

Quality of Investment Processes in the Regions

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Abstract—The article examines the theoretical and practical aspects of ensuring the quality of investment processes in the regions. The main areas of investment in the regions are identified, which include modernization, diversification, innovative development and intensive growth of socio-economic systems. The investments were divided into economically-oriented and socially-oriented groups, which differ by the principle of obtaining direct or indirect financial effect. The concepts of investment capacity and investment potential of the regions are defined. The causes and factors that affect occurrence rate of investment dead ends are identified. The influence of investments on the stability and security of regional development is shown. As an example, the provision of economic, energy and food security is considered

Keywords: *region, investment processes, quality, capacity, potential, modernization, diversification, innovation, intensive growth, economically-oriented investments, socially-oriented investments*

I. INTRODUCTION

The ideology of Russian economic development is still on its way to becoming. While the construction of a competitive market economy has been the common attraction of development over the past 30 years, the priorities, mechanisms and instruments of economic policy that are the basis for the implementation of the ideology of development are changing with the times.

The current stage of the development of the world economic system can be described as a stage of the formation of a mixed innovation and information economy. We can

consider the combination of high rates of innovative changes with the increasing rate of digitalization of life and the emergence of artificial intelligence systems in aid of the development of mankind as the main difference of this type of economic systems.

The growth strategy involves the choice of the economic paradigm underlying development.

Unlike most states with a developed market economy, characterized by, inter alia, mature economic space of states, developed infrastructure, and mostly established and relatively stable specialization of territories and states in the division of labor, Russia is still in the process of dynamically transforming the structure of its economy.

The specificity of the Russian economy lies in the presence of a large resource potential for development, as well as an undeveloped economic space of the state, which makes it possible to use both intensive and extensive factors in ensuring economic growth.

In shaping investment processes in the regions, questions arise about the state's interference in the economy:

- whether the state should generate business ideas and initiate its creation;
- whether the management should support any spontaneous "out-of-program" investors;
- whether the state should analyze the potential of the region, predict market conditions and innovative changes (including goods and services) and provide

business with information for searching for market niches.

In theory, all three options are feasible; it all depends on the choice of areas of responsibility, the availability of intellectual and financial potential.

It is necessary to say that the state cannot and should not "curate" and, even more so, finance all the projects for the development of the real sector of the economy. Private businesses, especially small ones, have every right to develop independently, financing investments at their own expense and borrowing, without resorting to budgetary support.

However, it raises the methodological question of the state's awareness of business strategies. The fact is that if they are not taken into account, it is possible to create competition between private and public investments in specific projects, which will eventually lead to the inefficient expenditure of budgetary funds.

Adapting to innovative changes and lack of confidence in the final correctness of the chosen development model leads to the fact that both the social sphere and the sector of the real economy of Russia are in constant transformation, requiring large investment.

We need to note that Russian regions have, on the one hand, some common investment tendencies, and on the other hand, investment specificities based on the influence of certain factors. In this research we will reflect on the specifics of investment development in the Republic of Buryatia.

II. LITERATURE REVIEW AND METHODS

Various aspects of investment processes were considered in the works of such foreign researchers as K. Arrow, J. Bright, J. Clark, E. Domar, R. Harrod, G. Hubler, F. Kene, J. Keynes, R. Lucas, C. Marx, A. Marshall, D. Ricardo, P. Romer, P. Samuelson, W. Sharp, A. Smith, R. Solow, J. Schumpeter, J. Tinbergen, A. Toffler and others. It should be noted that the main directions of modern research of investment processes abroad are global markets and macroregions, as well as social and behavioral aspects of investment activity.

In Soviet and Russian science, investment processes are mostly viewed from the perspective of managing socio-economic development and developing the economic space.

S. Glazyev [1], A. Granberg [2], S. Gusev [3], A. Kudrin [4], V. Mau [5], P. Minakir [6], V. Polterovich [7] and other authors in their works consider the role of investment in models of economic growth, socio-economic and spatial development of regions. The issues of economic security of Russia and its regions were considered in the studies of L. Abalkina [8], I. Minevrina [9] and other economists. The directions of investment in the regions are studied in the works of O. Berezinsky [10] and other authors. Specific aspects of the development of investment processes in the regions united by the presence of the World Heritage Site - Lake Baikal, were considered by L. Slepneva [11] and other researchers in their works.

These works, as well as the works of other authors, served as the scientific basis of the study.

As the main methods for achieving the goal and objectives of this study we have used systemic and structural analysis of economic processes, methods of expert assessments and forecasting methods.

III. RESULTS AND DISCUSSION

A. *Formation of quality of investment processes and management of investment restrictions*

Understanding of the quality of investment processes is based on the related expectations and the methodology of design development.

The development strategies, according to the authors, are based on the idea of possible advantages (preferences) and solving emerging problems in the process of achieving development goals.

One of the key problems of the development of Russian regions is the formation and use of their economic potential. With large reserves of economic, social and environmental resources, regions cannot turn them into potential and then continue to use them as production assets for a number of reasons.

The economic potential of territories, as the main domestic source of financial resources in most regions of Russia, does not correspond to the required for independent development.

The limited capacity has arisen as a result of trends in regional economies and social sectors, including regulatory and managerial ones.

The paradigm of uniform development of regions, characteristic of the days of the planned economy, has been replaced by the paradigm of competition of regions for the development of economic potential.

In Russia, uneven spread of raw materials between territories have played the main role in the stratification and differentiation of regions by financial resources.

The presence of restrictions of economic potential forms the responsibility of the state for the development of such regions. These include, first of all, regions with special economic conditions due to environmental restrictions, transport and communication problems, climate, border areas.

In these regions there should be processes of interactive convergence of interests of external and internal subjects of regional development. Thus, the state and corporations should compensate for the implementation of projects reflecting development strategies based on the exhaustion of natural resources through the development of the financial resources of the regions.

Compensation mechanisms are tied to the integrated use of the territory's economic, social and financial resources.

Thus, the general concept of ensuring the quality of the region's investment processes can be formulated as the formation of high rates of economic growth, aimed at

improving the competitive position with the most efficient use of unique economic, environmental and social resources and preferences of the region through increased activity of society, business and state.

The structure of investments in the regions depends on their focus on economic, social or environmental development, which leads to an increase in the output of a regional product [12].

At the same time, we should note that the efficiency, and therefore the quality of investment processes, depends on the restrictions, the main of which are determined by the investment policy of the state and business, as well as information barriers.

$$\Delta Y = (Aec \cdot \Delta Iec + Aso \cdot \Delta Iso + Aen \cdot \Delta Ien) \cdot Binv \cdot Binf \quad (1)$$

where Y is change in development result, Aec , Aso , Aen are coefficients of impact of economic, social and environmental investments on development, ΔIec , ΔIso , ΔIen are growth rates of economic, social and environmental investments, $Binv$ is influence ratio of localization (removal) of restrictions from investment policy on development, $Binf$ is influence ratio of localization (removal) of information restrictions on development.

The main task of the state in ensuring the quality of investment processes is to determine the optimal proportions between social, economic and environmental investments, as well as to remove the restrictions on their implementation as much as possible.

Despite the fact that the legislation on investment activities in Russia began to form in 1992, the authorities consider it important to adopt a federal law "On the protection and promotion of investment and the development of investment activities in the Russian Federation" [13], which will undoubtedly contribute to the improvement of the investment climate, the trend towards improvement of which has manifested in 2018 and was recognized by the world rating agencies through the increase in Russia's investment rating.

B. Investment direction and economic growth

Economic growth is defined by both product consumption, exports, imports and government spending, as well as increased investment.

$$\Delta Y = \Delta (Ctr + Cin + E - J + G) + \Delta (I mod + I int + I inn + I div) \quad (2)$$

where Y is the level of economic activity; Ctr , Cin are consumptions of traditional and innovative goods and services; E is exports; J is imports; G is government spending, $I mod$, $I int$, $I inn$, $I div$ are investments in modernization, intensive, innovative and diversification development.

Consumption of innovative and traditional goods and services reflects the degree of innovation of the state

economy. In this case, the growth of the share of innovative products is a target for development.

The quality of investment processes is determined both through the results of the investment, taking into account the time lag from the investments of the past period, and the expected results of future periods. And they depend to a large extent on the direction of investments.

Investment processes in regions from a directional point of view can be divided into investments in modernization, intensive development (expansion), innovation, and diversification of activities.

TABLE I. REQUIRED INVESTMENT IN DEVELOPMENT, IN RELATION TO EXISTING PRODUCTION CAPACITY, %

Sector	Modernization	Extension	Innovation	Diversification
Education	20	20	15	10
Healthcare	20	20	20	10
Culture	15	10	15	5
Heat, water supply	40	20	40	10
Transport	20	20	15	10
Communication and Internet	15	10	15	10
Trade	10	5	10	5
Industry	30	20	30	20
Construction	25	10	20	10
Energy	25	15	20	20
Agro-industrial complex	25	20	20	10

The authors' analysis of the financing needs for investment in regional sectors of the economy shows high development needs.

The need for modernization is related to the high accumulated depreciation of fixed assets, the level of which in some industries is critical, due to the inefficient depreciation policy of enterprises in the optimization of costs during the crisis, as well as with policy of withdrawing financial resources from enterprises as a strategy of owners.

The need for intensive development in the social sphere is mainly related to the lag behind the real demographic situation, which has improved significantly in a certain period, although it is now in a downward trend, including due to the high migration outflow of the population [14].

In the real economy and services sector, the need for intensive development can be attributed to the region's strategic goals for economic growth.

The need for innovative development is linked to the lag of technology and equipment used behind the majority of the world in most sectors of the regional economy.

Finally, the need for diversification development is determined by the need to improve competition and ensure sustainability and stability of development. In addition, it is necessary to expand the list of goods and, especially, services of local manufacturers presented to consumers.

C. Economic and social orientation of investments

All investments in the regions can be divided into economic-oriented and socially oriented groups, differing in terms of efficiency and, above all, the principle of obtaining direct or indirect financial effect.

Economic-oriented investments are aimed at economic growth, including indicators such as added value, strategic long-term profitability, market development and demand satisfaction, cumulative and multiplier effects, growth in the share of innovative products, etc.

If the Republic of Buryatia wants to remain a significant part of the world's corridors, we must facilitate the development of transport, energy and communication infrastructure on a global level [15, 16, 17]. At the same time, the most important task for Buryatia is to develop not only the magistral, but also its regional and municipal infrastructure.

The development of the agro-industrial complex can be attributed not only to the traditional specialization of our region, but also to the availability of sufficient resource capacity, as well as the need to develop economic activity in the countryside to reduce the problem of migration, depopulation and decrease of the economic space of the republic.

It is also necessary to take into account the unique resource of Buryatia, which distinguishes our region (and Irkutsk region) from other regions of Russia. This is the presence of Lake Baikal. The status of the world natural heritage site imposes on the republic not only duties, but also preferences for the development of the economy, including the organization of environmentally friendly tourism. The resources of archaeological, historical, ethnocultural, religious and other tourism areas are barely used right now. This is a fairly attractive base for development.

This group of investments is realized primarily in the real sector of the economy, although social investments in health, education, culture and other sectors are also carried out by private enterprises and are primarily purely commercial in their assessment and choice.

In some activities, the state has transferred the possibility of providing services to private business either in full or as part of the extra capacities.

This applies to pre-school, general and secondary education, healthcare, mainly diagnostic and dental services, almost all areas of culture, physical education and sports. The state and municipalities have reserved only the mandatory services assigned to them.

Socially-oriented investments are aimed at increasing employment, quality and living standards of the population, improving the environmental situation. Socially oriented investments mainly go to the development of social infrastructure.

Another area of socially-oriented investment is the creation of a comfortable living environment for the population. The financial effect in this case may also manifest in the strategic

period, and in the case of budgetary investments may be indirect through social indicators.

Industry, transport, tourism, agriculture, energy and trade should be the main sectors for innovative environmentally oriented development. Mandatory introduction of environmental standards, the formation of a system of regional environmental control and monitoring, the use of the best technologies, should be a priority of investment development.

D. Investment capacity and investment potential of the region

To analyze the quality of investment processes in the regions, we will introduce concepts of investment capacity and investment potential.

The region's investment capacity reflects the current and strategic needs in investment in the region's economy. To calculate the capacity of the market we use two methods: the demand of business and authorities for investment, or the supply of investment resources.

Nominal investment capacity is the required amount of financing for all declared projects without their ranking, correlation and selection by efficiency. Naturally, after passing all these procedures, the nominal capacity turns into a real investment capacity.

It is clear that real investment capacity is not necessarily realized during the development and implementation of strategic development programs in the region and its industries [18].

Many development projects remain unfunded due to insufficient state support resources and banking resources. There is a very important problem of prioritizing projects and improving the selection system, especially in the case of innovative businesses that often require venture funding.

Investment potential reflects all possible alternative areas and investment projects.

To that extent, the concept of investment potential is based on an estimate of the value of all the elements of the region's national wealth, when used most effectively.

It is clear that investment potential is rather a virtual indicator, characterizing the maximum economic attractiveness of the region for investors.

The high quality of investment processes in the regions means maximizing the convergence of investment capacity and potential on the basis of localization of restrictions or their elimination, as well as the use of investment preferences of the region.

E. The problem of "investment dead ends"

To analyze the quality of investment processes, we will introduce the concept of "investment dead end" as a wrong direction of investments that has not achieved goals or has not brought the necessary indicators of efficiency.

The reasons for the emergence of "investment dead ends" may be: the wrong idea of the project, ineffective design,

ineffective implementation, i.e. problems that arise at all the stages of the project life cycle.

At the stage of initiating the idea of the project and generating alternatives, the main reason for the lack of efficiency is limited information.

Lack of information, its uncertainty, fuzzy and probabilistic nature, on the one hand, give freedom for ideas, but on the other hand, make the process subjective, dependent on the personal interpretation of the information. In this case, even group command methods of expert analysis are ineffective and often lead to the failure of the investment project at the preliminary stage.

The problem of inefficient design arises at the stage of designing a formal document for the project with relevant technical and economic information. It arises both because of the previous problem, and because of the shortcomings of the system of project management at the enterprise (and, incidentally, at the state level).

Thus, the main problems of the development of Russia's national projects are: the problem of measurability and achievability of indicators; the lack of attachment to the goals of the project and the "inanimateness" of a number of indicators; the lack of prioritization of projects, goals and indicators, etc.

As noted above, one of the main factors of investment inefficiency and getting into "investment dead ends", when already implemented projects do not have an effect, can be attributed to investment policies of the state and large corporations.

As we know, the policy is reflecting the art of managing certain processes, the ability to most effectively use appropriate tools for achieving the goal.

Investment policy is aimed at identifying, attracting, securing and developing financial resources. It also determines the direction of diversification of sources of financing investment projects.

Naturally, when choosing inappropriate methods and instruments, investment policy not only does not promote the implementation of investments, but also becomes an obstacle or restriction for investment processes.

F. The impact of investment on the security of the development of the region

Investment processes have a significant impact on sustainability, as a characteristic of development stability and the possibility of a return to the growth trajectory even in the presence of negative impacts and crises, as well as on the security of regional development, as a characteristic of perception of resource and process perturbation without consequences for current functioning and development.

Methodologically, the issue of security is currently viewed from two perspectives:

- adequacy and availability of appropriate resources to ensure the livelihood of the population and business;

- protection of the main processes from the influence of external and internal disturbances.

Economic security in Russian regions is currently at a low level. Energy and food security problems also remain, especially in peripheral regions

If Russia as a whole feels stable enough economically and has a certain margin of safety, the regions continue to operate in an unstable environment of economic activity, in the conditions of stagnant industrial production and recession in other sectors of the economy. The import substitution program for the most important types of industrial products has solved the problem somewhat, but the severity of the situation has not yet subsided [19].

For energy security, it is important to create "conditions in which the consumer has reliable access to the energy he needs and the supplier—to its consumers. That is, we are talking not only about uninterrupted flows, but also about stable and reasonable prices" [20]. And this, first of all, depends on investments in the development of generating and transporting capacities, the formation of innovative, including alternative, energy.

Russian food security has had a significant positive impact, as expected, from foreign sanctions and retaliatory sanctions against them, affecting the food trade. Russia has invested heavily in agriculture and has achieved the necessary effect with a range of foodstuffs.

Currently, there are two main concepts of food security in Russian regions:

- maximum orientation on self-sufficiency for the basic foodstuffs available for production in the region;
- ensuring a stable (preferably positive, if possible) food balance and long-term contracts with guaranteeing suppliers, as well as the availability of alternative "spare" supply options.

The problem with those resources that are on the verge of exhaustion is more difficult. Similarly to the world as a whole, those are hydrocarbons, drinking water, etc.

In this case, the problem can be solved only by resource - innovation substitution, investment policy should be aimed at finding and developing innovations.

IV. CONCLUSIONS

Investment processes in the regions, while ensuring their proper quality, are indeed a source of economic growth and determine the opportunities for socio-economic development.

As the novelty of this study we can consider an introduction of an integrated approach to managing the quality of investment processes in the regions aimed at ensuring a balanced investment potential and territorial capacity, localizing the negative consequences of falling into "investment dead ends", and creating security and sustainable development of the regions.

As the author's contribution to the development of the theory of investment processes we can consider:

- an approach to ensuring the quality of investment processes due to localization (elimination) of restrictions, the main of which are determined by the investment policy of the state and business, as well as information barriers;
- dividing investments by their focus: in modernization, intensive development (expansion), implementation of innovations, as well as diversification of activities;
- identification of the nature of the relationship of economically and socially oriented investments.

Considering the problem of investment development of the Republic of Buryatia, the authors believe, that investment strategy should be based on a systematic approach to managing the use of parts of the country's capital:

- rich natural capital based on resource conservation aimed at maximizing the use of renewable resources and optimal extraction of non-renewable resources.
- development of human capital, the use and build-up of which, as well as adaptation to the conditions of changes in the innovative economy, creates the basis for the implementation of the projects of the strategy of social and economic development.
- diversified multi-sector industrial capital, which, subject to its modernization and renovation, makes it possible to carry out a new industrialization of the region's economy on the principles of environmentally-oriented management. The manufacturing is the most adaptable and responsive industry to change.

Investment processes in the regions should be aimed both at the implementation of large investment projects that provide strategic economic shifts, and on the implementation of medium and small investment projects aimed at providing continuous development.

At present, the task is to ensure the balance and harmony of the development by consolidating the interests of society, business and state.

The key to this task is to harmonize the priorities of the state and business in initiating and implementing development projects and conducting coordinated investment policy.

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