

Development of the Siberian Federal District in the Transitive Economy

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Abstract. Siberia is the region with rich resource and infrastructure potential that is of strategic importance for the country. Highly fluctuated current economic environment presents new challenges that affect the key vector of region development. An economic infrastructure of the region with its traditional relationship structure is not able to accept and successfully overcome these challenges. This makes researchers seek effective ways of region infrastructure and economic relationship transformation so that it can withstand the challenges. The author sees the primary task of developing an optimal approach for region economic development modeling in determination of the factors and patterns that limit the economy development in the region. Based on the analysis of the nature and structure of factors and patterns, the economic relation model concepts, designed in accordance with system-network approach, are presented. The concepts may be useful while designing a new strategy for the Siberian Federal district development as well as for development of the constituent entities that comprise it

1. Introduction

The Siberian Federal district (hereinafter the SFD) is the second largest district in the Russian Federation. It is of strategic significance for the country regarding both ensuring national economic security and potential-building for its economic and social growth. The district role as a part of Federation has been the subject of research in academia for many years. On the one hand, it is the industrial region which significant economic development stages fall mainly on the Soviet industrialization era. During this period, economic and infrastructural (engineering, social and other) frameworks needed for its further development were built. On the other hand, this is the region with a great (almost unique) raw material capacity and is generating undying boundless interest to its potential. In spite of existing positive sustainable social and economic growth background, the region is showing negative tendency concerning current changes in key economic and social indicators that testify development rate reduction as well as economic activity decrease as a whole.

At present, various attempts to slow and stop this decrease as well as change the vector of current negative trends are being made. Such measures are taken both by the authorities of all levels (foundation of synergy and business support centers, incident management technology development, development of convergent technologies in management, strategizing region economy digitalization, etc.) and by business community (establishing a range of industrial business associations, partnerships and other institutions). Due to these efforts, there are certain positive changes in the region economy and its social sector. However, they are just a few and highly localized due to limited resources. In general, the situation is far from any drastic changes. This stimulates the scientific and business

environment to search for new approaches to economic and administrative relation construction in the region, that enable to create the most favorable conditions for economy development.

A lot of papers are devoted to the search and survey of potential approaches to modeling economic relations in the region with their construction and development peculiarities are to concern. Among them, in the context of present research, it is worth to mention the following areas:

- nature elements research of methodological tool for regional economic policy formation and implementation most deeply represented by Siberian scientific school representatives [1, 2], as well as Savinov L [3], Tugaroola P [4] and others;
- study of region internal and external environment fragments, including the current problems of social and economic development, governing legislation and other aspects is made by Ershov Yu [5], Moskvichev V, Taseiko O, Ivanova U, Chernykh D [6], Basareva V, Mikheeva N [7], Tsiganov S [8] and others;
- distinctive feature analysis for certain regional policy directions, done for the Siberian region as whole and for the constituent entities of the Russian Federation that comprise it, represented by Atanov N, Andronov A [9], Bozo N [10], Vladimirova O, Malova O [11], Elkin S [12], Ratkovskaya T [13], and others;
- certain transitive economy aspects and their impact on regional development are explored by Gordeev O [14], Lyasnikov N, Usmanov D, Magaramov M, Omarova Z [15], Mordvintsev M [16], Sankovets A [17], and others.

With certain formalization global goals, search for any suitable region development model is aggravated by the influence of transitive economy factors. By the present, they have moved to the next evolution stage, with the state-wide intensification of project approach implementation and execution as their determinants, as well as with state policy strengthening in the field of national security and spatial development within the state.

2. Siberia development problems, factors, and patterns

The modern mechanism of certain transitivity factor coordination as well as developing region economic and administrative relation target model, that meets the needs of the area economy, steps as social and economic development strategies for the country, Federal district, and regions included. The Russian Federation constituent entity development strategy is based on the Federal and District strategy postulates, though taking into account estimated population needs.

Table 1. Parameters of the development of Siberia^a

Indicator	2010	Rank	2015	Rank	2018	Rank	2020 target
GRP, billion RUB	4131,4	5	6821,6	5	8020,3	5	↑ 1,6 times
Investment volume, billion RUB	890,0	5	1383,1	5	1574,0	5	↑ 2,3 times
Salary, RUB	18454,5	5	29616,0	5	37420,0	5	↑ 1,8 times
Per capita income, RUB	15007,0	6	23569,0	7	24088,0	7	↑ 1,8 times
Population, million	19251,9	3	19324,0	3	17201,7	3	↑by 600-800 thousand

^a Compiled on the basis of [18], in actual prices

Initiation and organization of finished goods manufacture in Siberia or neighboring areas, that enable to realize its potential, is the relevant development direction, insert in all Siberian region strategies. Dynamic development of the service industry, focused on local population's real interests and needs is a simultaneous and essential development condition.

The Siberia economic and social development strategy, designed up to 2020, was approved in 2010. For this ten-year development period, the annual growth of such indicators as GRP, industrial production, investment, salary, per capita incomes, as well as population growth was determined as the main criteria for region economy transformation. The table presents preliminary realization assessment for key development indicators and their dynamics based on the statistical data.

Despite the obvious positive trend in indicator dynamic, district development data demonstrate impossibility of achieving the strategy target criteria by the deadline, with an inflation factor in value figures. There may be several reasons for this situation. First of all, this may be due to the complexity of quantitative development goal description in itself. A major number of strategic development parameters are estimated mainly by expert means with a certain share of statistical analysis and forecasted data insert. There is no living standard system, differentiated according to the regional relevance, that enables to "link" the region economy to its population needs.

On the other hand, it's worth to mention the problems that are directly related to the livelihoods in the region. Deep-in analysis of the social and economic situation in the region enables us to reveal and group the main localized regional development problems:

- economical: budget policy is mainly oriented on current problems in the social sphere, a big innovative development gap with an average-country level to compare; high regional differentiation, a low level of the territory's transport development, slow pace of old tangible assets modernization; machine-building complex development does not meet the region domestic market needs; insufficient intensity of institutional reforms and low competitiveness of the agro industrial complex; predominantly costly utility sector's nature; small business structure inadequacy to human resources qualification and the large industrial enterprises needs, etc.;
- social: the education system is poorly adapted to the regional labor market requirements; the insufficient level of health care system adaptation to the territorial disease specificity; a significant share of shabby and hazardous dwellings; social welfare system targeting implementation is fragmented with urban consumers domination, etc.;
- organizational and managerial: weak internal integration links, insufficient common economic space development; implemented sub-Federal authority models, for the most their part, are not quite relevant to the economy needs; weak coordination of business actions concerning local depressed and old industrial areas; lack of formal rules and regulations of interaction between the government and business structures (that is essential in terms of building a system of relationship with corporations, investors and large business), weak federal and regional development strategy synchronization tools, etc.

In the strategies and programs of Siberia area economic and social development, the implementation mechanisms provide the use of an organizational, economic and legal measures set on the basis of: the "business and society balanced interests" principle, the presence of certain participants' action coordination (for authorities, business structures, public organizations, investors, etc.), monitoring changes concerning current situation and solving regional problems. However, they didn't become an effective tool in solving problems due to a number of factors:

- natural and geographic – natural and climatic conditions, leading to the rise in living and running-a-business costs; location, that imposes difficulties in goods and services promotion to the other regions of the country and abroad, etc.;
- economic – lack of financial resources, both budgetary and off-budgetary; low interest in increasing business activity among business entities, a considerable share of obsolete fixed assets, etc.;
- demographic – significant depopulation; high population ageing pace, negative trends in the working-age population migration flows, etc.;
- technical – low level of information and digital technologies implementation in the region in comparison with the European Russia; insufficient quantity of high-performance jobs, low innovative technology implementation intensity, etc.;

- organizational and managerial – maintenance of the resource-oriented economic policy priority, coupled with the need to establish current viability of the regional economy as a whole, as a result, innovative and structural components of the region economic policy does appeal to businesses, investors, and officials in the nearest and remote prospects, etc.

Continuity and intensity of listed factors influence, predetermined impossibility of systematic and timely solution of the mentioned problems in the region economy. This contributed to building of repeated and then established phenomena in the district economy– patterns that are currently presented by the following main manifestations:

- structural asymmetry of the district economy, accompanied by economic space fragmentation in relation to the "optimal unity" formation and inner relations;
- economic and social policy is characterized by the reduction of economic functions at all management levels as well as public functions strengthening, even the dominance in some areas;
- longer time lag of an economic sector diversification process;
- suppression of economy transformation processes by the raw-material-focused orientation, that proceeds from the current functioning tasks at the expense of strategic development interests;
- investment activity formation vertical model permanence (under the administrative principle influence), as a result, and region attractiveness, which ultimately determine a significant reduction in the investment potential as a driver in the entire economy development of the region.

The presented patterns form a kind of barrier in development, and don't enable reaching the target indicators and moving to the next economic level – full-scale components development of the fifth tenor of technology and basis preparation for sixth tenor of technology development. Based on the presented circumstances, the key element in ensuring region economy upgrade, in the author's opinion, is its economic space and stakeholder interaction organization quality (authorities, business structures, population, and investors).

3. Prospective ways of district development vector transformation

Modern economic and social development and certain objects and areas management theory and practice offer many options for regional space modernization [2]. Its goal is to increase adaptability to the existing and potential challenges. In addition, they can significantly improve its basic economic and social performance with changing environment and limited resources at place.

One such approach is network management. It contributes not only to the formation of organizational and managerial orientation mechanisms, but also of economic orientation, within the framework of a single time-space and digital-informational platform of multi-leveled area developing constituent entities interaction [19-25].

In accordance with the key scientific network management provisions and their usage results in various fields, it becomes possible to identify the main district development management concepts in line with network technologies. Thus, the general goal of network management using, with the district specific characteristics, counteracting declining industrial production trends and creating conditions for the economy stabilization must considered as the most optimal. In this regard, the basic goal implementation principles will be: implementation of area economic regulation not within the selective policy but mutually beneficial interaction policy framework; institutional framework upgrade that enable to implement the economic space fragments unification; economic entities collaboration not as a goal, but the means of achieving economic development objectives.

To solve the existing problems on the network management basis, it is necessary to perform methodological, regulative and financial support of cooperation within the Siberian Federal district, in particular:

- developing collaboration guidelines and unified contracts;

- developing material and financial flow formation, shifting and control methods in the economic collaboration context;
- creating investment environment for solving inter-regional and inter-municipal tasks and problems (within the district);
- developing the organizational structure of the department of ensuring collaboration efficiency between regions, municipalities and business structures, investors within the Siberian Federal district boundaries.

4. Conclusion

The presented approach to region development management will enable to shift from point-object management to system-network management. This approach will enable not only to achieve the target quantitative indicators, but also to form positive qualitative features of the region economic space. The latter are the key to the effectiveness of future strategic reach-to points in Siberian Federal district development and its presentation as a reliable platform in ensuring the country economic security. Due to particular significance of regional development management concepts implementation, the approach implementation should be performed not only by the Siberian Federal district administrative and managerial apparatus representatives. The initiation and start of the recommended approach implementation in the region economic practice should be resulted from the district, sub-federal and municipal authority collaboration, as well as the business community collaboration.

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