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Analysis of investment attractiveness and investment climate in Russia

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Author: Daria Honcharenko

Diploma Thesis Supervisor: Associate Professor of the Department of Statistics and Cybernetics, Candidate of Economic Sciences Ukolova A. V.

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1. Introduction

Investment resources are the basis for creating favorable conditions for the economic growth of Russia, as well as for the development of individual regions. One of the most urgent tasks of the Russian economy, both at the federal and regional levels, is to attract investment.

An important criterion for attracting investment resources is the investment attractiveness of the whole country and its various regions, which depends on bilateral relations between the corporate structure and stakeholders, as well as on the availability of an institutional framework for corporate development.

The level of innovative development of a region directly depends on its investment attractiveness, and in order to attract innovative investments, it is necessary to create an attractive investment climate for investors in the region. It should be emphasized that innovation is impossible without investment, and only additional financial investments can lead to scientific and technological advances and their further commercialization.

It is important to note that the criteria for assessing the investment attractiveness and investment climate of a region are not defined by the legislation of the Russian Federation. The existing methods of assessment can be divided into three categories: economic and mathematical methods, methods of factor analysis, methods of expert or rating assessment. Recently, the leading position in the Russian market has been taken by the Expert RA agency, whose rating is considered the most reliable and accurate.

In addition, the timely and correct application of regional investments ensures the socio-economic development of the regions, as well as the creation of new jobs, which serves as a basis for strengthening the state economic policy. This in turn helps to improve the well-being of people. Due to the limited resources within the regional economy, the most effective way to increase production is to attract additional capital

resources based on resource conservation and high-tech solutions. Therefore, the issue of in-depth analysis of the cause-and-effect relationships of improving the investment climate in the region and further increasing its attractiveness is relevant.

The purpose of this study is to analyze the current investment attractiveness of the Krasnodar Territory of the Russian Federation in terms of its investment potential, risks and activity.

In order to study the investment attractiveness of Russian regions, the following tasks were included:

− highlight and characterize the main theoretical aspects of the investment attractiveness of the region;

− determine the main macroeconomic indicators affecting the investment attractiveness of the region;

− study the methodology for assessing the investment attractiveness of a region proposed by the Expert RA rating agency;

− to analyze the relationship between investment attractiveness and investment activity (investment inflow);

The object of this study is the investment attractiveness of the region, namely the Krasnodar region. The subject of the research is the influence of the investment attractiveness of the region on potential and real investors and on the volume of investment resources.

The structure of the work includes an introduction, a main part consisting of three chapters, a conclusion, a list of sources used. The first chapter of the main part provides a theoretical basis and characteristics of investment attractiveness, as well as related concepts and components such as investment potential and risk, investment climate and activity. The first chapter describes the existing in Russia methods and techniques for assessing investment attractiveness.

The second chapter is a practical part, in which the selected methodology is displayed in more detail, the indicators (factors) taken into account are analyzed and

the investment attractiveness of the Krasnodar region for 2019 and the forecast for 2020 are calculated. The relationship between the investment attractiveness of the region and the volume of investment inflow (investment activity) is also analyzed.

To achieve the objectives and the main goal of the study, empirical research methods were used in the work: observation and description, symbolic modeling by constructing diagrams, graphs and formulas, econometric analysis (regression), as well as the method for calculating the investment attractiveness of the Expert RA rating agency. The study used theoretical methods: analysis, comparison, systematization of data. An analysis of the literature on the research problem was carried out, scientific and educational-methodical literature, articles in periodicals, normative-legislative acts and a database of statistical data provided by official bodies were used. The work presents domestic authors Agaeva L.K. Pronin A.S., Petrov A.A., Izyumova O.N., Anisimova V.Yu., Savenkova E.V., Damodarana D.A., Pilipenko P.P., Yakobson L.I. and many others who have studied the question in their writings. Also in recent years, the theoretical foundations of the influence of investment attractiveness on economic development have been studied by L.I. Abalkina, I.A. Blank, A.I. Gretchenko, I.V. Ishina, N.I. Lakhmetkina, M.A. Filina S.A., Sharp U. and a number of other domestic and foreign economists.

2. Objects and methodology

2.1. Objects

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In order to study the investment attractiveness of Russian regions, the following tasks were included:

– highlight and characterize the main theoretical aspects of the investment attractiveness of the region;

– determine the main macroeconomic indicators affecting the investment attractiveness of the region;

– study the methodology for assessing the investment attractiveness of a region proposed by the Expert RA rating agency;

– to analyze the relationship between investment attractiveness and investment activity (investment inflow).

2.2. Methodology

The peculiarity of this technique is to allocate two main indicators of the investment attractiveness of the regions of Russia, such as: investment potential, which provides the objective possibilities of the region, and investment risk, which, in turn, expresses the conditions of the investor.

As part of the analysis of the investment potential, nine private indicators are analyzed at the regional level:

– natural resource;
– labor;
– production;
– innovative;
– institutional;
– infrastructure;
– financial;
– tourist;

−   Consumer. [67, c. 285]

Each potential is characterized by the values of the set of certain private indicators (Table 3). Quantitative assessment of the potential of the region as a share in the total potential of all regions of the country and there is a regional rank. The value of investment risk is a totality of six private risks (economic, financial, managerial, social, environmental, criminal). [78, c. 49] This is an integral indicator that determines the level of probability of investment losses or income from investment. To determine the rank of the region into account, the relative deviation of the investment risk index from the average Russian, determined by one.

Table 1 - Indicators of private potentials and risks

Private factor	Private indicator
1	2
Investment potentials	
Labor	The number of economically active population, the natural population growth of 1000 people, employment level, average life expectancy
Infrastructure	Total length of railway lines, total length of roads, number of gas stations, number of apartment telephone, Internet users (percentage of the population)
Financial	Regional budget surplus, Tax revenues in the percentage of GDP
Industrial	GRP per capita
Institutional	The number of small enterprises (percentage of the total number of enterprises in the region), the number of individual entrepreneurs (percentage of the population of the region), the cost of opening a business (percentage of income per capita)
Innovative	The volume of innovative goods, works, services developed by advanced production technologies, the level of innovative activity of organizations
Consumer	Per capita income, average consumer spending per capita, the total area of residential premises, entering on average per resident, the number of natural cars per 1000 people in the population
Natural resource	Expert assessment of the geographical position of the region on a ten-point scale
Tourist	Expert assessment of the tourist potential of the region (1-10)
Investment risks	
Criminal	The number of registered crimes per 100,000 people
Management (political)	Expert assessment of political (managerial) risk on a ten-point scale

Table continuation 1

1	2
Social	Money revenue deficit of the population, fund coefficients, the share of population with cash income below the subsistence minimum
Ecological	Emissions into the atmosphere of pollutants (from stationary sources, from road transport), discharge of polluted wastewater
Financial	Regional budget deficit, regional tax debt
Economic	Degree of wear of fixed assets, unemployment rate

The expert RA methodology intends to calculate the rating of the constituent entities of the Russian Federation by means of the calculated private indicators of investment potential / risk in the integral indicator, which is called investment attractiveness. Accordingly, the calculated private indicators further on the corresponding scale is assigned a rating of one or another region.

Several basic advantages of this technique can be distinguished:

1. The investment rating of regions, calculated according to the dedicated method, can be considered comprehensive and multidimensional, since the analysis uses a large statistical database provided by the authorities:

– Federal State Statistics Service;

– Ministry of Economic Development and Trade of the Russian Federation;

– Ministry of Finance of the Russian Federation;

– Ministry of the Russian Federation for taxes and fees;

– Ministry of Natural Resources of the Russian Federation;

– Central Bank of the Russian Federation.

The legal database "Consultant Plus-Regions" and administrations of individual subjects of the Russian Federation are also used, which indicates the volume factual database and the reliability of the result. [70, c. 6]

2. The selected methodology of the Expert RA Agency estimates the weight of each component (private indicator) in the cumulative integral indicator. This weight is determined by holding annual surveys among experts from both Russian and foreign investment, consulting companies and enterprises. This advantage indicates a high degree of objectivity and quality of research.

However, it should be noted that the lack of this technique is the impossibility of factor analysis of the influence of individual basic statistical data on the cumulative indicator of the region's

investment rating in order to identify the factors undergoing it. The reason for this in the inaccessibility structure of statistical indicators taken as a base for calculating the investment rating. [6, c. 91]

In the calculations of both investment potential and risk, the weights of the significance of the indicator, the dynamics of which for the period 2015-2019 are taken into account. Depicted in Figures 1 and 2

Figure 1 Dynamics of expert scales of private indicators of investment potential in the period 2015-2019
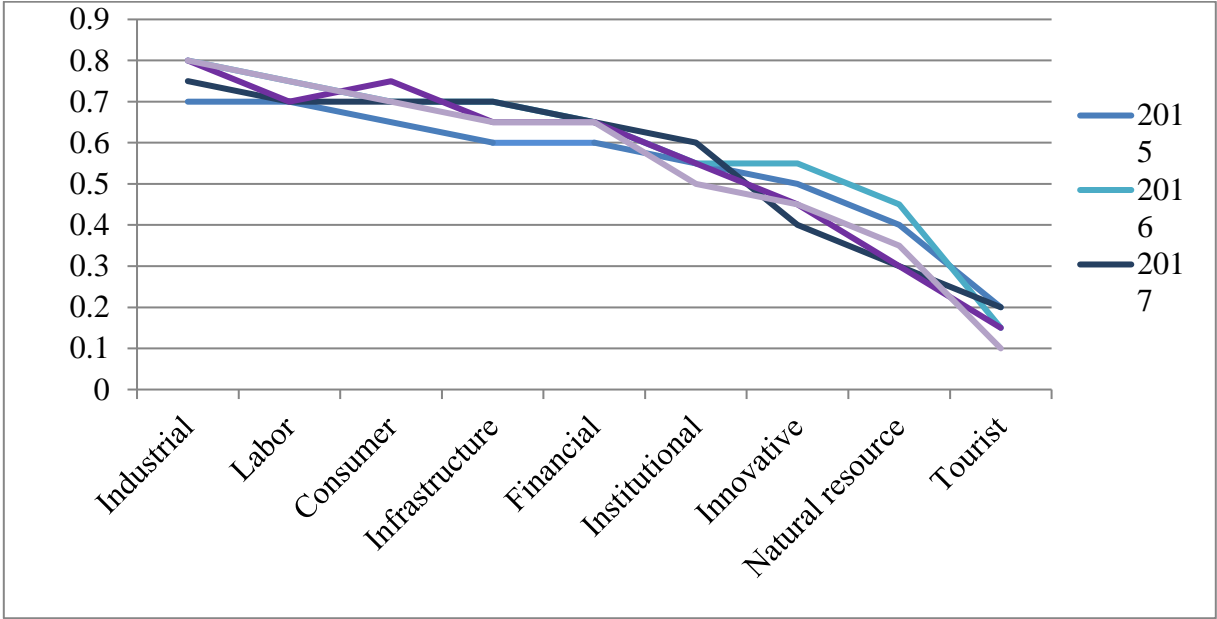
Figure 2 Dynamics of expert scales of private indicators of investment risk in the period 2015-2019
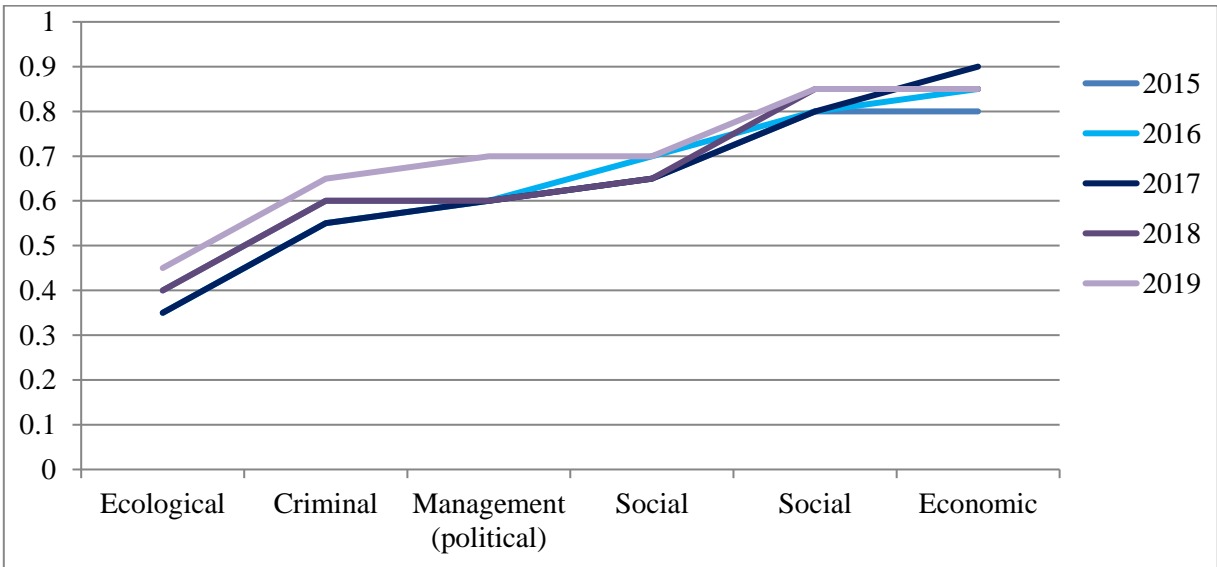
We form a schedule of private potentials in 2019. To further analyze the investment attractiveness of the Krasnodar Territory.

Figure 3Weight investment risk and potential in 2019
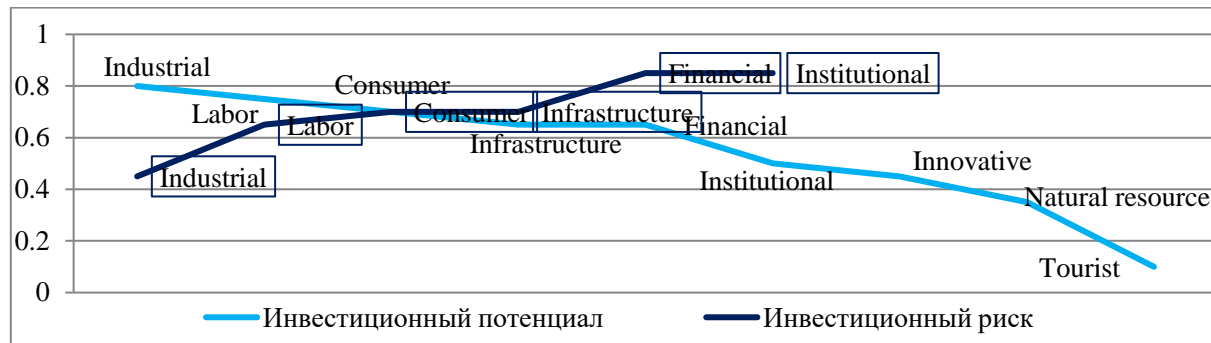
The weights of private indicators based on the data of the "Expert RA" methodology and according to Figures 1 and 2, we will enter in Table 2.

Table 2 Private factors in 2019

Integral indicator	Privat factors	weight
		2019 г.
Investment potential	Industrial	0,8
	Labor	0,75
	Consumer	0,7
	Infrastructure	0,65
	Financial	0,65
	Institutional	0,5
	Innovative	0,45
	Natural resource	0,35
	Tourist	0,1
Investment risk	Economic	0,85
	Financial	0,85
	Social	0,7
	Political	0,7
	Criminal	0,65
	Ecological	0,45

To calculate private indicators of assessing the investment attractiveness of the region, the following sources of information were used:

- Rosstat - official data of the Federal State Statistics Service;
- official data of the executive authorities of the constituent entities of the Russian Federation;

–   Expert assessment of indicators.

In the calculations of investment attractiveness, according to the selected method, traditional formulas are used. Integral indicators are calculated based on, as mentioned earlier, private potentials and risks, which in turn develop out of private indicators. When calculating the numerical value of each private indicator, the following formula is applied:

$$p = \frac{p_c}{p_{max}} * 100\% \qquad (1)$$

P is the calculated indicator;

p_c - the value of the indicator in the analyzed region;

p_{max} - Maximum value in all regions.

As a result of this calculation, the percentage expression of private indicators is obtained, after which their total value is divided into their number in each private indicator (potential / risk) and is multiplied by the appropriate weight, both for private potentials and risks. Formula is used:

$$I = \frac{\sum_{j=i}^{n} p_{i,j}}{n_i} * d_i, \qquad (2)$$

where I is a computed private indicator (potential / risk),

n - number of indicators,

$p_{i,j}$ - Jth private indicator of the i-th Private Indicator,

d_i - the weight of the private indicator (percentage).

To determine the outcome value of the investment attractiveness of the region in a certain year, it is necessary to calculate the importance of integral potential and risk, which is the most important in the assessment. To begin with, it is necessary to build petal diagrams various for potential and risk, the axes of which will display the values of each private potential and risk, and calculate the area of the formed figure using the following formula:

$$P = \frac{\sum_{a,b} \frac{1}{2} * a * b * \sin\frac{2\pi}{m}}{\sum_{d_a,d_b} \frac{1}{2} * d_a * d_b * \sin\frac{2\pi}{m}} * 100\%, \qquad (3)$$

where the P- integral indicator (potential / risk),

a, b - neighboring pairs of every private indicators,

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d_a, d_b - weights corresponding to neighboring pairs of each private factors,

m is the number of private indicators.

To denote the final indicator of the investment attractiveness of the region, (r, σ) is used, where r (integral investment potential) and σ (integral investment risk), which are expressed in the shares of the unit or most often in percent. The final indicator of investment attractiveness can be expressed as one value expressed in percent. With the help of Formula 4, investment potential and investment risk are reduced to a single figure:

$$IA_{reg.} = r * (1 - \sigma). \qquad (4)$$

Apply this technique. For the pilot region adopted the Krasnodar region.

3. General characteristics of the investment attractiveness of the region

3.1. Definition and essence of the investment attractiveness of the region

Investment attractiveness of the region is an important aspect for increasing the volume of investment resources. The regions create the most attractive conditions, that is, they create a positive investment climate to attract investors. The main condition for such a climate is to maintain the functioning of projects operating in the region, as well as the development of new, attractive for investors, proposals [4, p. 216]. For investors, in turn, the main thing is to maximize profits with minimal risks. Consequently, the main task of regional management (authorities) is to provide these conditions and achieve the highest investment attractiveness of the region. [12, p. 189]

The investment climate is not precisely defined. Theoretical scientists offer different interpretations, as some say that "it is a combination of economic, financial, labor, social and political factors that reflect the quality level of the analyzed object (organization, region, country)", others describe the investment climate as a concept identical to investment attractiveness or interchangeable. [31, p. 85] Within the framework of this work, investment attractiveness and climate are different concepts that intersect in investment analytics, but are not identified with each other. Proceeding from this, the investment climate is an investment attractiveness in a dynamic aspect, that is, in a period exceeding 5 years. [28, p. 20]

The investment attractiveness of a region is a very complex and multifaceted category that determines the level of functioning of each individual subject (region) of the Russian Federation. [18, p. 19] In the current conditions of the external economic situation: unstable oil prices, volatility of the ruble against the dollar exchange rate, sanctions against Russia and the introduction of retaliatory sanctions, in general, aggravated relations between countries in the international arena - the volume of resources offered in the investment market is sharply decreasing and reduces the

volume of incoming investments. As a result, the development decreases and the development of the business sector slows down. [49, p. 70] To maintain the economic growth of the region, social stability, the regional authorities enter into intense competition in attracting new investors and investments, in developing business and increasing the income of the regional budget. [27, p. 20] The individual sector is very important not only for the region, but also for the state as a whole, it is directly related to the economic sector, through tax payments to the budgets of all levels, job creation, income generation, collection of taxes from individuals and the development of competition, and also invests in high-tech production. [13, p. 33]

At the moment, one can single out such a problem as the uneven distribution of investments, their deficit. This arises as a result of investments by investors in more investment-attractive regions with high income and, accordingly, less risk, in megalopolises and developed regions with a large amount of natural resources. [34, p. 60] I would like to emphasize once again that this directly depends on the policy of the region and its authorities. Regional authorities use regional management as a method of managing socio-economic processes in the region. [15, p. 54]

Regional management is aimed at meeting the general needs of the region's population, for example, the formation of norms and rules for joint life in the region. Competent regional management ensures the effective formation of regional relations, the expansion of interregional interactions and the development of the region as a separate entity. [26, p. 125]

I would like to draw your attention to the fact that the criteria for assessing the investment attractiveness of the region and the investment climate are not defined by the legislation of the Russian Federation. Also, it is impossible to single out the main assessment method and a single strategy for increasing the attractiveness of the region, despite the rather large number of existing scientific studies in this area. Another important point is the distinction between the investment climate and attractiveness, since at the moment there is no clear difference in their definitions and assessment. [22,

p. 58] Based on what, at the moment, the development of attractiveness and modern methods of its assessment is a very topical issue. Further, one should turn to domestic and foreign literary sources to carry out a theoretical analysis of investment attractiveness, to determine its essence. It should be noted right away that in domestic works, attractiveness was studied at the regional level, while in foreign practices, attractiveness is considered at the state level.

Various authors, scholars and practitioners put forward their own interpretation of the concept of "investment attractiveness", based on various factors. So, for example, according to L.K. Artyukhova. and Anisimova V.Yu. the investment attractiveness of regions should be considered as an integral characteristic of individual regions of the country and take into account the investment climate, the level of development of the investment infrastructure, the possibility of attracting investment resources and other factors that can significantly influence the formation of investment returns and their risks [1, p. 162].

An interesting interpretation is E.P. Pankratov, who says that the investment attractiveness of a region is how much an objective characteristic of a region, that is, a set of business conditions, corresponds to the preferences of business entities, taking into account changes in the parameters of these characteristics in the communication of a business entity and a regional management entity ... [47, p. 53] We can say that this definition is of a private nature, since the preferences of business entities are highlighted.

G.P. Podshivalenko determines that the investment attractiveness of a region as a set of features, conditions and restrictions determines the inflow of investments / capital into the region, which are assessed using investment activity. [48, p. 8] This opinion is supported by ID Polynin, from the point of view of which, investment attractiveness is an independent variable and determines the dependent variable - investment activity. [50, p. 174] This interpretation is the most common. Many scholars and researchers refer to this definition in their works. Of course, this definition is

correct, but, in my opinion, not precise enough. Podshivalenko G.P. and Polynin I.D. in determining investment attractiveness, they refer to objective factors, but do not take into account a number of influencing subjective characteristics that are necessary for a more complete and correct assessment. The same conclusion can be drawn from the interpretation of Lagin Y.V. In his works, he defines the investment attractiveness of the region as a combination of factors (natural-geographical, socio-economic, political, etc.), which form the investor's idea of the effectiveness of investments in the region. [30, p. 111] The question of subjective assessment of factors arises again, which does not give a complete description of the situation in the region.

Many authors in defining investment attractiveness used such a concept as "investment activity of the region", which characterizes the investment of resources that meets the investment demand of the region, that is, measures the potential volume of investment. Consequently, investment activity affects the investment attractiveness in general and is an integral part of the investment environment in the region. Also, the concept of investment activity in the region is closely related to investment activity, in this connection, it is important to take into account the effectiveness of these processes. [35, p. 154]

The close interdependence of these concepts is due to the fact that investment attractiveness contributes to the activity of attracting investments to the region, characterizes investment objects, and determines the possibility of attracting new investments, and also forms an assessment of the regional risks in the interests of partners (investors). [54, p. 7]

In my opinion, the most complete, detailed and accurate concept of investment attractiveness, which can be taken as the basis of the study, is offered by V.V. Loginova: "Investment attractiveness is the state of the regional economy, which is formed by a set of investment potentials and risks, displayed by integral and private indicators (safety, profitability, reality and prospects) of investments in the development of social,

economic and environmental aspects due to the achievement of the economic effect of the implemented innovations". [32, p. 162]

Let's consider a few more definitions. Sennikova I.A. proposes to consider the concept of investment attractiveness to be identical to investment entrepreneurship, in other words, the higher the investment efficiency, the higher the investment attractiveness of the region. In this concept, a new indicator of investment efficiency is mentioned, since efficiency may not appear immediately after investment, and the region may have high attractiveness, comparison of these indicators in this case is impossible. [60, p. 156] Therefore, this interpretation is not complete and does not take into account all influencing factors.

One of the leading rating agencies "Expert RA", which annually provides a rating of the regions of the Russian Federation, gives the following concept: "investment attractiveness is an interconnected assessment of investment potential and investment risk". [36] Many authors use this concept in their works, we can say that the above definition is the most accurate and widespread definition in the domestic theory at the moment. To assess the investment potential and investment risk, a voluminous database of statistical data is used, influencing factors are analyzed, and expert assessments are used, which are formed by a group of special experts with the necessary and sufficient knowledge in the field, and monitor the current situation in the region.

Assessment of investment attractiveness has a significant impact on decision-making on investments in the region, characterizes the existing risks and possible losses in the event of their implementation. Proceeding from this, in the analysis it is necessary to take into account as many factors as possible, not only objective, but also subjective, in order to obtain the most accurate existing situation in the region. [59, p. 18]

Summing up, it can be noted that improving the investment attractiveness of regions is the main task of regional authorities and the country as a whole. The volume of attracted investments depends on the activities of regional authorities, on how effectively the investment policy of the region is drawn up, which further affects the

growth and development of the regional economy and the country's economy as a whole, on the formation of favorable conditions for attracting investors, increases competitiveness and living standards the population of the region and the country [58, p. 82].

3.2. Characteristics of investment potentials and investment risks of the regions

Investment potential and investment risk are two relatively independent characteristics, on the ratio of which the methodology of the Expert RA rating agency is based, which will be analyzed in more detail within the framework of this qualification work.

The integral indicator of the investment potential consists of nine private indicators (potentials), and the integral investment risk is calculated from the values of six types of private risks (Figure 3).

So, according to the large economic vocabulary, investment potential is understood as "the amount of free funds, opportunities in any area", in this case, in the regional investment environment. Semina L.A. defines the investment potential as a quantitative characteristic, that is, the sum of the factors of production and the use of capital in the region, the calculation of which takes into account the main macroeconomic indicators. [59, p. 18] For example, fixed assets, consumer demand or infrastructure, saturation of the territory with factors of production, such as natural resources, labor, etc.

Investment risk is a qualitative characteristic and depends on political, social, economic, financial, environmental and criminal conditions. Its value shows possible losses or income from investments. [63, p. 26]

Figure 4 Types of investment potential and risk
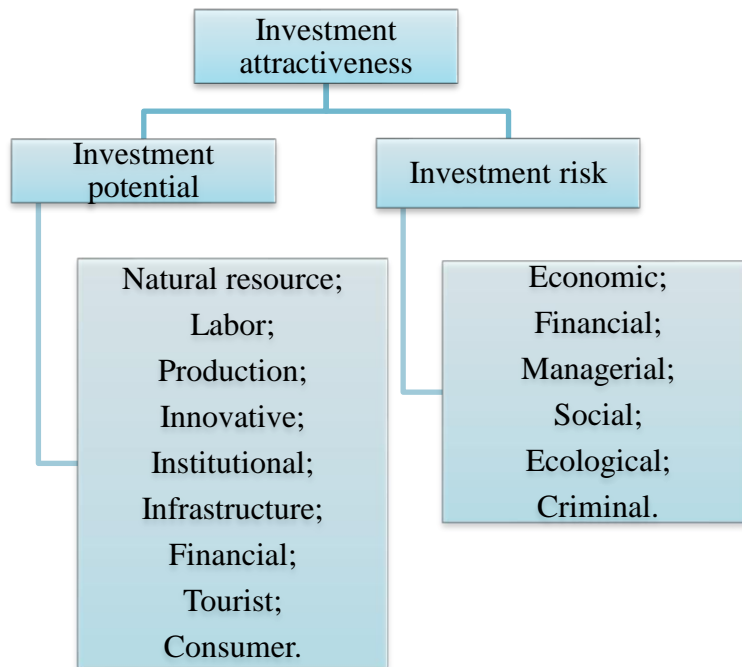
Let us consider in more detail the components of the investment potential of the region, which consists of 9 private potentials. each potential listed below is made up of certain indicators:

1. Natural resource potential - determines the level of provision (weighted average) of the region with the main balance types of natural resources, including: oil and gas; coal; precious metals and stones; non-ferrous and ferrous metal ore; non-metallic minerals; agricultural grounds; wood, etc.

2. Labor potential - includes two main indicators: the share of the population of working age and the share of those employed with higher and secondary specialized education, which reflect the size of the labor market and the level of education of the population, respectively.

3. Production potential - characterizes the development of economic activity and reflects the aggregate result of the region. To determine this potential, indicators such as production volumes in industry or agriculture and construction can be used; it is also worth considering the turnover of trade and paid services to the population. [53, p. 8]

4. Consumer potential - determined by the volume of incomes of the population and their purchasing activity. In other words, the consumer potential shows the purchasing power of the region's population.

5. Infrastructural potential is the infrastructural provision of the region, that is, how developed the transport network and communications are, what is the transport-geographical location of the country's economic center, main highways, also the provision of ports, airports, etc. [24, p. 30]

6. Innovation potential - evaluates the development of the research area of the region. The basis is data on the volume of research and development (the number of employees and organizations in this area, financial costs, innovative activity). To measure activity, in turn, the indicators of the number of patent applications and the volume of developed advanced technologies are used.

7. Institutional capacity - characterizes the development of insurance and financial institutions in the region, through a direct assessment of the volume of services provided, as well as through an indirect / subjective assessment of the conditions and factors for the development of the business environment. For the assessment, the indicator of the number of represented individual entrepreneurs and foreign business in the region is used.

8. Financial potential is a conditionally total indicator of the activity of the sectors of the economy, measured by the volume of money supply in circulation, that is, how much money is in the hands of business (the indicator of the balanced financial result of the activities of organizations is used), regional authorities (budget receipts) and the population of the region (saving).

9. Tourism potential - determines how developed the tourism infrastructure (availability and level of accommodation places) and the level of attractiveness, that is, the number of historical and cultural heritage / places in the region. In the analysis of this potential, the indicator of the tourist flow is used, and the climate is also monitored. [10, p. 93]

Let's move on to considering investment risk - this is the general state of business in the region, which reflects possible losses for investors. As mentioned earlier, investment risk consists of 6 private indicators (risks):

1. Economic risk characterizes possible losses as a result of the negative development of the situation in the region, namely, in business, industry, agriculture and trade. Indicators are used: depreciation of fixed assets, the share of unprofitable enterprises, etc.

2. Social risk is a combination of factors that negatively affect the social situation and cause social tension in the region. The analysis is carried out on the basis of data on the unemployment rate, the proportion of the population with incomes below the subsistence level.

3. Financial risk is a type of risk that can lead to the loss of capital for stakeholders (investors), reflects the level of financial reliability in the region. The financial condition of regional authorities is assessed through the prism of the current debt burden, the ability to cover expenses from their own income, credit rating - these are the main indicators for assessing financial risk. The indicator of the level of overdue accounts payable is used to assess the risk in the business environment.

4. Management risk - or in other words, the level of management. To assess this type of risk in the region, three main statistical criteria are taken into account:

−   the ratio of indicators of the volume of direct investment and gross regional product, which assesses the ability of the regional authorities to attract sufficient investment for the further development of the regional economy and the region as a whole;

−   the next item assesses the quality of regional budget management using an expert assessment of the quality of budget planning, budget execution and transparency of the budget process;

−   in the conclusion of the analysis of this risk, the level of social security of the population is assessed, or rather the ability of the regional authorities to provide the

population with the minimum necessary social services. The level of infant mortality in the region (an indirect indicator) is taken as a basis [25, p. 920]

The level of corruption in the region and public confidence in the authorities are taken into account as additional information.

5. Environmental risk - characterizes the level of environmental pollution (at the regional level):

−   emissions into the atmosphere;

−   background radiation level;

−   discharge of untreated wastewater into surface waters, etc. [75, p. 108]

6. Criminal risk is a special group of economic risks and crimes in the field of public relations. This risk is characterized by the following indicators: the level of crime in the region (taking into account the severity of crimes); the number of crimes. [66, p. 421]

3.3.   Methods for assessing investment attractiveness

Assessment of the investment attractiveness of a region is a system of research, in the process of which the potential of the region in the investment market and the possible risks of investing in the region are determined, the subjective perception of the investment state of the region by a potential investor is determined. In the course of the analysis, the indicators of the object of assessment are correlated with the selected comparison base. [8, p. 219]

An approach is a research strategy. The choice of this or that approach as the basis of the analysis largely predetermines the methods used in the future. [43, p. 35] Existing approaches can be combined into three main groups for assessing the investment attractiveness of a region, based on the following approaches:

1. Identification of the existing fundamental factors that uniquely determine the investment attractiveness of the region. These include such indicators as the image of the region, the dynamics of GRP and production volumes.

2. Identification of several factors that have an equal impact on the investment attractiveness of the region and are characterized by a certain set of indicators, for example, economic potential, market infrastructure, political factors, etc.

3. Determination of a wide range of factors. When analyzing investment attractiveness, these factors represent an aggregate indicator of investment potential and investment risk, for example, financial or social risks and labor or tourism potential. [38, p. 27]

The above approaches underlie the methods for assessing investment attractiveness. A method is a way to achieve a goal, it is also determined by a combination of various techniques and operations of practical or theoretical application in mastering reality. [55, p. 10]

Based on the considered approaches of methods for assessing the investment attractiveness of a region, three groups of methods were formed (Figure 4): economic and mathematical, methods of factor analysis and expert assessments. [37, p. 39] The economic and mathematical methods include correlation and variance analysis, mathematical modeling, optimization method and input-output balance analysis. Factor analysis is carried out using the compilation and analysis of enlarged groups, including indicators (factors) that are close in meaning. The method of expert assessments is a combination of analysis of the quantitative characteristics of the indicator under study and reasoned judgments of experts (managers and specialists) competent in a particular area. [64, p. 148]

Figure 5Methods for assessing investment potential
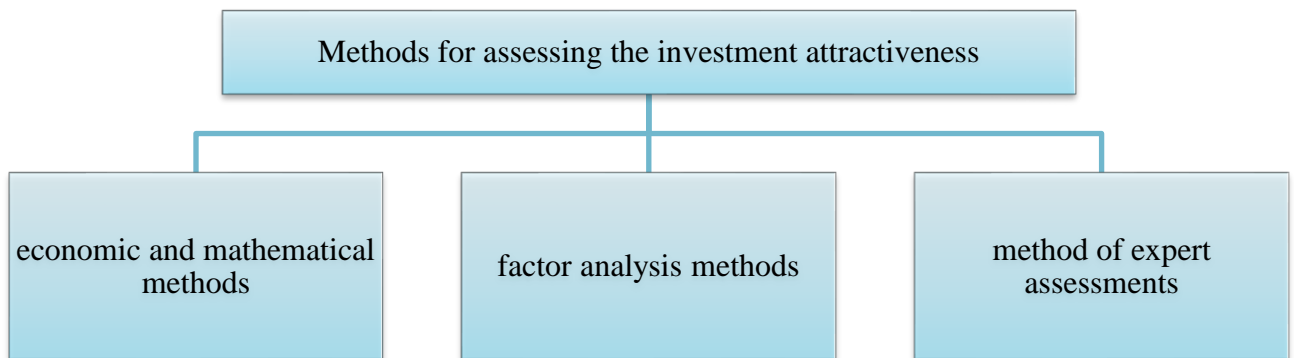
A technique is a set of rules or a statement of methods for performing some work. From which it follows that a technique is a holistic system based on certain principles and may include several methods, while a method is determined by a simple sequence of actions. According to the common understanding, the methodology is fundamentally different from the approach in its explicit practical and tactical focus. Among the variety of methods for assessing the investment attractiveness of a region, the following are the most famous:

−   Methodology of the Council for the Study of Production Forces of the Ministry of Economic Development of the Russian Federation (SOPS);

−   methodology of the Institute of Economics of the Russian Academy of Sciences (RAS);

−   foreign methods (Euromoney, Forbes, Fitch, Moody's, S&P).

−   methodology of the Harvard Business School;

−   methodology of the National Rating Agency;

−   methodology of the rating agency "Expert RA". [68, p. 12]

Naturally, these methods differ as they have different valuation goals and types of investors. According to the methodology of the Harvard Business School, investment risks are determined by region for foreign investors. The methodology of the Institute of Economics of the Russian Academy of Sciences is aimed at identifying depressed

regions in order to activate regional policy and implement budgetary financing by government authorities. The methodology of the Council for the Study of Production Forces of the Ministry of Economic Development of the Russian Federation is focused on investors who carry out project financing, that is, the purpose of this analysis is to identify regions with peculiarities in investment activities. The Expert RA methodology, one of the most accurate and reliable in the Russian Federation, is strategically important at the state level. The analysis according to this methodology is carried out to determine the regional potential, associated risks and further ranking by the level of investment attractiveness in order to attract long-term investments in the regions. Each of the above techniques has its own advantages and disadvantages. Let us consider in more detail the methods of analyzing investment attractiveness, which are paramount in Russian practice. Table 5 characterizes all the selected methods according to the purpose of the analysis, according to the types of investors to whom the result is oriented, and also describes the main advantages and disadvantages.

The methodology of the Institute of Economics of the Russian Academy of Sciences (RAS) in the framework of the analysis mainly uses the method of expert assessments, which is a feature of this method. The analysis is carried out on the basis of 7 large blocks (factors of economic potential, business conditions, formation of a market environment, political, social, organizational, legal and financial factors), represented by 75 particular assessment factors (65 expert assessments and 10, assessed by statistical indicators). It is important to note that the focus is more on expert assessment is the main disadvantage of this technique [64, p. 147].

The methodology of the Council for the Study of Production Forces of the Ministry of Economic Development of the Russian Federation (SOPS) is aimed at analyzing the correlation between 4 main structural elements: non-commercial risks, potential, investment activity, the degree of implementation of investment attractiveness. Investment activity is viewed as an effective indicator of investment

attractiveness, and risks and potential as influencing factors. This technique does not take into account the importance of indicators and does not use weights in the analysis.

The Harvard Business School methodology refers to foreign practice and is based on identifying the risks that an investor may face when investing in a particular region. The analysis takes into account the characteristics of the political situation, the national currency and inflation rate, legislation and the possibility of capital withdrawal, and much more. The main disadvantage can be considered the narrow focus of this method, since the ranking of regions by the level of investment attractiveness is based on an expert assessment of individual groups of parameters.

The methods of the magazine "Euromoney", "Forbes" and others represent foreign practice in studying the issue of investment attractive regions. These methods are similar and have some differences in the set of characterizing indicators (political risk, economic efficiency, ability to service debt and debt, regional competitiveness, availability of various types of lending, etc.) Indicators, in turn, are determined by both the calculation and analytical method expert judgment. Indicator weights are calculated based on their contribution to the total. An important advantage of this method is the constant correlation of the rating itself with changes in different types of markets, that is, general political and economic trends are taken into account. [87]

The methodology of the National Rating Agency is aimed at determining a set of factors that determine how expedient and effective investment investments in projects or in the region are, as well as what risks an investor may face. That is, this methodology describes the state of all investment projects operating in the region. The national rating agency forms the rating of the regions, taking into account seven main factors: geographical location and natural resources, labor resources, financial stability, institutional environment, production potential, domestic market, regional infrastructure, each of which is assessed by a set of statistical indicators using entrepreneurial surveys. community and a number of expert assessments [39]

Table 3 Characteristics of methods for analyzing investment attractiveness

Methodology	Objective	Type of investor	Advantages	Disadvantages
IE RAS	Identify regions with investment potential.	The authorities carrying out budget financing	- popularity and ratings; - openness and accessibility; - the validity of expert assessments..	- a narrow approach (based on an assessment of depressed regions, an assessment of small and medium-sized businesses, an assessment of active and planned projects).
SOPSa	Identify regions with peculiarities in investment activities	Investors, which providing project financing	- presence of a causal relationship between categories;- - indicators based on statistical data prevail	- the degree of importance of factors is not taken into account (weights are not used); - non-transparent assessment of indicators of investment potential and risk.
Harvard Business School	Determine the investment risks of the region	Different types of investors	- the method is recognized by foreign investors; focus on risk assessment.	- narrow approach (separate groups of criteria); - lack of an objective assessment of investment potential.
Foreign methods	To determine the investment risks of the territory	Foreign investors	- the weights of the importance of factors are taken into account; - the technique is recognized by foreign investors; - determination of the rating of regions by the level of investment risk.	. - laborious; - analyzes not all regions of the Russian Federation; - does not take into account the specifics of the Russian economic system; - subjective selection of criteria.
Methodology of the national rating agency	Rank the constituent entities of the Russian Federation by the level of investment attractiveness	Investors providing project financing	- the weights of the importance of factors are taken into account; - indicators based on statistical data prevail; - the presence of a causal relationship between categories;	- laborious; - lack of an objective assessment of investment risk; - does not lend itself to quick adaptation to changing conditions; - subjectivity of expert assessments.
Methodology of the rating agency "Expert RA"	Rank the constituent entities of the Russian Federation by the level of investment attractiveness	Strategic investors	- popularity of the rating; - recognized by foreign investors; - the validity of expert assessments.	- laborious; - does not lend itself to quick adaptation to changing conditions; - subjectivity of expert assessments.

The most popular method for analyzing investment attractiveness, which is also recognized by foreign investors, was developed by the Expert RA rating agency. This methodology evaluates investment attractiveness as an integral indicator of investment potential and risk. On the part of the investor, this is a clear drawback, due to the lack of clarity in the assessment when the values are reduced to a general integral indicator. As part of the investment potential assessment, Expert RA determines the weights of potentials and risks, which makes the result more reliable and accurate. It is the methodology of the Expert RA rating agency that will be studied within the framework of this research work [36].

The main advantage of the rating agency "Expert RA" is the compilation of a rating of the constituent entities of the Russian Federation after a qualitative and quantitative analysis according to the generally recognized scale of the level of investment attractiveness (Table6). [38, p. 27]

Table 4 Scale of assigning a rating to a region

1A	high potential	minimal risk
1B	high potential	moderate risk
1C	high potential	high risk
2A	average potential	minimal risk
2B	average potential	moderate risk
2C	average potential	high risk
3A	low potential	minimal risk
3 B1	reduced potential	moderate risk
3 C1	reduced potential	high risk
3 B2	negligible potential	moderate risk
3 C2	negligible potential	high risk
3D	low potential	extreme risk

Thus, some of the considered methods do not take into account the specifics of the regions, and therefore have a number of disadvantages. Based on the analysis, it

can be assumed that for greater efficiency, the technique should have the following properties:

– the complexity of the study, qualitative and quantitative indicators must be taken into account;

– openness, availability of results in the public domain;

– adaptability, promptly adjust to changes in economic conditions;

– validity, compliance of the results obtained with the tools used;

– the ability to assess the real distance between regions and identify the dynamics of their positions;

– take into account the sectoral focus of the region and investment activity. [69, p. 40]

4. Analysis of the investment attractiveness of the Krasnodar Territory

4.1. Analysis of the investment attractiveness of the Krasnodar Territory in 2019.

Analysis of the investment attractiveness of the region According to the methodology of the expert RA rating agency, includes an analysis of investment potential and risk, which are presented by a number of indicators (Table 3). Next, we will carry out the calculations of private indicators.

The production potential, which, based on the methodology of the expert RA rating agency, is characterized by the volume of GRP. The Ground Regional Product of the Krasnodar Territory in 2019 is 2,484,836 million rubles. Since 2010, this indicator stably increases, which is displayed in Figure 6. The positive trend of GRP growth testifies to the development of the production sector, and consequently about increasing the production potential of the region.

Figure 6 Dynamics of Gross Regional Product of the Krasnodar Territory at current prices, million rubles
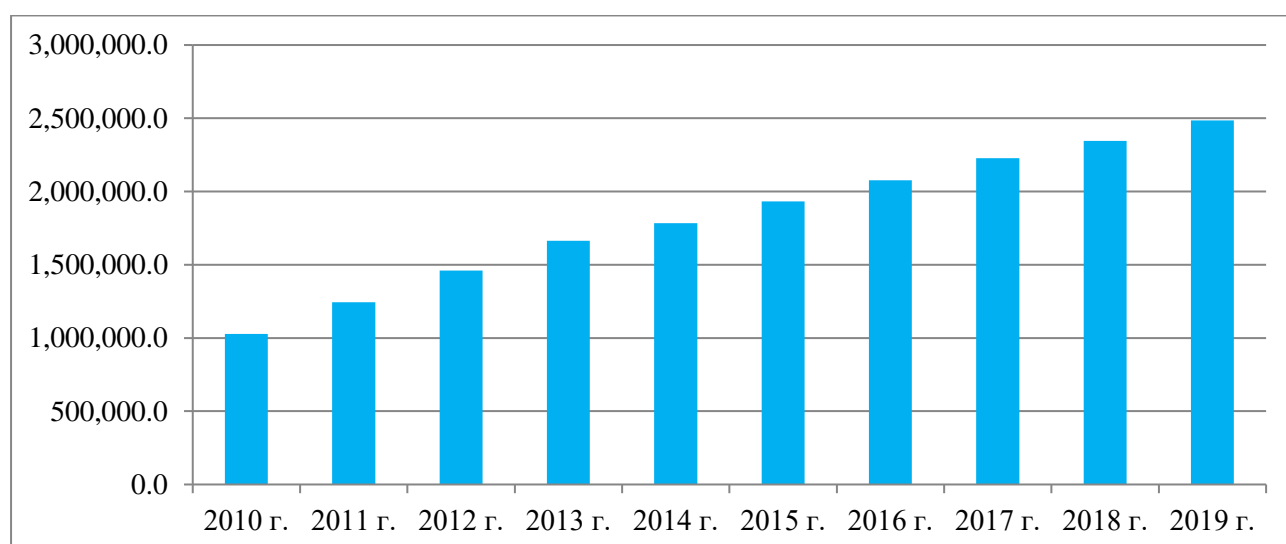

Figure 4 displays the volume of GRP in the leading subjects of the Russian Federation, among which Moscow city, Moscow and Tyumen regions, St. Petersburg, Republic of Tatarstan and Krasnodar region. To calculate the values of the indicators,

it is necessary to determine the greatest value among all regions. In this study for the "reference" region, with which the city is being compared with the city of Moscow, as it displays the highest possible values for all the analyzed indicators. GRP of the city of Moscow in 2019 amounted to 19,579,614.8 million rubles, which is the greatest value among all the subjects of the Russian Federation (Figure 5).

Calculate the value of the indicator using Formula 1:

$$\text{p}_{GRP} = \frac{2\,484\,283,6}{19\,579\,614,8} * 100\% = 12,69\,\%.$$

Since only one indicator is used to determine the production potential, then using formula 3, calculate the value of the Private Indicator:

$$\text{I}_{ind.} = 12.69\,\% * 0,8 = 10,15\,\%.$$

Figure 7 The volume of surplus / deficit for leading subjects of the Russian Federation in 2019, billion rubles.
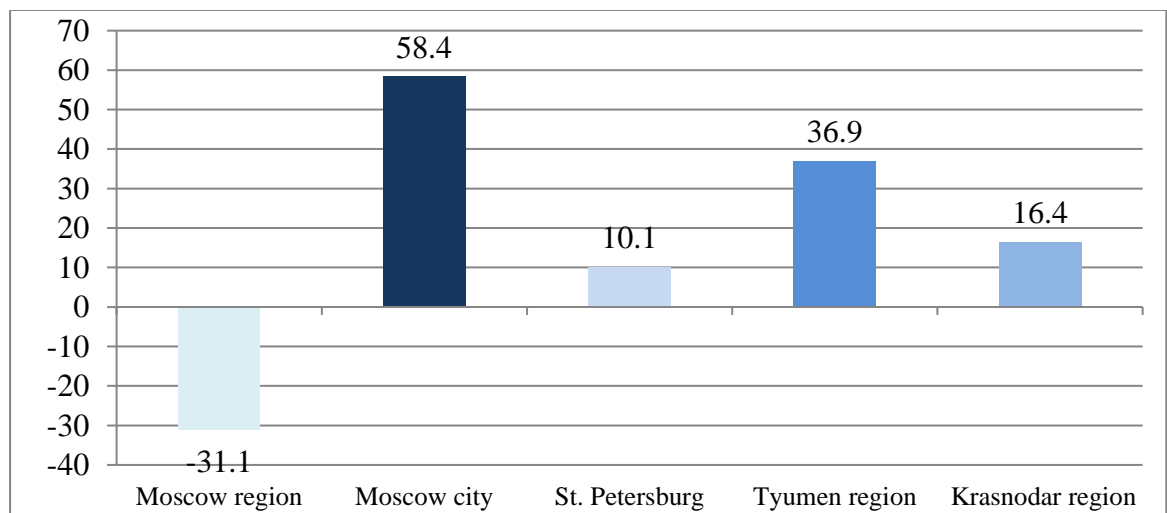
It is once again confirmed that the city of Moscow is characterized by the highest indicators in the analyzed potentials. Moscow city surplus is 58.4 billion rubles, while the surplus of the Krasnodar Territory is 16.4 billion rubles, which is three times less. The volume of tax revenues, fees, and other mandatory payments in the budget system of the city of Moscow is 7,750.5 million rubles, and the Krasnodar Territory - 790.4 million rubles.

Calculate the value of the indicators by Formula 1:

$$p_{surplus} = \frac{16,4}{58,4} * 100\% = 28,1\%.$$

$$p_{tax\,rev.} = \frac{790,4}{7\,750,5} * 100\% = 10,2\,\%.$$

So, having received a percentage expression of the indicators, add them and divide the number of indicators themselves, in this potential using formula 2:

$$I_{fin.} = \frac{28,1\% + 10,2\%}{2} * 0,65 = 12,44\,\%.$$

Labor potential is characterized by such indicators as the ratio of the natural growth of the population per 1000 people population, the number of economically active population, the level of employment and the average life expectancy in the region (if there is data). The coefficient of natural growth in the Krasnodar region is negative (-1.5), this suggests that mortality (12.3) in this region exceeded the birth rate (10,8) in 2019 the highest natural growth rate of the population per 1000 people in Chechen Republic - 16.0, is the result of low mortality fertility.

$$p_{nat.gr.rate} = \frac{-1,5}{16,0} * 100\% = -9,38\%.$$

The number of economically active population in the Krasnodar Territory is significantly high and amounts to 2820.5 thousand people, respectively, the employed population of 2683.7 thousand people, that is, the level of employment is 58.2%. Record indicators belong to the city of Moscow, where the number of economically active population is 74,25.6 thousand people, and the level of employment is 68.2%.

$$p_{act.population} = \frac{2683,7}{7425,6} * 100\% = 36,14\,\%;$$

$$p_{empl.rate} = \frac{58,2}{68,2} * 100\% = 85,3\,\%.$$

Based on statistical data, it is possible to conclude that the lowest life expectancy in the northern regions of the country. While the Caucasian republics occupy the top lines of the rating. The highest indicator in the Republic of Dagestan - 78.69 years,

which is due, first of all, a more healthy way of life and a less harsh climate. The average life expectancy in the Krasnodar Territory is 74.3 years.

$$p_{life\ expect.} = \frac{74,3}{78,69} * 100\% = 94,4\ \%$$

4 indicators were used to analyze the employment potential, therefore the private indicator is:

$$I_{labour} = \frac{(-9,38) + 36,14\% + 85,3\ \% + 94,4\%}{4} * 0,75 = 38,71\%.$$

Analysis of consumer capacity includes indicators of the average per capita income of the population of the region, the average consumer spending per capita and for a more detailed characteristic, the indicators of the number of natural cars per 1000 people of the population and the average area of residential premises, which comes to 1 inhabitant, should be calculated.

In the Krasnodar Territory, on average per resident there is 27.2 м²residential premises. The total area of residential premises occurring on average per resident of the Moscow region is 33.5 м², which is the largest indicator among all the constituent entities of the Russian Federation. The largest number of cars per 1000 people in the Kamchatka Territory, that 498.5 cars, whereas in the Krasnodar Territory 306.6 cars.

$$p_{cars} = \frac{306,6}{498,5} * 100\% = 61,5\ \%.$$

$$p_{area} = \frac{27,2}{33,5} * 100\% = 81,19\ \%.$$

Figure 6 shows the level of average per capita income in the regions of various districts. The highest average income in the Chukotka Autonomous District is 79,366 rubles. At the same time, the average per capita income of the capital is 66,377 rubles, and the Moscow region of the Central District - 43,977 rubles. The average income of the Krasnodar Territory is 33,846 rubles, which approximately corresponds to the average per capita income in the Russian Federation (33,10 rubles).

$$p_{average\ i.} = \frac{33\ 846}{79\ 366} * 100\% = 42,65\ \%.$$

Figure 8 Average cash income on selective regions of the Russian Federation in 2019 in rubles
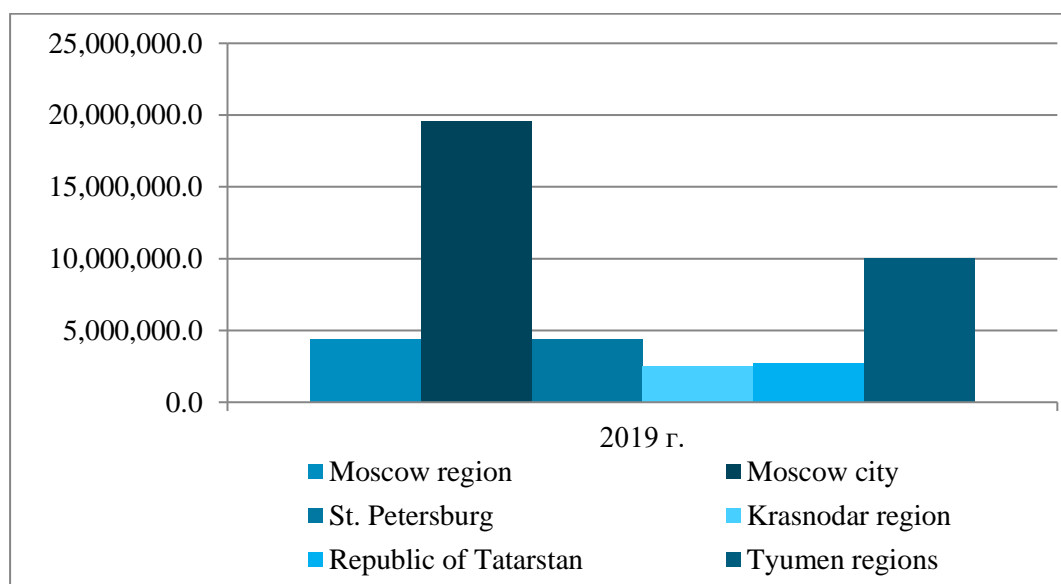
Consumer spending of the population of the Krasnodar Territory for 2019 amounted to 2,109,548 million rubles, and consumer spending per capita are 385,810.2 rubles. The cost of the population of the Krasnodar Territory dominates the cost of buying goods (70.6%), almost a third is spent on the payment of services, and 2.4%, namely 49,934 million rubles are spent abroad (Figure 7). The same indicator in the city of Moscow is 1,060,867.94 rubles.

$$\text{p}_{average\ spendings} = \frac{385\ 810,2}{1\ 060\ 867,94} * 100\% = 36,37\ \%.$$

Consumer potential indicators are calculated. The private indicator is:

$$\text{I}_{cons.} = \frac{42,65\% + 36,37\% + 61,5\% + 81,19\%}{4} * 0,7 = 38,8\%.$$

Figure 9 The structure of consumer spending of the population of the Krasnodar Territory in 2019

Legend:
- Chernomorskoe, Azov, Caspian coast
- North and Northwest
- Moscow, Saint Petersburg
- North Caucasus, Mineralnye Vody
- Ural, Siberia, Dalled East
- Center of the European Part of Russia

Pie chart values: 48%, 4%, 6%, 6%, 13%, 23%
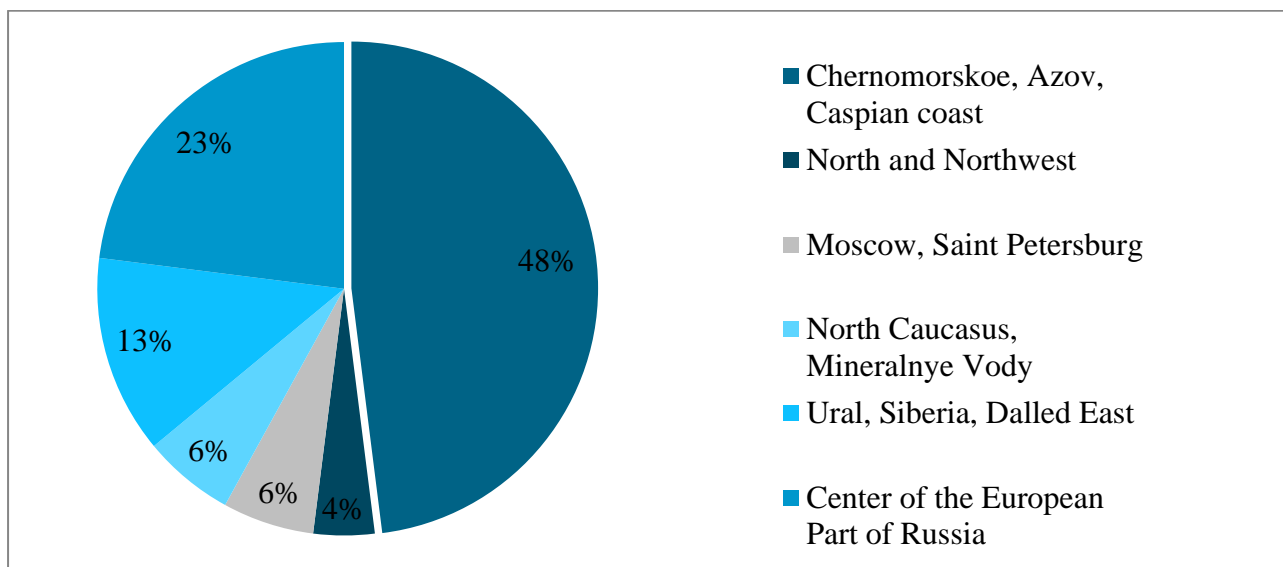
Institutional potential is characterized by the number of small enterprises expressed by the percentage of the total number of enterprises in the region, as well as the number of individual entrepreneurs as a percentage of the population. Analysis should take into account the average costs of opening a business (with statistical data).

Moscow is a leader in doing business, both small (including micro), secondary and individual. In total, there are 744,673 enterprises in the capital, of which 283 705 individual entrepreneurship, 460,968 small and medium-sized businesses. The ratio of small businesses to the total number of enterprises of the capital is 4.8%. Krasnodar Territory, in turn, actively develops a business sector and in 2019 in the region there are 278,251 organizations, of which small businesses 7 199, to the average businesses include 556. Consequently, the percentage of small businesses from the total enterprises in the region is 2, 59%. In the Krasnodar Territory of individual entrepreneurs 2.56% of the population of the region, while in the city of Moscow, individual entrepreneurs are 3.69%. Based on the above data, institutional potential indicators are equal:

$$p_{sm.bus.} = \frac{2,59}{4,8} * 100\% = 53,96\ \%$$

$$p_{ind.ent.} = \frac{2{,}56}{3{,}69} * 100\% = 69{,}4 \text{ \%}.$$

The average business opening costs in the Krasnodar Territory are 1.2% of the average per capita income, in the capital, this indicator is 6.8%.

$$p_{cost} = \frac{1{,}96}{3{,}4} * 100\% = 57{,}65 \text{ \%}.$$

Determine the value of institutional capacity. The sum of the indicators is divided by their number and multiply by weight, which is 0.5 (Table 4):

$$I_{inst.} = \frac{53{,}96\% + 69{,}4\% + 57{,}65\%}{3} * 0{,}5 = 30{,}17 \text{ \%}.$$

No less important infrastructure potential. For its assessment, the following indicators were selected: the total length of railway lines and public roads, the number of gas stations, coverage of mobile networks and the Internet, as a percentage of the population of the region.

The density of the general use of the highest in St. Petersburg is the highest in the city, where 10 thousand $км^2$ have 3,082 km. Railway paths, and in the Krasnodar Territory this figure is significantly lower and is 297 km. General use extension in the Krasnodar Territory 42,277.2 kilometers. The greatest length of the constituent entities of the Russian Federation in the Altai Territory (54,834 km). In this case, the provision of high-speed gas lines is quite low. In the Altai Territory, there are only 646 stations in the Altai Territory. In the Krasnodar Territory of such stations 1 090, and in the Moscow region 1,491, which is the greatest indicator by regions.

$$p_{railway} = \frac{297}{3\ 082} * 100\% = 9{,}64 \text{ \%};$$

$$p_{road} = \frac{42\ 277{,}2}{54\ 834} * 100\% = 77{,}1 \text{ \%};$$

$$p_{gas\ lines} = \frac{1\ 090}{1\ 491} * 100\% = 73{,}11 \text{ \%}.$$

Mobile network security coefficients and the Internet, as a percentage of the region's population, also important indicators in the assessment of infrastructure potential. The number of active Internet users in the Krasnodar Territory is 1,270,509

people, the percentage of population coverage is 22.4%. In the city of Moscow, the largest number of active subscribers (4,556,044), while the population is more than 12 million people, the coverage of the Internet bond is only 36.11%. The greatest coefficient of coverage in the city of St. Petersburg - 59.13%.

$$p_{int.} = \frac{22,4}{59,13} * 100\% = 37,88 \%.$$

The sphere of telecommunications can be estimated using the indicator - the number of apartment telephone sets of public network per 1000 people of the population (in urban and rural areas) on the constituent entities of the Russian Federation. On average, 245.7 telephone vehicles account for 100 people in the city of Moscow, whereas in the Krasnodar Territory an average of 108.4 telephones.

$$p_{tel.} = \frac{108,4}{245,7} * 100\% = 44,12 \%.$$

So, the private potential of the infrastructure of the Krasnodar Territory in 2019 is:

$$I_{infrastr.} = \frac{9,64\% + 77,1\% + 73,11\% + 37,88\% + 42,24\%}{5} * 0,65 = 31,2 \%.$$

Indicators The volume of innovative goods, works, services, the number of advanced production technologies developed and the level of innovative activity of organizations serve to assess the innovative potential. Innovative products, works, services - goods, works, services, new or subjected to different degrees of technological changes in the last three years, and the innovative activity of the organization characterizes the degree of participation of the Organization in the implementation of innovation activities in general or its separate species within a certain period of time.

The most important indicator in the assessment of the innovative potential is the indicator of the level of innovation activity, which is defined as the ratio of the number of organizations that carried out technological, organizational or marketing innovations, to the total number of organizations examined in the country, the industry, region. The highest level of innovation activity in Moscow - 33.8%, and in the Krasnodar Territory, this indicator is characterized by a relatively low level of 8.9%,

which is lower than the average. The average value of the level of innovation activity in all subjects of the Russian Federation is 11.6%.

$$p_{innov.} = \frac{8,9}{33,8} * 100\% = 26,33 \%.$$

Figure 8 shows that the greatest amount of innovative goods, works and services in the Republic of Tatarstan, which is 586,666 million rubles, in second place in St. Petersburg, its volume is 377,120.8 million rubles. Next, the Moscow region is located (357,737.7 million rubles), the Perm Territory (313,076.3 million rubles) and the city of Moscow (283,5446 million rubles). In the Krasnodar Territory, the volume of innovative goods, works and services is 115,396.5 million rubles. You can calculate the indicator of the volume of innovation:

$$p_{vol.\ of\ inn.} = \frac{115\ 396,5}{586\ 666} * 100\% = 19,7 \%.$$

Figure 10 The volume of innovative goods, works, services in 5 leading regions and the Krasnodar Territory in 2019, million rubles.
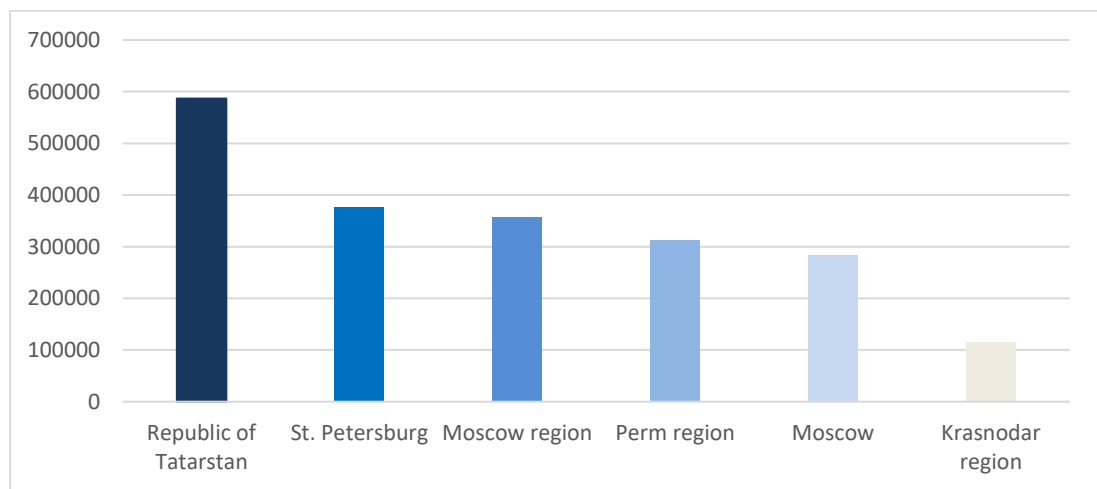
The number of advanced production technologies in the Russian Federation is 1620 and every year this number increases, as well as the innovative activity of not only regions, but also the country as a whole. 14.4% of advanced production technologies are developed in the capital, and in quantitative terms 233, which is the

largest indicator. 9.7% of the technologies were developed in St. Petersburg, 8.3% in the Chelyabinsk region and 7.9% in the Moscow region. In turn, in the Krasnodar Territory there are 52 developed advanced production technologies, which is also a fairly good result. Relying on the above data, the indicator of advanced production technologies will be equal to:

$$p_{a.p.t.} = \frac{52}{233} * 100\% = 22,3\ \%.$$

The three indicators obtained are quite enough to assess the innovative potential, which is equal to:

$$I_{inn.} = \frac{26,33\% + 19,7\% + 22,3\%}{3} * 0,45 = 10,25\ \%.$$

We will analyze the geographical position of the Krasnodar Territory as part of the analysis of natural resource potential and analysis of the tourist potential by the method of expert assessment. An expert assessment in this study work is based on the author's opinion.

Tourism is one of the sources of public income and regional budgets. It should be noted that the state of the tourist sphere at the regional level is significantly lagging behind the world-class indicators. Krasnodar region has unique climatic conditions, which in a decisive degree determine the potential for the development of tourist business in the region. In addition, in the Krasnodar Territory, the development of all types of tourism (marine, mountain, ski, balneological, etc.) is provided by a variety of resources and climate.

In 2019, in the Krasnodar Territory, 48% of the All-Russian volumes of sanatorium and health services were rendered by the population, and the volume of income from the services provided amounted to 36.4 billion rubles. It can be concluded that the Krasnodar region is the most popular region for tourism in Russia (Figure 9). Also, the region takes one of the leading places for the maintenance of the flow of tourists - 26.17% of all resting Russians.

Figure 11 Shares of territories of the Russian Federation in the provision of sanatorium and health services in 2019
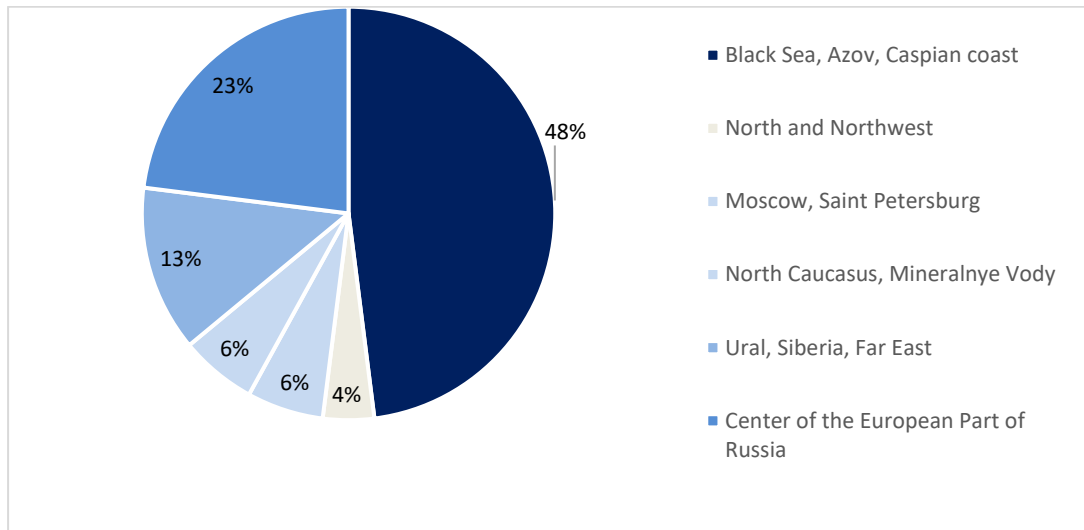
One of the main aspects of the attractiveness of the resorts of the Krasnodar Territory is the uniqueness of the natural environment and a favorable climate, which has already been mentioned more than once. The Krasnodar edge is washed by two seas: in the south-west - the Black Sea, and in the North-West - the Azov Sea. Another important indicator is the average duration of time when in the bright day of the day is sunny weather. On the territory of the Krasnodar Territory, this indicator is 2300 sun hours per year. According to a ten-point scale, the author considers it possible to evaluate the indicators of 6 points, and natural resource capabilities in 5. So, private potentials will be equal:

$$I_{tourist} = \frac{6}{10} * 100\% * 0,1 = 6\ \%;$$

$$I_{nat.res.cap.} = \frac{5}{10} * 100\% * 0,35 = 17,5\ \%.$$

All the calculated values of private indicators of investment potential are entered in Table 7.

Table 5 Values of private indicators for analyzing the investment potential of the Krasnodar Territory in 2019

Investment potential	
Industrial	10,15 %

Labor	38,71 %
Consumer	38,8 %
Infrastructure	31,2 %
Financial	12,44 %
Institutional	30,17 %
Innovative	10,25 %
Nature resource	17,5 %
Tourist	6 %

Let us turn to the analysis of investment risk. Expert estimates will not be used to evaluate private indicators (author's opinion), and only statistical data. The specificity of the risks is that the greater indicator characterizes the risk with a negative side, that is, the higher the indicator, the higher the risk.

Criminal risk is characterized by the number of registered crimes per 100,000 people of the population. Total in the Russian Federation in 2019. 2 024,337 crimes of different gravity were registered. This indicator rose by 1.6% compared to the previous year. According to this EMISS in the Republic of Tyva, 2,876.4 crimes were registered, which indicates the highest crime level among all subjects of the Russian Federation. 1215.7 crimes per 100,000 people of the population were registered in the Krasnodar Territory. The crime rate of the Krasnodar Territory in 2019 is:

$$\text{p}_{cr.l.} = \frac{1\,015,7}{2\,876,4} * 100\% = 35,31\ \%.$$

Since only one indicator is used to assess the criminal potential, and the weight is 0.65, the private indicator is:

$$\text{I}_{\text{crim.}} = 42,26\ \% * 0,65 = 27,47\ \%.$$

The most important indicator of investment risk is the economic risk, whose weight in 2019 amounted to 0.85. In the analysis of this private indicator, three indicators are used: the unemployment rate, the consumer price index, as well as the degree of wear of fixed assets. The indicator of the degree of wear of fixed assets is calculated as the relation of the depreciation accumulated at the end of the year, the fundamental funds of fixed assets by type at the same date, as a percentage. The degree of wear of the fundamental funds of the Krasnodar Territory is 27.3%, and the greatest

wear indicator in the Republic of Crimea is 69.2%. The indicator of the degree of wear of fixed assets to assess the economic potential is:

$$p_{wear\ ind.} = \frac{27{,}3}{69{,}2} * 100\% = 39{,}45\ \%.$$

The unemployment rate in the Krasnodar Territory in 2019 is 3.8, which is slightly lower than the average communion (4.5). The critically high indicator is observed in the Republic of Ingushetia - 26%, it is important to note that this indicator decreased by 0.4% with respect to 2018. The estimated unemployment rate is:

$$p_{unemployment} = \frac{3{,}8}{26} * 100\% = 14{,}6\ \%.$$

$$I_{econ.} = \frac{39{,}45\% + 14{,}6\%}{2} * 0{,}85 = 22{,}97\ \%.$$

The deficit of the regional budget, regional tax arrears, fees, and other mandatory payments to the budget system of the Russian Federation - the main indicators of the analysis of private financial risk. Krasnodar region has significantly high regional debt. The analyzed region ranks 4th after the city of Moscow, the Moscow region, and the city of St. Petersburg in terms of tax debt, fees and other mandatory payments in the budget system of the Russian Federation. The amount of debt of the capital is 63,042,147 thousand rubles, and the Krasnodar Territory - 5,379,063 thousand rubles. An indicator of financial risk is:

$$p_{fin.} = \frac{5\ 379\ 063}{63\ 042\ 147} * 100\% = 8{,}53\ \%.$$

To calculate the indicator of the deficit of the regional budget as the basis of the comparison, the value of the greatest deficit (Figure 8) of the Moscow Region, which is -31 081 million rubles, is, whereas in the Krasnodar Territory there is a surplus of this indicator in the amount of 16,397 million rubles.

The indicator of the deficit of the regional budget within the analysis of financial risk is:

$$p_{def.} = \frac{16\ 397}{(-31\ 081)} * 100\% = -52{,}76\ \%.$$

Since the indicator is negative this indicates the absence of risk. A negative indicator can also be considered as ineffective use of budgetary funds, but in this aspect, this value cannot be accepted in further calculations.

Consequently, a private financial risk is equal to:

$$I_{fin.} = 8,53\% * 0,85 = 7,25\ \%.$$

Consider the environmental risk that is assessed by three indicators of emissions of harmful (polluting) substances into atmospheric air from road transport and from stationary sources, as well as the volume of waste (contaminated) water. The number of emissions of harmful (polluting) substances into atmospheric air from road transport and from stationary sources in the Krasnodar Territory are 60.8 and 426.77 thousand tons, respectively. If we talk about the highest indicators, then emissions from road transport numbers in the amount of 334.4 thousand tons в г. Moscow (for which the number of cars in the region) and from stationary sources are 2,369.5 thousand tons in the Krasnoyarsk Territory. Therefore, the rate of emissions of harmful (polluting) substances into atmospheric air from road transport is:

$$p_{transport} = \frac{60,8}{334,4} * 100\% = 18,18\ \%;$$

and from stationary sources:

$$p_{stat.} = \frac{426,77}{2\ 369,5} * 100\% = 18,01\ \%.$$

The volume of discharge of waste (contaminated) waters in the Krasnodar region is 1,070.1 million $м^3$, which is 50.7% of the total sewage of the region. The greatest indicator in the Leningrad region - 3,005.6 million $м^3$. The calculated indicator is:

$$p_{waste\ water} = \frac{1\ 070,1}{3\ 005,6} * 100\% = 35,6\ \%.$$

The private ecological risk of the Krasnodar Territory is:

$$I_{ecol.} = \frac{18,18\% + 18,01\% + 35,6\%}{3} * 0,45 = 10,77\ \%.$$

The next private indicator is social. As part of its analysis, we calculate the share of the population with cash income below the subsistence minimum. In 2019, 8.5% of

the population of the region have a cash income below the subsistence minimum, and the largest share in the Republic of Tyva - 34.4% of the population, therefore, the indicator is:

$$p_{sub.min.} = \frac{8,5}{34,4} * 100\% = 24,7\ \%.$$

As part of the social risk assessment, we calculate the indicator of the revenue ratio of 10% of the most and 10% of the least secured population, which is called the fund's coefficient. This coefficient characterizes social inequality, and its decline is one of the components of improving the quality of life of the population. The highest value of this distribution is observed in the Tyumen region 17.7, in the Krasnodar Territory the value is below 9.3. This figure decreased by 0.8 per year:

$$p_{funds\ coef.} = \frac{9,3}{17,7} * 100\% = 52,54\ \%.$$

As part of the analysis, the indicator of the population's money income (as a percentage) can also be used. The greatest indicator in the Republic of Tyva, which is 7%, which is associated both with a low average wage and a small share of the working-age population. In the Krasnodar Territory, the deficit is only 1%.

According to the indicator of the money income shortage of the population is:

$$p_{income} = \frac{1}{7} * 100\% = 14,29\ \%.$$

The social risk of the Krasnodar Territory in 2019 is:

$$I_{soc.} = \frac{24,7\% + 52,54\% + 14,29\%}{3} * 0,7 = 21,36\ \%.$$

The managerial or political risk of the Krasnodar Territory is an average, estimated estimate 3 under the influence of factors such as: an external and internal threat of stability, as the region borders the territory (Republic of Crimea and G. Sevastopol), which is currently considered controversial in the international arena and It is amenable to some sanctions. Also affected the attitude of the administrative authorities to directly foreign investments, namely the inefficiency of their use and the project (straight) orientation, the infringement of the media freedom, the influence of

the opposition and the conservative position of the population in the elections. Consequently, private management (political) potential is:

$$I_{pol.} = \frac{3}{10} * 100\% * 0,7 = 21 \%.$$

The data obtained will be reduced to Table 6 for clarity.

Table 6 Values of private indicators of analyzing the investment risk of the Krasnodar Territory in 2019

Инвестиционный риск	
Economic	22,97 %
Financial	7,25 %
Social	21,36 %
Political	21 %
Criminal	27,47 %
Ecological	10,78%

The next stage is also calculating the total value of the investment attractiveness of the region, that is, the total values of the potential and risk are determined, which is considered the most important stage. To calculate the total potential and risk values, it is necessary to build a petal diagram (Figure 12 and 13), on the axes of which each component of potentials and risks will be postponed. After calculating the area of the resulting figure using the formula 3. The value obtained / share (in%) and will be the total potential / risk.

The calculated integral investment potential is 3.473%. This value indicates a high potential and considerable level of investment attractiveness. It should be assumed that this indicator under the influence of a plurality of factors studied in this study has an error. The natural resource and tourist potential was calculated on the basis of expert assessment, that is, the opinions of the author, which is considered to be subjective.

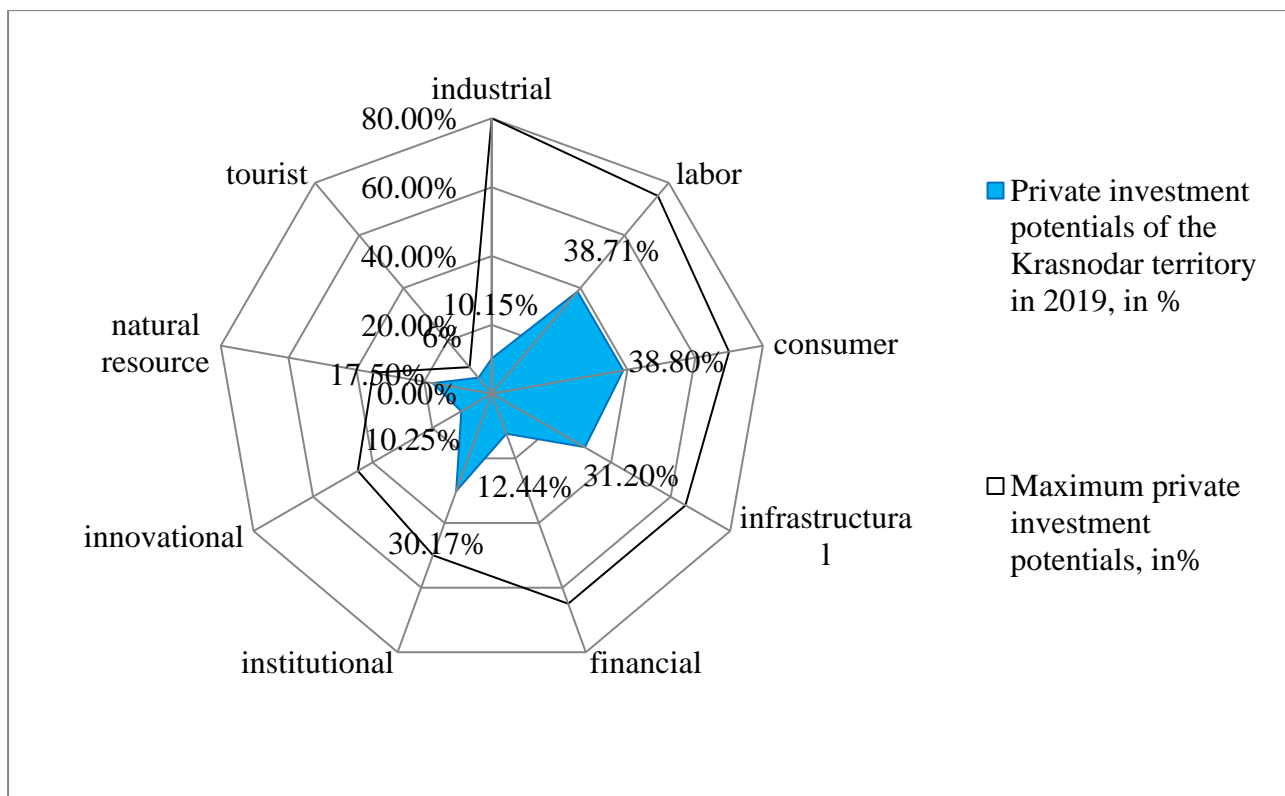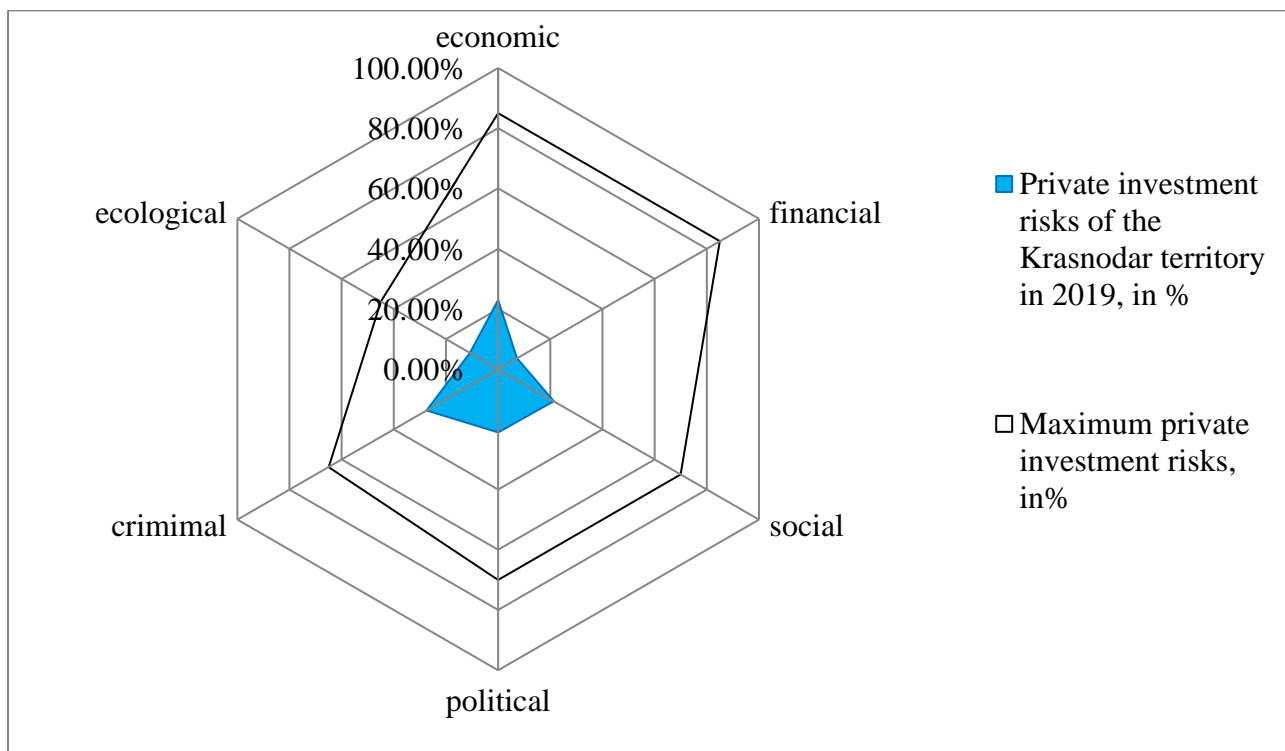*Figure 12 Petal diagram of the investment potential of the Krasnodar Territory (2019)*

*Figure 13 Petal diagram of the investment risk of the Krasnodar Territory (2019)*

So, the investment risk of the Krasnodar Territory in 2019 is low, in percentage terms is 0.197. It should be noted that this indicator is also overestimated. Integral

investment risk depends on 6 private indicators, which, in turn, volatile and are sensitive to the slightest changes. When calculating private risks, there is no specific list of analyzed indicators, the proposed set of indicators is considered advisory. In the analysis of investment risk, an expert assessment was taken into account, which is subjective. This value, according to the rank distribution scale, refers to minimal risk. Given the value of the potential (high), the Krasnodar Territory is assigned a rating of 1A (Table 1). The overall indicator of the investment attractiveness of the Krasnodar Territory in 2019, calculated using formula 4, is:

$$IP = 3{,}473 * (1 - 0{,}197) = 2{,}789.$$

According to the calculated values of the investment attractiveness of pilot regions on the basis of these RATING AGENCY "Expert RA" and the calculations of the author, we construct a schedule for the dynamics of the analyzed indicators of the Krasnodar Territory (Figure 14).

Figure 14 Dynamics of investment potential / risk and integral indicator of the investment attractiveness of the Krasnodar Territory in the period 2010 - 2019.
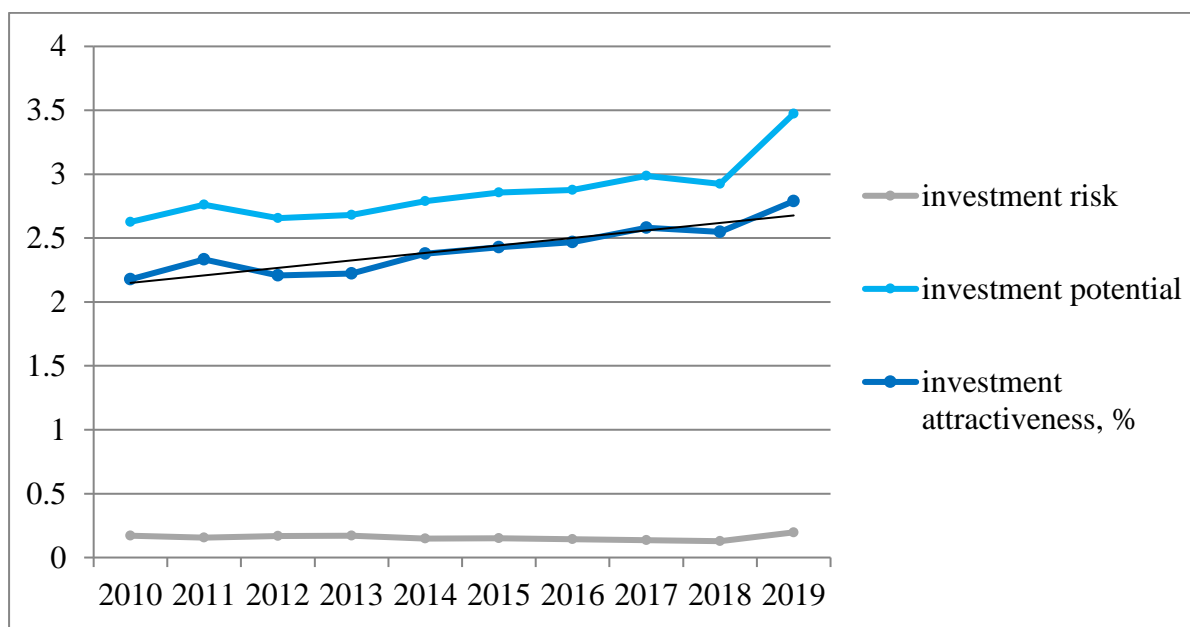
In the period 2010 - 2019 In the Krasnodar Territory there is a positive growth dynamics of investment attractiveness. Since investment attractiveness is an integral

indicator of investment potential and risk, it can be noted that the increase in the integral indicator in the dynamics has influenced the increase in investment potential, and the risk, in turn, has both negative (reduction) and positive (increase) changes, but they are insignificant.

The region retains its position in the ranking over the past five years. High investment attractiveness is one of the decisive factors for the investor, based on which it can be concluded that investment activity and investment attractiveness are interdependent.
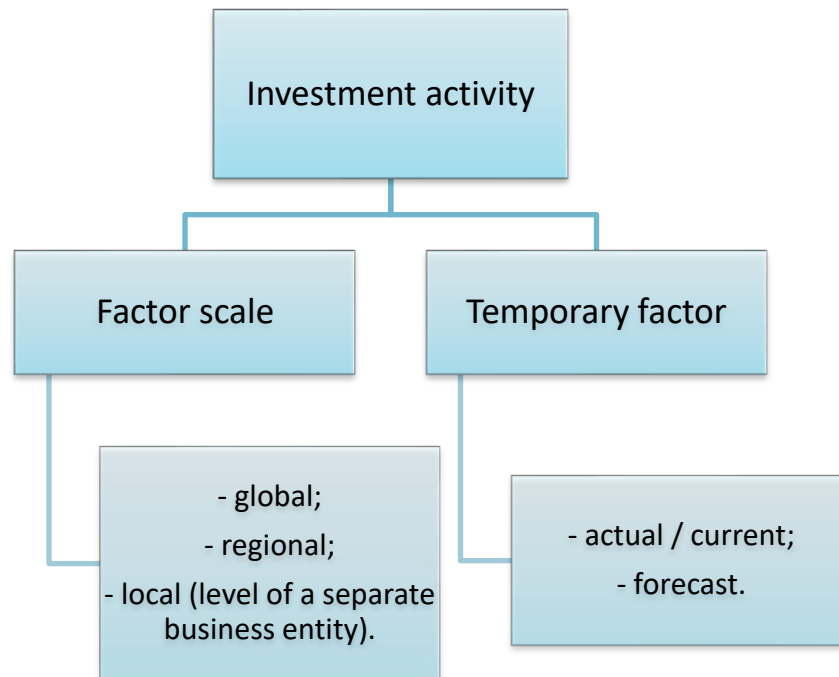
4.2. Analysis of the investment activity of the Krasnodar Territory in 2010-2019.

Investment activity is one of the most important characteristics of intensity, and more precisely the activity, an investment process that clearly demonstrates investors a change, the dynamics (development or deterioration) of individual indicators. In the scientific and methodological literature, the concept of "investment activity" is synonymous with the concept of "investment activity", that is, it can be said that investment activity is a set of actions aimed at improving the efficiency and volume of investment. [17, c. 56]

Within the framework of this research work should be deepened in the analysis of investment activity, as it is an effective sign of investment attractiveness and is characterized by the volume and rates of attracting and investment movement. The intensity of investment activity is directly situationally the degree of investment attractiveness, one can note the interdependence of these two indicators.

The concept of investment activity is versatile and has several species that are allocated on the basis of two factors: scale and time (Figure 15).

Figure 15 Types of investment activity

In the course of the study it seems possible to explore the investment activity of the Krasnodar Territory as an effective indicator of investment attractiveness. In the context, the characteristics of the concept, as the intensity of investment activities and its activation, the analysis of investment activity is carried out on the basis of determining the volume and size of attracted investments in fixed assets. [23]

To date, the last 10 years Krasnodar region is one of the most dynamically developing constituent entities of the Russian Federation. Krasnodar Territory demonstrates high investment activity, which is confirmed by the associated statistical data. Over the past 10 years, the region has received investment investments for a total of more than 6.2 trillion. rubles, which is 5.73% of the volume of attracted investments of the Russian Federation for the period 2010-2019. (Figure 16), while the average annual growth rate of the investment of the region is 104%.

Figure 16 The volume of investments received in the Krasnodar region for the period 2010-2019,%

5,73 %

- Russian Federation
- Southern Federal District
- Krasnodar region
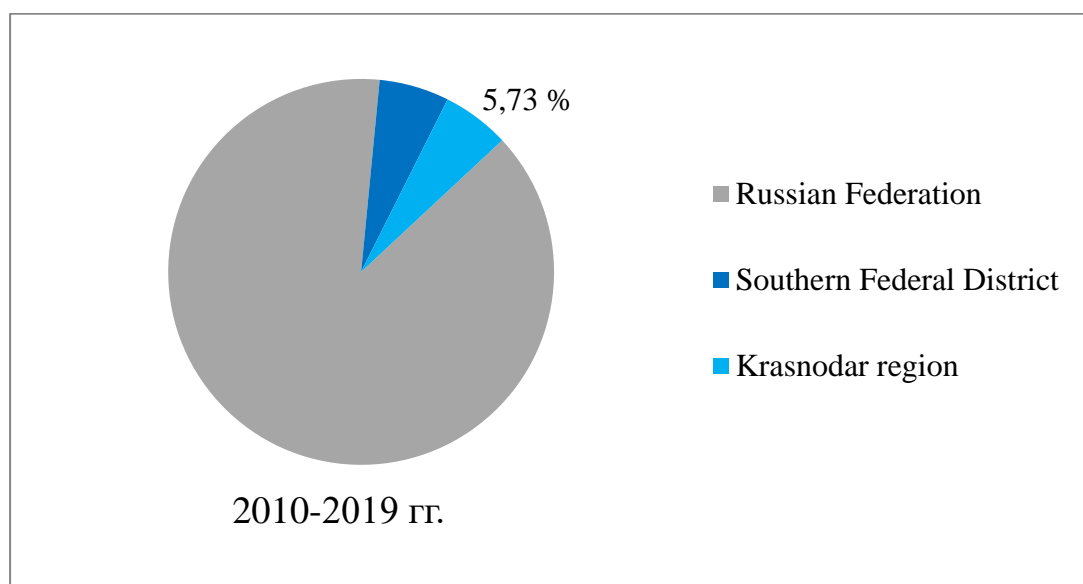
2010-2019 гг.

In the period 2010-2019 About 110 trillion was drawn to the Russian Federation. rubles (Figure 17), 11.66% of these means are to the Southern Federal District, 50% of which master the Krasnodar region. Krasnodar region ranks fourth in terms of the volume of attracted investments, after the Tyumen region (including the Khanty-Mansiysk and Yamalo-Nenets Autonomous District - almost 17 trillion. Rubles), city of Moscow (about 16 trillion rubles) and Moscow region (6.5 trillion. rubles).

Figure 17 Dynamics of investment in the main capital of the Krasnodar Territory in the period 2010-2019, billion rubles.

- The volume of investment in the main capital of the Krasnodar Territory
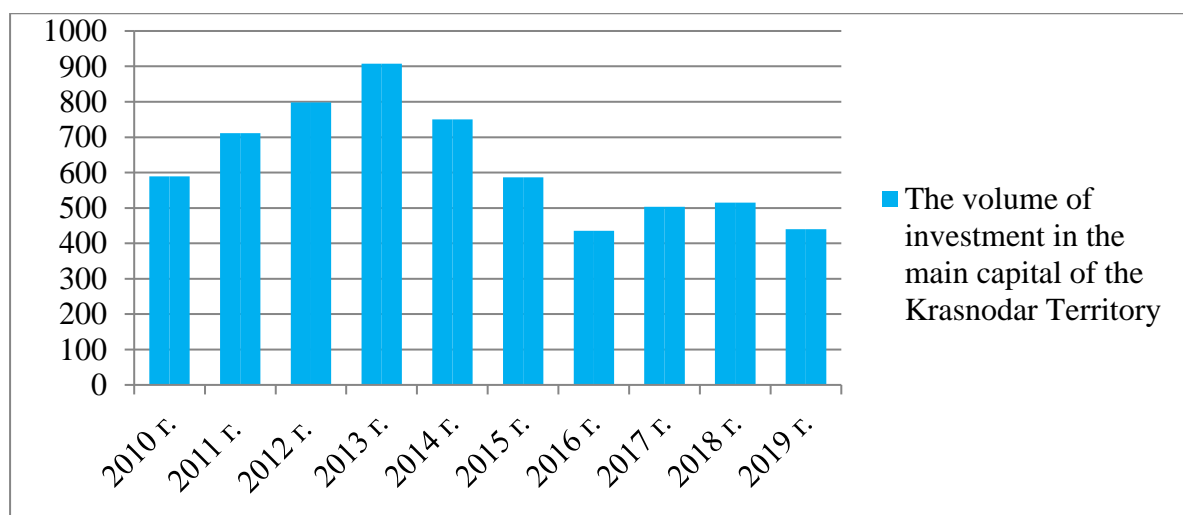
In the period 2010-2014 Krasnodar region is characterized by the positive dynamics of investment influx, which is associated with the holding of the Olympic Games in 2014 in the region. The maximum amount of investment in fixed assets is observed in 2013 in the amount of 907.2 billion rubles, in 2014 it is noticeable to reduce the influx of capital of 157 billion rubles and a decrease in the growth rate by 17.3% to the previous year (Figure 18). Reducing investment in the Krasnodar region is largely due to the high base of previous years, when work was carried out towards the preparation of the Olympic Games. The trend of reducing the growth rate of investments retains until 2016 and is 74.1% relative to the previous year. In monetary terms, the volume of investments in 2016 is 435.1 billion rubles. Such a low inflow can be explained by the introduction of sanctions against the Russian Federation in 2014 and with their tightening in 2016.

Figure 18 The growth rate of investments in the Krasnodar region in% to the previous year
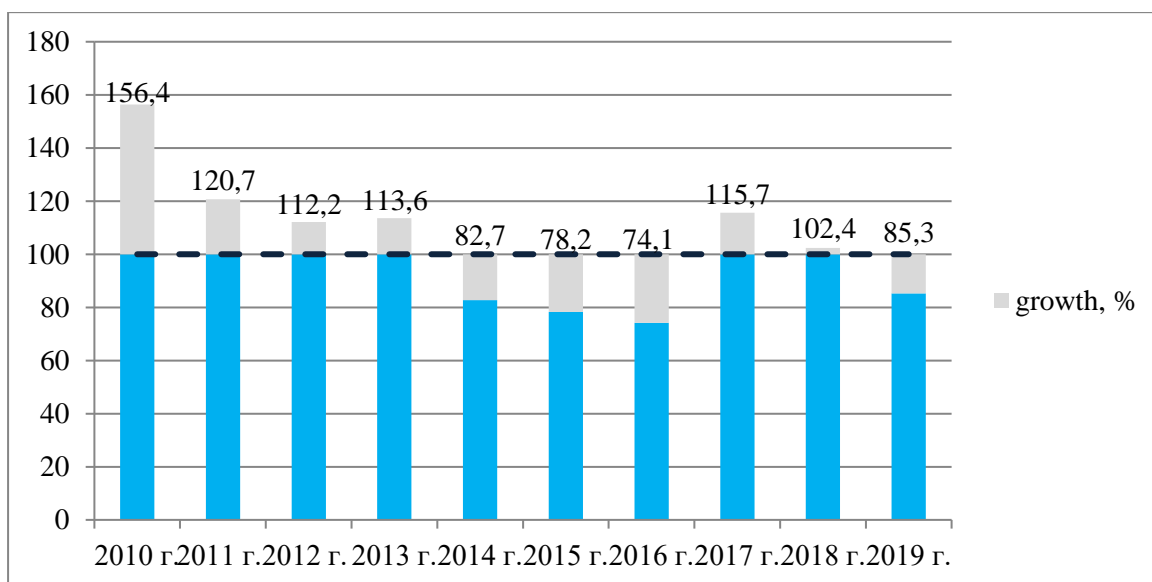

For the analyzed period from (2010 G.-2019), the growth rate of investment investments is not stable, a sharp decline since 2014 is noticeable and a slowdown in 2014. The specifics of this stage of economic growth is the weakness of financial

markets. and banking system. As a result, more than 60% of investment financing in the region is carried out at their own expense.

In the indicator of the volume of investments in fixed assets, similar to the per capita is observed similar growth dynamics and decline. The increase in the figure since 2010 (112.9 thousand rubles) to 2013 (178 thousand rubles) due to the increase in investment revenues in connection with the preparation for the Olympic Games, the figure is reduced in the period 2014-2016. (78.5 thousand rubles), due to the introduction of sanctions against the Russian Federation, then insecure growth (Figure 19). In 2019, the volume of investments per capita of the Krasnodar Territory is 77.5 thousand rubles. This is explained by the fact that the population of the Krasnodar Territory, as well as the Southern Federal District, changes within 100 thousand people, which cannot affect the calculated indicator. The dynamics of the stable growth of the country's indicator in general is interesting, since the population of Russia increases annually in a significant amount (more than a million). In 2010, at the level of the Russian Federation per capita, there are 65.5 thousand rubles per capita, and in 2019 the same figure is equal to 131.6 thousand rubles. Such a speaker suggests that the growth rate of investment inflows exceeds the growth rate of the country's population.

Figure 19 Dynamics of investment in fixed capital per capita for the period 2010-2019, rubles
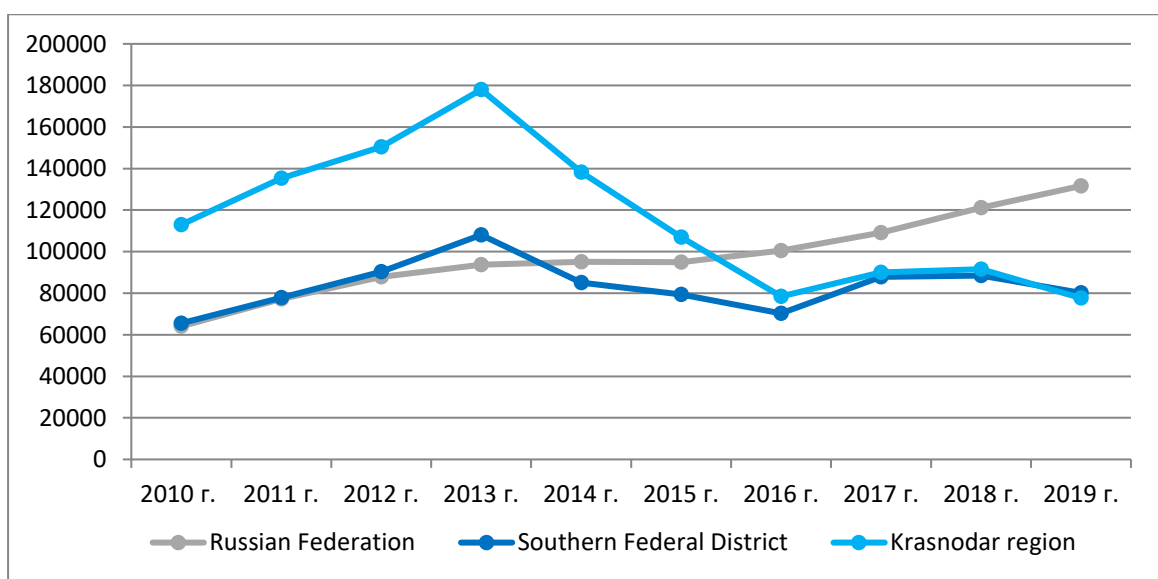
It should be noted that the influx of investments largely depends on the current economic situation in the region, from active and planned projects, as well as on the dynamics of development of various industries. For the period 2010-2019. The main most attractive industry for investors on the basis of statistical data of investment in fixed assets by type of economic activity (Figure 20) was allocated.

The most actively developing industry in the Krasnodar Territory is a transport, which includes transport infrastructure, transportation and storage, repair of motor vehicles and motorcycles and other services. 27.3% of the total investment for the period 2010-2019. It was rightly sent to the transport industry of the Krasnodar Territory, which is more than one fourth part of all investments. The region has a very developed transport infrastructure and has important strategic importance for the country as a whole. On the territory of the Krasnodar Territory, 9 port complexes, an extensive network of railway tracks and roads, railway stations, train stations, airports, etc., which, in turn, forms attractive conditions for investors.

In second place in terms of investment attracted and in terms of attractiveness, the processing industry is located, using 14.8% of the total investment. It includes such strategically important production as the production of coke and petroleum products, food and beverage production, metallurgical production, the production of other non-metallic mineral products, chemicals and chemical products and much more.

Figure 20 The most attractive sectors of the economy of the Krasnodar Territory for investment in 2019, million rubles
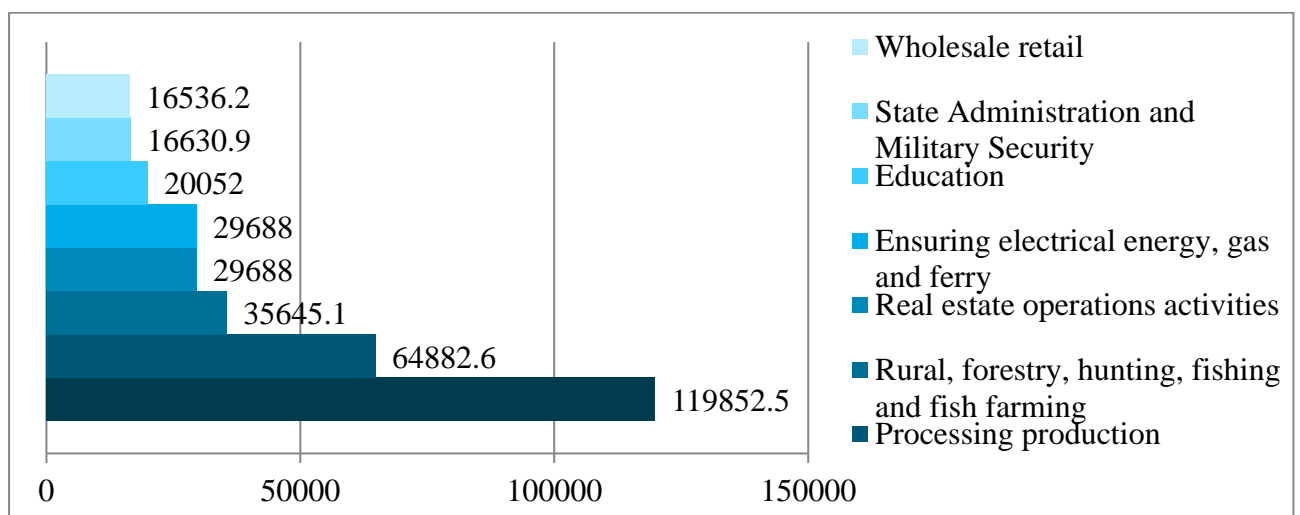
Figure 21 shows that agriculture uses 8.1% of investment. In 2019, the Krasnodar region ranks first in the Russian Federation in terms of gross agricultural products, which is 9.5% of the All-Russian volume.

Figure 21 Distribution of investments in the context of branches of the economy of the Krasnodar Territory in the period 2010-2019,%
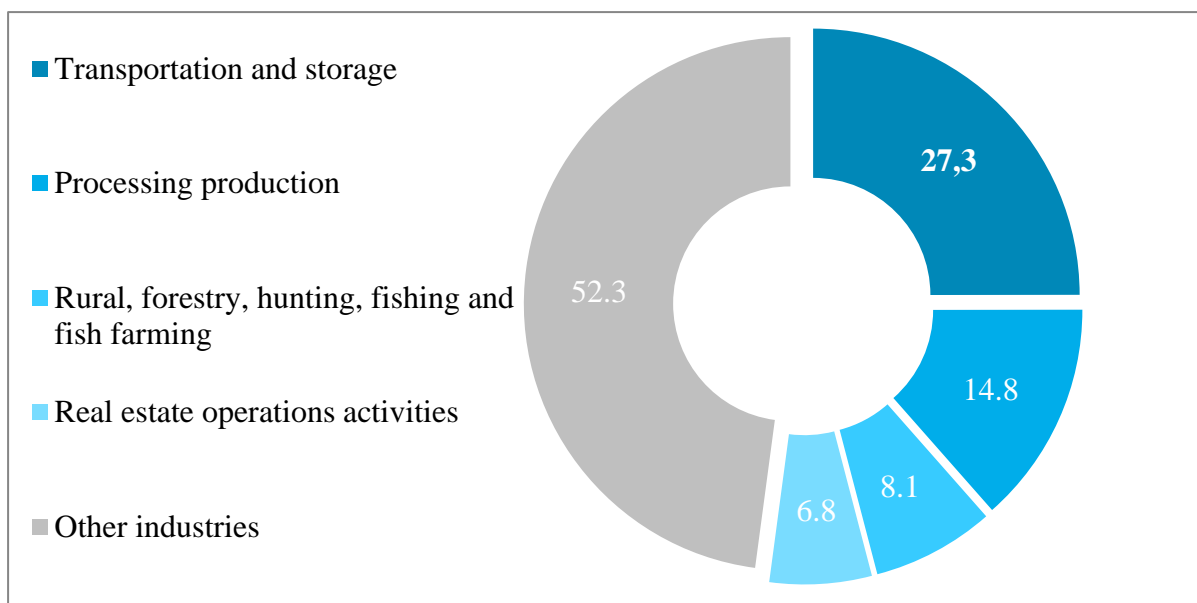
In Figure 21, industries are hidden, whose investment in fixed assets does not exceed 5-6%, for example, construction, financial and insurance activities, social security, information activities, mining and other.

In 2019, the structure of the most attractive sectors of the economy of the Krasnodar Territory did not change (Figure 22). The largest investment is sent to the sphere of transportation and storage - 119852.2 million rubles. About 65 billion rubles invested in manufacturing production and 35645.1 million rubles - in rural and forestry, hunting, fishing, and fish farming.

Figure 22 Dynamics of foreign investments received in the Krasnodar Territory in the period 2010-2019, million dollars
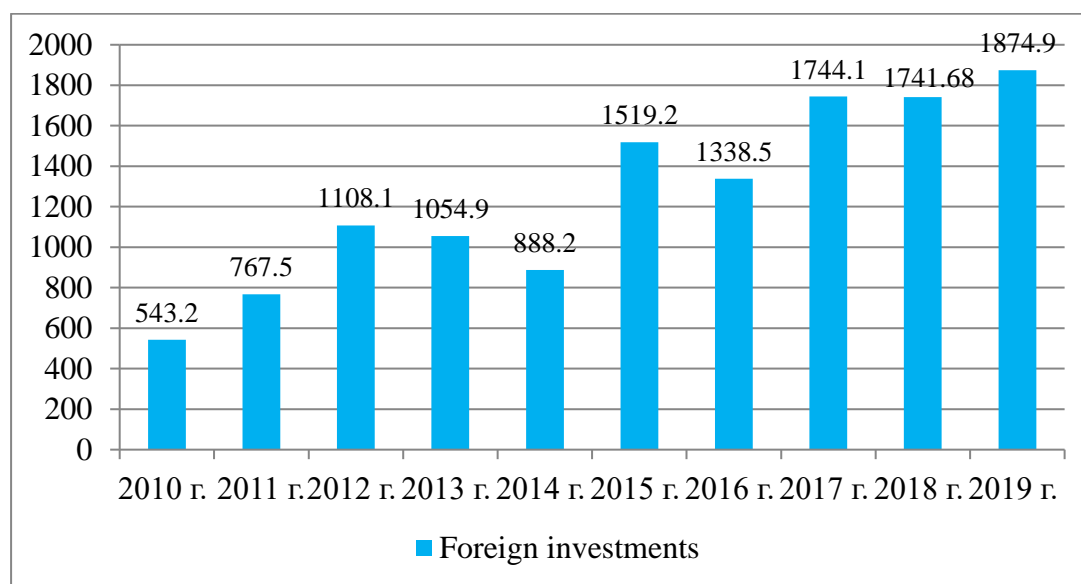
It can be concluded that the greatest investment activity is noted in the above industries.

Foreign investment increases every year. This is due to the successful implementation of many investment projects of foreign companies Knauf, Claas, Philip Morris, Nestle, Bonduelle, Cargill, Lafarge, Anadolu Cam, Metro, Auchan and others. The main investors of the Krasnodar Territory are Cyprus ($ 8.1 billion), the Netherlands ($ 6 billion), United Kingdom ($ 4.8 billion), Ireland ($ 3.2 billion), Hong Kong (US $ 2.7 billion), France (US $ 1.8 billion), Qatar ($ 1.5 billion), etc.

The lowest investment in the analyzed period received to the Krasnodar Territory, in 2010 amounted to $ 543.2 million (Figure 23). In 2012, the year of foreign investment was $ 1108.1 million, in 2013-2014. There was a decline in investments and in 2014 amounted to $ 888.2 million, this was the interest of foreign investors to Russia after the successful holding of the Olympic Games in Sochi. This tempo has strengthened through the preparation and holding of the FIFA FIFA Football Championship in 2018. Dynamics of foreign investment in the period from 2015-2019 They have a tendency of growth and reach the maximum value of $ 1874.9 million for

the analyzed period. A minor decline in foreign investment influences is noticeably in 2016, which is associated with the tightening of sanctions, as previously specified.

A significant amount of foreign investment comes annually into the budget of the Krasnodar Territory. For the analyzed period (2010-2019), the total amount of foreign investment amounted to $ 12.5 billion. In 2019, the number of organizations funded at the expense of this type of resource appears about 1000 enterprises, among them the Sochi Plant "Pepsi-Cola", Kargil-South LLC, Kuban Gyps-Knauff JSC, FAT-Kuban LLC, AlphaTEK LLC, Radisson Sas Azure, JSC "Nepar Kuban", JSC "Okerlund & Rauzing (Kuban)", OOO "Bonduel Kuban", JSC Export Forest, OOO "Kargil South" and other firms that implement various investment Projects in many areas of activity. Such organizations ensure the introduction of new technologies in production, increase the volume of import-substituting products, increase its competitiveness at the country level, and, most importantly, create new jobs, which is the best effect.

There is also a disadvantage, many investment projects are enshrined exclusively in the Russian market, which does not contribute to the development of the Krasnodar Territory. It can be concluded that foreign investments are ineffective, as they are mainly focused on the Russian market, and not for exporter-based production (through foreign investment, exports were provided only to the CIS countries, but in very minor volumes).

It can be concluded that with the beginning of the growth of investment activity in 2010 in connection with the orientation for the Olympic Games in 2014, respectively, the growth of investment attractiveness began, which can be noted in Figure 23. The volume of inflow of investment resources has decreased after 2014, but Started at a high level.

Figure 23 Dynamics of investment attractiveness and investment in fixed assets in the period 2010-2019.
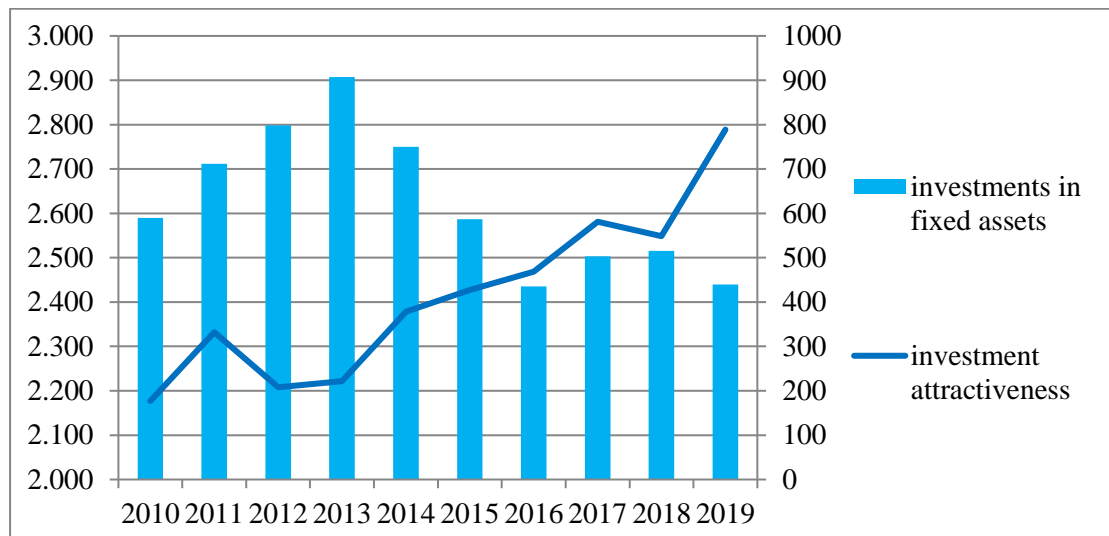
To confirm the results of the assessment of the investment attractiveness and activity of the Krasnodar Territory, correlation analysis will be carried out using the data analysis function in Excel. The interdependence of these two indicators, as well as the presence of sustainable correlation between them, was proved in many research work.

If the resulting correlation coefficient between indicators is greater than 0.75, therefore, the results that were obtained during the analysis of the investment attractiveness and activity of the Krasnodar Territory within this work can be considered correct. In study, X characterizes the amount of investment attractiveness, in - investment activity.

So, as an assessment of investment activity, it is proposed to use a statistical indicator of investment in the fixed capital of the Krasnodar Territory (Figure 17). Since the dependent variable (investment activity) is not the nature of the normal distribution, which in the future can lead to distortion of the results, it is necessary to minimize the influence of this factor without excluding the indicator using the variable logarithm.

Figure 24 Regression statistics describing the dependence of investment attractiveness and activity.

20		
21	*Регрессионная статистика*	
22	Множественный R	0,7709438
23	R-квадрат	0,5943543
24	Нормированный R-	0,5436486
25	Стандартная ошиб	0,0531073
26	Наблюдения	10

The correlation coefficient is 0.77, which proves the presence of a high positive correlation between the values of investment attractiveness and investment activity. The correlation coefficient is close to 1 indicates the correctness of the proposed methodology for assessing the investment attractiveness of the region.

A visual assessment of the graph (Figure 24) allows you to select a linear function as a database to search for a trend. The regression equation $y = 2.4 + 0.23 * x$, which indicates that with an increase in investment by 1 ruble, investment attractiveness increase by 0.23%.

Since the significance F (Figure 25) is 0.009 <5%, that is, the condition is performed and the regression equation is significant. For the resulting equation of the Krasnodar Territory, autocorrelation is absent, which characterizes such a trend as an adequate description of the trend in the corresponding series of speakers and forecasting on it is possible. Consequently, substituting the corresponding values of the indicator of the volume of investment in fixed assets, it is possible to determine the level of investment attractiveness.

Figure 25 Dispersion analysis characterizing the dependence of investment attractiveness and activity

	df	SS	MS	F	Значимость F
28 Дисперсионный анализ					
29	df	SS	MS	F	Значимость F
30 Регрессия	1	0,0330596	0,03306	11,721644	0,009038607
31 Остаток	8	0,02256312	0,00282		
32 Итого	9	0,05562272			
33					

	Коэффициенты	Стандартная ошибка	t-статистика	P-Значение	Нижние 95%	Верхние 95%
34						
35 Y-пересечение	2,400080556	0,44485329	5,395218	0,0006497	1,374247037	3,425914
36 Переменная X 1	0,237572956	0,06939094	-3,42369	0,0090386	-0,397588739	-0,077557
37						

The forecast for a linear function at 2020 determined the indicator of investment attractiveness at the level of 2.740% (Figure 26). To accurately predict, a further change in the charts is quite difficult, since there are a lot of factors affect investment attractiveness. Also, the current level of investment attractiveness and few subsequent periods could have an impact of a financial and economic crisis.

Figure 26 Forecast of investment attractiveness in linear function at 2020, in%.
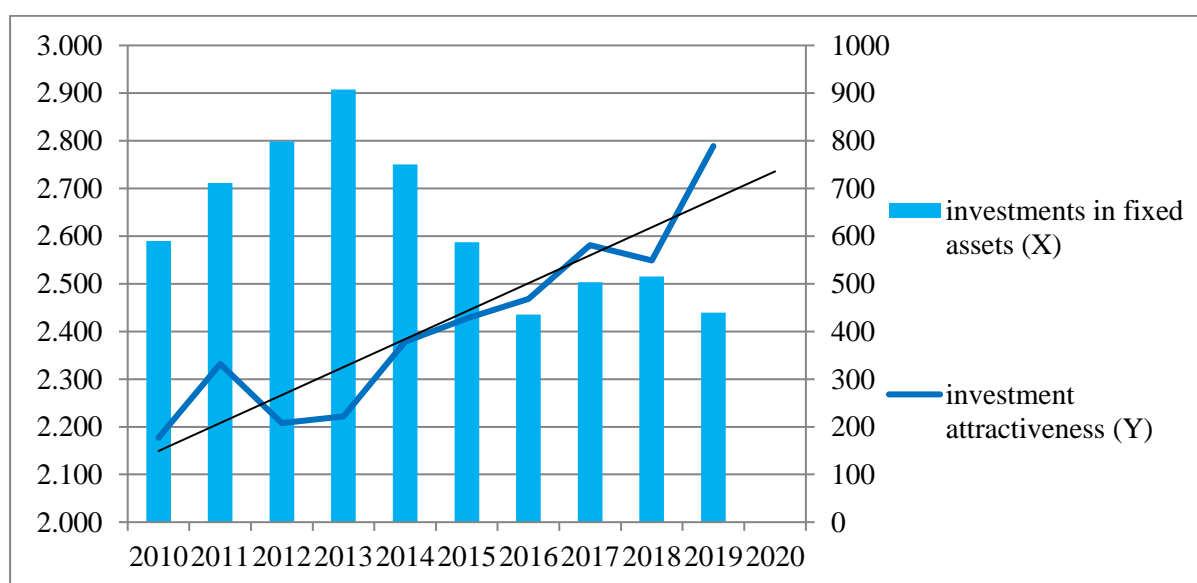
5. Recommendations for improving the methodology for analyzing investment attractiveness and improving indicators of investment potential and risk of the Krasnodar region

During the analysis of the investment attractiveness of the Krasnodar region, within the framework of the chosen methodology, 33 indicators (the set of which is advisory) and expert assessments (the author's opinion) were studied to assess the natural resource and tourist potential and political (managerial) risk.

The studied method is the most popular and accurate in the Russian Federation, and the rating provided by the Expert RA agency is the most reliable. Indeed, this methodology has enough advantages and advantages, but there are also a number of disadvantages, the solution of which can form and consolidate the methodology for analyzing investment attractiveness at the state level. As part of the assessment of the investment potential, Expert RA determines the weights of potentials and risks, which makes the result more reliable and accurate - this is the main advantage of this method.

The result of assessing the investment attractiveness of a region is an integral indicator of investment potential and risk, which can be considered a disadvantage for an investor, due to the lack of clarity in the assessment when the values are reduced to a general integral indicator. On this basis, it is more practical to provide results for each type of potential and risk in relation to the weights of significance, which will provide a broader picture of a potential investor.

Based on the analysis carried out, several competitive advantages of the region can be identified, as well as several proposals for the development of the pilot region can be put forward.

The investment attractiveness, calculated using the methodology of the Expert RA rating agency, was 2.799%, which is a fairly high result and indicates a high potential and low rating. The integral investment potential of the pilot region was

3.473% with an integral risk of 0.250%. This result allows the region to fall into category 1A, which is considered the most attractive for potential investors. The integral indicator makes it clear that the region is attractive for attracting investment, but the investor has no idea about the efficient spheres of production and management. For the state and for regional authorities, the picture is also insufficiently broad, which does not reflect the weak "zones".

The proposed reflection of information will help to tune regional policy to attract investment in less developed areas and channel resources to progressing in sufficient volume to maintain positive dynamics. For example, the most significant potential in 2019 is production potential, its weight is 0.8. As a result of the analysis, the production potential of the Krasnodar region is 10.15%, which, according to the weight, is a low indicator. This is due to the rather low GRP per capita - the main indicator for assessing the production potential. Also, the low value of financial potential, which is 12.44% with a significance of 0.65, which was influenced by a decrease in support from the federal center and the financial and economic crisis. The situation may be aggravated under the influence of a high political (managerial) risk of external and internal threats, since the region borders on the territory (the Republic of Crimea and the city of Sevastopol), which at the moment is considered controversial in the international arena and lends itself to some sanctions. Also influenced by the attitude of the administrative authorities to foreign direct investment, namely the inefficiency of their use and the project (direct) focus.

Above, two potentials and risks are identified that require priority intervention from the regional authorities, through actions, namely the injection of resources aimed at increasing private indicators.

Also, the factors that increase the investment attractiveness of the Krasnodar region include infrastructural and institutional potentials. The development of the logistics area with sufficient investment will have a positive effect on the growth of investment attractiveness, which will also be facilitated by the favorable economic and geographical position of the region. Within the institutional capacity, a large number

of small businesses and individual entrepreneurs can form the image of a "business incubator". This will create the preconditions for the development of the tourist base, since tourists are mainly served by small businesses, in connection with which it is necessary to constantly build up infrastructural and institutional capacities.

In 2018, the Krasnodar region is one of the three leaders in the ranking of the best Russian regions for doing business (according to Forbes), and also ranks 4th in terms of investment attractiveness and 8th in terms of investment inflows among all constituent entities of the Russian Federation. As in 2018, the Krasnodar region improved the value of institutional capacity, which is 30.17% in 2019 and characterizes the efficiency of investments and the development of small and medium-sized businesses.

Krasnodar region, whose territory is 76 thousand km^2 (0.4% of the total area of the Russian Federation) is located in the southwest of the Russian Federation and is part of the Southern Federal District. The pilot region borders on the Rostov region, Stavropol region, the Karachay-Cherkess Republic, the Republic of Adygea and the Republic of Crimea (through the Kerch Strait), and in the south there is the state border with Abkhazia.

Today, many companies, international corporations and large transnational companies localize production in the Krasnodar region, which makes it possible to expand the sales market, covering the countries of the CIS and Eastern Europe. This testifies to the attractiveness of the sales network and the efficiency of the transport and logistics hub of the Krasnodar region for potential investors, which is due to the favorable economic and geographic location of the region and the developed infrastructure.

Since the region is washed by the waters of the Sea of Azov in the north-west and the Black Sea in the south-west, the presence of 9 ports, including the first and third ports of the Russian Federation in terms of cargo turnover, creates a competitive advantage over other regions. The infrastructural potential of Krasnodar kai in 2019 amounted to 31.2%, which is not surprising given the presence of an extensive rail,

road, water and air communication systems. As a result, high investment activity in this area leads to the consolidation of infrastructure potential as a competitive advantage.

The Krasnodar region has unique climatic conditions and natural resource potential, as it is one of the southernmost regions of the country, on the territory of which agricultural and fishery activities, viticulture and winemaking, resort and recreational activities are effectively developing, and its subsoil is rich in mineral resources. The main natural resources of the Krasnodar region are agro-climatic, soil, water, forest and recreational resources. The main tourist resorts of Russia are located in the Krasnodar region.

The Krasnodar region has a sustainable competitive advantage in the field of tourism, that is, a high tourist potential: a developed tourist infrastructure, which includes not only attractions, but also hotels and restaurants. Also, a high indicator of consumer potential, which, together with tourism, increases the level of attractiveness for the inflow of investments in such areas as: recreation and entertainment, the sphere of production and sale of consumer goods. In addition, the Krasnodar region is characterized by a high innovative potential, which ensures an inflow of investments in science and education, in the development of the economy and information technology.

The tourism potential in 2019 is 6% with the indicator value of 0.1, which confirms the region's advantage. The assessment of the tourist and natural resource potential is carried out by the method of expert assessment, which can be considered a disadvantage of the methodology, since this assessment is subjective. The analysis should focus exclusively on statistical data for the absolute accuracy of the analysis. For example, to assess the tourist potential, use the indicators of the volume of the tourist flow, and for the natural resource - the volume of minerals, fresh water reserves, etc.

Based on the results of the study, several general recommendations can be distinguished:

–   to take into account the image aspect of investment attractiveness;

–   to develop and implement an individual image strategy of the region among the subjects competing for investment resources;

–   each region should focus on its competitive advantages, and on their basis form an offer that will meet the needs of a potential investor.

Conclusion

Assessment of the investment attractiveness of a region is a process of determining the subjective perception of the investment potential and investment risk of a region by a potential investor, during which the indicators of the assessment object are correlated with the selected comparison base. Thus, an analysis of the investment attractiveness of Russian regions made it possible to establish the following:

– the essence of investment attractiveness and methods of its assessment, as well as a number of the most significant methods in practice and analyze the pilot region based on theoretical material;

– factors influencing the investment attractiveness and its particular indicators. Most of the statistical indicators under consideration describe the macroeconomic sphere of development of the Krasnodar region, which in turn made it possible to identify promising areas of development for the region;

– the relationship between investment attractiveness and investment activity (using correlation analysis), which is the basis in the formation of recommendations to increase investment potential and reduce investment risks.

It was found that with an increase in the inflow of investments, the investment attractiveness increases, which indicates the efficient use of resources.

The analysis noted the heterogeneous development of Russian regions and the dynamics of their investment attractiveness. Among all the constituent entities of the Russian Federation, the most attractive for the inflow of investment are the capital cities and resource regions. This, in turn, determines the directions of the regional government's activities to form an effective investment policy, intensify foreign economic activity, as well as improve the image of the region.

To date, there is a large number of studies, however, there is no single transparent methodology for assessing investment attractiveness, which would be approved at the legislative level. Also, there is a need for a unified system for posting

information for quick access to potential investors. It can be an investment map of the regions in a visual form on the Internet. At the moment, the most popular methodology in Russia is the methodology of the rating agency "Expert RA" and claims to be a single recommended methodology. However, the presented method has some drawbacks that require improvements.

It can be noted that the use of the methodology of the Expert RA rating agency makes it possible to determine the rating of the regions, that is, to draw a conclusion about the real distance between them. The clarity of the chosen methodology allows us to identify sustainable competitive advantages and identify weaknesses, which will make it possible to formulate recommendations for the development and implementation of investment programs, as well as to determine the current state of the region. The current state of investment risk and investment potential determines a lot: from regional policy to the formation of budget expenditures.

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