Indicative Assessment of Reliability of Investment Climate of the Territory: An Important Condition of Engaging of Investments Into Economy of Regions of the Far East

S V Shishmakov¹, V T Shishmakov²
¹Ph.D. Head of a scientific school of Far Eastern State Transport University, 47 Serishev str., Khabarovsk, 680000, Russia
²Doctor of science, Professor of Far Eastern State Transport University, 47 Serishev str., Khabarovsk, 680000, Russia

E-mail: shvt0102@mail.ru

Abstract. Method of assessment of reliability of investment climate by means of calculation of the system of indicators consisting of objective indicators, indexes, the generalized indicators of the integrated groups of indicators and a general indicator is given in article. The indicator analysis allows to estimate investment climate of regions in comparison with each other, with the average Russian level, to keep track of dynamics of its state and to define factors which lead to its improvement or deterioration.

1. Introduction
Investments are one of the major factors determining rates of economic development. Given the limited financial capital, one of the most important tasks for business is the selection of options for the most profitable investment. The decision on investments directly depends on a ratio of future income of the investment project to its initial investments and also other factors of the external environment, which can affect a ratio of income and investments. Factors of the external environment, including risks it is necessary to estimate and consider while planning investment projects, therefore researches in this field as abroad and in Russia were and remain very relevant. The system of assessment of reliability of investment climate of territories, offered by authors of article is one of instruments of quantitative measurement of the factors of the external environment defining comparative investment attractiveness of regions in terms of reliability of long-term investments. The system of indicators includes structure of the indicators, characterizing a condition of various factors of the external environment in objective values, their indexes, the generalized indicators on groups of indicators and a total general indicator of reliability of investment climate. The general methodology of use of this system for assessment of reliability of investment climate of regions of the Russian Far East is given in article. The analytical value of the offered method is an opportunity for investors at implementation of investment projects quantitatively to define reliability of investment climate of various territories, including in dynamics. The method can be used by executive authorities of regions, for planning and the organization of long-term economic policy.
2. Main part
Activities of investors for studying of factors of the external environment forms investment process, which elements are given in figure 1. Many economists determine essence of investment climate as set of various factors by means of which it is possible to define a condition of external investment environment in which implementation and development of concrete investment process is supposed [1,2,3].

![Figure 1. The structural diagram of the investment process.](image)

The concept of investment climate needs specification and, according to the author, can represent the generalized characteristic of all set available in the researched territory of social, legal, economic, organizational, political, historical, cultural conditions and also existence of infrastructure of the market and effective management of the territory. This set of factors and conditions predetermines degree of usefulness of investment climate of the territory and influences streams of investment resources in territory economy. Reliability of investment climate represents set of the factors of political, economic and social character defining a form, the purposes, terms and conditions on which national and foreign investors are ready to invest the capitals in various spheres of economy (fig. 2)

![Figure 2. Structural elements of the investment climate.](image)

According to the economist V Kiryukhin, the investment attractiveness depends on created in the territory of the investment potential and level of investment risk. The investment climate allows to compare objective opportunities of the region (investment potential) and conditions of activity of the investor (investment risk). In case investment potential exceeds investment risk of the region, it is possible to speak about favorable investment climate [4]. As shows international experience, the most important condition of attraction of investments into national economy and ensuring their positive result is existence of the long-term government policy including branch and regional priorities of investments, borders of access of investment which are reflected in taxation and the system of guarantees for investors [5]. As the investment climate is formed on the basis of investment attractiveness, the investment attractiveness can be considered as at the level of the country, and the
certain region. Most often the investment attractiveness is used for assessment of expediency of investments into the project in a certain territory and search of alternative options for capital investments [6]. As the main components of investment climate it is possible to allocate the investment potential which is quantitative characteristic of conditions and investment risk as its qualitative characteristic [7]. Under the investment climate, we understand a structured set of objective natural-geographical, economic, social factors that allows achieving the synergy effect and ensuring stable economic income [8]. The investment risk presents itself degree of probability of emergence of economic losses in the form of lack of income and profit, decrease or loss of the capital because of uncertainty of conditions of investment activities at adoption of investment decisions, impact of the external environment on activity of the investor.

The investment climate needs to be considered allocating three the main elements, which create the real conditions of investment climate of the territory: the available investment potential, degree of investment risk and investment attractiveness of the entities, which work at the researched territory. The author's technique of assessment of reliability of investment climate considering investment potential and investment risks is based on the analysis of objective factors from the open statistic data, which are conditionally divided into three integrated groups: natural and geographical factors; factors of economic development; social factors (table 1) [9].

Table 1. Factors of reliability of investment climate.

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<td></td>
<td>potential</td>
<td>risk</td>
<td>potential</td>
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<tr>
<td>Natural resources</td>
<td>Financial resources</td>
<td>Financial risks: high debt, insolvency</td>
<td>Human resources</td>
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<td>Ecological situation</td>
<td>Institutiona l environment</td>
<td>Tactical fluctuations of the markets</td>
<td>Intellectual potential</td>
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<td>Production capacities</td>
<td>Restriction for production factors</td>
<td>Political instability, economic sanctions and political restrictions</td>
<td>Change of the legislation</td>
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<td>Logistics</td>
<td>Scientific research and inventions</td>
<td>Transfer restrictions of technologies</td>
<td>Consumer opportunities</td>
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<td>Infrastructure of the territory</td>
<td>Level of real income of the population and criminogenic situation, migration</td>
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The first and third groups include five objective indicators, which are calculated by special formulas on the basis of open statistical data. The second group of indicators "Economic development" includes ten objective indicators and two generalizing indicators. Additional indicators are necessary to estimate innovative opportunities and innovative risks in economy as they have a considerable impact on economic growth [10]. The general logical sequence of calculation of indicators is presented in figure 3. At a stage 1 a calculation of objective indicators for each group in natural amounts or cost values per capita of the region of the Russian Far East are made (RF). At stage 2, the indexes of indicators are calculated by comparing their values with the indicator values, calculated for the RF as a whole. At stage 3, the received indexes are adjusted by the weight coefficients, received as
a result of poll of 16 experts and the corresponding mathematical processing. At stage 4, four generalizing indicators of each group of indicators in general are calculated, and at the last stage, the general indicator of reliability of investment climate of regions, is calculated in the form of coefficient.

![Diagram](image)

Figure 3. The general logical sequence of calculating the indicators of reliability of the investment climate.

Diagrams of the generalizing indicators of each group of indicators in general for Khabarovsk krai and Primorsky krai in dynamics from 2009 to 2014 are given below.

![Graphs](image)

**Figure 4.** The dynamics of the generalizing indicators of each group of indicators in general for Khabarovsk krai and Primorsky krai.

On figure 4 it is shown that values of indicators of the Khabarovsk krai and Primorsky krai, are below the average Russian values. On all groups of indicators, except natural and geographical factors increase in lag from the average Russian level is observed. Investors can use these data for obtaining information on reliability status of investment climate interesting them territories in dynamics. In turn the authorities of regions, having calculated objective indicators and the generalizing indicators, will be able to see those directions in which there is a deterioration in a condition of investment climate.
and to take the appropriate measures. The reliability of investment climate in the system offered by authors is estimated by the general indicator, which is determined as the arithmetic sum of indicators of generalization for all groups of indicators. The general indicator is less than one, demonstrates that total assessment of reliability of investment climate of this territory does not reach the average Russian level. The general indicator of the average Russian level is always equal to one. On an example general indicators of reliability of investment climate of Khabarovsk krai and the Sakhalin oblast are given below.

![Dynamics of general indicator for a all group of factors](image)

**Figure 5.** Dynamics of the general indicator of the reliability of the investment climate for 2009-2014.

In figure 5 it is shown that the general indicator of Khabarovsk krai is lower than the average Russian level and since 2012 has adverse trend, and the similar indicator of the Sakhalin oblast exceeds the average Russian level almost by two and a half times and has noticeable trend to increase.

As a fundamental condition in assessment of reliability of investment climate is the investor confidence which is expressed in amounts of national and foreign investment into the regions, therefore becomes expedient to compare values of the general indicator to the amounts of investment in Khabarovsk krai and the Sakhalin oblast in dynamics. Such easy way of check of the offered method is the most reliable and clear. Below in figure 6 data on the amounts of investment of Khabarovsk krai and the Sakhalin oblast are provided in dynamics since 2009.

![Dynamics of fixed investments in comparable prices](image)

**Figure 6.** Dynamics of the amounts of investment for 2009-2014.
On curves of dynamics of investments (fig.6) and indicators of reliability (fig.5) it is possible to draw a conclusion that the amount of investment into fixed capital of the Sakhalin oblast has a steady trend to increase according to trend of a general indicator of reliability of investment climate. By 2008, the Sakhalin oblast completed the commissioning of the infrastructure of the Sakhalin-1 and Sakhalin-2 projects, but even taking into account this circumstance, amount of investment in the oblast continues to grow steadily, which indicates investor confidence and is reflected in the trend of the general reliability indicator of the investment climate. In Khabarovsk krai since 2011 decrease in the amount of investment is observed. Since 2012 the general indicator of reliability of investment climate of krai also began to decrease in comparison with the average Russian level.

The method of calculation of a general indicator of reliability of investment climate not at one stage doesn't use the amounts of investment. Thus, it is possible to claim that between the factors measured by indicators of a system of assessment of reliability of investment climate and the amounts of investment into economy of territories there is a dependence, therefore, the technique of assessment can be applied to diagnostics of problems the bound to deterioration in investment climate and also planning of the actions directed to its improvement.

3. Conclusion
Authors of article offered an alternative method of assessment of reliability of investment climate in regions from used by local authorities. The method is based on use of open statistical data, is simple in application, and the received conclusions have an analytical and practical significance.

References
[3] Ivanov M Y 1996 Concept of investment climate and its influence on effectiveness of investment influence of partners Russian academy of public service under the President of the Russian Federation (Moscow)
[5] Borisenko A 1996 The fissile investment policy is necessary Rural economics of Russia 1 37 p
[10] Shishmakov V T Shishmakov S V 2015 Monograph "Complex Assessment of Investment Climate of the Territory" FESTU