

Methodology for Assessing the Relationship between Investment Attractiveness of Enterprises and Sustainable Development of the Region

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Keywords: Region, Sustainable Development, Investment Attractiveness of the Enterprise.

Abstract: Consistent transition to sustainable development, whose material basis is not so much quantitative as qualitative changes in the factors of production of the real economy, the authors focus on the regional aspect of the problem of creating an environment in territorial entities that favours the investment attractiveness of enterprises. Following the sustainable development paradigm involves balancing economic, social, and environmental objectives. The stated conceptual considerations are the basis for the development of the original universal method of diagnostics and assessment of constraints, threats and challenges of economic, administrative and legal, resource and technical, social and environmental nature, manifested at the regional level and affecting the investment attractiveness of enterprises in this research. This approach implies the possibility of using the diagnostic results to develop specific measures to eliminate or reduce the role of negative factors determining the investment attractiveness of investment objects in the region, as well as motivational and stimulating measures to resolve contradictions arising from environmental and social restrictions on economic activity to ensure a balanced solution of three tasks as we move towards sustainable development: ensuring


1 INTRODUCTION


The balance between economic, social, and environmental issues, i.e., between all the subsystems in the sustainable development model of the territory (region), seems to be quite difficult to maintain. Each subsystem can develop in opposite directions and manifest itself differently, depending on the sector, geography. However, as noted by the World Investment Report 2020, progress in investing for sustainable development requires fund-raising and the use of sound environmental, social and governance practices in business operations to ensure a positive return on investment.

We draw attention, first of all, to the fact that the adoption of optimal investment decisions is conditioned by the risks generated by the introduction of reasonable restrictions of environmental and social nature on the economic activities of business structures. However, when developing and

implementing the investment policy in the region, it will be necessary to consider that this circumstance can have a very negative impact on the investment attractiveness of enterprises in the given region and, accordingly, on the motivation of businesses to invest. In this respect, it creates the problem of resolving the objective contradictions arising in the relationship between the region with its need to ensure sustainable development and the economic interests of investors based on mutually beneficial solutions. As for investing in the Russian territories' enterprises, it is necessary to develop and implement programs for the transition to sustainable development for each region, focusing on the relevant priorities in the economic, social, and environmental spheres.

The purpose of the research is, firstly, to determine the impact of investment processes on the formation of a balanced system of region sustainable development, in which financial and economic objectives would be harmonized with environmental

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and social processes, and, secondly, to develop a methodology and a specific method of diagnosis and assessment of this mutual influence, including the development of institutional measures aimed at making investment decisions adequate to the sustainable development of territories. The need for implementation also stems from the fact that from the very beginning of the discussion on the need for transition to sustainable development, the difficulty of the practical application of the concept has been stressed.

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The problem of transition to sustainable development, including concerning the territorial (regional) level, predetermines the content of the proposed hypothesis, which consists in the fact that the nature of investment processes should be consistent with the goals of sustainable development. But this compliance can be ensured only if the region itself is attractive for investment, which is tantamount to creating in it an environment in which specific objects of investment are investment-attractive. Hence, the most important circumstance is to create conditions in the regions, firstly, to attract investment for sustainable development purposes, and secondly, to remove barriers and constraints, threats and challenges that negatively affect the investment attractiveness of enterprises. However, at the same time, the proposed hypothesis presents an objective contradiction, the essence of which lies in the fact that in the conditions of transition to sustainable development, the latter can be the factors, on the one hand, limiting the implementation of investment activities, but, on the other hand, introduced as restrictions to solve environmental and social problems in the process of investment.

Formation of the hypothesis of solving the problem of investment focus on the transition of territorial entities to sustainable development and then developing a specific method of diagnostics and assessment of regional factors that determine the investment attractiveness of enterprises involves a review of the current situation with the implementation of the concept of sustainable development presented in scientific publications.

Since the 1980s and up to the present time, foreign researchers' publications have actively discussed the problems of assessing the economic impact of environmental, social, and political problems and the

risks of large-scale migration and conflicts (Stern, 2013). Special attention is paid to social policies and the population's quality of life (Selahattin and Kitao, 2012). Their research is based on the principle that tangible and intangible resources should be used to make life as safe and comfortable as possible for humankind. It is noted that analysis of the relationship between natural resource scarcity and sustainable economic development shows that resource scarcity induces fear, which can undermine well-being (Endress, 2015). Moreover, several authors believe that: "Social fear components have become an integral part of human existence" (Rudenko, Rodionova and Stepanova, 2019) and suggest that non-traditional factors, such as investor sentiment, should be taken into account with social fear components (Solanki and Seetharam, 2018).

The World Investment Report 2020 notes that because the volume and structure of investments drive the development of any economic system, the past decade has seen a dramatic increase in the number of sustainability initiatives around the world, particularly in the creation of various sustainable investment funds that pursue environmental, social and governance outcomes in addition to economic ones. Investment in inputs, resources, and low-cost labor, i.e., extensive investment, has underpinned many countries' development strategies over the past three decades. However, the opportunities for their involvement are increasingly narrowing. Moreover, as the Report points out, economic growth in rich countries as a mechanism for achieving the task may not work because, as has become particularly clear, the true limits to humanity's material growth today are determined less by physical than by environmental, biological and even cultural and psychological causes.

Meanwhile, analysis of investment processes in sustainable development in different economies shows an ambiguous and contradictory situation with both domestic and foreign investment. For example, there has been sluggish growth in international investment over the past decade. At the same time, "Inflows to developing countries are projected to be particularly hard hit, as an investment in export-oriented and commodity-based industries, in particular, will be hardest hit" (World Investment Report, 2020). This very negative trend could become a long-term problem, especially for developing countries. Researchers in the United States (Li, Gupta and Yu, 2017) argue that increased public investment can boost growth for commodity-exporting countries, but too rapid fiscal spending will increase macroeconomic vulnerability. But at the same time,

as noted in a number of articles (Berg et al., 2013; Melina, Yang and Zanna, 2016), an analysis of the effects of investing revenues generated from natural resource exploitation leads to the conclusion that public investment is inefficient. As for foreign investment inflows, they are negatively affected by uncertainties due to the country's domestic economic policies (Phuc Canh et al., 2020). Some analysts confirm that less reliance on commodity exports contributes to the role of foreign direct investment in reviving economic growth dynamics (Mohamed, 2016). Incidentally, important for moving towards a sustainable development path, the social return from direct investment inflows is significantly higher than that from domestic investment (Driffield, 2004).

So, as it follows from the above, in publications on investment for sustainable development, scientists consider investment and investment processes not only in terms of financial models that calculate the return on invested capital but also taking into account several environmental, social, administrative, and legal (managerial) factors. It is noted in particular that non-financial attributes have a greater influence on investment processes (Umar, Kenourgios and Papatnasiou, 2020). In China, for example, at the outset of its economic growth path, environmental concerns were a secondary consideration, and the focus of factory construction was mainly on job creation, wage increases, and tax revenues. However, as these issues were addressed, an environmental program was announced there in 2014. Despite the conflicting views of experts on the nature of the relationship between the state of economies and the solution of problems of transition to their sustainable development, nevertheless, an opinion has been formed that there is no alternative to the implementation of the concept of sustainable development.

3 RESULTS

To identify the factors negatively affecting the efficiency of sustainable investments, we propose to use our methodological approach (Alexandrov et al., 2020), which is based on the principle of "levels-factors". The specified principle allows us to make a new diagnosis and evaluate the factors that characterize the investment climate in the region and the investment attractiveness of its enterprises because it involves a complex assessment of the factors of specific types of groups that are formed not only directly at the level of enterprises themselves, but also at the upper levels of the economic hierarchy.

It is meant that the object of the analysis is groups of *external* environment factors, manifested as barriers, limitations at the sectoral, territorial (regional), and national levels in general.

In this case, we are based on the theoretical position that, firstly, the production process is based on the interaction of material and personal factors, provided by the conditions of production (infrastructure), production is a unity of productive forces (means of labor and conditions of production such as organizational, social and environmental, as well as labor force) and corresponding to the production relations. Secondly, on the fact that the production process is also characterized by certain organizational-economic organizational and legal relations, as well as - social and environmental aspects. Therefore, it would be quite adequate to form the following four main groups of factors: economic, administrative-legal, resource-technical, and socio-environmental.

This "level-factor approach" should enable analysis and evaluation of investment attractiveness, which will allow:

- 1) a potential investor to make a reasoned investment decision based on the results of diagnostics;
- 2) an investing entrepreneur to get a realistic idea of the factors and trends that negatively affect the investment attractiveness of his business;
- 3) an investing entrepreneur and other stakeholders to identify measures that would contribute to the elimination of everything that negatively affects its attractiveness.

To implement the above tasks, we propose using a step-by-step linear algorithm of diagnostics and assessing the existing environment in the region, which determines the attractiveness of enterprises operating in its territory.

STEP 1. Identify possible factors and integrate them into their own species group and the appropriate hierarchical level.

All multiple factors are distributed in the cells of the matrix, the principal scheme of which is shown in Figure 1.

Economic levels	Large groups of factors			
The country				
Region				
Industry				
Company				

Figure 1: Diagram of the distribution of factors by group and corresponding hierarchical levels (source: authoring).

The system "levels - groups of factors", allows to analyze and evaluate both aspects in close interrelation. At the same time, given the nature of the problems solved in the article, as well as its limited size, the object of our attention here is the link "region - group of socio-economic factors". This is since the socio-economic direction, on the one hand, is becoming increasingly important, as the quality of habitat, life, and social equality of people in sustainable development, and, accordingly, the role of corporate social and environmental responsibility as a norm of business activity is increasing.

Therefore, investment processes leading to development cannot be considered in isolation from the extent to which development investment meets the requirements of social progress, efficient use of natural resources, and environmental protection. At the same time, we should take into account the fact that for a comprehensive assessment of investment attractiveness of specific investment objects, it is necessary to diagnose all the factors that form the investment climate at all hierarchical levels of management because all four groups of factors are in some way interrelated (Fig. 2).

In particular, this is manifested in the fact that, for example, such factors of the socio-environmental group as population migration, demographic dynamics, as well as the social conditions of the employees of enterprises belong to the group of resource-technical factors as well, since they determine the resource supply possibilities of the invested enterprises. However, to a much greater extent, with the group of socio-environmental factors, the group of administrative-legal factors is connected. In particular, such factors as: the socio-political situation in the region, the authorities' readiness to reform it, the degree of independence of the regional authorities in decision-making on motivation and stimulation of social and environmental policy. All the administrative and legal factors listed here that characterize the region's investment climate under certain conditions can become significant barriers and constraints for investors, determining the possibility of their entry into the region. The regions themselves can well solve several problems with administrative and legal factors that harm the investment attractiveness by reforming the administration system and regulation of organizational and economic relations. However, regional capacity may not be enough. In this case, one can count on their solution at the federal level of government because at a higher level, there are opportunities for institutional changes in the administrative and legal factors that negatively affect the regional investment climate.

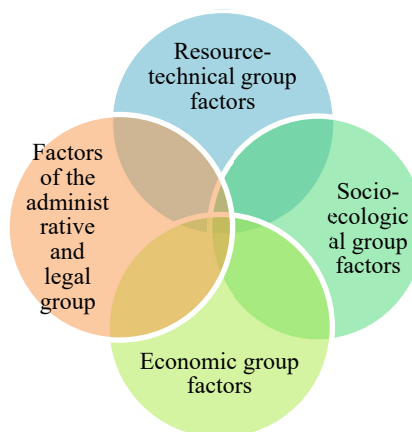


Figure 2: Relationship between groups of factors determining the region's investment attractiveness for enterprises operating on its territory (source: authoring).

The results of the identification of the factors constituting the socio-environmental group and formed at the regional level are aggregated in: the quality of life of the population; the nature of the social status of the population; the state of demography and migration; the availability of necessary social infrastructure; the level of social stability; the state of the environment. This may include the region's ability to solve nature conservation and environmental protection problems on its own. Although this factor, in fact, could also be attributed to the factors of the administrative-legal group.

STEP 2. According to the empirical Pareto rule, ranking the multiple factors of each species group at the appropriate hierarchical level.

As a result, we get a set of factors represented in the point estimates which to the greatest extent (conventionally by 80%) predetermine in the combination "region - factors of the socio-ecological group" the investment attractiveness of the region as a whole and a specific object of investment.

STEP 3. Transition from scoring of selected factors to risks.

Aggregate investment risk is defined as the sum of its two components systematic and unsystematic. The mentioned components are obtained by different methods. The systematic component, obtained by *calculation* method, and the non-systematic component, determined by the method of *expert evaluations*. To reduce to a comparable kind of the summands, the methodology is offered, the essence of which consists in the use of the coefficient expressing the average ratio of both parts of the risk. To determine the non-systematic component of investment risk, it is sufficient to multiply the

calculated value of systematic risk by the specified coefficient (for details, see (Alexandrov et al., 2020)) and thereby solve the additivity problem.

STEP 4. Development of specific adequate measures and regulatory mechanisms.

Especially considering that the implementation of the concept of sustainable development imposes socio-environmental requirements on businesses and, consequently, investors, which, as shown above, may come into conflict with the interests of the latter and undermine their motivation to invest. At the same time, note that in several cases, to reduce or even completely eliminate barriers and limiting factors, threats, and challenges, the regional level's capacity to address these issues may be limited. But you can always consider doing it at the federal level. This applies, first of all, to environmental protection measures, formation of the social infrastructure of the region, which are the objects of lawmaking and economic policy exclusively at the federal level.

4 CONCLUSIONS

The article deals with the problematic theoretical and methodological issues of ensuring the transition of regions to sustainable development through the intensification of investment processes and the creation of the environment in the regions, ensuring the increase in the investment attractiveness of the initial objects of investment, enterprises. The proposed tool of diagnostics of investment attractiveness of enterprises and its subsequent evaluation in the form of a non-systematic component of investment risk will allow entrepreneurs to justify and make adequate managerial decisions in their investment activities, taking into account the need to implement sustainable development goals. At the same time, we consider it necessary to emphasize that the use of the obtained results of the research will, in our opinion, significantly promote both theoretically and practically the development and implementation of sound interim measures to promote the region to sustainable development. The authors expect that the results of the research presented in the article will:

- 1) deepen and expand the understanding of methodological approaches to determining the specific factors that characterize the investment climate of the regions and the investment attractiveness of enterprises;
- 2) focus primarily on socio-environmental factors as the basis for the formation of the relevant component of unsystematic investment risk;

3) determine areas in which specific measures need to be developed to help eliminate or minimize specific factors that, on the one hand, negatively affect the investment attractiveness of investment targets and, on the other hand, ensure compensation for possible additional costs caused by the need to realize not only economic growth but also to achieve social progress and improve environmental quality in the process of investment.

Ultimately, the implementation of these measures should help boost investment processes and ensure the transition of regions to sustainable development.

ACKNOWLEDGEMENTS

The reported research was funded by RFBR, project number 19-010-00032

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