sum Y_t f_t}{\sum f_t}$$
2) Calculate the specific indicator of comparison of the region and district in the corresponding period:
$$U_Y = \bar{Y}_{T_{region}} / \bar{Y}_{T_{NCFD}}$$

Analysis and assessment of the level of development of the region and management effectiveness in areas

Figure 1: Summarizing dynamic assessment of regions in terms of socio-economic development and management efficiency

The study was carried out in several directions:

1) analysis of evidence to identify changes in indicative and factor indicators in various regions of the district; 2) an assessment of the dynamic development of the subjects of the North Caucasian Federal District, identifying the main trends of their change in accordance with the value of average growth rates in the context of the periods under consideration; 3) a specific assessment of the contribution of each individual subject to the level of socio-economic development of the federal district as a whole.

RESULTS

The analysis of the three main directions of development - economic, social and cognitive - Stavropol Region on the basis of integral coefficients (Table 1-3).

Table 1: The generalized dynamic assessment of indicative and factor indicators of economic development the Stavropol Region

Indicators	Years			Average growth rate,%			
	2013	2014	2015	2007-2009	2010-2012	2013-2015	2007-2015
GRP per capita, rub. (Y_1)	172204	193489	217565	111,30	114,10	112,40	113,20
Capital productivity ($X_{1.1}$)	0,387	0,414	0,406	307,24	100,84	102,51	135,04
The rate of renewal of fixed assets,% ($X_{1.2}$)	9,025	9,795	7,407	89,59	123,20	90,59	100,98
The share of agriculture in the overall structure of GVA,% ($X_{1.3}$)	11,9	15	17,2	80,89	92,33	120,22	100,75
The share of mining and manufacturing industries in the total structure of GVA,% ($X_{1.4}$)	12,4	12,5	15,5	93,19	93,31	111,80	100,24
The share of wholesale and retail trade in the overall structure of GVA,% ($X_{1.5}$)	19,4	17,9	17	104,40	101,70	93,61	98,68
Index of physical volume of investments, in% to the previous year ($X_{1.6}$)	106,5	103,3	80	93,04	100,87	86,67	96,00
Receipt of taxes, fees and other obligatory payments, mln. rub. ($X_{1.7}$)	69743	72312	70060	106,08	111,84	100,23	107,80
Consumer price index,% ($X_{1.8}$)	106,7	108,6	114,9	98,43	98,12	103,77	100,26

Based on the presented data on economic development indicators of the Stavropol Region (Table 2), it can be concluded that both for the three-year periods presented, and in general for the period under review, the indicative indicator (GRP per capita) shows a steady upward trend - the average annual the growth rate in the region as a whole for the entire study period is 13.2%; in comparison with the NCFD, this indicator exceeds the average value by 22%. In many ways, this growth is caused by the growth of capital productivity (by 35%); Also, the receipt of taxes, fees and other payments to the federal budget and the budget of the Stavropol Region increased by 7.8% on average, with the largest average growth shown by this factor in 2010-2012 (the average growth rate for the period was 111.8%). The remaining factor indicators of economic development do not have a pronounced tendency to increase or decrease in their level; their changes are structural in nature.

Table 2: Summarizing dynamic assessment of indicative and factor indicators of social development of the Stavropol Region

Indicators	Years			Average growth rate,%			
	2013	2014	2015	2007-2009	2010-2012	2013-2015	2007-2015
The share of the population with incomes below the subsistence minimum,% (Y_2)	18,3	11,8	13,5	101,34	86,05	106,96	96,07
Unemployment rate,% ($X_{2.1}$)	6	5,6	5,6	115,69	88,47	100,00	98,15
Real incomes of the population, in% to the previous year ($X_{2.2}$)	102,9	108,8	92	94,77	102,11	91,96	97,26
Consumer spending per capita, rub. ($X_{2.3}$)	13201,7	17421	19265	118,87	119,47	105,16	114,38
Average monthly nominal accrued wages, rub. ($X_{2.4}$)	15588,7	20667	23245	120,93	115,00	106,05	113,16
The cost of a fixed set of consumer goods and services, rub. ($X_{2.5}$)	9313,5	10231,5	12817,3	114,27	106,12	111,93	110,42
The real size of pensions, as% of the previous year ($X_{2.6}$)	106,4	102,8	100,9	103,83	97,09	99,07	98,35

At the same time, other factor indicators of this block show either a pronounced negative trend, or an insignificant increase in their values; Thus, annual revenues increased on average by less than 1% over the study period, while in 2013-2015. The annual increase in consumer spending was 20.2%. As a positive one, we can note a tendency to reduce the cost of a fixed set of consumer goods and services by an average of 1.32% for 2007-2015, and as a negative one - a decrease in the real size of pensions by 4%.

Analysis of indicative and factor indicators of the cognitive development of the Stavropol Region shows that the human development index (HDI) shows a positive trend for the periods under consideration. As a result of a dynamic analysis of changes in factor indicators, it can be noted that over the period under review, spending on education (by 60%) and on health care (by 54%) per inhabitant increased in the region. In the region, the amount of social support per user has increased (almost 2 times) and subsidies per family (by 47%).

The increase in living standards in the Stavropol Region led to a demographic rise (the natural population decline was replaced by the natural population growth in 2012), and life expectancy at birth increased, on average, by 4 years (from 69.5 to 73.4 years).

Table 3: Summarizing dynamic assessment of indicative and factor indicators of the cognitive development of the Stavropol Region

Indicators	Years			Average growth rate,%			
	2011	2013	2015	2007-2009	2010-2012	2013-2015	2007-2015
Human Development Index (HDI) (Y_3)	0,808	0,828	0,826	101,80	101,31	99,90	103,39
Average monthly amount of social support per user, rub. ($X_{3.1}$)	814	926	950	125,87	150,42	101,29	197,72
The average monthly amount of subsidies for one family, rubles. ($X_{3.2}$)	1180	1488	1450	116,61	109,06	98,71	147,44
Natural increase per 1000 population ($X_{3.3}$)	-0,5	0,9	1,4	by 3,1 time	129,90	108,01	by 6 time
Life expectancy at birth, years ($X_{3.4}$)	71,57	72,75	73,36	100,59	100,80	100,42	102,70
Percentage of workers employed in government agencies and local authorities,% ($X_{3.5}$)	2,23	2,23	3,21	101,57	99,23	120,16	119,05
Expenditures of the consolidated budget for education per 1 resident, rub. ($X_{3.6}$)	7645,4	10367,8	11075,5	122,94	117,95	103,36	160,19

DISCUSSION

The study of modern approaches to management has shown that there are no absolutely universal, not without flaws, approaches. Each of them is aimed at solving a certain circle of managerial problems, they are also differentiated by the field of study [10, 11, 16]. Currently, there is a tendency of mixed use of several approaches to the management of objects at various levels, however, scientific research is not continued to develop and introduce into management practice a unified methodological approach aimed at creating and making management decisions adequate to problem situations, coordinating efforts object development [12, 17].

When considering indicators of social development of the region, it can be noted that the proportion of the population of the region with incomes below the subsistence minimum has decreased by an average of 4%. The unemployment rate, which has the greatest impact on the indicative indicator, fell by 3.1% compared

with the peak value of 2009 and now stands at 5.6%, which is more than 2.5 times less than the average value of the indicator in the North Caucasus Federal District as a whole [13, 14, 18].

CONCLUSION

The current socio-economic state of Russia is characterized by a large number of negative phenomena that constrain the dynamic development of the country. These include regional differentiation and polarization, low rates of economic growth and incomes of the population, inadequate development of market and social infrastructure, low investment activity, etc. [15].

When solving these problems, an important role is assigned to the authorities of the constituent entities of the Russian Federation, since it is in the regions that the economic, innovative, and human potential is created and reproduced.

A comprehensive study of the problems of socio-economic development at the regional level requires the use of large-scale diagnostics of important indicators of the development direction, in which three main ones were chosen - economic, social and cognitive - development directions.

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REFERENCES

[1]   Berezhnoy V.I.,Berezhnaya E.V., Gerasimov A.N., Gromov Y.I., Shatalova O.I. Systematic and subsistential analysis of the conditions of stable development of local mono-product markets.Life Science Journal; 2014, 11(8), pp. 596-599.
[2]   Bobryshev A.N., Golchenko Y.V., Kazakov M.Y. Directions of municipal territorial and economic transformation in a monopolar highly urbanized region, Actual Problems of Economics, 2014.152(2), pp. 230-238.
[3]   Bobrishev A.N., Kulish N.V., Tunin S.A., Sytnik O.E., El'chaninova O.V. Accounting and analytical procurement of business performance in an inflationary environment, International Journal of Applied Business and Economic Research, 2016.14(14), pp. 627-637.
[4]   Borodin A.I., Shash N.N., Tatuev A.A., Galazova S.S., Rokotyanskaya V.V. Model of control of financial results of the enterprise, Mediterranean Journal of Social Sciences, 2015.6(4S2), pp. 578-583.
[5]   Gerasimov A.N., Gromov Y.I., Pshenichniy P.P. Improving the management system for macroregion's economy. Actual Problems of Economics. 2015; 168(6), pp. 220-228.
[6]   GerasimovA.N.,GromovE.I., SkripnichenkoY.S. Development of localized in space economies in traditionally agricultural regions of Russian Federation. Actual Problems of Economics; 2014.156(6), pp. 264-276.
[7]   Gerasimov A.N.,Gromov, E.I.,Shatalova O.I. Implementation of econometric approach to determination of prospective directions in development of local markets of crop products. Actual Problems of Economics; 2014.156(10), pp. 456-465.
[8]   Korobeinikova L.S., Skripnichenko Y.S., Grigorieva O.P. Methodological approach to formation of centers of advanced socioeconomic development in agrarian sector of stavropol krai, Actual Problems of Economics, 2015. 165(3), pp. 188-195.
[9]   Tatuev A.A., Kutsuri G.N., Shanin S.A., Rokotyanskaya V.V., Romanova, S.V. Changing sources of investment of expanded reproduction of the Russian economy. Journal of Engineering and Applied Sciences, 2017.12(8), pp. 2045-2053.
[10]   Tatuev A.A. Building of the model of sustainable competitive advantages of the Region, International Business Management, 2015.9(7), pp. 1656-1663.
[11]   Tatuev A.A., Kiseleva N.N., Gukasova N.R., Tatuev A.A., Rokotyanskaya V.V. Features of international cooperation and development of bioeconomics and natural resource economics, RJPBCS, 2015. 6(6), pp. 1525-1533.

[12]   Tatuev A.A., Kutsuri G.N., Shanin S.A., Rokotyanskaya V.V., Ovcharova N.I. Formation of a new organizational and economic mechanism enhancing the functional role of population's savings in financing investments, Journal of Advanced Research in Law and Economics, 2016. 7(7), pp. 1858-1867.

[13]   Tatuev A.A., Rokotyanskaya V.V., Shanin S.A., Tatuev A.A., Moshchenko O.V. Socially-oriented operating principles of innovation policy in the regional economy, International Business Management, 2016. 10(16), pp. 3369-3374.

[14]   Tatuev A.A., Shash N.N., Nagoev A.B., Lyapuntsova E.V., Rokotyanskaya V.V. Analysis of the reasons and consequences of economic differentiation of regions, International Business Management, 2015.9(5), pp. 928-934.

[15]   Tikhomirov Y.A., Tikhomirov A.A., Tatuev A.A., Rokotyanskaya V.V., Budaeva V.A. Current situation and prospects of the national environmental economics, Indian Journal of Science and Technology, 2016. 9(18).

[16]   Truhachev V.I., Kostyukova E.I., Bobrishev A.N. Development of management accounting in Russia | [Desarrollo de la contabilidad gerencial en Rusia], Espacios, 2017. 38(27), 7.

[17]   Trukhachev V.I., Kurennaya V.V. Methodological aspects of system and hierarchal analysis of the oilseeds sub-complex of the regional agro-industrial complex: Risks and production and technological specificity, International Journal of Applied Business and Economic Research, 2016. 14(14), pp. 767-784.

[18]   Trukhachev V.I., Sklyarov I.Y., Sklyarova J.M., Latysheva L.A., Lapina H.N. Contemporary state of resource potential of agriculture in South Russia, International Journal of Economics and Financial Issues, 2016. 6(5), pp. 33-41.