

**METHODOLOGY
FOR ASSESSING
THE INVESTMENT
CLIMATE IN TRANSITIONAL
ECONOMIES ON THE EXAMPLE
OF BELARUS
AND POLAND**

**PIOTR MISZTAL
VASILI KULAKOU**

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SPIS TREŚCI

INTRODUCTION	7
1. DETERMINANTS OF BUSINESS LOCALIZATION	9
1.1. THEORETICAL ASPECTS OF BUSINESS LOCALIZATION.....	9
1.2. PRACTICAL ASPECTS OF BUSINESS LOCALIZATION.....	14
2. IDENTIFICATION AND SELECTION OF THE KEY FACTORS THAT DETERMINE THE INVESTMENT CLIMATE OF A COUNTRY (REGION)	21
2.1 ANALYSIS OF KEY CHARACTERISTICS AND APPLICABILITY OF THE MOST COMMON METHODOLOGIES FOR ASSESSING THE INVESTMENT CLIMATE.....	21
2.2 IDENTIFICATION AND SYSTEMATIZATION OF THE MOST SIGNIFICANT FACTORS DETERMINING A COUNTRY'S INVESTMENT CLIMATE.....	61
3. EXAMINATION OF STAKEHOLDER PERSPECTIVES ON INFORMATION REQUIRED FOR ASSESSING A COUNTRY'S INVESTMENT ATTRACTIVENESS AND THEIR ATTITUDE TO EXISTING ASSESSMENT METHODOLOGIES	77
3.1. THE ANALYSIS OF POTENTIAL INVESTORS' AWARENESS OF EXISTING APPROACHES TO ASSESSING THE INVESTMENT CLIMATE AND THEIR SATISFACTION WITH THESE METHODOLOGIES.....	78
3.2. THE MOST SIGNIFICANT FACTORS OF THE INVESTMENT ENVIRONMENT FROM THE POINT OF VIEW OF POTENTIAL INVESTORS.....	84
4. DEVELOPMENT OF AN INVESTMENT CLIMATE ASSESSMENT METHODOLOGY BASED ON SYSTEMATIZED DETERMINANTS	93
4.1. PRELIMINARY ASSESSMENT (SCREENING STAGE) PREPARATION.....	96
4.2. DETAILED ASSESSMENT (MAGNIFYING GLASS STAGE) PREPARATION.....	107

5. PRACTICAL IMPLEMENTATION OF THE METHODOLOGY	115
5.1. PRELIMINARY ASSESSMENT (SCREENING STAGE).....	115
5.2. DETAILED ASSESSMENT (MAGNIFYING GLASS STAGE).....	123
6. RECOMMENDATIONS FOR COUNTRIES BASED ON INVESTMENT CLIMATE ASSESSMENT	145
6.1. RECOMMENDATIONS FOR BELARUS.....	145
6.2. RECOMMENDATIONS FOR POLAND.....	153
6.3. ASSESSMENT OF THE AUTHOR'S METHODOLOGY ACCORDING TO THE APPLICABILITY MATRIX.....	155
CONCLUSION	159
ANNEX	161

INTRODUCTION

The investment climate of a country is one of the most essential aspects in shaping a country's economic activity and one of the most important factors influencing a specific country's competitiveness. On the other side, a country's investment climate is determined by its economy's competitiveness. The ability of a country to attract foreign investors making direct investments by offering them a range of localization advantages that can be achieved in the course of doing business is referred to as a country's investment attractiveness. These benefits stem from the unique qualities of the region in which economic activity is generated and carried out. These advantages are related to localization factors. Thus, the investment climate of a country is related to the localization factors that contribute to the optimization of the localization of the economic activity.

The aim of the undertaken research was to develop a more universal and easy-to-use methodology for assessing the investment climate, taking into account the opinion of potential investors and the specificity of economies in the transition period; based on it, developing practical recommendations aimed at improving the investment climate in Belarus and restoring bilateral Polish-Belarusian cooperation.

The monograph employed a research method based on literature investigations in the field of international economics, as well as statistical analysis and statistical inference. The research findings reveal the primary economic and non-economic aspects of a country's investment climate. They also show a rising trend in Belarus and Poland's investment attractiveness, implying that these countries may become particularly appealing to potential investors in the near future. However, keep in mind that investment decisions are made not only based on an assessment of the country's investment climate, but also on the risk associated with these investments.

DETERMINANTS OF BUSINESS LOCALIZATION

1.1 THEORETICAL ASPECTS OF BUSINESS LOCALIZATION

The theoretical basis for the localization of economic activity in a regional, national and international perspective are the theories of localization, new economic geography and spatial economics. Theories of localization, new economic geography and spatial economics are closely related and often complement each other, examining various aspects of the formation of economic space. Localization theories examine what determines the localization of companies and economic activities. They focus primarily on the microeconomic aspects of localization decisions, such as production prices, resource availability and sales markets. By using macroeconomic factors that influence economic distribution in space, new economic geography expands the concept of localization theory. It focuses on how scale, transport costs, agglomeration and the impact of the environment influence the development of economic space. In contrast, spatial economics is an area of research that integrates both localization theories and new economic geographies and examines issues related to spatial planning, regional policy, geographic economic patterns, and regional development. It covers aspects of the development of the economy at the macroeconomic and microeconomic levels. In practice, localization theories, new economic geography and spatial economics are often used in combination to analyze and forecast phenomena related to the localization of enterprises, economic agglomeration, regional balance and the effectiveness of regional development policy. Their inclusion enables a more comprehensive and comprehensive approach to studying the dynamics of spatial management.

The primary observations regarding the localization of commercial activity were made, among others, by Weber, Lösch, Isard and Christaller [1]. Lichtenberg, Vernon, and Chinitz also conducted relevant research on the origins and regional effects of the geographical clustering of economic activities; their work was primarily concerned with growth and agglomeration-related concerns [2]. Their research was primarily concerned with the characteristics of various agglomeration economies, and it was conducted using the conventional analytical framework for agglomeration phenomena, which was developed by combining the insights of Marshall and Hoover [3]. Marshall emphasized the importance of local knowledge transfer, the presence of locally produced, non-traded inputs, and locally skilled labor, whereas Hoover, Ohlin and Isard distinguished between internal and external economies of scale, which come from advantageous localizations and the benefits of urbanization [4].

The existence of a single large firm in space implies a large local concentration of factor employment; therefore, there is nothing intrinsically spatial about this concept. For a single firm, there may be internal increasing economies of scale due to production cost efficiencies gained by serving large markets. The outward benefits, however, varied greatly in quality. A high degree of local factor employment may enable the establishment of external economies inside a group of local enterprises in a particular industry, regardless of the company's size or the huge initial number of local companies. We call this localization economics. It is considered that these local externalities have varying strengths, becoming stronger in certain sectors and weaker in others. Related economies of scale include things like things that lower the average cost of manufacturing goods there.

By taking market shape into explicit consideration, theories of localization economics might be improved. Externalities sometimes referred to as Marshall–Arrow–Romer (MAR) externalities are those that are defined by knowledge exchanges amongst enterprises in a spatially concentrated industry. Similar to Schumpeter, MAR theory predicts that in a dynamic situation, a local monopoly is preferable to local competition for growth since it restricts the flow of ideas to others, allowing the inventor to become internalized. In addition to acknowledging the significance of localization economics, Porter contends that knowledge flows in specialized, geographically concentrated industries promote growth [5].

On the other hand, the advantages of urbanization are independent of industry structure and represent outside benefits that are given to businesses

as a result of savings from the large-scale operations of the city or agglomeration. Universities, industrial research labs, trade groups, and other knowledge-generating organizations are more likely to be found in relatively more populous areas or localizations that are easier to get to from major cities. The dense concentration of these institutions—which are social, political, and cultural in nature rather than just economic—supports the creation and assimilation of knowledge, encouraging creative behavior and varying rates of interregional expansion. Therefore, there are more opportunities for interaction, imitation, and modification of creative behaviors and practices in the same or adjacent businesses when there is a diversified industry mix in an urbanized area. Jane Jacobs defined variety as a major source of agglomeration economies in her well-known theory of urban development. In contrast to MAR theory, she holds that the most significant knowledge transfers originate from sources outside than one's own industry [6].

Agglomeration economies have four features, according to Quigley. The first component relates to economies of scale, or the enterprise's indivisibility, which has historically been used to explain productivity development, especially in agglomerated industries. In the absence of industrial economies of scale, economic activity would be distributed in order to reduce transportation expenses. Urban amenities are a result of public goods' existence and usage. Cities provide as the perfect settings for the emergence of social bonds that relate to different kinds of externalities related to society and culture. The second component, joint inputs for consumption and production, includes Marshall's description of localized industrial economies. Shared inputs are often used in agglomerations related to variety, fashion, culture, and style to produce a wider range of consumer goods. The anticipated decrease in transaction costs is a third factor that could explain why agglomeration economies could yield higher benefits in economic efficiency. In general, service-based economies have dominated the development of Western economies. The bulk of jobs in cities today are in business and consumer services, and a large portion of urban activity is defined by the knowledge-based information society. The growing significance of transaction-based explanations for the increase of local economic productivity is a natural consequence of the connection between knowledge-based service industries and urban economies. The survival of local businesses and lower labor search costs demonstrate that in matching, which is consistent with the California School of Economic Geography's emphasis on transaction costs as a means of explaining agglomeration economies [7].

Apart from these characteristics of agglomeration economies, cities possess two further attributes that enhance the potential for growth within a city-region. First, a company's product portfolio diversity might be compared to the structure of a regional or urban economy. One way to think of regional diversity as a portfolio strategy is to shield regional revenues from asymmetric, erratic demand shocks that are peculiar to a given industry. This will specifically safeguard labor markets and, as a result, stop the emergence of long-term unemployment. Asymmetric shocks diminish economic development as agglomeration economies and tax bases weaken, even in the presence of strong interregional labor mobility. According to this logic, specialization would raise the danger of unemployment and impede growth, but industrial diversity at the regional level would cut unemployment and foster economic progress [8].

The above mentioned theories are key reference points in the analysis of business localization. In practice, localization decisions are often made by companies taking into account various factors such as the availability of human resources, infrastructure, government policies, as well as cultural and social factors.

As previously stated, the concept of a country's investment attractiveness is inextricably tied to the concept of its international competitiveness. Specifically, the country's high international competitiveness is a necessary but not sufficient requirement for the country to be an appealing destination for foreign direct investment by commercial entities. As a result, it is critical to examine an economy's investment attractiveness in the context of its competitiveness with other economies throughout the world.

Foreign direct investment (FDI) is defined as an investment made by a foreign institution or entity in a company registered in the country. According to the United Nations Conference on Trade and Development (UNCTAD), FDI can provide numerous other benefits to the host country, such as the entry of technology or the transfer of skills. The entrance of FDI in this manner has a favorable impact on the economy's competitiveness, enhancing the possibility of job growth. The findings of theoretical and empirical studies conducted by Behrman, Findlay, Blomström & Kokko, Blomkvist support these benefits [9].

One of the variables influencing the country's economic growth is the policy of recruiting foreign capital. A country can provide a variety of incentives to encourage capital inflows in the form of FDI. Localization considerations (access to the sales market), demographic factors (access to an educated

workforce), and economic factors (dynamic economic growth) are examples of these. Furthermore, financial variables such as tax costs and institutional factors such as the quality of institutions in the host country are aspects that foreign investors consider when making investment decisions. The tax burden has a direct impact on the return on investment capital movements and has an indirect impact on company competitiveness. Bellak et al. demonstrate that a high corporate income tax rate reduces the profitability of FDI investments. Economically underdeveloped countries are viewed as appealing destinations for FDI inflows due to their comparative advantage of low labor costs, favorable pro-investment policies implemented by their governments, rich mineral resources, and an abundance of raw commodities. However, due to limited financial resources and substantial pressure on budget deficits, it is apparent that these countries' governments adopt high tax rates to ensure enough budget revenues [5].

Poor institutional quality is today a global concern, affecting many aspects of the economy not only in individual countries but also across the developing world as a whole. Poor quality institutions are the root source of corruption. Corruption, in theory, is a "hand in hand" since it increases the risk of transaction costs and impedes the flow of FDI. Corruption, on the other hand, may act as a "helping hand" by helping to "oil" the flywheel in countries where institutions remain cumbersome and ineffective. As a result, corporations earn more by paying a little fee to obtain critical data and profits [10].

Tax rivalry between governments to attract FDI has become a worldwide challenge in the modern economy. Capital owners commonly compare tax costs in countries with comparable market size and geography. While international tax competition is increasing, these states' tax rates are seen as unavoidable. Nonetheless, there is no strong evidence that this tax drop will help impoverished countries recruit FDI. Reduced tax revenues will result in decreased infrastructure investment, which will result in a reduction in the provision of public goods and services as well as distortions in the distribution of public money. As a result, it is unclear whether these countries remain appealing to international investors.

Furthermore, low institutional quality might be one of the most significant barriers to economic growth and development. According to the World Bank and Transparency International, corruption has become more complex and prevalent in some rising countries. Many international empirical studies indicate that corruption and low institutional quality slow economic development by limiting private investment and diminishing the effectiveness of government

investment [11]. However, Ehrlich and Lui argue that the repercussions of corruption are broad and have a significant economic impact. Corruption stifles economic growth in several African and South American countries. Corruption, on the other hand, does not appear to be limiting growth in many countries with significant regional disparities, including China and India. Foreign direct investment (FDI) has grown significantly in recent years, as has its share of overall capital flows in emerging markets, as has its contribution to economic growth [12].

1.2. PRACTICAL ASPECTS OF BUSINESS LOCALIZATION

The level of taxation in the host country is one of the elements influencing the entry of foreign direct investment into a country. While the influence of taxes on FDI inflows varies greatly depending on the type of tax, empirical evidence suggests that nations with high tax rates are less appealing to FDI inflows than those with low tax rates. Hartman was the first to demonstrate that certain forms of FDI inflows are less tax sensitive than others. This means that FDI investors in specific areas are immune from taxation in the host country [13].

Using a meta-analysis technique, De Mooij and Ederveen discovered a charge versatility for FDI of -3.3, which means that a 1% decrease in the charge rate of the host nation will increase the influx of FDI to that nation by 3.3% [14]. Meanwhile, Bellak et al. conducted a comparison analysis, and the results of their investigation revealed that this flexibility is less than -1.45 [5].

In addition, Stöwhase investigated the sensitivity of FDI to interest rates. He observed that the variety of FDI streams has a large impact on this affectability. As a result, this study shows that there is an underestimating or overestimation of FDI charge versatilities as compared to the average detailed in previous studies. The theory also posits that problems with information access, estimation, and estimating methodologies may have led to incorrect conclusions in previous studies. Furthermore, a regulatory number governing the influx of outside coordinate speculation to the country was envisaged. The World Bank defines debasement as the abuse of open control for individual pick up. Debasement is widely acknowledged to have a detrimental impact on FDI flows in many circumstances. Regardless, there is no clear link between debasement and FDI flows. [15]

Wheeler and Mody investigated the impact of debasement on FDI in countries with poor regulatory quality. This is exemplified by sluggish

authoritative techniques, excessive bureaucracy, and the necessity for the legal framework to be plain. According to the study, the effect of debasement on FDI is not statistically significant. In other words, debasement does not stifle FDI flows because of poor education in developing countries. In any event, Wei pointed out that the Wheeler and Mody consider has certain limitations and contributes to bias in the research outcomes. Wei claims that Wheeler and Mody included one debasement variable among 12 other factors used in the demonstration experiment. As a result, the assessment of the impact of debasement on FDI is ambiguous in this scenario. Wei did information mining from 45 countries in this method. The Tobit technique was used to show estimation. According to the findings of the investigation, debasement has a negative impact on FDI flows. Abed and Davoodi examined the impact of debasement levels on FDI per capita flows in transition economies using cross-sectional and board data. It appears that economies with lower levels of debasement attract more FDI investment [16].

In any case, when a control variable for organizational change was included within the appear, the degradation variable had to be immaterial, so this thought almost sheds light on the basic conclusion that organizational change is more important than reducing the level of degradation to draw in FDI streams to specific countries. Habib and Zurawicki examined the impact of debasement on reciprocal FDI flows in 7 subsidized countries and 89 countries tolerating coordinate speculation. In this scenario, the hypothesis was tested that if the level of corruption in the receiving country is higher than in the native country, the influx of FDI will be lower. As a result, the experimental design uses the difference in debasement levels between providing and receiving countries as an illustrative variable [12]. It has been argued that FDI influx keeps a strategic distance from debasement because it is regarded as dishonest. Furthermore, Voyer and Beamish used a single source country (Japan) and 59 developing countries as target countries for these investments. The researchers discovered evidence that the influx of FDI from Japan had a negative link with debasement within the host country. Looking into remote coordinate speculation in Africa, Asiedu identified the most important factors influencing FDI inflows to Africa. It appears that both debasement and political insecurity have a negative impact on FDI inflows [2].

Mathur and Singh emphasized that international investors are more concerned with economic freedom than political freedom when deciding on capital flows. The paper investigates the factors that influence FDI inflows to

29 emerging markets. According to empirical findings, corruption has a substantial impact on the choice of destination for investors. FDI flows to developing countries, in particular, are extremely intertwined. The high level of corruption has a detrimental influence on foreign direct investment inflows into certain countries [17].

According to some studies, corruption has no negative influence on foreign direct investment. The premise is that corruption can help in some cases if other components of governance are missing or economic measures are deemed to be unsuccessful. In certain circumstances, corruption is advantageous since it allows investors to avoid impediments and take advantage of host-country benefits. Between 1995 and 1999, Egger and Winner investigated the relationship between corruption and FDI inflows in 73 developed and developing countries, and their empirical findings show that corruption can promote FDI inflows by allowing entrepreneurs to avoid burdensome regulations and administrative procedures. They contended that corruption can increase efficiency by allowing businesses to remedy or eliminate government errors. Lui developed a queuing model to demonstrate how corruption might assist firms in avoiding the repercussions of inefficient rules, and the results demonstrated that bribes to officials can give an incentive to speed up the administrative process. Bayley claimed that corruption may overcome bureaucracy by enhancing institutional quality, and it can assist enterprises in avoiding public policy impediments that impede their operations, so assisting them in finding good and acceptable solutions [18].

Macroeconomic variables can also play a role in determining the amount of foreign direct investment that enters a country. Behrman produced one of the first comprehensive studies on the effects of these determinants on FDI inflows. According to a study of 72 U.S. enterprises with substantial foreign operations, FDI promoted growth not only in terms of money but also in terms of management and technical skills. Findlay established using the dynamic model that technological diffusion enhances the rate of technical improvement in a somewhat "less developed" localization, enhancing the attractiveness of FDI. These previous findings imply that fast-growing countries attract more FDI. However, the relationship between FDI inflows and economic growth may be complex and varied between industrialized and developing countries [19].

According to Nunnenkamp and Blonigen, FDI inflows are influenced by two major groupings of determinants. Market (traditional considerations) and efficiency are examples. Economic growth rate, population, tax load, and other market characteristics are examples. The impact of efficiency on FDI

inflows, in turn, comprises the amount and dynamics of a country's cost of doing business, which includes tax charges, salaries, non-wage labor costs, and so on. The scholarship on the determinants of FDI inflows is currently focused on analyzing the shift in emphasis between the two groups of factors outlined above [20]. Mottaleb and Kalirajan and Kumari and Sharma examined the impact of host nation market size on FDI inflows in recent publications. These studies give information on the macroeconomic factors influencing FDI inflows in both developed and developing nations, however the results are inconclusive [21].

The level of human capital development and costs are major predictors of FDI inflows to the country, according to research on the impact of efficiency on FDI flows [22]. According to Noorbakhsh et al. and Braconier et al., lowering labor costs has a favorable impact on FDI inflows to a country, and human capital is one of the elements that trigger FDI inflows [18].

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IDENTIFICATION AND SELECTION OF THE KEY FACTORS THAT DETERMINE THE INVESTMENT CLIMATE OF A COUNTRY (REGION)

2.1. ANALYSIS OF KEY CHARACTERISTICS AND APPLICABILITY OF THE MOST COMMON METHODOLOGIES FOR ASSESSING THE INVESTMENT CLIMATE

The primary goal for any economic system, regardless of its scale, is to ensure sustainable and progressive development. Achieving this requires the system's ability to attract investment resources, as investment attractiveness largely determines the system's competitiveness in different markets such as capital, labor, and innovation.

When making a decision on investing capital, it is critically important for an investor to have as complete and reliable information as possible about both the benefits (growing markets, cheap labor, infrastructure development, etc.) and potential risks (economic, political, legal, etc.) awaiting him in the host country. Only if there is a complete information picture based both on the analysis of statistical indicators of the country's development and on expert assessments, it is possible to make a balanced justified decision that minimizes the likelihood of inefficient investment location. For this reason, a comprehensive analysis of the investment climate is very important in making the final decision on the implementation of capital investments, both for internal and external investors.

It should be noted here that the consumer of information on the results of assessing the investment attractiveness of a country (or a separate region) is not only the business community, but, and sometimes even to a greater

extent, government authorities at various levels. As a rule, such assessments serve as a valuable source of information about the most problematic issues in various spheres of the state's life that hinder its normal development. The availability of reliable and timely information that adequately reflects reality is the key to the formation of a successful investment policy with clearly defined priorities, which allows attracting investments in precisely those sectors that really need them.

To date, a multitude of methods have been developed for assessing the investment climate (attractiveness) of countries and separate regions, which are based on research by rating agencies, business schools, scientific and research institutions. Existing approaches differ in the number and composition of the analyzed indicators, methods for determining their qualitative and quantitative characteristics, evaluation ranges, etc. It should be noted that the sets of factors that determine the investment climate are often formed quite arbitrarily and (in some cases) subjectively.

In our opinion, currently the problem lies not in the shortage of methodologies, but rather in the lack and complexity of specialized approaches that allow for an effective assessment at certain stages of the development of the economic system, especially during periods of radical transformations that, most likely, await the Belarusian, Ukrainian and Russian economies.

This part of our research assumes a detailed study of existing methodologies for assessing investment climate (attractiveness) in order to determine the prevailing areas of analysis (economics, politics, law, etc.), as well as the most frequently evaluated indicators.

The analysis will consist of two stages:

- I. Initial (general) analysis: its main task is the general assessment and comparison of the studied methodologies;
- II. Component (detailed) analysis: it aims to select the most universal, significant and frequently used factors in assessing the investment climate.

Taking into account the fact that in the last three decades a number of approaches have been developed to assess the investment attractiveness of post-Soviet economies (mainly regions of the Russian Federation) the first part of the analysis will consist of two sub-stages.

At the first sub-stage, it is supposed to examine the most common **universal methodologies** in international practice, such as:

- Harvard Business School methodology;
- "Euromoney" magazine methodology;
- BERI Index;
- Forbes magazine methodology;
- The Venture Capital and Private Equity Country Attractiveness Index;

The second sub-stage will pay attention to more **specialized approaches**. Due to the fact that the most significant economic player in the post-Soviet space for a number of objective reasons in the pre-war period was the Russian Federation, the vast majority of such methodologies focus on assessing the investment attractiveness of Russian regions.

Among the methodologies proposed for study are the following:

- Methodology of the Bank of Austria ("Regional Risk Rating in Russia");
- Methodology of the company "RAEX-Analytics";
- Methodology of RSPP and KPMG;
- The National Rating Agency (NRA) methodology;
- Methodology of the Agency for Strategic Initiatives (ASI).

In addition, approaches developed by the World Bank group for The Doing Business project and Business Enabling Environment are also planned to be studied.

In our earlier research, a classification was developed in which the factors influencing the investment climate of a country (region) are aggregated (subdivided) into seven main groups: economic and financial, political, legal, geographic, socio-demographic, technological and infrastructural [33]. This classification will serve as the basis for a comprehensive analysis of the category under study. This will make it possible to determine not only individual factors, but also general areas that are given the most attention by experts when conducting comparative assessments of investment attractiveness.

It should be emphasized that the approaches to the distribution of specific determinants into groups within the framework of various methodologies differ slightly from those proposed by us. As an example, components of soft infrastructure (development of social environment, medicine, etc.) according to the methodology of Euromoney magazine are included in structural risks, while we propose to include them in the group of socio-demographic factors.

Within the framework of this study, in order to unify the analysis, we will adhere to the author's approach to the grouping of determinants.

Initial analysis

Base for analysis

Choice of analysis criteria

In the scientific literature, there are many approaches to the analysis and classification of methodologies for assessing the investment climate (attractiveness), depending on the criteria underlying them. Among the most common criteria are the following:

1. Approaches underlying the assessment (risk, factorial, integral-factorial, etc.) [39, 45, 51, 54];
2. Objectives of the assessment (identify risks or determine the potential of the region, identify investment-attractive regions, etc.) [45, 54, 55];
3. Balance of qualitative and quantitative assessments [2, 30, 54];
4. The form of presentation of the final results (rating scale, matrix, general quantitative assessment) [39, 51] etc.

Also, during the analysis, researchers usually pay attention to the comparative characteristics of the methodologies, to the determination of their advantages and disadvantages, and to the set of the estimated indicators [2, 5, 45, 54].

However, while recognizing the importance of all the approaches studied, it should be said that most of them overlook some extremely important criteria for both analysis and classification of the methodologies. Such criteria, in our opinion, are the complexity (i.e. applicability) and information coverage (i.e. how fully the methodology reveals the existing opportunities and risks) of the methodology.

Therefore, after studying various approaches to comparative analysis and classification of methodologies for assessing the investment climate, we came to the decision that within the framework of our study, a comparative analysis of the approaches will be carried out according to 4 main criteria. The classification will be based on the Applicability matrix developed by us.

Analysis criteria

For a comparative analysis of investment climate assessment methodologies, we selected next four key characteristics:

1. **Information coverage** – the number of analyzed determinants and groups (out of 7 selected groups)
2. **Ease of use** – the complexity of the analysis algorithm and whether special knowledge and skills are required for its implementation;
3. **The variety of the approaches in use** – i.e. on the basis of what the assessment is carried out: are these only expert assessments, or is there a quantitative analysis, integral indicators, etc.
4. **Availability of information** – how easy it is to access the information needed for analysis

Each criterion will be evaluated on a four-point scale ranging from 1 to 4 with the possibility of fractional ratings (if necessary):

- 1 – negative assessment;
- 2 – more negative assessment with a positive component;
- 3 – more positive assessment with a negative component;
- 4 – positive assessment.

Applicability matrix

In essence, these criteria characterize two main components: informational – includes information coverage and the ability to obtain the necessary information; operational – includes the variety of the approaches in use and simplicity of the algorithm.

For a better visual presentation of the results of the analysis, we have developed a matrix of the applicability of methodologies for assessing the investment climate (attractiveness) (AM). It consists of 4 group quadrants, each of which in turn is also divided into 4 quadrants, for the convenience of evaluation. Thus, its total dimension is 4x4.

The horizontal axis of the matrix reflects the information component (average value of the level of information coverage and availability of information), the vertical axis reflects the operational component (the average value of the breadth of the approaches in use and ease of use).

The assessment of each component is also given on a four-point scale, by analogy with the system used in the previous step.

Fractional estimates are also possible, such as 0.5, 1.75, etc. Points determine which of the sixteen squares the technique falls into (an intermediate position is also possible in the case of fractional ratings).

Group quadrants have the following aliases:

- **Aliens** – low information coverage and complexity of use (ratings: 1;1, 1;2, 2;1, 2;2);
- **Guides for beginners** – low information coverage but easy to use (ratings: 1;3, 1;4, 2;3, 2;4);
- **Macadamia nuts** – hard to crack, but very informative (ratings: 3;1, 4;1, 3;2, 4;2);
- **Stars** – very informative and easy to use (ratings: 3;3, 3;4, 4;3, 4;4).

Grading will be based on a critical analysis of the information and expert opinions of the authors of the research.

Universal (general) methodologies

Our earlier studies [34] made it possible to identify the most common approaches to assessing the investment climate (attractiveness) of countries (regions). One of the first in this area was a study by the Harvard Business School.

Harvard Business School (HBS)

The Harvard Business School methodology is based on peer reviews. It focuses on determining the degree of risks for the investor in the host region.

Within the framework of this approach, the following are assessed: legislative conditions for foreign and national investors; the possibility of capital export; the state of the national currency; the political situation; the inflation rate; the possibility of using national capital. There are eight main determinants in total, each of which is assigned a certain number of points. The result is a comprehensive indicator of the degree of risk of investing capital in the country's economy. Its value can vary from 8 to 100 points: the higher this indicator – i.e. the closer its value is to 100 points, the lower the degree of risk and vice versa [31, 43, 48].

The number of indicators evaluated, as well as the fact that the analysis is carried out exclusively by experts, suggests that this is a highly narrow

approach with a high degree of subjectivity in the assessment. The advantage of this technique is its relative simplicity. In addition, despite the need for special knowledge and skills to conduct qualitative analysis, it is quite simple to obtain the relevant information for this. Most of the necessary data is available to the public.

Euromoney

The methodology used by Euromoney magazine expands the number of indicators studied and adds a quantitative indicator of sovereign debt to the Euromoney Country Risk (ECR) experts' estimates.

ECR evaluates the investment risk of a country, such as risk of default on a bond, risk of losing direct investment, risk to global business relations etc., by taking a qualitative model, which seeks an expert opinion on risk variables within a country (90% weighting) and combining it with a basic quantitative value (10% weighting). To obtain the overall Euromoney Country Risk score, they assign a weighting to five categories. The four qualitative expert opinions are political risk (35% weighting), economic risk (35%), structural risk (10%) and access to international capital markets (10%). The quantitative value comes from the sovereign debt indicators (10%) [25].

When applying political, economic, and structural assessments to a 100 point scale for the qualitative average only (rather than the full Euromoney Country Risk score), the following weighting is used: political 45%, economic 45%, and structural 10% [25].

Qualitative assessments

Economic risk: participants rate each country for which they have knowledge from 0-10 across 6 sub factors to equal a score out of 100. The categories of economic risk scored are as follows: bank stability/ risk; GNP outlook; unemployment rate; government finances; monetary policy/ currency stability.

Political risk: participants rate each country for which they have knowledge from 0-10 across 5 sub factors to equal a score out of 100. The categories of political risk scored are as follows: corruption; government non-payments/ non-repatriation; government stability; information access/ transparency; institutional risk; regulatory and policy environment.

Structural risk: participants rate each country for which they have knowledge from 0-10 across 4 sub factors to equal a score out of 100. The categories

of structural risk scored are as follows: demographics; hard infrastructure; labour market/ industrial relations; soft infrastructure.

Access to international capital markets: participants rate each country's accessibility to international markets on a scale of 0-10 (0=no access at all and 10=full access). These scores are averaged and then weighted to 10% [7, 25, 47].

The quantitative score factors – Debt indicators calculated using the following ratios from the World Bank's Global Development Finance figures: total debt stocks to GNP (A), debt service to exports (B); current account balance to GNP (C). Developing countries which do not report complete debt data get a score of zero.

Combined Euromoney Country Risk score is measured in the range from 0 to 100 and is the actual sum of estimates of individual indicators both given by experts and obtained by calculation and analytical means.

The methodology for calculating the rating, as well as the composition of the evaluation indicators, is regularly adjusted taking into account changes in the global market situation. This is done in order to improve the correctness of the assessment and the adequacy of the results obtained.

However, it should be noted that, despite the increase in the number of analyzed indicators in comparison with the HBS approach, their set remains insufficiently broad to consider all the conditions taken into account by investors. Adding a quantitative indicator of sovereign debt reduces the level of subjectivity of estimates to a certain extent, but, in our opinion, it still remains at a high level. The algorithm used and the set of indicators presuppose the presence of special knowledge. The specificity of a number of determinants being evaluated complicates access to the necessary information, as well as the independent use of the methodology.

Forbes (factor)

The methodology of the Forbes magazine involves the selection of parameters that reflect various aspects of the economic life of the region, as well as the compilation of a rating of regions that clearly shows the position of each relative to others in terms of attractiveness for an investor [23].

This methodology contains 6 groups of parameters describing different aspects of economic life: economic situation (resistance to crisis), socio-demographic characteristics, infrastructure, purchasing power of the population, personal comfort, business climate. Each individual parameter is assigned a score: the higher the score, the better the result. The summary indicator is a

weighted average value by groups. The characteristics of the business climate have the greatest weight among the groups, and the indicators of personal comfort have the least weight [2, 5, 31].

In terms of a set of factors, this technique differs from the approaches discussed above. The differences are mainly in the infrastructural component of the investment climate (the cost of residential and industrial real estate, the cost of connecting to power grids are included), and the development of small business is also considered.

Like the previous ones, this approach relies mainly on the opinions of experts. This allows us to talk about a certain degree of subjectivity of the choice and assessment of factors. The range of analyzed indicators points to insufficient information coverage. However, despite the small number of indicators under consideration, the algorithm of the methodology is quite complex and time-consuming. Also, according to some experts [2, 5], there is no objective criterion of reliability in this technique.

The advantages of the Forbes methodology, despite the labor intensity of the process, are: its practical feasibility, relative accessibility for investors, international recognition, as well as the ranking of indicators according to their significance for the final result, which makes it possible to more accurately take into account the interests of capital owners.

It should also be said that this approach is advisable to use in the case when an investor chooses between several priority options, since it involves conducting a comparative assessment.

Index BERI (risk)

Business Environment Risk Intelligence uses the **BERI** index which measures the general quality of the countries' business climate. The components of this indicator are the Operations Risk Index (ORI), the Political Risk Index (PRI), and the Remittance and Repatriation Factor (R-Factor). The methodology provides for an expert assessment of 15 basic risks of the business environment [4, 9, 32].

The values of the indicators are assigned according to an evaluation scale from 0 (unacceptable) to 4 (very favorable) points. Each indicator has a certain weight for the final result. The weighted score is determined by multiplying the points assigned on the rating scale and the corresponding weight. The sum of the weighted scores is the Business Environment Risk Index.

One of the main advantages of this approach is its versatility. The calculation algorithm itself is relatively simple. It also includes a ranking of indicators according to their significance for the final result. At the same time, conducting a qualitative assessment requires a wide range of specialized knowledge. Obtaining all the information necessary for conducting a full-fledged analysis (on the conditions for interaction between government and business, the degree of bureaucratization, etc.) in the conditions of countries with transitive economies can be associated with certain difficulties, and in some cases it is simply impossible.

Venture Capital and Private Equity Country Attractiveness Index (VCPEI)

The index measures the attractiveness of countries for investors in the venture capital (VC) and private equity (PE) asset classes. It is a dynamic valuation system that changes according to market conditions.

The authors of this approach identify 6 main drivers, which gives a clear idea of the structure of the final index:

- Economic Activity;
- Depth of Capital Market;
- Taxation;
- Investor Protection and Corporate Governance;
- Human and Social Environment;
- Entrepreneurial Culture and Deal Opportunities [52].

These six key drivers by alone cannot be measured. Their evaluation is based on sub-criteria that characterize the level of development of a particular driver. The sub-criteria themselves can also be two-level structures. Thus, the index itself is based on the three levels of indicators. The analyzed criteria are dynamic and can change depending on the structure and needs of the market.

In the context of this study, as indicators included in our final analysis within the framework of the Venture Capital and Private Equity Country Attractiveness Index assessment methodology, we will mainly take into account the second-level sub-criteria, with the exception of those cases where the third-level sub-criteria clearly correlate with the groups of determinants we identified earlier. Therefore, the main drivers will include:

1. Economic Activity: the size of the economy (Total Economic Size), i.e. the volume of GDP; expected GDP growth; unemployment rate;
2. Depth of Capital Market: Size of the Stock Market, Stock Market Liquidity (Trading Volume), IPOs and Public Issuing Activity, M&A Market Activity, Debt and Credit Market, Bank Non-Performing Loans to Total Gross Loans;
3. Taxation: the level of taxation and non-tax payments (Entrepreneur Tax Inc. and Administrative Burdens);
4. Investor Protection and Corporate: Quality of corporate Governance; Security of Property Rights; Quality of legal Enforcement, specifically, the independence of judicial power, the effectiveness of the legal framework, the integrity of the legal system, the operation of the rule of law, the quality of legal regulation;
5. Human and Social Environment: the level of education of the population and the quality of human capital, the state of the labor market, the level of corruption;
6. Entrepreneurial Culture and Deal Opportunities: the level of innovation development; the number of published scientific and technical articles; ease of starting and running a business; ease of closing a business; corporate R&D.

Based on the analysis, we can conclude that when assessing investment attractiveness, the specialists of Venture Capital and Private Equity Country Attractiveness Index rely on 21 sub-criteria. The total number of assessed variables, taking into account the basic (third) level, is 46 different indicators of socio-economic development of the country.

Considering the specifics of the methodology (the attractiveness for venture capital and direct investment), the key criteria here are the depth of capital markets, as well as investor protection and corporate governance.

This approach, despite the specialization, has wider information coverage than the previously discussed methods. The algorithm of the analysis is quite complex and requires special knowledge in various fields. The quality of the results largely depends on the composition of the team of experts involved in the assessment. The specialization of the approach involves access to profile information about the capital market, which can cause certain difficulties due to the underdevelopment of such markets in many countries with economies in transition.

The comparative characteristics of the studied methodologies of assessing the investment climate in accordance with the previously defined analysis criteria are presented in Table 2.1.

Table 2.1 – Summary table of comparative characteristics of universal methodologies for assessing the investment climate of countries (regions)

Methodology	Information coverage	Availability of information	Variety of the approaches in use	Ease of use
HBS	1	3	1	3
Euromoney	2	2	2	1
Forbes	2	2	1	2
BERI	2	2	2	3
VCPEI	2,4	2	2	1

The data presented in the Table 1.1 allows us to calculate the indicators necessary to compile the applicability matrix (Table 2.2).

Table 2.2 – Initial data for the compilation of applicability matrix

Methodology	Informational component	Operational component
HBS	2	2
Euromoney	2	1,5
Forbes	2	1,5
BERI	2	2,5
VCPEI	2,2	1,5

The matrix of the applicability of methodologies for assessing the investment climate is presented in the figure 2.1.

As we can see, the studied techniques mostly belong to the Aliens group to one degree or another. This group is characterized by low level of information coverage, combined with the complexity of the assessment. This implies the need for a wide range of specialized knowledge, the involvement of external experts, as well as the possibility of difficulties in collecting the information necessary for analysis.

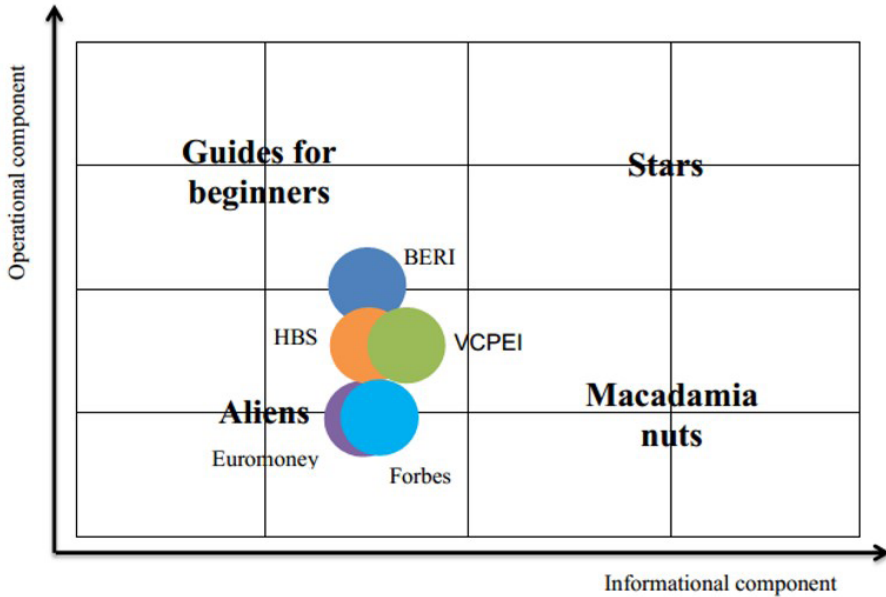


Figure 1.1 Applicability matrix for the five most common universal methodologies for assessing the investment climate of countries

The BERI approach along with Aliens, is partly included in the Guides for beginners group. The methodologies under this alias are easy to use, but they give only a basic idea of the investment attractiveness of the country (region).

The Venture Capital and Private Equity Country Attractiveness Index is shifted to the side of the Macadamia nuts group. The methodologies of this group, like the Aliens group, are difficult to use, but offer fairly wide information coverage.

Conclusion

The conduct analysis allowed us to identify a number of characteristic features common to universal methods for assessing the investment climate (attractiveness).

First of all, it should be noted the relatively low level of information coverage. Climate and Geographic (0 out of 5) and Technological (2 out of 5) factors should be singled out among the least accounted groups. Separately, it should be said about the VCPEI methodology. Despite the possibility of

universal application, this approach can be characterized as semi-specialized, since it pays special attention to capital markets. This gives a slightly higher level of information coverage, however, not in areas critical for transition economies.

Regardless of the fact that some of the methodologies use statistical comparisons in the analysis, all of them, without exception, are based on expert assessments. Accordingly, the quality and reliability of the analysis depends on the professionalism of the selected team of evaluators.

The HBS and BERI methodologies are based mainly on data that do not require serious efforts to obtain them (GDP, inflation rate, currency stability, etc.). At the same time, Euromoney, Forbes and VCPEI consider a number of specialized indicators (the state of the labor market, the stability of the banking system, the liquidity of the stock market), which implies additional research, and, accordingly, complicates access to this information.

A similar situation is observed with respect to analysis algorithms. The HBS and BERI methodologies are less complex to apply than the other three approaches.

It should also be said that three of the five methodologies studied are aimed primarily at identifying hidden risks, thereby losing sight of the potential of the host territory. At the same time, in certain cases, possible benefits can cover all existing risks for the investor. This situation is often typical for fast-growing economies in transition.

Specialized methodologies

The importance of analyzing specialized methodologies lies in the fact that many post-Soviet countries have similar development models, legal and state systems, as well as political and socio-economic models and traditions. There is no doubt that the common, almost 70-year-old history has left a significant imprint on this group of countries.

This similarity suggests that specialized approaches in assessing the investment climate will take into account factors that are not considered by universal approaches, but are crucial for the post-Soviet economies. In view of the above, their study will allow selecting the most relevant indicators to include them in the author's methodology for assessing the investment attractiveness of transformational economies.

**The methodology of the Bank of Austria (BoA)
(risk approach, score assessment, expert assessment)**

The methodology for assessing regional risks in Russia ("Regional Risk Rating in Russia"), carried out by the Institute for Advanced Studies (IAS) commissioned by the Bank of Austria, involves the assessment of investment risks in 11 different positions, including:

1. Political rating (13 indicators);
2. Economic rating (18 indicators);
3. Financial and banking rating (15 indicators);
4. Privatization rating (12 indicators);
5. State of the labor market (4 indicators);
6. Development of transport and communications (9 indicators);
7. Demographic rating (4 indicators);
8. General social rating (5 indicators);
9. Ethno-political rating (6 indicators);
10. Behavior of the population (4 indicators);
11. Environmental rating (6 indicators) [38].

A region is considered as integral economic and political system, i.e. investment risk is determined based on any changes in it. This methodology involves the use of predominantly expert assessments and data from scientific (literary) sources [55].

For each specific indicator, its level of significance for the position is determined, which largely defines the evaluation of the position itself. The accuracy of the weight of the indicators characterizing each position is ensured by virtue of the high qualification of experts.

The result of this report is a rating where all regions are divided into 6 classes: Class 1 – favorable situation for capital investment; Class 2 – relatively favorable situation; Class 3 – contradictory situation; Class 4 – unfavorable situation; Class 5 – seriously unfavorable situation; class 6 – situation dangerous for capital investment [27, p.11].

In general, the methodology of the Bank of Austria is a fairly balanced specialized approach to assessing regional investment risks. The analysis of 11 positions, including more than 90 indicators, to a greater or lesser degree delving into each of the groups we have identified, allows us to talk about fairly wide information coverage. The similarity of the development models of

many post-Soviet economies makes this methodology easily adaptable, and the indicators selected for the analysis are widely applicable and relevant for other economic systems of this group of countries.

At the same time, a detailed study of the of the factors under evaluation showed that some of them are closely intertwined, and in certain cases duplicated in different risk groups, which is fraught with misrepresentation of information. The assessment algorithm, as well as the range of assessed indicators, determine the complexity of both the approach itself (it requires special knowledge related to various areas of the functioning of socio-economic systems) and access to the necessary information. Therefore, conducting a qualitative analysis requires the involvement of highly qualified specialists from various fields. A significant proportion of expert assessments suggests that this technique is not free from subjectivity.

Methodology of the company "RAEX-Analytics" (factorial/risk approach, expert assessment)

The methodology for compiling the rating of investment attractiveness of the company "RAEX-Analytics" (formerly the rating agency "Expert RA") is based on the analysis of two relatively independent characteristics: investment potential and investment risk [46].

The RAEX-Analytics experts understand the investment potential as a quantitative characteristic that takes into account the saturation of the region's territory with economic resources (natural resources, labor, fixed assets, infrastructure, etc.), consumer demand of the population and other indicators that affect the potential volume of investment in the region [21, 37]. This characteristic consists of 9 partial potentials:

1. Natural resource potential;
2. Labor potential;
3. Production potential;
4. Consumer potential;
5. Infrastructure potential;
6. Innovation potential;
7. Institutional capacity;
8. Financial potential;
9. Tourism potential.

Each of the identified potentials, in turn, is characterized by a group of indicators [37].

Investment risk in this methodology is a qualitative and quantitative characteristic that reflects the non-commercial risks faced by entrepreneurs in the region, as well as the general state of business.

By analogy with the potential, the total risk consists of 6 separate risks:

1. Economic risk;
2. Social risk;
3. Financial risk;
4. Management risk;
5. Environmental risk;
6. Criminal risk [37].

The rating is based mainly on statistical data of government agencies and departments of various levels, as well as international rating agencies.

The methodology is based on a comparative analysis, according to the results of which each region is assigned a rating or index of the ratio between the level of investment risk and investment potential [46]. This approach, in its idea, does not imply the possibility of evaluating an isolated country or region. Nevertheless, the set of determinants used in the analysis seems to be very useful in the framework of our study.

From the point of view of information coverage (the number of analyzed indicators), the methodology of the company "RAEX-Analytics" is one of the most extensive among the studied approaches. In different periods, the number of indicators studied by experts can reach up to 200. However, it practically does not pay attention to political risks, which can be very significant during periods of transformation.

The analysis technique is quite complex and requires a wide range of special knowledge. This makes the methodology difficult to implement. The situation is further complicated by the fact that in the current realities of many countries with transitional economies it is not always possible to gain access to even the minimum amount of necessary information.

The advantages of this methodology include its specialization. As in the case of the approach developed by the Bank of Austria, most of the indicators selected by RAEX-Analytics experts to analyze the investment attractiveness of Russian regions will be relevant for other economic systems. And as an addition, this similarity greatly simplifies the extrapolation of the approach.

It should also be noted that the evaluation combines both statistical analysis of quantitative indicators and expert assessment of the qualitative side of the development of various processes, which increases the balance and, accordingly, the quality of the results.

Methodology of RSPP (Russian Union of Industrialists and Entrepreneurs) and KPMG (factorial approach, expert assessment)

In 2010, the Russian Union of Industrialists and Entrepreneurs together with KPMG conducted research on the regional investment climate from the point of view of foreign investors. The developed approach assumes a conditional division of all factors taken into account by foreign investors when making a decision on investing capital into two large groups:

- "hard" – those that are part of the existing environment and cannot be changed in the short and medium term (e.g.: geographic location, natural resources, etc.). This group includes seven indicators. The ability to influence them is very limited;
- "soft" – including the creation and management of representations, the effectiveness of processes, the internal capabilities of representatives of relevant state organizations, legislation, etc. (six indicators) [3].

Each indicator is evaluated from two positions: the possibility of change and the speed of influence.

The advantages of this technique include its specialization in the transitional economy of the post-Soviet space with all the benefits that follow from this described earlier. The approach combines both the assessment of physical and statistical indicators, and expert assessments.

However, the study of the results of the research itself [3, 26] shows the ambiguity of the evaluated criteria in terms of specific indicators. It is often difficult to determine what exactly was evaluated and how the final result was formed. In addition, the analysis uses very specific information (such as the administration's interest in FDI, managing investor expectations, etc.), which is associated with additional costs and is not always possible. All this makes it difficult to understand and use the methodology.

Despite the fact that the study, one way or another, pays attention to each of the seven identified groups of factors, the absolute number of assessed

determinants is rather short. The set of analyzed indicators consists of only 13 main components.

The National Rating Agency (NRA) Methodology (factor/risk)

The investment attractiveness of a region is determined taking into account a set of factors influencing the expediency, efficiency and level of investment risks in each region. The Agency considers seven key factors of regional investment attractiveness.

1. Geographical location and natural resources
2. Labor resources of the region
3. Regional infrastructure
4. Internal market of the region (regional demand potential)
5. Production potential of the regional economy
6. Institutional environment and socio-political stability
7. Sustainability of the regional budget and enterprises of the region [29].

To assess these seven determinants of investment attractiveness, a set of 56 indicators is used. The Agency experts divide them into three main groups:

1. Statistical indicators are traditionally used to assess most of the factors of investment attractiveness of regions.
2. Surveys of the business community that allow evaluating indicators that are not quantifiable.
3. Expert assessments are used to study the factors of the region's investment attractiveness, for which statistics are not maintained or published in the public domain. In the NRA methodology expert opinions are used to assess a region's resource potential, quality of the institutional environment and level of social and political stability [29].

The level of regional investment attractiveness is determined using a dedicated scale that is divided into three broad categories – high, medium and moderate level of investment attractiveness. Each group, in turn, consists of three subgroups from IC1 to IC9.

The level of investment attractiveness of the region is assigned according to a special scale, divided into three large categories, within each of which there are three sublevels.

Our research shows that the indicators evaluated during the analysis of investment attractiveness cover to varying degrees all seven selected groups, which allows us to talk about the level of information coverage above average. However, despite this, a number of significant factors relevant to potential investors, such as the inflation rate, property rights protection, the level of corruption, and others, remain overlooked to a considerable extent.

Taking into account within the framework of this methodology, both statistical factors and expert assessments, as well as conducting specialized surveys, allows us to talk about the balanced approach. At the same time, this makes it quite difficult to reproduce both due to the inaccessibility of the full amount of necessary (required) information, and due to the need for special knowledge from various fields to obtain a high-quality and reliable result.

The Agency for Strategic Initiatives (ASI)

The Agency for Strategic Initiatives (ASI) analyzes the national rating of the investment climate in the constituent entities of the Russian Federation.

According to ASI specialists, this rating evaluates the efforts of regional authorities to create favorable business conditions and identifies best practices. The rating is calculated on the basis of 67 indicators (the number of indicators is dynamic) in 4 directions:

1. Regulatory environment – performance indicators of the provision of various public services for business (e.g.: registration of legal entities, issuance of construction permits, issuance of licenses, etc.). The time of passage, the number of procedures and the satisfaction of entrepreneurs with standard administrative procedures are assessed.
2. Institutions for business – availability and quality of tools to protect and improve the investment environment. Indicators of work and dynamics of the development of institutions and mechanisms for business (for e.g.: the availability and quality of legislation protecting the rights of investors, mechanisms to support investment activities, assessment of the level of corruption, etc.).
3. Infrastructure and resources – indicators of the level of infrastructure development, as well as the availability of resources for business and investment activities (assessment of state support measures and availability of financing, availability of physical infrastructure

and resources: development of roads, availability of investment infrastructure facilities, availability and qualification of labor resources).

4. Small business support – the level of small business development and the effectiveness of various types of small business support [40].

In parallel with the ranking, ASI also collects data on additional indicators in order to analyze their applicability for inclusion in the methodology in the future.

Obtaining information on indicators is carried out by conducting surveys of entrepreneurs and experts, as well as using statistical data. It should be noted that the approach to forming a sample of respondents is very complex and requires a significant amount of preparatory work.

After the initial data collection is completed, the rating result is calculated and presented at four levels:

1. *The level of indicators* is the summarized and processed raw data, given on a similar scale from 0 to 100, where 0 is the worst possible measurement, 100 is the best.
2. *The level of factors* is the weighted average of the scores for the indicators included in the factors.
3. *The level of directions* is the weighted average values of the factors included in the direction.
4. *The level of the integral index* is the sum of points in all four directions of the rating [40, 41, 42].

The maximum value of the index cannot exceed 400 points [50].

The analysis shows that the ASI methodology combines both surveys of experts and entrepreneurs and statistical assessments. The collection of additional data indicates the dynamic nature of the rating and its ability to adapt to changing market needs. At the same time, we note a very complex algorithm for conducting analysis with a high proportion of indicators evaluated by experts.

In our opinion, this methodology is characterized by a below-average level of information coverage. The set of 67 indicators is more or less focused on five of the seven selected groups of determinants. The main attention is paid to the legal and financial and economic components. However, even within these groups, possible risks and opportunities are not fully disclosed.

It should also be noted the use of highly specialized data in the analysis, the collection and study of which requires special knowledge. In addition, most

of the information ASI specialists receive through surveys, which implies a large amount of field research.

Tables 2.3 and 2.4 present summary comparative characteristics of specialized methodologies for assessing the investment climate (attractiveness) and data for compiling the applicability matrix.

Table 2.3 – Comparative characteristics of specialized country (region) investment climate assessment methodologies

Methodology	Information coverage	Availability of information	Variety of the approaches in use	Ease of use
BoA	4	2	3	1
RAEX	4	2	3	1
RSPP and KPMG	2	2	2	1
NRA	3	1	4	1
ASI	2	1	3	1

Table 2.4 – Initial data for the compilation of Applicability Matrix for specialized methodologies

Methodology	Informational component	Operational component
BoA	3	2
RAEX	3	2
RSPP & KPMG	2	1,5
NRA	2	2,5
ASI	1.5	2

Based on this information, we can conclude that the group of specialized methodologies is more diverse than the group of universal ones. This thesis is also confirmed by the applicability matrix (Figure 2.2).

As evident from the analysis, two methodologies created by the Agency for Strategic Initiatives and RSPP & KPMG belong to the “Aliens” category. This category is characterized by a low level of information coverage, accompanied by the complexity of evaluation. It implies the necessity of extensive specialized knowledge, involvement of external experts, and potential challenges in gathering the required information for analysis. These factors indicate a low level of applicability.

The methodologies developed by the Bank of Austria and the company "RAEX-Analytics" are in the third group of quadrants, i.e. “Macadamia nuts”.

This group is characterized by a high level of information coverage, combined with a complex assessment mechanism. As in the “Aliens” group, this assumes the need for a wide range of specialized knowledge, the involvement of external experts, as well as the possibility of difficulties in collecting the information necessary for analysis.

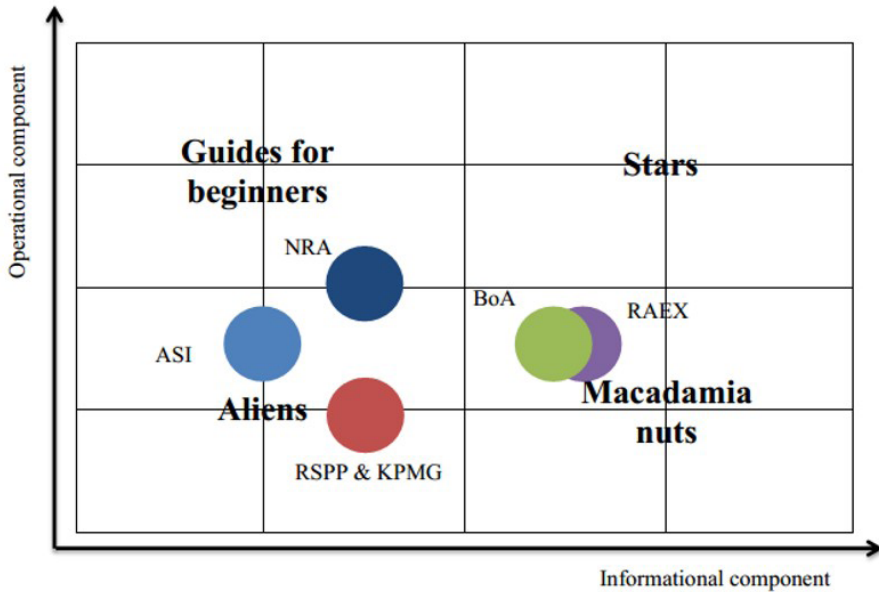


Figure 2.2 Applicability matrix for the five most common specialized methodologies for assessing the investment climate of countries

The approach applied by The National Rating Agency, in consequence of the wide range of methods used in the analysis, is located on the border of the “Aliens” and “Guides for beginners” groups. Having the characteristics of the “Aliens” group, this methodology, due to a wide range of methods employed in the analysis, is slightly more effective than the previous two. It could approach the “Stars” group if the collection of substantial amounts of necessary information did not rely on surveying the business community.

Conclusion

Having studied the main characteristics of specialized methodologies for evaluating the investment climate, we can conclude that all approaches,

without exception, use expert assessments in various combinations with statistical comparisons and conducting specialized surveys. This makes them fairly balanced regarding to the methods of analysis in use.

As a rule, the methodologies of this group are based on very complex techniques for compiling ratings, involving multi-level assessments and the corresponding mechanisms for aggregating the results obtained. For this reason, in terms of “ease of use”, all of the studied approaches were rated 1 point out of 4 possible.

It is worth highlighting the level of information coverage as a separate aspect. Out of the five methodologies examined, three demonstrate an above-average information coverage, with two of them (RAEX, BoA) achieving the maximum value for this indicator. At the same time, such high results are associated with additional difficulties in finding and accessing the data necessary for analysis. This is due to the fact that field-specific information is required to obtain a high-quality and reliable assessment, which, as a rule, is not available in public sources. For instance, in the case of the approaches of The National Rating Agency and The Agency for Strategic Initiatives, experts receive part of the necessary data through specialized field surveys. These nuances affected the assessment of the availability of information and, as a consequence, the information component in the calculation of indicators for the Applicability Matrix.

In general, we can say that, for the most part, specialized techniques are superior to universal ones in terms of information coverage, but inferior in terms of operational component.

World Bank Group

According to experts from the International Finance Corporation (World Bank Group), it is crucial to take into account the specific characteristics of a country's economic, political, social and other environments for a comprehensive assessment of its investment attractiveness. However, at the same time, there are a number of global initiatives for comparative analysis of various aspects of country and regional development, which can help businesses understand the investment climate of the host country. Most of these initiatives can be categorized into five directions: competitiveness and the investment climate; perceived constraints by businesses; business and investment barriers; risk and policy uncertainty; cost of operations [49].

Among the information resources used by the World Bank specialists, it is noteworthy to highlight:

The Doing Business project provides objective measures of business regulations and their enforcement across 190 economies and selected cities at the subnational and regional level [10, 49].

Global Competitiveness Index – World Economic Forum dataset combines executive opinion survey results and quantitative data to compare the competitiveness of an economy [49].

The World Bank Enterprise Surveys (WBES): The World Bank Group's Enterprise Surveys provide company-level data in emerging markets and developing economies, including 130,000 firms in 135 countries [24, 49].

The World Bank Group's Worldwide Governance Indicators project (WGI) reports aggregate and individual governance indicators for over 200 countries and territories over the period since 1996 [49, 53].

As part of our research, we will take a closer look at The Doing Business project and the Business Enabling Environment (this is a working title with the acronym BEE).

The Doing Business

On September 16, 2021, the World Bank Group (WBG) Senior Management decided to discontinue the Doing Business (DB) report and data and also announced that the WBG would work on a new approach for assessing the business and investment climate [8]. However, despite this and the fact that the project primarily assesses business rules and compliance, and is not a full-fledged methodology for evaluating the investment climate, we have decided to include it in the preliminary analysis. This decision was based on the fact that the calculation of the rating involves extremely important factors of the business environment that can be useful in forming the set of determinants for the author's assessment methodology. At the same time, in order to avoid distorting the information, the data obtained during the analysis will not be taken into account when evaluating the frequency of use of determinants included in various methodologies.

The Doing Business report covers ten areas of business regulation, including starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency [16]. Each

of the areas measures procedures, time, and cost for a specific action required at a particular stage of doing business:

Starting a Business – measures the procedures, time, cost, and minimum capital to start a new business (usually limited liability company). These procedures include the processes entrepreneurs undergo when obtaining all necessary approvals, licenses, permits and completing any required notifications, verifications or inscriptions for the company and employees with relevant authorities.

Dealing with Construction Permits – measures the procedures, time, and cost required to obtain construction permits and safety mechanisms in the construction permitting system. In addition, Doing Business measures the building quality control index, evaluating the quality of building regulations, the strength of quality control and safety mechanisms, liability and insurance regimes, and professional certification requirements. Information is collected through a questionnaire administered to experts in construction licensing

Getting Electricity – measures the procedures, time, and cost required to obtain a new electricity connection. It also considers the reliability of the electricity supply and the transparency of tariffs. These procedures include applications and contracts with electricity utilities, all necessary inspections and clearances from the distribution utility as well as from other agencies, and the external and final connection works between the building and the electricity grid. In addition, Doing Business measures the reliability of supply and transparency of tariffs index and the price of electricity.

Registering property – measures the procedures, time, and cost required to register property. It also considers the quality of the land administration system and the transparency of property information. The quality of land administration index has five dimensions: reliability of infrastructure, transparency of information, geographic coverage, land dispute resolution and equal access to property rights.

Getting Credit – the legal rights of borrowers and lenders with respect to secured transactions through one set of indicators and the reporting of credit information through another. The first measures whether certain features that facilitate lending exist within the applicable collateral and bankruptcy laws. The second measures the coverage, scope and accessibility of credit information available through credit reporting service providers such as credit bureaus or credit registries.

Protecting Minority Investors – measures the strength of investor protection laws and the ease of shareholder suits. It also considers the disclosure

requirements for related-party transactions and the availability of corporate governance information. The data come from a questionnaire administered to corporate and securities lawyers and are based on securities regulations, company laws, civil procedure codes and court rules of evidence.

Paying Taxes – measures the procedures, time, and total tax rate and contribution required to comply with tax regulations, as well as the ease of filing and paying taxes and the post-filing processes such as tax refunds and audits. Taxes and contributions measured include the profit or corporate income tax, social contributions and labor taxes paid by the employer, property taxes, property transfer taxes, dividend tax, capital gains tax, financial transactions tax, waste collection taxes, vehicle and road taxes, and any other small taxes or fees.

Trading across borders – measures the time and cost (excluding tariffs) required to export and import goods, as well as the ease of complying with border regulations and the availability of trade-related information. It considers three sets of procedures – documentary compliance, border compliance and domestic transport – within the overall process of exporting or importing a shipment of goods.

Enforcing Contracts – measures the efficiency of the judicial system in resolving commercial disputes looking at factors such as the time and cost required to resolve a dispute and the quality of the court system. It also evaluates whether each economy has adopted a series of good practices that promote quality and efficiency in the court system.

Resolving Insolvency – measures the efficiency of the insolvency system in resolving distressed companies considering such factors as the time and cost required to complete the insolvency process and the recovery rate for creditors [1, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21].

Most indicator sets refer to a case scenario in the largest business city of each economy, except for economies that have a population of more than 100 million, where Doing Business, also collected data for the second largest business city [10].

The rankings are based on a set of quantitative indicators that are designed to be comparable across countries and over time. The indicators are based on data collected from various sources, including government agencies, legal practitioners, and business experts. Each economy is ranked based on its overall ease of doing business score, which is calculated as an average of the scores on the individual indicators.

The analysis allows us to draw certain conclusions about The Doing Business project, taking into account the specifics of this study.

Despite the fact that this rating, as already mentioned above, is not an exhaustive (full-fledged) methodology for assessing the investment climate, it considers a fairly wide range of different indicators that are important for a potential investor. Given this, the level of information coverage of Doing Business can be characterized as above average (information coverage 3).

The approaches used for analyzing the information allow us to speak of a certain balance and breadth of the methods used (breadth of the approaches used 3). It should also be noted that the analysis is largely based on the use of fairly specific information, the acquisition of which is difficult and costly (availability of information 2). This, as well as the evaluation algorithm itself, determines the fact that conducting a high-quality comparative analysis requires the involvement of experts from various fields, both for data collection and analysis, which makes the methodology difficult to reproduce independently (ease of use 1).

Thus, the Doing Business methodology with coordinates 2.5:2 falls into the group of Aliens with a shift the Macadamia nuts on the Applicability Matrix, as a quite informative but complex-to-use methodology.

Business Enabling Environment – a new approach to assessing the business and investment climate in countries following the discontinuation of the Doing Business project ratings. Since this approach is new and still under development, we do not plan to include it in the second part of our analysis at this stage. The purpose of studying BEE is rather to familiarize ourselves with more modern trends and views on assessing the investment climate.

The objective of the Business Enabling Environment (BEE) project is to provide a quantitative assessment of the business environment for private sector development, with regular annual frequency and for most economies worldwide [6]. A key innovation of the BEE project will be the collection and use of data obtained directly from firms. Firm-level data will be obtained by expanding the Enterprise Surveys (ES) program.

BEE will focus on ten topics that are organized following the life cycle of the firm and its participation in the market while opening, operating (or expanding), and closing (or reorganizing) a business. The main topics include Business Entry, Business Location, Utility Connections, Labor, Financial Services, International Trade, Taxation, Dispute Resolution, Market Competition, and Business Insolvency [8].

Within each of the ten topics, BEE will include data on three critical themes that are increasingly important for modern economies. They are digital adoption, environmental sustainability, and gender.

BEE analyzes a set of specific indicators within each topic. For each topic, there will be three sets of indicators, one for each pillar. Indicators on the regulatory framework and public services will be collected through expert consultations, whereas the efficiency indicators will be assessed through firm-level surveys and expert consultations.

The granular data produced by the BEE project will be combined to produce a score for each of the ten BEE topics, resulting in a simple cardinal measure that will enable absolute comparisons over time and across economies for each topic area. Every topic score will be generated by averaging the scores assigned to each of the three pillars (regulatory framework, public services, and efficiency) for that topic.

- In addition to topic-specific scores, the BEE project will consider producing higher-level aggregate scores to increase the impact and informational value of the project. Options include the following:
- A set of categorical scores that result from combining topic scores in groups following the life cycle of the firm; for instance, aggregate scores for opening, operating, and closing a business.
- A set of categorical scores that combine topics according to their nature as production inputs (e.g., Labor and Financial Services), market interactions (e.g., International Trade and Market Competition), and institutional interactions (e.g., Taxation and Dispute Resolution).
- An overall score that combines all topic scores into a representative summary statistic [8].

Next, let's take a closer look at three main components for each of the 10 directions that are expected to be analyzed under this approach:

1. **Business Entry:** the quality of regulations for business entry (regulatory framework pillar); the digital public services and transparency of information for business startups (public services pillar); and the efficiency of business entry in practice (efficiency pillar).
2. **Business Location:** quality of regulations for immovable property lease, property ownership, and urban planning (regulatory framework pillar); quality of public services and transparency of information (public services pillar); and efficiency of obtaining a business location in practice (efficiency pillar).
3. **Utility Connections:** quality of electricity, water, and internet regulations (regulatory framework pillar); performance and transparency of utility

- services (public services pillar); and efficiency of utility service provision in practice (efficiency pillar).
4. **Labor:** the quality of labor regulations (regulatory framework pillar); the adequacy of public services for labor (public services pillar); and the efficiency of labor regulations and public services in practice (efficiency pillar).
 5. **Financial Services:** the quality of regulations for commercial lending, secured transactions, e-payments, and green financing (regulatory framework pillar); the accessibility of information in credit infrastructure (public services pillar); and the efficiency of receiving financial services in practice (efficiency pillar)
 6. **International Trade:** quality of regulations for international trade (regulatory framework pillar); quality of public services for the facilitation of international trade (public services pillar); and efficiency of importing goods, exporting goods, and engaging in digital trade (efficiency pillar).
 7. **Taxation:** quality of regulations on taxation (regulatory framework pillar); public services provided by tax administration (public services pillar); and efficiency of tax systems in practice (efficiency pillar).
 8. **Dispute Resolution:** regulatory framework for dispute resolution (regulatory framework pillar); public services for dispute resolution (public services pillar); and ease of resolving a commercial dispute in practice (efficiency pillar).
 9. **Market Competition:** quality of regulations that promote market competition (regulatory framework pillar); adequacy of public services that promote market competition (public services pillar); and efficiency in the implementation of key services promoting market competition (efficiency pillar). Each set of indicators will cover aspects of enforcement of competition policy, intellectual property rights, and innovation policy, and regulations that focus on improving competition and innovation in the private sector, including in markets where the government is a purchaser of services or goods.
 10. **Business Insolvency:** quality of regulations for insolvency proceedings (regulatory framework pillar); quality of institutional and operational infrastructure for insolvency processes (public services pillar); and efficiency of resolving a judicial insolvency proceeding in practice (efficiency pillar) [8].

According to the published Concept Note, the study will rely both on ratings published by various international organizations, forums, and agencies (Corporate Registers Forum, OECD, European Business Registers Association, etc.) and on direct field research, during which World Bank experts will gather data by conducting consultations with professionals from different branches (lawyers, notaries, accountants, advisors, etc.) familiar with the specifics of activities related to the corresponding directions.

Despite the fact that Business Enabling Environment is currently under development, and the release of the pilot edition with an assessment of the first 55 economies is planned no earlier than 2024 [8], some interim conclusions regarding this approach can already be drawn in accordance with the efficiency criteria proposed above:

1. The methodology under development will have a very broad level of information coverage. At this stage, it is difficult to say exactly which indicators and how many of them will be included in the assessment, but it is already clear that all seven designated determinant groups will be covered (information coverage 4).
2. The approach is designed in such a way that the collection of necessary information, as well as its evaluation, will be (planned to be) carried out by highly qualified World Bank experts from various fields. The algorithm for conducting the analysis is quite complex (ease of use 1);
3. As follows from the Concept Note, both statistical analysis and expert assessments will be used in assessing the investment climate of countries. In addition, a wide range of field studies is planned to be conducted within the framework of BEE. This indicates the breadth and balance of the approach (breadth of the approaches used 4);
4. Despite the fact that the evaluation will use publicly available data from various international comparative analyses, a significant portion of the information base will be comprised of data obtained through expert consultations with professionals from various fields, as well as on-site research at the firm level. This makes the acquisition of all necessary information extremely (really) difficult and costly (availability of information 2).

Thus, this methodology with coordinates 3:2.5 falls on the border in the Macadamia nuts and Stars of Applicability matrix groups, as a very informative, but difficult to use technique.

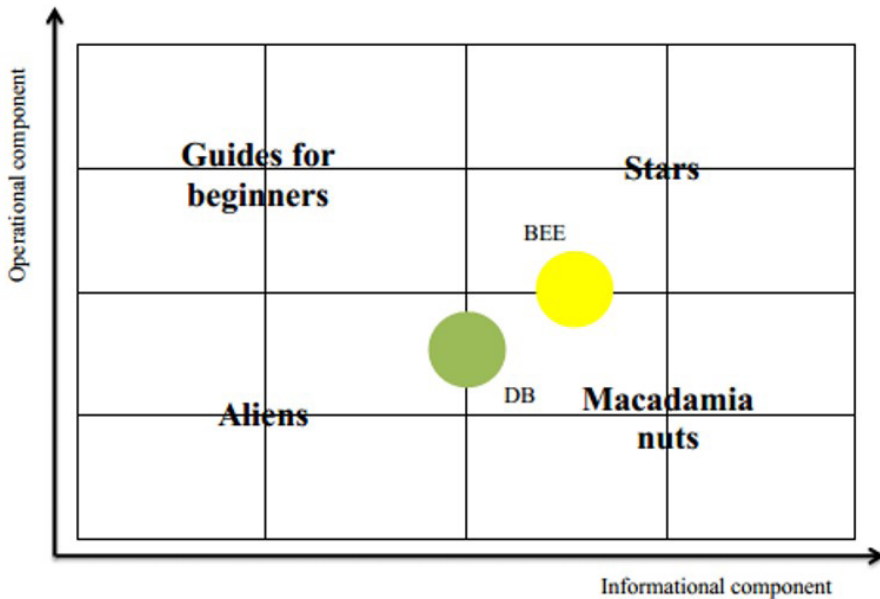


Figure 2.3 Applicability matrix for the Doing Business and Business Enabling Environment methodologies

As can be seen from the analysis and the Figure 1.3, the Business Enabling Environment should not just be a replacement, but an improved version of the approach used in compiling the Doing Business ranking. Its main drawback is the complexity of both collecting the necessary information and the algorithm for its subsequent analysis.

Strengths and Shortcomings of the methodologies

When analyzing the advantages and disadvantages of the studied methodologies, in our opinion, it is advisable to resort to their comparison, to a certain extent. This will allow not only to identify the pros and cons, but also emphasize the common characteristics and distinctive features of the approaches, and also, to some extent, make it possible to trace their evolution.

Universal (general) methodologies

Harvard Business School

Strengths:

- Universality;
- Relative simplicity of the approach (evaluation of a small amount of available data in accordance with a clear algorithm);
- Availability of information necessary for analysis (most of the data is in open sources);
- Despite its narrowness, this approach provides a basic understanding of the situation;
- International recognition.

Shortcomings:

- *Narrowness of approach (only 8 factors are evaluated based on expert opinion);
- Low level of information coverage (not enough attention is paid to socio-demographic, technological, infrastructural and geographical factors);
- Subjectivity of the results (the quality of the results largely depends on the composition of the expert team);
- Assessment of existing risks, without due consideration of the potential of the territory.

Euromoney

Strengths:

- Universality;
- Wider information coverage than HBS;
- A quantitative indicator was added to the expert assessments;
- Ranking of indicators by significance for the final result;
- **Variability of the set of the analyzed indicators;
- International recognition.

Shortcomings:

- *Narrowness of approach (despite the addition of the quantitative indicator);
- There is still a low level of information coverage (not enough attention is paid to infrastructural and geographical factors);
- Subjectivity of the results (the quality of the results largely depends on the composition of the expert team);
- Assessment of existing risks, without due consideration of the potential of the territory;
- ** Variability of the set of the analyzed indicators.

Forbes

Strengths:

- Ranking of indicators by significance for the final result;
- Small business development is considered separately;
- Increase in the list of analyzed infrastructure indicators;
- Possibility of comparative evaluation;
- International recognition.

Shortcomings:

- *Narrowness of approach;
- Opacity of the assessment;
- Labor-consuming nature;
- Insufficient information coverage (not enough attention is paid to political and geographical factors);
- Narrow focus of the assessment (predominance of the economic component, which does not always allow you to obtaining the desired information);
- Subjectivity of the results (the quality of the results largely depends on the composition of the expert team);

Index BERI

Strengths:

- Universality;
- Ranking of indicators by significance for the final result;
- Possibility of comparative evaluation;
- Relative simplicity of the analysis algorithm;
- International recognition.

Shortcomings:

- *Narrowness of approach;
- Insufficient information coverage (not enough attention is paid to socio-demographic, technological and geographical factors);
- Lack of a unified approach to the interpretation of basic indicators and evaluation criteria;
- Difficulty in obtaining certain data necessary for qualitative analysis;
- Subjectivity of the results (the quality of the results largely depends on the composition of the expert team).

VCPEI

Strengths:

- Information coverage is wider than that of other universal methodologies;
- Recognition of the methodology by Forbes magazine experts;
- ** Variability of the set of the analyzed indicators;
- *** Specialization (assessment of the attractiveness of countries for venture capital and direct investment).

Shortcomings:

- * Narrowness of approach;
- Still insufficient level of information coverage (not enough attention is paid to socio-demographic and infrastructural factors);
- Complexity of the analysis algorithm;
- Subjectivity of the results (the quality of the results largely depends on the composition of the expert team);
- The need to obtain narrow-profile information;
- **Variability of the set of the analyzed indicators.

Specialized methodologies

Bank of Austria

Strengths:

- Certain balance in the approach (combination of expert and statistical analysis methods);
- Ranking of indicators by significance for the final result;
- High level of information coverage;
- ***Specialization;
- International recognition.

Shortcomings:

- Subjectivity of the results (in addition to expert estimates of indicators, the weight of each indicator in the final result is also determined based on the opinion of experts);
- Complexity of the analysis algorithm;
- The need to attract specialists from different fields;
- Duplication and interweaving of indicators;
- Difficulty in obtaining certain data necessary for qualitative analysis;
- ***Specialization.

RAEX-Analytics

Strengths:

- High level of information coverage;
- Taking into account both the risks and the potential of the host country;
- Certain balance in the approach (combination of expert and factor analysis methods – a more balanced approach than the Bank of Austria);
- ** Variability of the set of the analyzed indicators;
- *** Specialization;
- Международное признание.

Shortcomings:

- Complexity of the analysis algorithm;
- Does not imply the possibility of assessing a single country or region;
- Little attention is paid to political risks;

- Lack of transparency in approaches to assessing indicators;
- Unobvious separation of factors between potentials and risks;
- A certain amount of subjectivity remains;
- Difficulty in obtaining certain data necessary for qualitative analysis;
- ** Variability of the set of the analyzed indicators;
- *** Specialization.

RSPG and KPMG

Strengths:

- Certain balance in the approach (combination of expert and factor analysis methods);
- Broad scope of analysis areas, despite a small number of factors;
- *** Specialization.

Shortcomings:

- Opacity (it is not always clear what exactly is evaluated and how);
- Complexity of the analysis algorithm;
- Low level of information coverage (despite the fact that the methodology, one way or another, affects the seven selected groups of factors, not enough attention is paid to legal, socio-demographic and technological factors);
- A certain amount of subjectivity;
- Difficulty in obtaining certain data necessary for qualitative analysis;
- *** Specialization.

The National Rating Agency

Strengths:

- Information coverage is above average;
- Certain balance in the approach (combination of expert and statistical methods of analysis with data from specialized surveys);
- Confirmed accuracy of the results in the study of a small number of regions;
- *** Specialization;

Shortcomings:

- Complexity of the analysis algorithm;
- Subjectivity of the results (the quality of the results largely depends on the composition of the expert team);
- Low share of statistical indicators;
- Difficulty in obtaining certain data necessary for qualitative analysis;
- *** Specialization;

The Agency for Strategic Initiatives

Strengths:

- Certain balance in the approach (combination of expert and statistical methods of analysis with data from specialized surveys);
- Hierarchy of evaluation;
- Accumulation of data on additional indicators with the prospect of including them in the assessment;
- ** Variability of the set of the analyzed indicators;
- *** Specialization.

Shortcomings:

- Complexity of the analysis algorithm;
- The level of information coverage is below average (not enough attention is paid to technological and geographical factors);
- Subjectivity of the results (the quality of the results largely depends on the composition of the expert team);
- Difficulty in obtaining certain data necessary for qualitative analysis;
- ** Variability of the set of the analyzed indicators;
- *** Specialization.
-

Annotations

* The narrowness of the approach lies in the fact that the analysis is based mainly on one method, without resorting to additional tools to balance the assessment and improve the quality of the results.

** Regular adjustment of the set of indicators for analysis is considered by us both as a positive and as a negative characteristic. Its positive value lies in the

fact that such dynamism allows one to respond to changes in market demands. At the same time, this complicates the practical application of the methodology.

*** The specialization of the methodology can act both as a positive and as a negative characteristic, depending on the range of indicators taken into account and the form of presentation of the results.

In the case of VCPEI, despite the focus on assessing the attractiveness for venture capital, the methodology considers a fairly wide range of general indicators, displaying their impact when presenting the results.

In the case of the specialized assessment methods studied by us, which focus mainly on the regions of the Russian Federation, within the framework of this study, taking into account its orientation, specialization is a positive characteristic due to the similarity of development models of many post-Soviet economies. However, it should be remembered that the possibility of using such approaches is very limited.

The table version of strengths and shortcomings of the studied investment climate assessment methodologies presented in annex A Table A1.

Conclusion

As can be seen from the above data, each of the methodologies presented in the analysis has both strengths and weaknesses. Some of the edges (advantages), such as, for example, international recognition, the approach can only acquire over time, having proven its effectiveness. At the same time, there are a number of positive characteristics that can initially be taken as a basis for the development of a new methodology.

First of all, this should include a **balanced approach**. This implies the inclusion of various tools in the methodology, such as statistical analysis, economic and mathematical modeling, expert assessments, etc. Excessive focus on any one tool leads to one-sided evaluation and, as a result, to a significant distortion of the final result.

An important point is also the **level of information coverage**. The research shows that, despite the existing differences, one of the principal defects of most universal methodologies is the low level of information coverage. It can be assumed that their main goal is to give a general description of the investment environment without going into specific details, which actually makes them universal. At the same time, many specialized techniques manage to achieve a

very high value for this criterion by analyzing a large amount of data. This feature, in fact, determines their main shortcomings, which include the complexity of both the analysis algorithm and obtaining (access to) the necessary information. This situation suggests that when forming a set of factors for analysis, one should keep in mind possible issues both with access to information and with its subsequent analysis.

Special attention, in our opinion, deserves such a characteristic as the dynamic nature of the estimated indicators. The agile nature of the system of determinants allows the methodology to more effectively respond to changes in market demands. In addition, such an approach makes it possible to create various branch lines (highly specialized approaches for assessing the attractiveness of individual areas or industries) based on a single assessment algorithm.

A characteristic drawback of all the studied methods is the different degree of subjectivity of the results. This is due to the fact that they all rely to some extent on the opinions of experts, in which there will always be subjectivity. With the introduction of additional tools into the methodology, such as statistical analysis of quantitative indicators of the development of economic systems, economic and mathematical modeling, specialized surveys, etc., the approach will become more balanced, and the level of subjectivity of the results will decrease.

This does not mean that expert assessments should be abandoned. Excessive striving to assess the investment climate mainly on the basis of statistical analysis of quantitative indicators can lead to the fact that the approach will become overly formalized, and important qualitative characteristics will be overlooked. At the same time, basing the methodology solely on expert assessments of qualitative indicators can have an opposite negative effect. From our point of view, the analysis should be based on an adequate balance between the qualitative and quantitative characteristics of the system being evaluated, using the minimum possible, but sufficient number of indicators to achieve the goal.

Thus, after analyzing the positive and negative characteristics of the studied approaches, we came to the conclusion that *an effective methodology for assessing the investment climate should be easily formalized, balanced and based on an understandable and accessible system of both quantitative and qualitative indicators. An important element of it should be a periodic review of the set of analyzed indicators and approaches to analysis, in order to increase its adaptability to changing market needs. Moreover, the number of indicators included in the analysis should be minimal, but sufficient to obtain the required level of information coverage.*

2.2 IDENTIFICATION AND SYSTEMATIZATION OF THE MOST SIGNIFICANT FACTORS DETERMINING A COUNTRY'S INVESTMENT CLIMATE

For the analysis within the framework of the first stage of the research, we selected ten (twelve) of the most frequently cited and widely used methods for assessing the investment climate (attractiveness) of countries, as found in scientific literature and international practice. Five (seven) of them are universal approaches that allow for analysis regardless of the specific development characteristics of any given economic system. The other five are specialized methodologies developed for assessing the investment climate (risks, potential, attractiveness) of various regions of the Russian Federation. Such a selection is more thoroughly explained in the introduction to the first part.

During the study of the aforementioned methodologies, we compiled two matrices:

1. The matrix of repetitions (inclusions) of factors in different methods;
2. The matrix of information coverage, i.e. the inclusion of factors from the seven previously identified groups in the evaluation.

These two matrices form the statistical basis for the second stage of the study. With their help, we plan to determine both the most frequently evaluated groups and the most commonly occurring individual factors within each group. This will allow us to further select the most significant of them for inclusion in our own methodology of evaluating the investment climate, taking into account its specificity.

Main part

As stated in the introduction to the first part of the analysis, we proposed a classification according to which determinants affecting the investment climate of a country (region) are aggregated (subdivided) into seven main groups.

Our proposed classification, taking into account the update, includes the following groups of factors:

- Economic and financial;
- Political;
- Legal;
- Geographic;

- Socio-demographic;
- Technological;
- Infrastructural;

The division is rather conditional and subject to discussion. It should also be noted that the list of factors included in each group varies greatly when conducting an assessment. For example, in the HBS and Forbes methodologies, there is not a single match in the group of financial-economic factors. This should be taken into account in the analysis.

Among the seven identified groups, only financial-economic and legal factors are present in each of the 10 studied methodologies (Figure 2.4), indicating their extreme importance for the investment climate of the country.

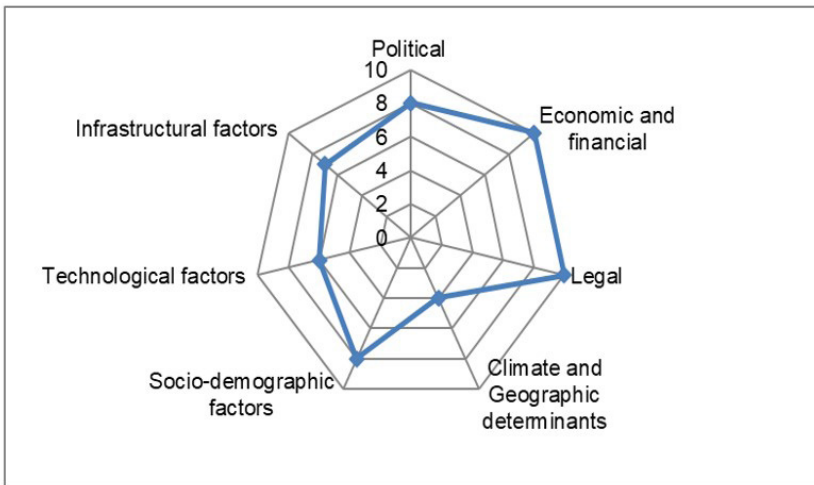


Figure 2.4 Distribution of factor groups by frequency of inclusion in investment climate assessment methodologies

In terms of frequency of inclusion in the analysis, political and socio-demographic factors ranked second with an inclusion rate of 8/10, while the third and fourth positions are held by the groups of infrastructure (7/10) and technological (6/10) determinants, respectively. In our opinion, the authors of the methodologies unfairly rarely pay attention to the climate and geographical characteristics of the region – 4/10.

It should also be noted that in 3 out of 10 approaches, there are factors that are difficult to assign to any of the 7 groups. Typically, these are highly specialized characteristics, such as the quality of experts preparation (BERI), stock market liquidity (VCPEI), or the number and scale of strikes (Bank of Austria).

Further, we are going to examine each group in more detail in terms of the most frequently evaluated determinants in the order in which they are listed above. It is also important to understand that the basic names of the factors (the name fixed in the methodology) may differ from approach to approach. In this study, factors will be considered identical if they are based on the same statistical data or have very similar information load. The distribution of factors is based on expert evaluations of the authors of the study.

Economic and financial determinants

According to the results of the study, the most numerous group, in terms of the diversity of indicators included in it, was the group of financial-economic factors. The most frequently evaluated factors within this group are presented in Figure 2.5. Here it should be noted that more than half of all identified determinants are found in no more than one methodology, which indicates a very wide pluralism of approaches to the selection of indicators.

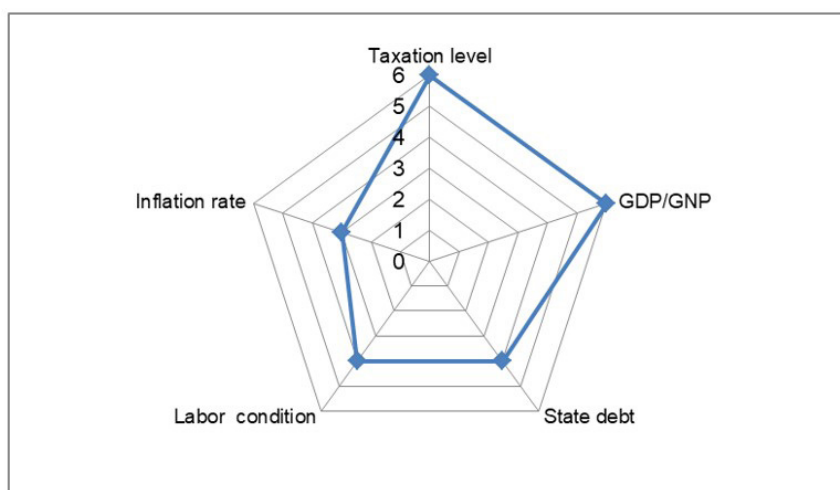


Figure 2.5 Most frequently evaluated financial and economic determinants

As can be seen from the data in Figure 2.2, the most frequently included factors in the analysis are the level of taxation and non-tax payments and the size and dynamics of GDP/GNI, including per capita. They are present in six out of ten methodologies. However, while the assessment of the level of taxation is predominantly characteristic of specialized approaches, with the exception of "RAEX-Analytics", there is parity in the case of GDP/GNI.

Assessment of the state of public debt and the labor market can be found in four out of ten methods. Nine determinants are present in three approaches. Among them, it is necessary to highlight the level of inflation, availability of credit (both short-term and long-term), income and purchasing power of the population, as well as the level of development of small business. We included the inflation rate in the most common factors, since there are determinants in the methodologies that closely correlate with this indicator.

Of the factors that occur in one or two approaches and which are not reflected in Figure 2.5, in our opinion, the stability and convertibility of the national currency, the price level, customs duty rates, export support and ease of doing business deserve attention.

Legal determinants

Among the legal determinants, the authors of investment climate assessment methodologies most often include in their analysis an evaluation of the existence of discriminatory measures and foreign capital control with respect to national capital. This indicator is present in five out of ten approaches.

This and other legal factors that occur in more than one methodology are presented in Figure 2.6.

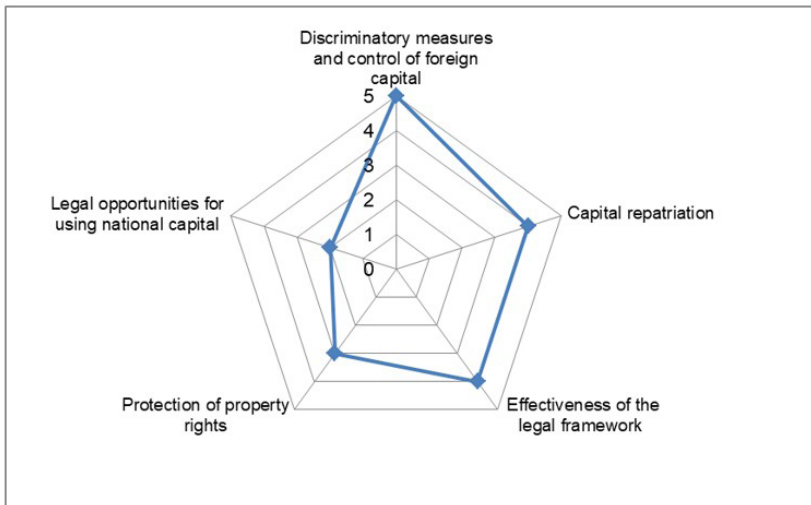


Figure 2.6 Most frequently evaluated legal determinants

Among the indicators included in no more than one methodology, it is difficult to rank them in terms of significance, as they are all essentially important. However, given the direction of this study and the criteria of an effective methodology determined earlier, the factors of greatest interest to us were identified as: the independence of the judicial system, the principle of the rule of law, and the effectiveness of procedures ensuring the normal functioning of businesses (registration of property rights, issuance of licenses, land registration, etc.).

Political determinants

The most frequently analyzed factors of the political environment are general political stability and the level of corruption (Figure 2.7). Their assessment is assumed in four out of ten methodologies.

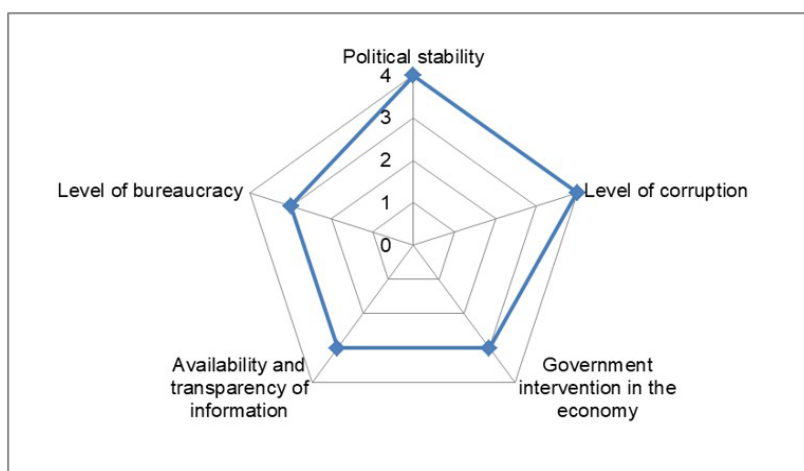


Figure 2.7 Most frequently evaluated political determinants

We can also see the degree of bureaucracy, government intervention in the economy and business, as well as the availability and transparency of various types of information among the leaders in terms of frequency of inclusion.

It should be noted that the legal and political environment is often the most problematic issue in both transition economies in general and post-Soviet countries in particular. This is largely due to the fact that overcoming the "middle-income trap" and further transforming the economy requires the reorganization

of state and political institutions. At the same time, the established vertical of power is not ready and does not want such reorganizations, preferring to sacrifice political, legal, and other freedoms in favor of self-preservation. Typical examples of this are the Republic of Belarus and the Russian Federation.

Socio-demographic determinants

Among the social-demographic determinants, experts are usually most interested in the quality of human capital and the unemployment rate. These indicators are evaluated in six out of ten approaches studied (Figure 2.8). It is worth noting that the first of these factors is of particular interest to representatives of specialized methods, while the second is equally represented in both groups.

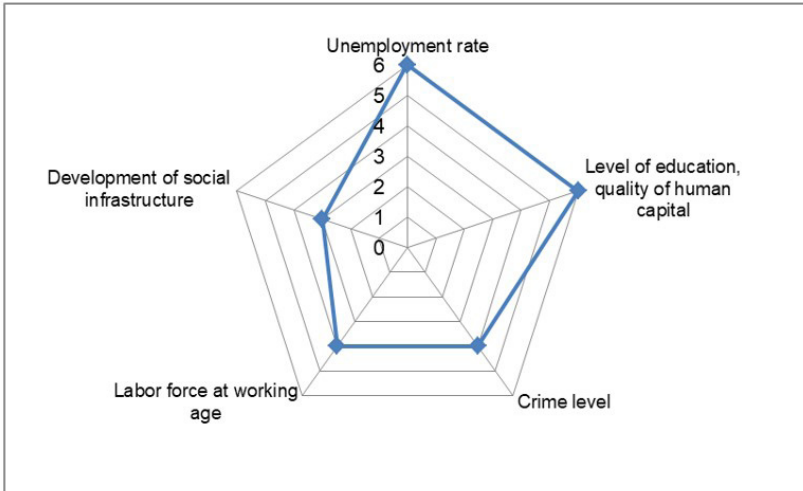


Figure 2.8 Most frequently evaluated socio-demographic determinants

In the top of the analysis of the social-demographic environment, we can also see the level of crime, the availability of labor resources, and the development of social infrastructure. Among the determinants not reflected in the figure, it should be noted the demographic situation, as well as the level of interethnic, social, and religious tension.

Infrastructural determinants

According to the results of our analysis, when evaluating the investment climate, experts are interested in both the overall development of physical infrastructure and its individual components (Figure 2.9). At the same time, the infrastructure component is mainly included in specialized methodologies. This group of indicators is considered to some extent in each of them, which cannot be said about universal approaches.

The most commonly included indicators in the assessment are the development of transport and communication infrastructure, the development of roadside and hotel services, and the cost and availability of electricity.

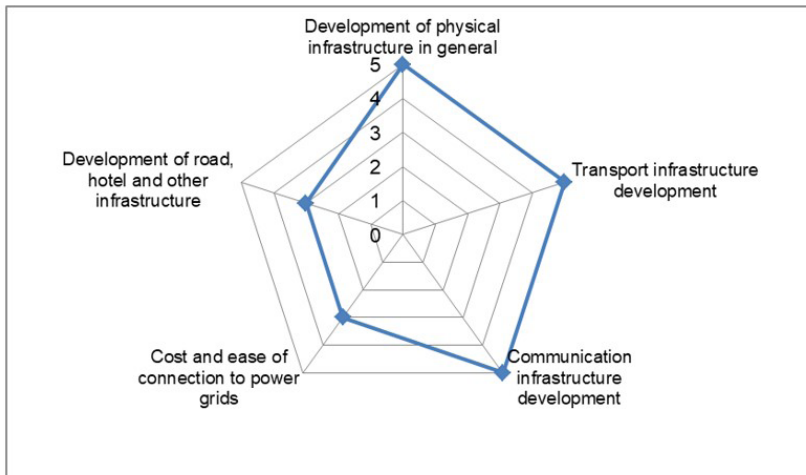


Figure 2.9 Most frequently evaluated infrastructural determinants

Among less common but significant determinants, it is worth noting such factors as the cost and availability of residential, office, and industrial real estate, the presence of large airports, and opportunities for waste recycling. Additionally, in our view, the authors of most methodologies unjustifiably overlook the development of investment infrastructure (special economic zones, technology parks, incubators, etc.). This characteristic is only considered in the approach proposed by ASI.

Technological determinants

The number of technological factors found in the studied methodologies is relatively small. Similar to infrastructure determinants, this group is of greater interest to representatives of specialized approaches. The most frequently evaluated indicator, which is present in four methodologies, is the general level of innovation development.

Among the specific technological determinants used to evaluate the investment climate, it is necessary to note such factors as the spread of cellular communication, R&D expenses, the number of published scientific and technical articles, patent applications, as well as the number of employees engaged in scientific research.

Climate and Geographic determinants

As noted above, indicators that can be attributed to the group of climate and geographic determinants are found only in four approaches, and all of these approaches are specialized. As in the case of technological factors, their number is not large.

Experts most often evaluate the advantages and disadvantages of the of the region's geographic location, the level of environmental pollution (water, air, soil, nuclear contamination, etc.), the balance of various minerals and other natural resources, the level of raw material independence, as well as climatic characteristics.

Other determinants

During the analysis, we also identified a number of specialized factors that are difficult to attribute to any of the seven groups. Given the recent trends and the context and focus of this study, indicators such as the existence of interregional territorial problems, sovereign tendencies of autonomies and the emergence of various epidemics and infections are of interest among them.

Conclusion

Thus, based on the analysis of the most frequently evaluated determinants conducted in the second part of the study, we can form a basic list of factors

determining the investment climate of the country (region), systematizing them into homogeneous groups:

1. Financial and Economic: GDP/GNP (including per capita), level of taxation and non-tax payments, labor market conditions, state debt, level of inflation, availability of credit, income and purchasing power of the population, level of development of small business, stability and convertibility of national currency, price level, customs duties rates, export support, ease of doing business;

2. Legal: discriminatory measures and control of foreign capital in relation to national capital, capital repatriation (threat of nationalization), overall effectiveness of the legal framework, protection of property rights, legal opportunities for the use of national capital, independence of the judicial system, rule of law, effectiveness of procedures ensuring the normal functioning of business;

3. Political: general political stability, level of corruption, level of bureaucracy, government intervention in the economy and business, availability and transparency of various types of information.

4. Socio-demographic: unemployment rate, quality of human capital, crime level, availability of labor resources, development of social infrastructure, demographic situation, level of interethnic, social and religious tension;

5. Infrastructure: overall development of physical infrastructure, development of transport and communication infrastructure, development of roadside and hotel services, cost and availability of electricity, development of investment infrastructure, cost and availability of residential, office and industrial real estate, availability of major airports, opportunities for waste recycling.

6. Technological: level of innovation development, spread of cellular communication and internet, R&D expenses, number of published scientific and technical articles, patent applications, number of employees engaged in scientific research;

7. Climate and geographical: geographical location, level of environmental pollution, balance of various mineral resources and other natural resources, level of raw material independence, climatic characteristics.

In addition to the seven groups identified, we believe it is appropriate to consider the possibility of including indicators such as the existence of interregional territorial problems, sovereign trends of autonomy, and the emergence of various epidemics and infections in the assessment.

This composition of factors, divided into groups, will serve as the basis for forming a set of determinants that will be subject to analysis within the framework of the author's methodology for assessing the investment climate.

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EXAMINATION OF STAKEHOLDER PERSPECTIVES ON INFORMATION REQUIRED FOR ASSESSING A COUNTRY'S INVESTMENT ATTRACTIVENESS AND THEIR ATTITUDE TO EXISTING ASSESSMENT METHODOLOGIES

For this stage of the research, the following tasks have been set:

1. Determine the level of awareness among potential investors regarding existing approaches to assessing the investment climate and their satisfaction with the methodologies employed for evaluation and the information obtained.
2. Identify and systematize the most significant factors of the investment environment from the perspective of potential investors.

For this purpose, we developed a specialized questionnaire consisting of 25 questions of various directions (see the annex B) and conducted a survey of stakeholders (entrepreneurs and representatives of the management of special economic zones) with the involvement of a specialized third-party organization in this process.

The survey was conducted by the company “Laboratorium Wiedzy Artur Borcuch” among 506 enterprises, as well as among 14 SEZ management bodies. The survey period was from June 10 to July 20, 2023.

3.1. THE ANALYSIS OF POTENTIAL INVESTORS' AWARENESS OF EXISTING APPROACHES TO ASSESSING THE INVESTMENT CLIMATE AND THEIR SATISFACTION WITH THESE METHODOLOGIES

The first step in addressing the set tasks was the analysis of respondents' answers to questions related to their awareness of existing methodologies for assessing the investment climate, as well as an examination of their willingness to use these methodologies to obtain the necessary information about a potential investment country.

It is worth noting at the outset that among the surveyed companies, only 181 have foreign branches and experience in direct foreign investment, accounting for slightly over 35% of the respondents. At the same time, the geography of these subsidiaries is quite diverse, including Germany, Italy, the United Kingdom, Spain, Scandinavian countries, Bosnia and Herzegovina, Macedonia, Croatia, Romania, Ukraine, Czech Republic, Slovakia, Bulgaria, the United Arab Emirates (UAE), the United States, Sweden, and Greece.

From the obtained responses, it can be deduced that the vast majority of the respondents (over 85%) are aware of the existence of various methodologies for assessing the investment climate (Figure 3.1).

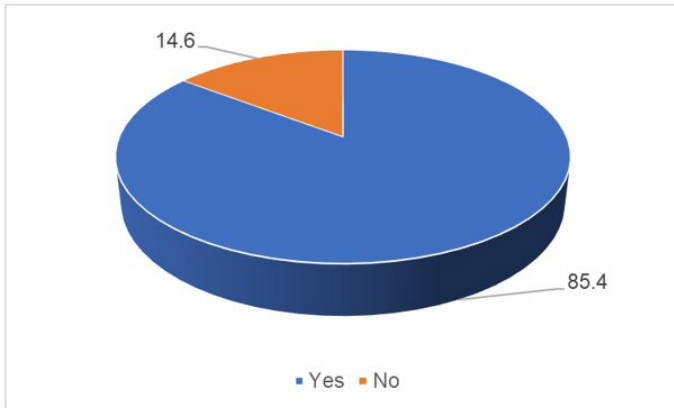


Figure 3.1 – Structure of Responses to the Question Regarding Respondents' Awareness of Various Investment Climate Assessment Methodologies

Source: Developed by the authors based on the survey

Survey participants were asked to indicate which methodologies from the list provided they had heard of. Among the respondents, the most well-known methodology was "The Venture Capital and Private Equity Country Attractiveness Index," which was familiar to 38% of those surveyed (Figure 3.2).

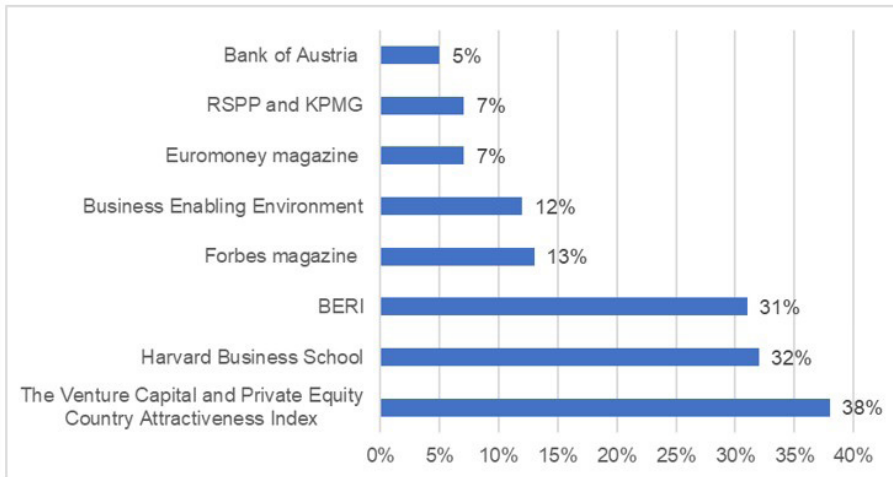


Figure 3.2 – Recognizability Rating of Investment Climate Assessment Methodologies Among Potential Investors

Source: Developed by the authors based on the survey

Additionally, the top three leaders included the Harvard Business School methodology and the BERI Index with figures of 32% and 31%, respectively.

As can be inferred from the provided data, universal assessment methodologies are more recognizable among survey participants than specialized ones. This is largely attributed to the low interest of investors in placing capital in countries with economies in transition. Supporting this argument is the geographical distribution of subsidiaries mentioned earlier.

The overwhelming majority of respondents (more than 93%) consider it advisable to utilize the services of specialized companies to obtain information about the investment destination country.

Such a stance is based on the prevailing opinion (91% of respondents) that such organizations provide a more comprehensive assessment of both the risks and prospects of capital deployment in the host country (see Figure 3.3).

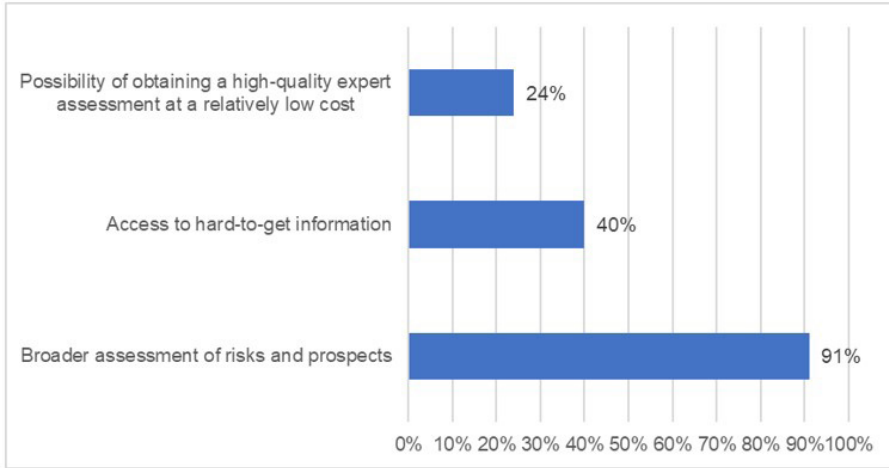


Figure 3.3 – Ranking of Reasons to Use the Services of Specialized Agencies According to Potential Investors

Source: Developed by the authors based on the survey

Among other positive aspects of using specialized companies, respondents also mentioned broader access to hard-to-reach information and the engagement of expert in the assessments.

As for the negative points, high costs and incomplete information were primarily noted. Additionally, 8% of survey participants indicated a preference for conducting such analysis themselves.

When composing the questionnaire, it was decided not to include direct questions regarding the satisfaction of potential investors with existing investment climate assessment methodologies. Instead, a series of interconnected items were incorporated into the survey that implicitly highlighted the information of interest to us.

As previously noted, the majority of survey participants are aware of the existence of various approaches to assessing the investment climate and recognize the advisability of turning to specialized companies. However, only 13 (2.6%) out of 506 survey participants had ever used agencies or third-party experts to conduct such an assessment (Figure 3.4).

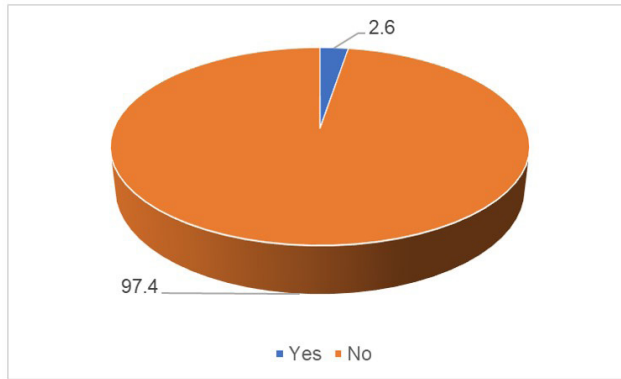


Figure 3.4 – Structure of Responses to the Question Regarding the Use of Services of External Companies in Assessing Investment Attractiveness
 Source: Developed by the authors based on the survey

Furthermore, when responding to the question about the possibility of engaging specialized rating agencies or external experts to conduct an analysis of the investment attractiveness of the intended investment country in the case of planning foreign direct investments, only 41 out of 506 respondents (8.1%) indicated that their company considers such an option for obtaining the necessary information (see Figure 3.5).

We observe a clear contradiction between what survey participants consider advisable when planning international investment activities and the actions they intend to take in reality.

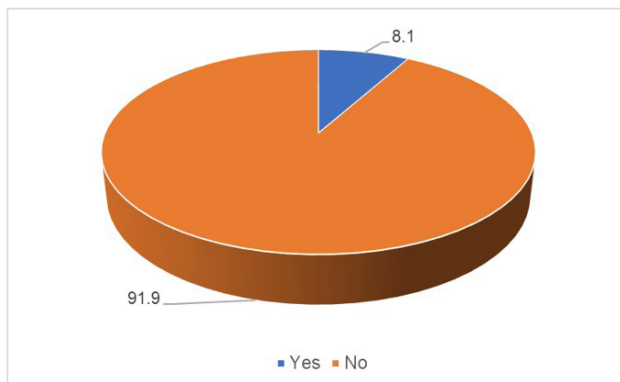


Figure 3.5 – Structure of Responses to the Question Regarding the Possibility of Engaging External Organizations for Conducting an Analysis of the Investment Attractiveness of the Intended Investment Country
 Source: Developed by the authors based on the survey

In our view, the reason for this discrepancy lies in the aforementioned shortcomings of engaging external experts in investment climate analysis. This primarily pertains to the high cost of such services and the acquisition of incomplete information.

Indirectly, our assumption is also supported by the fact that over 38% of respondents indicated that they have experience in assessing investment attractiveness. The difference between the number of those with such experience and those who have used the services of external (third-party) organizations suggests that companies prefer to conduct such analysis independently.

It is worth noting that in most cases, such an assessment is limited to a specific examination of individual aspects of the business environment, such as market conditions or demographic composition. Therefore, the application of a comprehensive approach to investment climate assessment is not considered in this context.

In our opinion, this situation identifies the problem of dissatisfaction with existing approaches and the lack of an accessible methodology for independently assessing the investment climate that would provide a sufficiently comprehensive evaluation while maintaining a relatively simple analysis algorithm.

Survey participants were also asked to rate the significance of various characteristics that, in their opinion, an effective methodology for assessing the investment climate should possess. For this purpose, a ten-point scale was chosen, where 10 represented the highest and 1 the lowest rating, respectively.

According to the respondents, the most important criterion, with a significance level of 8.86, is the breadth of methods used in the analysis (Figure 3.6).

Survey participants also highly value methodologies that have proven their effectiveness in practice – 7.94 out of 10. The third place, with a score of 7.49, was shared between criteria such as the level of information coverage and the accessibility of the necessary information for analysis. Meanwhile, the complexity of the analysis algorithm was rated with an estimation of only 5.21.

The examination of investment climate assessment methodologies conducted in the first part of the research revealed that the most balanced and informative approaches, which have proven their effectiveness, are based on relatively complex analysis algorithms that require extensive specialized knowledge and skills. Not every company's staff possesses such skills.

At the same time, we have found that potential investors are not inclined to turn to specialized organizations that have the necessary infrastructure for

implementing complex analysis algorithms in practice. Instead, they prefer to conduct their own research. This results in the assessment of investment attractiveness being limited to the examination of individual elements of the business environment.

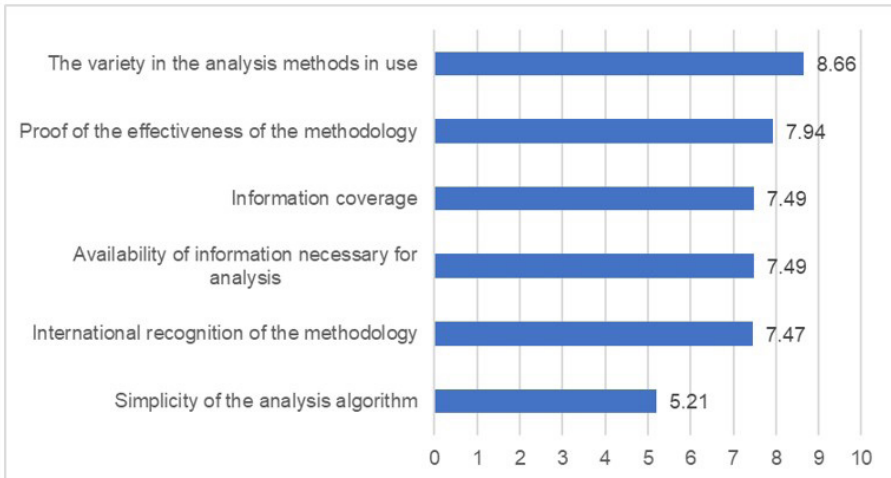


Figure 3.6 – Significance of Various Characteristics for an Effective Investment Climate Assessment Methodology According to Potential Investors
Source: Developed by the authors based on the survey

Taking into account the fact that the vast majority of representatives from the surveyed companies are aware of the existence of widely recognized investment climate assessment methodologies, a question arises: why do they, when conducting their own research on a potential investment country, not make use of these methodologies, opting instead for a limited and relatively superficial analysis?

From our point of view, one of the reasons for such a situation is precisely the complexity of these methodologies. In this regard, the relatively low significance rating of the complexity of the analysis algorithm as a characteristic of an effective investment climate assessment methodology may not be entirely justified.

3.2. THE MOST SIGNIFICANT FACTORS OF THE INVESTMENT ENVIRONMENT FROM THE POINT OF VIEW OF POTENTIAL INVESTORS

The second stage in addressing the research objectives involved analyzing the survey results to determine which factors are considered decisive by potential investors when assessing the investment climate.

Similar to the determination of the most frequently included factors in the analysis within various investment climate assessment methodologies examined in the first part of the study, all determinants were categorized into seven groups:

- Economic and financial;
- Political;
- Legal;
- Geographic;
- Socio-demographic;
- Technological;
- Infrastructural.

Respondents were asked to select the most significant factors within each group from their perspective. The choices for selection were formed based on the results obtained in the first part of the study. Participants were also given the option to provide their own variants.

Economic and financial determinants

According to the data obtained during the survey, the most prioritized financial and economic factors for the majority of companies are a favorable tax situation and a stable labor market in the target investment country. Specifically, 71% and 66% of respondents included them in their lists, respectively (Figure 3.7). In third place, with a large lag, is the GDP/GNP indicator (including per capita), which was noted by 34% of the respondents. Bringing up the rear are credit availability and the inflation rate.

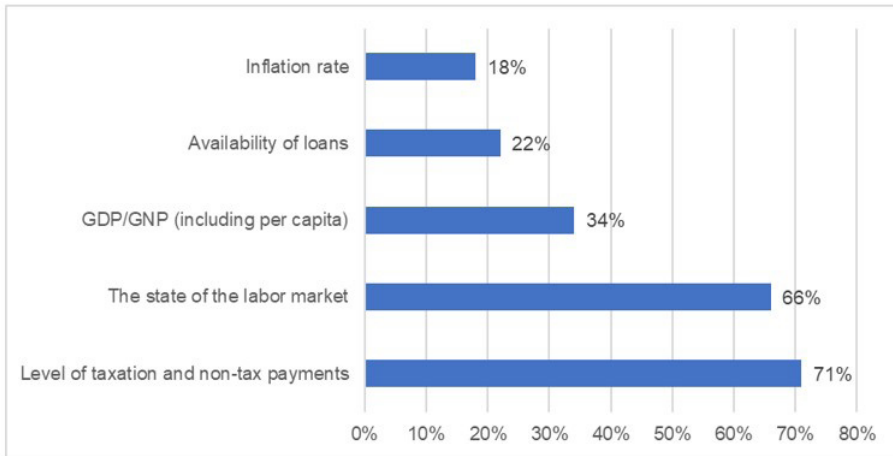


Figure 3.7 – Most Significant Financial and Economic Determinants According to Potential Investors

Source: Developed by the authors based on the survey

It should be said that only 11% of the survey participants provided their own variants, among which the overall economic development level of the country and the competitiveness of the projected investment sector should be highlighted.

Such results indicate that the majority of Polish investors focus on favorable conditions for doing business when choosing an investment destination.

Legal determinants

The study indicates that companies place significant importance on legal factors when planning foreign direct investments. Respondents identified judicial independence and potential discriminatory measures and foreign capital control in relation to domestic capital as the most important determinants in this group, with 77% and 74% of respondents mentioning them, respectively (Figure 3.8).

The third place, with a slight lag, is occupied by the efficiency of the legal environment. This characteristic is important for 67% of respondents. Property and other ownership rights protection is essential for 44% of companies. Last on the list is the repatriation (possibility of nationalization) of capital.

It is important to note that approximately 30% of companies mentioned other legal factors, among which the transparency of business conduct rules deserves special attention.

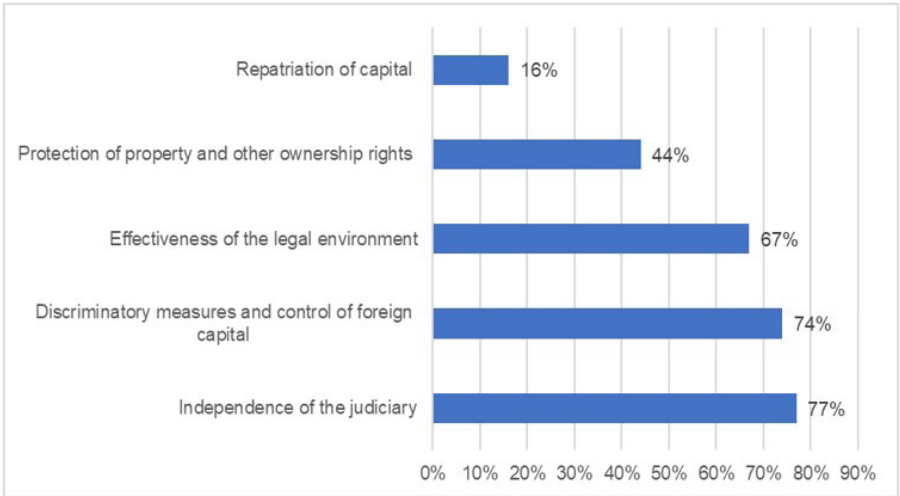


Figure 3.8 – The Most Significant Legal Determinants According to Potential Investors
 Source: Developed by the authors based on the survey

These results indicate that for the majority of potential investors, a stable and efficient legal environment in the prospective investment country is of paramount importance.

Political determinants

Among the political factors, the investors are most concerned about the overall political stability in the host country and how favorable the government's policies are towards business. These factors were indicated by 90% and 80% of the respondents, respectively (Figure 3.9). The emphasis on political stability underscores the significance of a predictable and secure political environment for businesses considering foreign investments. This issue is particularly relevant for countries with economies in transition.

Next in line, albeit with a significant lag and an interest level of 31%, the indicator of the level of corruption is positioned. Even less influential in the investment decision-making among the survey participants are the availability and transparency of information and government intervention in the economy.

Additionally, according to the respondents, another characteristic that should be taken into account when making investment decisions is the level of bureaucratic complexity in the processes.

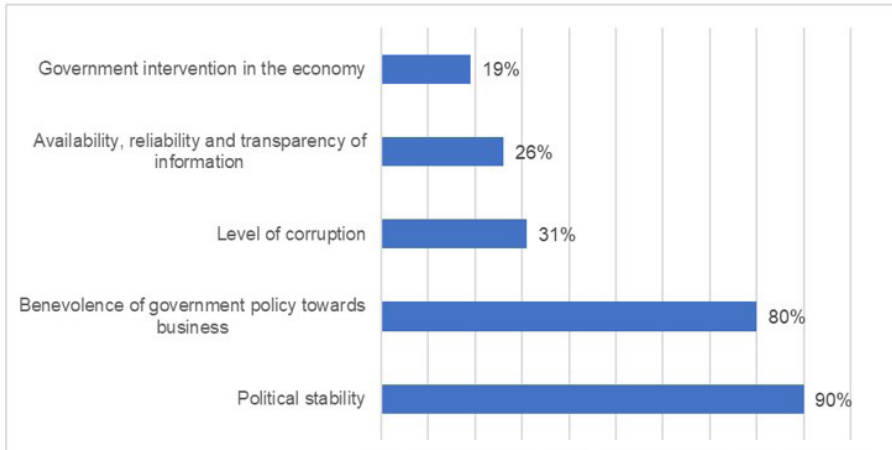


Figure 3.9 – The Most Significant Political Determinants According to Potential Investors
Source: Developed by the authors based on the survey

Socio-demographic determinants

In assessing the importance of socio-demographic factors, the respondents' preferences were distributed more evenly compared to other groups. Leading positions in this category, with a slight margin, are occupied by indicators of the unemployment rate and the development of soft (social) infrastructure. The level of interest in them stood at 53% and 48%, respectively (Figure 3.10).

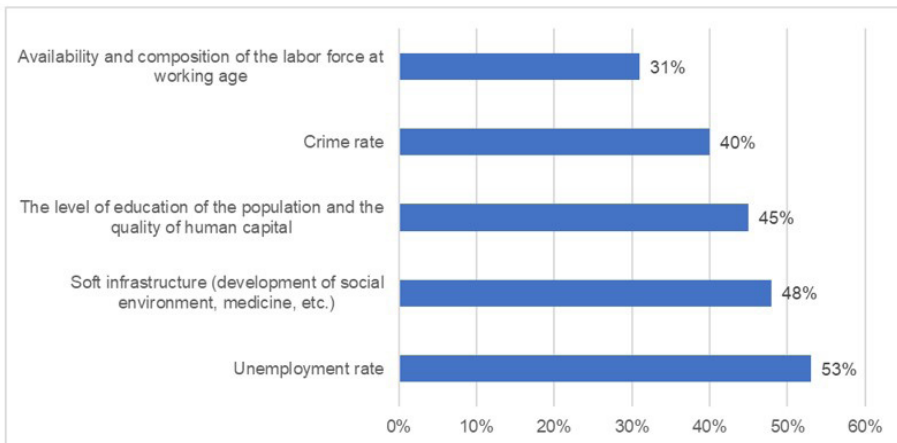


Figure 3.10 – The Most Significant Socio-Demographic Determinants According to Potential Investors
Source: Developed by the authors based on the survey

Next, trailing the second place by only 3%, is the level of education of the population and the quality of human capital. Slightly fewer survey participants are interested in the crime rate and the availability and composition of the labor force.

Among other factors, the responding companies emphasized the possibility of conducting business in English.

Infrastructure determinants

In the group of infrastructure factors, we decided to separate the transportation infrastructure from the general physical infrastructure and treat it as a separate parameter. This decision was made due to the strategic significance of transportation infrastructure for the economic development of countries.

Taking into account this division, opinions were distributed as follows:

- 81% of respondents consider it necessary to analyze the development of general physical infrastructure (energy, housing, office, etc.) in the host country;
- in the second position, with a slight lag of 2%, is the indicator of the development of communication infrastructure;
- interest in transportation infrastructure, however, turned out to be not as great as initially assumed, with only 67% of respondents indicating its importance (Figure 3.11).

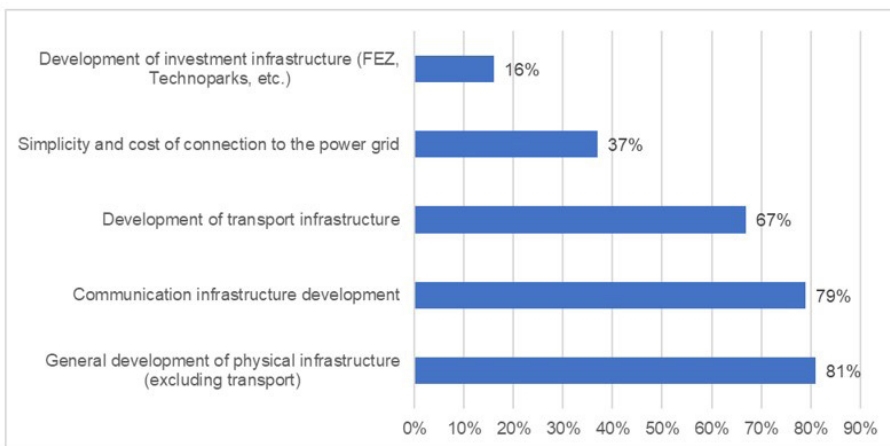


Figure 3.11 – Most Significant Infrastructure Determinants According to Potential Investors
Source: Developed by the authors based on the survey

It is worth noting the very low interest of survey participants in the presence and level of development of investment infrastructure (Special Economic Zones, technological parks, etc.) in the host country. In our view, this assessment looks strange for two reasons:

1. Such structures are typically established with the aim of attracting foreign capital, and in many countries, favorable business conditions are only available within the framework of these entities.
2. The survey was conducted among companies located in Poland's special economic zones.

This suggests that residents of Polish SEZs may not be fully satisfied with the privileges available for conducting economic activities in these areas.

Technological determinants

According to the respondents, among the group of technological factors, corporate research and development are of the greatest interest to potential investors. This indicator was noted by 76% of the respondents (Figure 3.12).

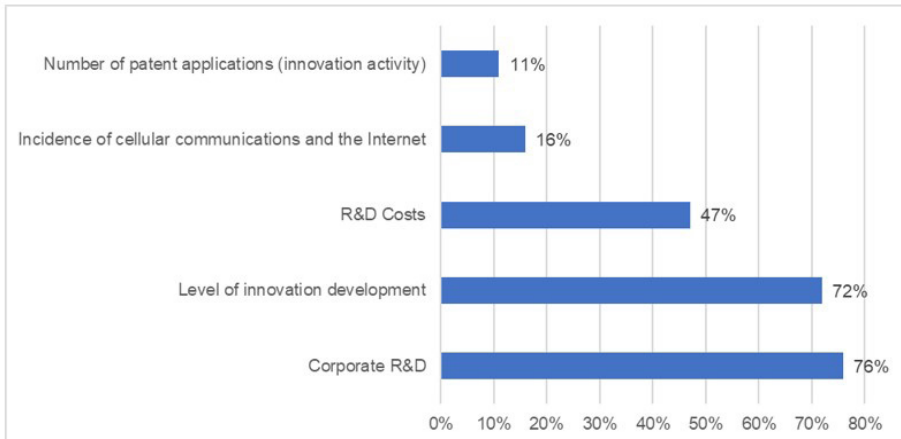


Figure 3.12 – The most significant technological determinants according to potential investors
Source: Developed by the authors based on the survey

The second and third positions in terms of significance are occupied by the overall level of innovation development in the potential host country and the cost of conducting scientific research and developing new products and technologies. The ranking is closed by the indicator of the number of patent applications.

In our opinion, this somewhat contradicts the high level of interest among companies in the overall level of innovation development, as this factor essentially points to innovation activity.

In general, the results indicate that aspects related to research, innovation, technical knowledge, and expenditures have a significant impact on foreign direct investment decision-making.

Climate and Geographic determinants

Regarding natural-geographical factors, the vast majority of respondents (90%) emphasize the importance of the country's geographical location (Figure 3.13).

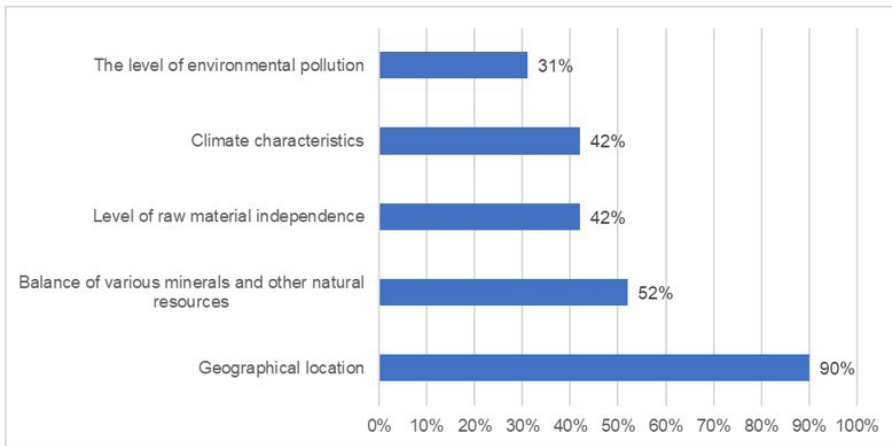


Figure 3.13 – Most Significant Natural-Geographical Determinants According to Potential Investors

Source: Developed by the authors based on the survey

Second in importance, significantly trailing geographical location, is the indicator of the balance of various mineral and other natural resources. It was noted by 51% of the respondents. Sharing the third and fourth positions with equal interest at 42% are climatic conditions and the level of raw material independence of the potential investment country.

It's worth noting the relatively low level of interest (31%) among the survey participants in environmental pollution. This drew our attention because many of the respondents, as additional factors for various groups of indicators,

specifically mentioned pollution levels, air quality, and the state of the natural environment in investment zones.

Conclusion

1. During the analysis of the survey results, it was determined that the absolute majority of the respondents are aware of the existence of various approaches to assessing the investment climate (over 85%), and consider it expedient to involve specialized organizations in such assessments (over 93%). They put forth arguments in favor of this, such as obtaining a broader evaluation, access to hard-to-reach information, and the involvement of experts.

However, despite this, only 8.1% of the respondents consider the possibility of engaging external companies for analysis, preferring to conduct assessments independently when necessary. Based on indirect evidence, it was established that the likely source of this contradiction is the high cost of services provided by specialized agencies, as well as the risk of receiving incomplete information.

The survey also revealed that the own assessment conducted by companies independently typically comes down to a fragmented examination of individual components of the investment environment, without providing a comprehensive overview of risks and opportunities. This indicates a lack of user-friendly and balanced publicly available methodology.

The survey participants identified the following key criteria that an effective investment climate assessment methodology should meet: balance (the breadth of methods used in the analysis), proven effectiveness, the level of information coverage, and the accessibility of information required for the analysis.

2. Based on the responses received, we compiled a list of the most significant factors, as perceived by potential investors, shaping the investment environment of a country or region. As in the first part of the study, the selected determinants were categorized (combined) by us into respective clusters.

Leading positions among the group of financial and economic factors are held by: the level of taxation and non-tax payments, labor market stability, GDP/ GNP (including per capita).

Among the legal factors, respondents noted the independence of the judicial authority, potential discriminatory measures, foreign capital control compared to domestic capital, and the effectiveness of the legal environment.

The most important determinants in the group of political factors, as indicated by survey participants, include the overall political stability in the host country, the favorability of government policies toward business, and the level of corruption.

The most significant socio-demographic indicators of the investment environment's development are the unemployment rate, the development of soft infrastructure, the level of education, and the quality of human capital.

Opinions regarding infrastructure factors leaned in favor of the development of general physical infrastructure (energy, housing, office, etc.), as well as communication and transportation infrastructure.

The determining technological determinants were identified as corporate research and development, the level of overall innovation development, and the cost of conducting research and development activities.

Among the climatic and geographical factors, the potential investors express the greatest interest in the country's geographical location, the balance of various natural resources, including valuable minerals, climate conditions, and the level of resource independence.

The obtained results will be further used by us in the development of the author's methodology for evaluating the investment climate.

SOURCES

Own survey research (survey attached)

DEVELOPMENT OF AN INVESTMENT CLIMATE ASSESSMENT METHODOLOGY BASED ON SYSTEMATIZED DETERMINANTS

In the course of studying existing approaches to assessing the investment climate of countries (regions), we have identified their main strengths and weaknesses. This has enabled us to formulate basic (essential) requirements (principles, criteria) that will form the basis for the development of an original approach.

Our findings indicate that an effective methodology should be:

1. Easily formalizable – defining the algorithm of its implementation, establishing criteria necessary for its successful execution, and possessing tools for measuring results.
2. Balanced – combining various approaches and methods of analysis.
3. Adaptable – taking into account changes in the economic environment and conducting timely revisions of the evaluated determinants.
4. Based on an accessible system of quantitative and qualitative indicators – the set of indicators to be assessed should provide the expected level of information coverage, but not be redundant.

Focus on these criteria is, in our opinion, a necessary, but not always sufficient, condition for the development of similar methodologies. This holds particularly true for (post-Soviet) countries undergoing a period of transformation.

In addition to the foundation, studying and consideration the specifics of the development of particular economic systems and their groups is essential in the methodology development. In other words, creating a "special" framework that allows incorporating a maximum number of features capable of influencing

the efficiency and timelines of investment projects, and consequently, decision-making on investments. Such an approach will enable a more effective utilization of foundational principles, resulting in a more qualitative and sought-after methodology.

As indicated by preliminary analysis, the majority of methodologies characterized by a high level of information coverage and employing differentiated approaches and methods in information analysis generally presume a complex and costly analytical algorithm, spanning from data collection to result interpretation. This implies that, before obtaining information enabling informed investment decisions, capital owners must expend a certain, often substantial, amount of resources, both in terms of time and finances.

Indeed, in many cases, a detailed examination of all nuances is required to determine whether the host country is attractive for investments. However, there are situations where a straightforward surface analysis alone can demonstrate the failure of the economic system as an investment target without the need for expensive assessments.

A notable limitation in the examined approaches, in our view, is the absence of any mechanism for pre-filtering, which would identify results that are not immediately evident but are decidedly negative. This, along with the methodology of the Harvard Business School, which provides a general assessment of the situation, prompted us to develop a two-stage (two-phase) methodology for assessing the investment climate:

1. Preliminary Assessment (Screening Stage) – a narrow approach based on a simple statistical analysis of a limited set of key indicators that characterize the overall level and direction of development of a specific economic system.
2. Detailed Assessment (Magnifying Glass Stage) – a comprehensive examination of the country (region), encompassing both a more in-depth statistical analysis and, when necessary, expert assessment.

The first stage serves as a kind of filtering mechanism (valve) with the aim of screening out inherently negative options. If the preliminary analysis yields a negative assessment, conducting further investigations that require more substantial time and financial resources becomes impractical. This will allow potential investors to save resources.

The transition to the second stage should occur only in the case of positive results from the preliminary analysis or if these results are contentious (ambiguous),

and the potential investor is specifically interested in this particular country for some additional reasons.

In assessing at both stages, it is advisable to utilize the minimum number of factors sufficient to achieve the set goal. This will help avoid unnecessary complexity and streamline the methodology.

Indicators within a specific assessment group should adequately reflect its distinctive features, avoid overlap (i.e., not create multicollinearity effects), and, whenever possible, be quantitatively measurable.

Given the specificity of countries undergoing a transformational period, we believe it is more expedient to assess the dynamics and direction of changes in various indicators rather than their absolute values. This is driven by the fact that a country's economy may currently be in a poor state, yet positive changes have the potential to attract investors (as exemplified by South Korea). Undoubtedly, the reverse situation is also possible (as seen in the case of Russia).

The development of each phase (part) of the methodology will consist of three main steps, as illustrated in Figure 4.1 – two preparatory steps (1 and 2) and the core step (3).

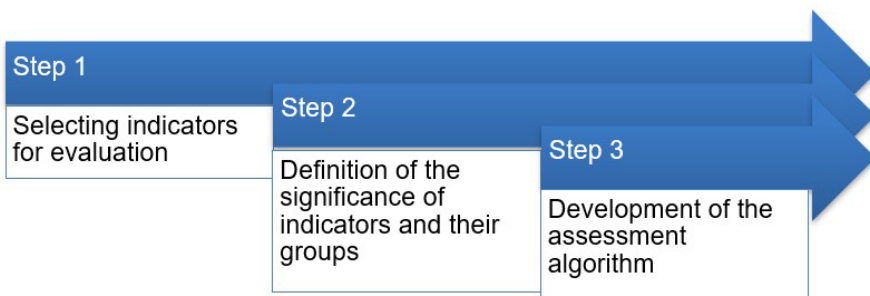


Figure 4.1 – General step-by-step scheme for the development of the investment climate assessment methodology.

The first step involves selecting from the entire set the most significant determinants that influence the investment climate of a country. The basis for such selection will include the previously conducted analysis of existing methodologies for assessing the investment climate, as well as the results of a survey of the business community regarding the importance of individual indicators for investment decision-making. Additionally, at this step, a list of information sources for each determinant will be compiled.

The factors selected for further analysis may have varying degrees of importance (significance) in determining the investment climate. In the second step, it is envisaged to assign a specific coefficient (SC – significance coefficient) to each indicator, ranging from 0 (minimum) to 1 (maximum). This will allow for the structuring and systematization of the assessment process, taking into account the relative importance of each factor for the final assessment.

On the third, main stage, the direct development of the assessment algorithm will take place, including a description of all details and features.

Here it should be noted that there is no fundamental difference in approaches to analysis in the first and second stages of assessment. The main difference lies in the breadth of data coverage. This argues in favor of the expediency of using a single basic analysis algorithm, with the assumption of its adjustment when necessary.

4.1. PRELIMINARY ASSESSMENT (SCREENING STAGE) PREPARATION

Step 1. Selection of the determinants

As the task of the first stage is to quickly filter out negative options, corresponding requirements will be imposed on it:

- A simple algorithm is needed for the assessment, requiring minimal or no specialized knowledge.
- The number of analyzed determinants should be small (not exceeding 10) but sufficient to achieve the set (stated) goal.
- Easily accessible (preferably publicly available) and reliable (provided by authoritative sources) data should be used for the analysis. Whenever possible, we propose relying on the World Bank's database.
- The obtained results should be easily interpretable and understandable to a wide audience.

This will enable potential investors to independently and without significant costs conduct an initial assessment of the prospective country for capital investment before delving into more detailed and costly analyses.

As part of the primary screening analysis, we propose to focus attention on those determinant groups that were most frequently encountered in the reviewed methodologies for assessing the investment climate. These include

financial-economic, legal, political, and socio-demographic factors. The selection of specific determinants for inclusion in the analysis for each group was conducted based on both an analysis of methodologies and taking into account the results of the business community survey.

Here it should be noted that both political factors and socio-demographic factors, are considered in 8 out of 10 studied methodologies. However, due to the high degree of influence of politics (government) on the business environment, which is characteristic of many countries during transitional periods, the primary assessment will predominantly include political factors.

The following indicators were selected for evaluation:

Economic and financial determinants – 1) GDP, 2) GDP per capita, 3) Taxation level

Dynamics of GDP and GDP per capita characterize the overall level of economic development. To avoid inaccuracies due to the use of different approaches in calculating these indicators, we propose relying on official data published by the World Bank for analysis. This information is publicly available, and the reliability of its source is beyond doubt.

The assessment of the taxation level at this stage will be based on the average corporate tax rate. The situation with access to information on this indicator is more complicated than with the indicators discussed above. Here, we propose to rely on two main sources – Trading Economics and The Tax Foundation. In case of discrepancies in data, additional information sources should be consulted.

Legal determinants – 4) Discriminatory measures and control of foreign capital, 5) General state of the legal environment 6) Protection of physical and intellectual property rights (and other property rights)

To assess the existence and severity of discriminatory measures and control of foreign capital at this stage, we propose to use the Investment freedom index by The Global Economy. This indicator evaluates a variety of investment restrictions (burdensome bureaucracy, restrictions on land ownership, expropriation of investments without fair compensation, foreign exchange controls, capital control, security problems, a lack of basic investment infrastructure, etc.). Points are deducted from the ideal score of 100 for each of the restrictions found in a country's investment regime.

The general state of the legal environment is characterized by the Rule of Law Index, calculated and published by the World Justice Project. Information on this indicator is publicly available.

The analysis of the level of protection of physical and intellectual property rights is intended to be conducted based on one of two indicators: the International Property Rights Index by Property Rights Alliance or the Property Rights Index by The Global Economy.

The choice of the information source should be based on the availability and sufficiency of data for the analyzed country. For example, at the time of the study, the International Property Rights Index does not contain data for the Republic of Belarus. Consequently, the assessment should be conducted using the Property Rights Index indicator.

Political determinants – 7) Political stability, 8) Corruption level.

To measure the overall level of political stability, we propose using the Political Stability Index published by The Global Economy. This is an aggregated indicator that takes into account factors such as the presence of political violence, the effectiveness of political institutions, the degree of government control and legitimacy, etc. In the second stage of the assessment, for a more comprehensive understanding of the political situation, it makes sense to consider some of these indicators separately.

The most reliable source of information about the level of corruption, in our opinion, is Transparency International. This is a global movement working in over 100 countries to end the injustice of corruption. Accordingly, we propose conducting the assessment based on the Corruption Perceptions Index. It shows the degree of corruption perception in the public sector of the country, including government institutions, law enforcement agencies, and political parties. Indirectly, this index also covers the level of bureaucracy, as a high level of corruption may indicate complexity and inefficiency of bureaucratic procedures.

Earlier, to assess the degree of bureaucratization of procedures related to entrepreneurial activities, it was possible to use The Doing Business Index quite effectively. However, as noted in the first part of the study, the World Bank no longer calculates this indicator. Currently, its experts are working on developing BEE, which can also be used for these purposes in the future.

Socio-demographic determinants – 9) Unemployment rate.

Despite the fact that the unemployment rate is a component of the labor market's condition, we have included it in the group of socio-demographic factors. The basis for this decision lies in the fact that unemployment can often be a consequence not only of economic but also demographic and social problems, leading to significant social tensions (e.g., in African countries).

However, providing an adequate characterization of the labor market without considering this indicator is not possible. For this reason, during the second stage of the analysis, it will be included in the group of factors characterizing the labor market. To avoid duplicating information, it will be excluded from the group of socio-demographic factors.

When assessing the unemployment rate, we also suggest relying on information from the World Bank database or data published by The Global Economy.

Annex C Table C1 provides a list of indicators proposed for inclusion in the preliminary (screening) assessment, along with the informational resources that publish the required data.

Thus, within the framework of the first stage of the author's methodology for assessing the investment climate, we propose to analyze 9 determinants, covering to varying degrees 4 out of the 7 identified groups.

Step 2. Determination of the significance of the determinants

As can be seen, at the first step of the screening assessment, as was planned, a relatively small group of the most important determinants that significantly influence the country's investment climate has been selected. Considering this fact, no distinctions in the level of significance will be made among them. Each indicator is proposed to be assigned the maximum coefficient, equal to 1.

Step 3. Assessment Algorithm

To assess determinants, we propose using a base of 100 points (perhaps it is better to use a scale smaller than 10, for example).

Examining the features of information representation characterizing the analyzed determinants allowed us to categorize them into five conditional groups:

1. Absolute indicators with statistical characteristics but not international indices, e.g. GDP.
2. Relative indicators with statistical characteristics but not international indices, e.g. GDP per capita.
3. Indicators measured in percentages, e.g. Inflation rate, Unemployment rate, Tax Rate.
4. International indices - indicators with numerical values and maximum

magnitude: FDI Regulatory Restrictiveness Index, International Property Rights Index or Property rights index, Political stability index, Corruption Perceptions Index.

5. Indicators without statistical characteristics.

Basic Formulas

In the calculation formulas, it is assumed to use such a characteristic of indicator changes as growth over a specific period of time – t, which is calculated using the following formula:

$$G = IV_t / IV_{t-1} * 100$$

where:

- G – represents the growth, %
- IV_t – is the value of the indicator for period t
- IV_{t-1} – is the value of the indicator for the period preceding t

1. Absolute indicators with statistical characteristics (e.g. GDP)

To evaluate determinants related to the first group, we propose using, as a basis, the average world or regional dynamics of a specific indicator over the past 5 years. In other words, the average regional indicator is assessed at 100 points, and assessments for each specific country are calculated considering deviations from the average regional dynamics.

Indicator_Score_i = average growth rate for the country / average growth rate for the world * base score (100 points)

$$IS_i = AVR_c / AVR_w * BS$$

where

- IS_i – the score for the i-th factor, points
- AVR_c – the average growth (or decrease) rate for the country, %
- AVR_w – the average growth (or decrease) rate for the world, %
- BS – the base score, points (100 points)

The average growth rate (or decrease) is calculated as the average magnitude of increases over a specified period (in this case, 5 years).

2. Relative indicators with statistical characteristics (e.g. GDP per capita)

$$IS_i = V_c / AVR_w * BS$$

where:

- IS_i – score for the i -th factor, points
- V_c – indicator value for the country,
- AVR_w – average world (region) value of the indicator,
- BS – the base score, points (100 points)

3. Indicators measured in percentages (e.g. Tax rate)

In this instance, the baseline value, assessed at 100 points, will be considered the global average (average for the region) of the indicator.

Adjustment of country-specific indicators will be carried out considering deviations from the global indicator over the entire analyzed period. For each percentage deviation, 1 point will be subtracted or added to 100 points.

$$IS_i = BS + AVR_j(WR_t - CR_t)$$

where:

- IS_i – the score for the i -th factor, points
- WR_t – the global (world/region) rate for period t , %
- CR_t – the country rate for period t , %
- BS – the base score, points (100 points)
- j – the number of years in the analyzed period
- AVR_j – means the average value of the difference in indicators over period j

4. International indices

We propose simplifying the assessment of such indicators by calculating a simple proportion, where the maximum (or minimum, depending on the methodology of index calculation) value of the index represents 100 points, i.e., the base score (BS). The country-specific indicator is calculated proportionally.

$$IS_i = V_c / V_m * BS$$

where:

- IS_i – the score for the i -th factor, points
- V_c – the index value for the country,
- V_m – the maximum possible value of the index
- BS – the base score, points (100 points)

5. Indicators without numerical values.

This group of indicators, if included in the assessment, is assessed by experts based on available information.

Additional Coefficients

1. Dynamics Coefficient

A distinctive feature of economic systems during post-crisis and transformative periods is a high degree of dynamism in all spheres without exception.

To account for this characteristic, we find it necessary to introduce an adjustment coefficient into the assessments of determinants – the dynamics coefficient K_d – either reducing or increasing depending on the direction of change.

Gradation of the Dynamics Coefficient

Since we are dealing with transformative economies, it is necessary to consider the direction and stability of the changes occurring during the analyzed period (over 5 years or more):

- Consistent indicator value over the last 5 years – coefficient of 1;
- Consistent positive dynamics of the indicator – plus 0.01 to the base 1 for each percentage point increase/decrease;
- Fluctuations in the indicator with a general trend of improvement – plus 0.005 to the base 1 for each percentage point increase;
- Fluctuations in the indicator with a general trend of deterioration – minus 0.005 to the base 1 for each percentage point increase;

- Consistent negative dynamics of the indicator – minus 0.01 to the base 1 for each percentage point increase.

The boundaries of the coefficients are conditional and may be adjusted based on the circumstances of the dynamics of specific indicators. This classification is presented to demonstrate the gradation of adjustment coefficients.

Extended Formulas

Thus, considering the introduction of the dynamics coefficient into the analysis, the formulas for calculating indicators take the following form:

1. Absolute indicators with statistical characteristics:

$$IS_i = AVR_c / AVR_w * BS * K_d$$

where:

- IS_i – the score for the i -th factor, points
- AVR_c – the average growth (or decrease) rate for the country, %
- AVR_w – the average growth (or decrease) rate for the world, %
- BS – the base score, points (100 points)
- K_d – the dynamics coefficient.

2. Relative indicators with statistical characteristics

(e.g. GDP per capita)

$$IS_i = V_c / AVR_w * BS * K_d$$

where:

- IS_i – score for the i -th factor, points
- V_c – indicator value for the country,
- AVR_w – average world (region) value of the indicator,
- BS – the base score, points (100 points),
- K_d – the dynamics coefficient.

3. Relative indicators with statistical characteristics

$$IS_i = BS + AVR_j(WR_t - CR_t) * K_d$$

where:

- IS_i – the score for the i -th factor, points
- WR_t – the global inflation rate for period t , %
- CR_t – the inflation rate in the country for period t , %
- BS – the base score, points (100 points)
- j – the number of years in the analyzed period
- K_d – the dynamics coefficient.
- AVR_j – means the average value of the difference in indicators over period j

4. International indices

$$IS_i = V_c / V_m * BS * K_d$$

where:

- IS_i – the score for the i -th factor, points
- V_c – the index value for the country,
- V_m – the maximum possible value of the index
- BS – the base score, points (100 points)
- K_d – the dynamics coefficient.

At the initial stage, the aggregated indicator of investment attractiveness is proposed to be determined as a simple average of the calculated ratings.

In order to determine the feasibility of conducting the second stage of assessment, the obtained results are proposed to be classified into 4 groups based on the evaluation:

1. Group – above 60 points – the second stage of assessment is recommended;
2. Group – from 40 to 60 points – the second stage of assessment is rather recommended;
3. Group – from 30 to 40 points – the second stage of assessment is rather not recommended;
4. Group – up to 30 points – the second stage of assessment is not recommended.

If the aggregate result for the criterion, due to additional adjusting coefficients, exceeds the maximum value of 100 points, then the indicator is assigned the highest possible score of 100 points.

Red Flags (Stop Signs)

Under the red flags in the framework of our methodology, we mean circumstances, the occurrence (manifestation) of which signals that investing in the analyzed country is associated with elevated risks, and further analysis of the investment climate likely does not make sense.

1. **Red flag 1** – if any of the key indicators selected for analysis in the first stage of assessment scores less than 30 out of 100, accompanied by a downward trend observed for at least the last 3 years. In this case, it is advisable to clarify the reasons for the situation and consider refraining from further analysis and the idea of investing in the country.

Specific cases clarifications

General

Within the context of data analysis, when significant variability in the rankings of indicators among different countries is observed, it is imperative to undertake a data normalization process. This encompasses a verification against the three-sigma rule, which allows the identification and exclusion of anomalies uncharacteristic for the majority of values. Subsequently, the data should be aligned with the law of normal distribution. This approach ensures the robustness and comparability of research outcomes.

International indices

1. In situations when index takes negative values, the proposed calculation formula requires adjustment. In this case, the maximum possible value will be represented by the sum of the negative and positive ranges in absolute terms. Negative values of indicators for countries will also be converted into the positive range.

Here, we will use a linear transformation to convert the scale into the positive range. To do this, it is necessary to calculate the transformation coefficients.

For linear transformation, we will use the equation:

$$y = mx + b$$

where:

y – indicator value according to the new scale,

m – slope factor,

b – free term of the equation.

Example: The index is measured on a scale from -2.5 weak to 2.5 strong.

$$m = (5 - 0) / (2,5 - (-2,5)) = 5 / 5 = 1$$

$$b = 0 - 1 * (-2,5) = 2,5$$

$$y = 1 * 0,5 + 2,5 = 3$$

2. Additionally, specific adjustments are required in cases where the index utilizes an inverse measurement scale, that is, the higher its value, the poorer the situation concerning the specific factor. In such instances, the calculation of the indicator's value will be conducted according to the following formula:

$$CVc = (Vmax - IVc) / Vmax * BS$$

where:

CVc – corrected value of the indicator,

Vmax – maximum index value,

IVc – initial value of the indicator

BS – the base score, points (100 points)

Example: The index is measured on a scale from 0 to 10, where 0 represents the best value and 10 the worst, respectively. The initial value of the indicator for the country is 6.

$$CVc = (10 - 6) / 10 * 100 = 40$$

4.2. DETAILED ASSESSMENT (MAGNIFYING GLASS STAGE) PREPARATION

One of the main guiding principles in the development of an assessment methodology is the possibility of its independent application by potential investors. For this reason, despite the fact that the second stage involves a more detailed analysis aimed at identifying potential opportunities and possible risks, the simplicity of the algorithm of the assessment remains one of the main criteria for the effectiveness of the methodology (and achieving the set goal).

The number of analyzed determinants may vary depending on the country and specific circumstances, however, it should not be excessively large. In the framework of the basic variant, we propose relying on 30 most significant factors.

As in the first stage of evaluation, the analysis should be structured based on available and reliable data, and the obtained results should be easily interpretable and understandable to a wide audience.

Due to the fact that the second stage involves the possibility of incorporating specialized information into the analysis process that does not have straightforward numerical characteristics, potential users of the methodology should be prepared to independently assess such indicators or possibly engage external experts to ensure higher quality results.

Step 1. Selection of the determinants

The selection of determinants for evaluation at this stage, as well as the previous one, will be based on conducted analyses of the most common methodologies used and a questionnaire survey of representatives of the Polish business community. Additionally, a set of indicators will be added, which did not rank highly in the aforementioned analyses but are considered by the authors to be significant for forming a comprehensive assessment of the investment climate in the country. These factors will cover all seven groups defined earlier.

The indicators whose assessment was conducted in the framework of the first stage will also be included in the second stage.

The following indicators were selected for evaluation:

Economic and financial determinants – 1) GDP 2) GDP per capita, 3) Taxation level, 4) Inflation rate 5) Business freedom index 6) Availability of national credit capital for foreign investors – (indirectly Financial freedom index), Labor market conditions – consist of – 7) Unemployment rate 8) Level of

education and quality of human capital (Human Development Index) 9) Labor freedom index.

Here it should be noted that factors such as the unemployment rate and the quality of human capital essentially pertain not only to the state of the labor market but also are important characteristics of the socio-demographic environment. To avoid duplicating information, we have decided to assess them within the framework of the financial-economic group when analyzing the labor market.

The Labor freedom index is composed of six quantitative factors: ratio of minimum wage to the average value added per worker, hindrance to hiring additional workers, rigidity of hours, difficulty of firing redundant employees, legally mandated notice period, and mandatory severance pay. The index is based on data collected in connection with the World Bank's Doing Business study.

Legal determinants – 1) Discriminatory measures and control of foreign capital, Capital repatriation risk are covered by the Investment freedom index, 2) Fundamental Rights – General state of the legal environment 3) Protection of physical and intellectual property rights (and other property rights) (International Property Rights Index, Property rights index), 4) Independence of the judicial system – Civil Justice и 5) Independence of the judicial system – Criminal Justice.

Civil Justice and Criminal Justice are components of the Rule of Law Index that take into account the independence of these branches of the judicial system.

The Investment Freedom Index lies at the intersection of legal and political determinants. It assesses various investment constraints (cumbersome bureaucracy, restrictions on land ownership, expropriation of investments without fair compensation, currency controls, capital controls, security issues, lack of basic investment infrastructure, etc.).

To avoid duplicating information and the multicollinearity effect, we will not include individual components of this index in the group of political factors.

Political determinants – 1) General political stability (Political stability index), 2) State legitimacy index 3) Corruption level (Corruption Perceptions Index), 4) Availability and reliability of information (Component of the Rule of Law Index – Open Government), 5) Regulatory quality index.

The degree of government intervention in the economy and the **bureaucratization of business processes** are covered by the Business Freedom Index indicator.

Regulatory quality index captures perceptions of the ability of the government to formulate and implement sound policies and regulations that

permit and promote private sector development.

Socio-demographic determinants – 1) Public services index 2) Health Care Index, 3) Crime Index, 4) Level of social tension (Group grievance index)

The unemployment rate and the level of education and the quality of human capital are taken into account when assessing the state of the labor market.

Public services index – refers to the presence of basic state functions that serve the people. This may include the provision of essential services, such as health, education, water and sanitation, transport infrastructure, electricity and power, and internet and connectivity. On the other hand, it may include the state's ability to protect its citizens, such as from terrorism and violence, through perceived effective policing. The higher the value of the indicator, the worse the public services in the country.

Group grievance index – focuses on divisions and schisms between different groups in society – particularly divisions based on social or political characteristics – and their role in access to services or resources, and inclusion in the political process. The higher the value of the indicator, the higher the division of the societal groups in the country.

Infrastructure determinants –

1) Development of transport infrastructure (Logistics performance index)
2) Development of communication infrastructure: 2) Mobile phone subscribers, per 100 people 3) Internet subscribers, per 100 people 4) Access to electricity, percent of the population (Ease and cost of connecting to electrical networks).

Mobile phone subscribers, per 100 people – refers to subscriptions to mobile cellular services for public use using cellular technology. The indicator applies to all mobile cellular subscribers offering voice communication. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data transmission services, private trunked mobile radio communication, telepoint services, radiopaging communication, and telemetry services.

Internet subscribers, per 100 people – Fixed broadband subscriptions refers to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organizations.

Simplicity and cost of connecting to electrical networks – after the cessation of the Doing Business analysis, access to such information and its

assessment becomes a highly complex and costly task. With the introduction of the Business Environment and Enterprise Performance Survey (BEE), this problem will be addressed. Until the BEE is conducted, to account for such an important factor as access to electricity, we propose using information on "Access to electricity, percent of the population," also provided by the World Bank. As soon as BEE starts, we suggest transitioning to the indicator "Time & Cost to obtain electricity, water, and internet connections," which is a component of the Utility connections group in the BEE.

Assessing the overall development of physical infrastructure is only possible based on the analysis of its individual components.

Technological determinants – 1) General level of innovative and technological development (The Global Innovation Index (GII)).

The coverage of cellular and internet services intersects with infrastructure factors and will be assessed within the framework of that group.

Geographic and environment determinants – 1) Geographical location
2) Pollution level.

It was decided to include the Pollution level in the analysis due to recent trends and the adoption of the UN resolution on climate.

Considering the composition of this determinant group, within the framework of the developed methodology, we have opted to rename it to better encapsulate its essence.

Annex C Table C2 provides a list of indicators proposed for inclusion in detailed assessment (magnifying glass stage), along with the informational resources that publish the required data.

Step 2. Determination of the significance of the determinants

The fact that various methodologies for assessing the investment climate focus on different sets of factors, often not considering some of the groups we have identified, has led us to conclude that it makes sense to assign significance coefficients not only to individual determinants but also to groups.

The significance coefficient of a factor will determine its relative importance within the group. The significance of the group, on the other hand, will be based on its importance for the overall assessment of the investment climate. This will allow for additional adjustment of the impact of individual factors on the final result, taking into account the importance of the group itself.

The significance coefficients or weights of determinants and groups

are intended to be determined based on previously conducted analyses of methodologies, surveys of representatives of the business community in Poland, as well as expert assessment by the authors of the methodology.

It should be noted that the initial significance coefficient for the group of socio-demographic factors was assumed to be at the level of 1. However, since the most important factors for potential investors within this group were included in our assessment of the labor market conditions, the significance of the group itself was reduced to the level of 0.8.

Table 4.1 presents the significance coefficients proposed by the authors.

Table 4.1 – Pivot table of Significance Coefficients for Factor Groups and Individual Determinants

No	Group/Determinant	SC
	Economic and financial determinants	1
1	GDP	1
2	GDP per capita	1
3	Tax Rate	1
4	Inflation	0.8
5	Business freedom index	0.9
6	Financial freedom index	0.9
	Labor market conditions	1
7	Unemployment Rate	1
8	Human Development Index	1
9	Labor freedom index	0.9
	Legal determinants	1
10	Investment freedom index	1
11	Fundamental Rights	0.9
12	Property rights index	0.9
13	Independence of the judicial system	1
14	Independence of the judicial system	1
	Political determinants	1
15	Political stability index	1
16	State legitimacy index	0.9
17	Corruption Perceptions Index	1
18	Open Government	0.9
19	Regulatory quality index	0.8

	Socio-demographic determinants	0.8
20	Public services index	1
21	Health Care Index	1
22	Crime Index	0.9
23	Group grievance index	0.8
	Infrastructure determinants	0.9
24	Logistics performance index	1
25	Mobile phone subscribers, per 100 people	0.9
26	Internet subscribers, per 100 people	0.9
27	Access to electricity, percent of the population	0.8
	Technological determinants	0.8
28	The Global Innovation Index	1
	Geographic and environment determinants	0.7
29	Geographical location of the country	1
30	Pollution Index by Country	0.7

Step 3. Assessment Algorithm

The foundation for conducting the assessment within the second phase of the analysis will be the algorithm described in the initial stage. The values of the indicators will be calculated using the formulas previously proposed, however, they will be adjusted within groups to reflect their local (within-group) significance.

In turn, the final assessment of the investment climate will be represented by the weighted average of evaluations across groups, taking into account the significance coefficients (weights) assigned to them.

To account for the significance coefficients, both in the case of individual determinants and for groups, we propose using the following formula:

$$GR = \sum_{i=1}^n (x_i * sc_i) / \sum_{i=1}^n (sc_i)$$

where:

GR – weighted average assessment for the group,

x_i – value of the i-th indicator,

sc_i – significance coefficient (weight) of the i-th indicator within the group,

n – number of indicators in the group.

Building on the same approach, the final formula for calculating the investment climate assessment will be as follows:

$$IC = \sum_{i=1}^m (W_j * (\sum_{i=1}^n (x_i * sc_i) / \sum_{i=1}^n (sc_i)))$$

$$IC = \sum_{i=1}^m (GR_i * gsc_i) / \sum_{i=1}^n (gsc_i)$$

where:

IC – final assessment of the investment climate,
 GR_j – weighted average assessment for the j-th group,
 gsc_i – significance coefficient (weight) of the j-th group,
 m – number of groups.

To present the results of the investment climate assessment in a clearer and more accessible manner, we propose categorizing countries into five distinct groups:

1. Up to 30: Unfavorable investment climate (extreme risks and numerous problems)
2. 30-45: Moderately unfavorable climate (significant risks but with potential for improvement)
3. 46-60: Moderately favorable climate (favorable investment conditions but with certain limitations)
4. 60-80: Favorable investment climate (promising prospects and manageable risks)
5. Above 80: Exceptionally favorable investment climate (ideal conditions with minimal risks)

PRACTICAL IMPLEMENTATION OF THE METHODOLOGY

The pilot testing of the methodology will be conducted based on data from two countries: the Republic of Poland and the Republic of Belarus.

The Republic of Belarus has been in a period of transformation for an extended period, however, since the 2020 elections, the direction of its development has significantly shifted.

The investment climate of the Republic of Poland is also actively evolving, increasingly integrating into the broader European economic space.

The results of the analysis will enable the determination of whether the specified countries are attractive for investment, considering the latest trends in their development.

All calculations are presented in the accompanying Excel spreadsheet.

5.1. PRELIMINARY ASSESSMENT (SCREENING STAGE)

Table 5.1 – GDP

GDP	2018	2019	2020	2021	2022	Average	2022 to 2018, %
GDP Total							
World, trillion USD	86.54	87.78	85.27	97.15	100.88	91.52	116.6
Belarus, billion USD	60.03	64.41	61.37	69.67	72.79	65.65	121.3
Poland, billion USD	588.78	596.06	599.44	681.35	688.13	630.75	116.9

CHAPTER 5

		To previous year, %						
World	N/D	101.4	97.1	113.9	103.8	104.1		
Belarus	N/D	107.3	95.3	113.5	104.5	105.1		
Poland	N/D	101.2	100.6	113.7	101.0	104.1		

Source: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

Regarding the GDP value in Belarus, there are minor fluctuations, while in Poland, we observe a consistent trend of growth. The overall growth amounted to 21.3% and 16.9%, respectively. Thus, the dynamics coefficients for each country will be equal to:

$$\text{Belarus Kd} = 1 + 21.3 * 0,005 = 1,107$$

$$\text{Poland Kd} = 1 + 16,9 * 0,01 = 1,169$$

$$\text{Belarus IS} = 100 * (105.1/104.0) * 1,107 = 111.8 \Rightarrow 100$$

$$\text{Poland IS} = 100 * (104.1/104.0) * 1,169 = 116.9 \Rightarrow 100$$

Table 5.2 – GDP per capita

GDP per capita	2018	2019	2020	2021	2022	Average	2022 to 2018, %
GDP per capita thousands USD							
World, USD	10786.7	10949.8	10508.6	11066.7	11318.7	10926.1	104.9
Belarus, USD	6166	6267.8	6252	6457.8	6204.1	6269.5	100.6
Poland, USD	14408.4	15053.2	14775	15863.2	17117.3	15443.4	118.8
To previous year, %							
World	0.0	101.5	96.0	105.3	102.3	101.3	
Belarus	0.0	101.7	99.7	103.3	96.1	100.2	
Poland	0.0	104.5	98.2	107.4	107.9	104.5	

Source: <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD>

As for GDP per capita, there is fluctuation in both countries. Despite the significantly greater amplitude in Belarus, the formula for calculating the dynamics coefficient will be the same for both countries. The growth for the period under consideration amounted to 0.8 for Belarus and 15.9 for Poland.

$$\begin{aligned} \text{Belarus Kd} &= 1 + 0.6 * 0,005 = 1,003 \\ \text{Poland Kd} &= 1 + 18,8 * 0,005 = 1,094 \\ \\ \text{Belarus IS} &= 100 * (6204.1/11318.7) * 1,003 = 55.0 \\ \text{Poland IS} &= 100 * (17117.3/11318.7) * 1,094 = 165.4 \Rightarrow 100 \end{aligned}$$

Table 5.3 – Corporate Tax rate

Corporate Tax rate	2019	2020	2021	2022	2023	Average	2022 to 2018, %
Inflation rate, %							
World, trillion USD	24.0	23.8	23.5	23.4	23.5	23.6	97.9
Belarus, billion USD	18	18	18	18	20	18.4	111.1
Poland, billion USD	19	19	19	19	19	19	100.0
Deviation from the world average +/-, %							
Belarus	6.0	5.8	5.5	5.4	3.5	5.2	
Poland	5.0	4.8	4.5	4.4	4.5	4.6	

Source: <https://taxfoundation.org/data/all/global/corporate-tax-rates-by-country-2023/>

In Poland, the corporate tax level remained constant throughout the entire analyzed period, whereas in Belarus, we observe an increase. It is not accurate to speak of either fluctuations or a consistent upward trend in the case of Belarus, as the tax rate was only raised in 2023.

In this case, it is suggested to take the average between 0.005 and 0.01 as a value to augment the base dynamics coefficient, specifically 0.0075.

$$\begin{aligned} \text{Belarus Kd} &= 1 - 11.1 * 0,0075 = 0,917 \\ \text{Poland Kd} &= 1 \\ \\ \text{Belarus IS} &= (100 + 5.2) * 0,917 = 96.4 \\ \text{Poland IS} &= (100 + 4.6) * 1 = 104.6 \Rightarrow 100 \end{aligned}$$

Table 5.4 – Investment freedom index (0-100)

Investment freedom index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Investment freedom index							
Maximum	100	100	100	100	100	100	
Lider (Luxembourg)	95	95	95	95	95	95	
Belarus	30	30	30	30	30	30	100.0
Poland	80	80	80	80	80	80	100.0
Deviation from the leder +/-, %							
Belarus	-65.0	-65.0	-65.0	-65.0	-65.0	-65	
Poland	-15.0	-15.0	-15.0	-15.0	-15.0	-15	

Source: https://www.theglobaleconomy.com/rankings/herit_investment_freedom/

The Investment Freedom Index (0-100) remained constant in both countries throughout the entire studied period. Consequently, the dynamics coefficients will be equal to 1.

$$\text{Belarus IS} \quad 30 / 100 * 100 * 1 = 30$$

$$\text{Poland IS} \quad 80 / 100 * 100 * 1 = 80$$

As this indicator aligns with our scale, its effectiveness can be assessed by taking the direct value of the indicator, which will be further adjusted considering the dynamics of changes.

Table 5.5 – WJP Rule of Law Index

WJP Rule of Law Index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
WJP Rule of Law Index							
Maximum	1	1	1	1	1	1	
Lider (Denmark)	0.9	0.9	0.9	0.9	0.9	0.9	
Belarus	0.52	0.51	0.48	0.46	0.45	0.484	86.5
Poland	0.66	0.66	0.64	0.64	0.64	0.648	96.97
Deviation from the leder +/-, %							
Belarus	-0.380	-0.390	-0.420	-0.440	-0.450	-0.416	
Poland	-0.240	-0.240	-0.260	-0.260	-0.260	-0.252	

Source: <https://worldjusticeproject.org/rule-of-law-index/global>

We observe a decrease in both countries according to the WJP Rule of Law Index. However, in the case of the Republic of Belarus, we note an annual decrease, while in Poland, the situation has stabilized over the last 3 years.

In this case, for Poland it is advisable to adjust the value to decrease the base dynamics coefficient by 0.0075.

$$\begin{aligned} \text{Belarus Kd} &= 1 - 13.5 * 0,01 = 0.865 \\ \text{Poland Kd} &= 1 - 3.0 * 0,0075 = 0.977 \\ \\ \text{Belarus IS} &= 0,45 / 1 * 100 * 0.865 = 38.9 \\ \text{Poland IS} &= 0,64 / 1 * 100 * 0.977 = 62.5 \end{aligned}$$

Table 5.6 – Property rights index

Property rights index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Property rights index							
Maximum	100	100	100	100	100	100	
Lider (Finland)	90	92	92	100	100	94.8	
Belarus	55	63	59	35	31	48.6	56.4
Poland	62	63	63	72	73	66.6	117.7
Deviation from the leder +/-, %							
Belarus	-35.0	-29.0	-33.0	-65.0	-69.0	-46.2	
Poland	-28.0	-29.0	-29.0	-28.0	-27.0	-28.2	

Source: https://www.theglobaleconomy.com/rankings/herit_property_rights/

In Belarus, we observe certain fluctuations in the Property Rights Index with a general tendency towards a sharp decline. This is associated with the socio-political crisis and its consequences. Positive changes are unlikely without a change in the ruling regime. For this reason the value to increase the base dynamics coefficient will be 0.0075.

In Poland, we can see the opposite trend.

$$\begin{aligned} \text{Belarus Kd} &= 1 - 43,6 * 0,0075 = 0.673 \\ \text{Poland Kd} &= 1 + 17,7 * 0,01 = 1,177 \\ \\ \text{Belarus FS} &= 31 / 100 * 100 * 0.653 = 20.9 \\ \text{Poland FS} &= 73 / 100 * 100 * 1,177 = 86.0 \end{aligned}$$

Table 5.7 – Political stability index (-2.5 weak; 2.5 strong)

Political stability index	2018	2019	2020	2021	2022	Average	2022 to 2017, %
Political stability index							
Maximum	2.5	2.5	2.5	2.5	2.5	2.5	
Lider (Liechtenstein)	1.48	1.48	1.62	1.69	1.64	1.582	
Belarus	0.35	0.34	-0.89	-0.75	-0.79	-0.348	-225.714
Poland	0.48	0.55	0.49	0.49	0.5	0.502	104.167
Deviation from the leder +/-, %							
Belarus	-1.130	-1.140	-2.510	-2.440	-2.430	-1.93	
Poland	-1.000	-0.930	-1.130	-1.200	-1.140	-1.08	

Source: https://www.theglobaleconomy.com/rankings/wb_political_stability/

Due to the fact that this index can take negative values, the proposed calculation formula requires adjustment. In this case, the maximum possible value will be represented by the sum of the negative and positive ranges in absolute terms. Negative values of indicators for countries will also be converted into the positive range.

Here, we will use a linear transformation to convert the scale into the positive range. To do this, it is necessary to calculate the transformation coefficients.

For linear transformation, we will use the equation:

$$y = mx + b$$

where:

y – indicator value according to the new scale,

m – slope factor,

b - free term of the equation.

Let's find the coefficients m и b:

$$m = (5 - 0) / (2,5 - (-2,5)) = 5 / 5 = 1$$

$$b = 0 - 1 \cdot (-2,5) = 2,5$$

Table 5.8 – The recalculated data for Political stability index

Political stability index	2018	2019	2020	2021	2022	Average	2022 to 2017, %
Political stability index							
Maximum	5	5	5	5	5	5	
Lider (Liechtenstein)	3.98	3.98	4.12	4.19	4.14	4.08	
Belarus	2.85	2.84	1.61	1.75	1.71	2.15	60.0
Poland	2.98	3.05	2.99	2.99	3	3.00	100.7
Deviation from the leder +/-, %							
Belarus	-1.13	-1.14	-2.51	-2.44	-2.43	-1.93	
Poland	-1.00	-0.93	-1.13	-1.20	-1.14	-1.08	

$$\text{Belarus Kd} = 1 - 40 * 0,005 = 0.8$$

$$\text{Poland Kd} = 1 + 0.7 * 0,005 = 1.004$$

$$\text{Belarus IS} = 1.71 / 5 * 100 * 0.8 = 27.4$$

$$\text{Poland IS} = 3 / 5 * 100 * 1.003 = 60.4$$

Table 5.9 – Corruption Perceptions Index, 100 = no corruption

Corruption Perceptions Index	2019	2020	2021	2022	2023	Average	2022 to 2018, %
Corruption Perceptions Index							
Maximum	100	100	100	100	100	100	
Lider (Denmark)	87	88	88	90	90	88.6	
Belarus	45	47	41	39	37	41.8	82.2
Poland	58	56	56	55	54	55.8	93.1
Deviation from the leder +/-, %							
Belarus	-42.0	-41.0	-47.0	-51.0	-53.0	-46.8	
Poland	-29.0	-32.0	-32.0	-35.0	-36.0	-32.8	

Source: <https://www.transparency.org/en/cpi/2023>

According to the available data, we observe fluctuations in this indicator in the Republic of Belarus with an overall tendency towards decline. In the case of Poland, a similar trend is observed, with the distinction that it is constant.

$$\text{Belarus Kd} = 1 - 17.8 * 0,005 = 0.911$$

$$\text{Poland Kd} = 1 - 6.9 * 0,01 = 0.931$$

$$\text{Belarus FS} = 37 / 100 * 100 * 0.911 = 33.7$$

$$\text{Poland FS} = 55 / 100 * 100 * 0.931 = 50.3$$

Calculation of aggregated indicators of investment attractiveness.

Table 5.10 – Unemployment Rate

Unemployment Rate	2019	2020	2021	2022	2023	Average	2022 +/- 2018, %	
	Unemployment Rate, %							
World, trillion USD	5.6	6.6	6.1	5.3	5.1	5.74	-0.5	
Belarus, billion USD	4.2	4	3.9	3.6	3.5	3.84	-0.7	
Poland, billion USD	3.3	3.2	3.4	2.9	2.8	3.12	-0.5	
Deviation from the world average +/-, %								
Belarus	1.4	2.6	2.2	1.7	1.6	1.9		
Poland	2.3	3.4	2.7	2.4	2.3	2.6		

Source: <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>

The unemployment rate in both countries shows a positive trend of decrease with certain fluctuations from year to year.

$$\text{Belarus Kd} = 1 + 0,7 * 0,005 = 1,004$$

$$\text{Poland Kd} = 1 + 0.5 * 0,005 = 1,003$$

$$\text{Belarus IS} = (100 + (1.9)) * 1.004 = 102.3 = 100$$

$$\text{Poland IS} = (100 + (2.6)) * 1.003 = 102.9 = 100$$

Table 5.11 – Summary Table

Indicator	Value	
	Belarus	Poland
GDP	100	100
GDP per capita	55	100
Corporate Tax rate	96.4	100

Investment freedom index	30	80
WJP Rule of Law Index	38.9	62.5
Property rights index	20.9	86
Political stability index	27.4	60.4
Corruption Perceptions Index	33.7	50.3
Unemployment Rate	100	100
Average value	55.8	82.1

Conclusion

Summarizing the results of the first stage of analysis, the following observations can be made:

1. At present, the Republic of Poland outperforms the Republic of Belarus across all metrics evaluated in the initial phase of assessment. The most significant gap is observed in the areas of property rights protection and other aspects of the legal environment, as well as various restrictions on the free conduct of investment activities (Investment Freedom Index). A common issue for both countries is the problem of corruption.

2. Analysis of indicators for the Republic of Belarus revealed two red flags among international indices – Property Rights Index and Political Stability Index with values of 20.9 and 27.4, respectively. The Investment Freedom Index is also close to being flagged red. All this indicates that Belarus is currently not an investment-attractive country. Investing capital in Belarus is associated with elevated legal and political risks.

Despite the fact that the aggregated indicator is at an acceptable level, further, more in-depth analysis of the investment climate is not recommended.

3. The assessment of indicators characterizing the investment climate in Poland did not reveal any red flags. The aggregated value of the indicators at this stage of calculations was 86 points, corresponding to the 1st group. All this indicates that the country has successfully passed the first stage of preliminary evaluation (screening stage) and is recommended for the second stage.

5.2. DETAILED ASSESSMENT (MAGNIFYING GLASS STAGE)

During the preliminary assessment stage, it was identified that currently, due to a combination of factors, the Republic of Belarus is not a viable country

for foreign investments. Therefore, detailed analysis of the investment climate will only be conducted for Poland.

The assessments of several indicators obtained in the first stage are valid and will be utilized in the second stage. The designations of coefficients and indicators remain unchanged.

Economic and financial determinants

Table 5.12 – GDP

GDP	2018	2019	2020	2021	2022	Average	2022 to 2018, %
GDP Total							
World, trillion USD	86.54	87.78	85.27	97.15	100.88	91.52	116.6
Poland, billion USD	588.78	596.06	599.44	681.35	688.13	630.75	116.9
To previous year, %							
World	N/D	101.4	97.1	113.9	103.8	104.1	
Poland	N/D	101.2	100.6	113.7	101.0	104.1	

Source: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

$$\mathbf{Kd} = 1 + 16,9 * 0,01 = 1,169$$

$$\mathbf{IS} = 100 * (104.1/104.0) * 1,169 = 116.9 = 100$$

Table 5.13 – GDP per capita

GDP per capita	2018	2019	2020	2021	2022	Average	2022 to 2018, %
GDP per capita thousands USD							
World, USD	10786.7	10949.8	10508.6	11066.7	11318.7	10926.1	104.9
Poland, USD	14408.4	15053.2	14775	15863.2	17117.3	15443.4	118.8
To previous year, %							
World	0.0	101.5	96.0	105.3	102.3	101.3	
Poland	0.0	104.5	98.2	107.4	107.9	104.5	

Source: <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD>

$$\mathbf{Kd} = 1 + 18,8 * 0,005 = 1,094$$

$$\mathbf{IS} = 100 * (17117.3/11318.7) * 1,094 = 165.4 \Rightarrow 100$$

Table 5.14 – Corporate Tax rate

Corporate Tax rate	2019	2020	2021	2022	2023	Average	2023 to 2018, %
Corporate Tax rate, %							
World, trillion USD	24.0	23.8	23.5	23.4	23.5	23.6	97.9
Poland, billion USD	19	19	19	19	19	19	100.0
Deviation from the world average +/-, %							
Poland	5.0	4.8	4.5	4.4	4.5	4.6	

Source: <https://taxfoundation.org/data/all/global/corporate-tax-rates-by-country-2023/>

$$\mathbf{Kd} = 1$$

$$\mathbf{IS} = (100 + (4.6)) * 1 = 104.6 \Rightarrow 100$$

Table 5.15 – Inflation rate

Inflation rate	2018	2019	2020	2021	2022	Average	2022 +/- 2018, %
Inflation rate, %							
World, trillion USD	2.5	2.2	1.9	3.5	8	3.62	5.5
Poland, billion USD	1.8	2.2	3.4	5.1	14.4	5.38	12.6
Deviation from the world average +/-, %							
Poland	0.7	0.0	-1.5	-1.6	-6.4	-2.4	

Source: <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG>

$$\mathbf{Kd} = 1 - 12,6 * 0,01 = 0,874$$

$$\mathbf{IS} = (100 + (-2.4)) * 0,874 = 85,3$$

Table 5.16 – Business freedom index

Business freedom index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Business freedom index							
Maximum	100	100	100	100	100	100	100.0
Lider (Norway)	89	86	86	91	95	89.4	106.7
Poland	65	63	62	79	75	68.8	115.4

Source: https://www.theglobaleconomy.com/rankings/herit_business_freedom/

$$\mathbf{Kd} = 1 + 15,4 * 0.005 = 1.077$$

$$\mathbf{IS} = 75 / 100 * 100 * 1.077 = 80.8$$

Table 5.17 – Financial freedom index

Financial freedom index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Financial freedom index							
Maximum	100	100	100	100	100	100	100.000
Lider (Australia)	90	90	90	90	90	90	100.000
Poland	70	70	70	70	70	70	100.000

Source: https://www.theglobaleconomy.com/rankings/herit_financial_freedom/

The Financial Freedom Index also aligns with our baseline scale. It remained constant throughout the entire studied period. Consequently, the dynamics coefficients will be equal to 1.

$$\mathbf{Kd} = 1$$

$$\mathbf{IS} = 70 / 100 * 100 * 1 = 70$$

Table 5.18 – Unemployment Rate

Unemployment Rate	2019	2020	2021	2022	2023	Average	2023 +/- 2018, %
Unemployment Rate, %							
World, trillion USD	5.6	6.6	6.1	5.3	5.1	5.7	-0.5
Poland, billion USD	3.3	3.2	3.4	2.9	2.8	3.1	-0.5
Deviation from the world average +/-, %							
Poland	2.3	3.4	2.7	2.4	2.3	2.6	

Source: <https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>

$$Kd = 1 + 1,3 * 0,005 = 1,007$$

$$IS = (100 + (2.6)) * 1.003 = 102.9 = 100$$

Table 5.19 – Human Development Index (HDI)

Human Development Index	2018	2019	2020	2021	2022	Average	2022 to 2018, %
Human Development Index							
Maximum	1	1	1	1	1	1	100.0
Lider (Switzerland)	0.957	0.959	0.962	0.956	0.962	0.959	100.5
Poland	0.876	0.88	0.874	0.876	0.881	0.877	100.6

Source: <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>

$$Kd = 1 + 0.6 * 0,005 = 1,003$$

$$IS = 0,881 / 1 * 100 * 1,003 = 88.4$$

Table 5.20 – Labor freedom index (0-100)

Labor freedom index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Labor freedom index							
Maximum	100	100	100	100	100	100	100.0
Lider (Micronesia)	72	78	74	82	82	77.6	113.9
Poland	64	62	66	56	55	60.6	85.9

Source: https://www.theglobaleconomy.com/rankings/herit_labor_freedom/

$$\begin{aligned} \mathbf{Kd} &= 1 - 14 * 0,005 = 0.93 \\ \mathbf{IS} &= 55 / 100 * 100 * 0.93 = 51.2 \end{aligned}$$

The final calculations for the group of economic and financial factors are presented in the table below.

Table 5.21 – Summary assessment of the group of economic and financial determinants

Indicator	IS	SC	IS * SC
GDP	100	1	100
GDP per capita	100	1	100
Tax Rate	100	1	100
Inflation Rate	85.3	0.8	68.2
Business freedom index	80.8	0.9	72.7
Financial freedom index	70	0.9	63.0
Unemployment Rate	100	1	100.0
Human Development Index	88.4	1	88.4
Labor freedom index	51.2	0.9	46.1
Total	775.7	8.5	738.4
Total Group Score	86.9		

Legal determinants

Table 5.22 – Investment freedom index (0-100)

Investment freedom index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Investment freedom index							
Maximum	100	100	100	100	100	100	100.0
Lider (Luxembourg)	95	95	95	95	95	95	100.0
Poland	80	80	80	80	80	80	100.0

Source: https://www.theglobaleconomy.com/rankings/herit_investment_freedom/

$$\begin{aligned} \mathbf{Kd} &= 1 \\ \mathbf{IS} &= 80 / 100 * 100 * 1 = 80 \end{aligned}$$

Table 5.23 – Fundamental Rights

Fundamental Rights	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Fundamental Rights							
Maximum	1	1	1	1	1	1	100.0
Lider (Denmark)	0.92	0.92	0.92	0.92	0.92	0.92	100.0
Poland	0.66	0.64	0.61	0.61	0.61	0.63	92.4

Source: <https://worldjusticeproject.org/rule-of-law-index/global/2023/Fundamental%20Rights/>

$$Kd = 1 - 7.6 * 0,01 = 0.924$$

$$IS = 0.61 / 1 * 100 * 0,924 = 56.4$$

Table 5.24 – Property rights index

Property rights index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Property rights index							
Maximum	100	100	100	100	100	100	100.0
Lider (Finland)	90	92	92	92	100	100	111.1
Poland	62	63	63	72	73	66.6	117.7

Source: https://www.theglobaleconomy.com/rankings/herit_property_rights/

$$Kd = 1 + 17.7 * 0,01 = 1.177$$

$$IS = 73 / 100 * 100 * 1.177 = 86.0$$

Table 5.25 – Independence of the judicial system: Civil Justice

Civil Justice	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Civil Justice							
Maximum	1	1	1	1	1	1	100.0
Lider (Norway)	0.85	0.85	0.85	0.84	0.86	0.85	101.2
Poland	0.64	0.63	0.61	0.61	0.61	0.62	95.3

Source: <https://worldjusticeproject.org/rule-of-law-index/global/2023/Civil%20Justice/>

$$Kd = 1 - 4.7 * 0,01 = 0.953$$

$$IS = 0.61 / 1 * 100 * 0.953 = 58.1$$

Table 5.26 – Independence of the judicial system: Criminal Justice

Criminal Justice	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Criminal Justice							
Maximum	1	1	1	1	1	1	100.0
Lider (Finland)	0.84	0.83	0.84	0.83	0.84	0.84	100.0
Poland	0.61	0.6	0.58	0.58	0.58	0.59	95.1

Source: <https://worldjusticeproject.org/rule-of-law-index/global/2023/Criminal%20Justice/>

$$\mathbf{Kd} = 1 - 4.9 * 0,01 = 0.951$$

$$\mathbf{IS} = 0.58 / 1 * 100 * 0.951 = 55.1$$

The final calculations for the group of legal determinants are presented in the table below:

Table 5.27 – Summary assessment of the group of legal determinants

Indicator	IS	SC	IS * SC
Investment freedom index	80.0	1	80
Fundamental Rights	56.4	0.9	50.7
Property rights index	86.0	0.9	77.4
Civil Justice	58.1	1	58.1
Criminal Justice	55.1	1	55.1
Total	335.6	4.8	321.4
Total Group Score	67.0		

Political determinants

Table 5.28 – Political stability index (-2.5 weak; 2.5 strong)

Political stability index	2018	2019	2020	2021	2022	Average	2022 to 2017, %
Political stability index							
Maximum	2.5	2.5	2.5	2.5	2.5	2.5	100.0
Lider (Liechtenstein)	1.48	1.48	1.62	1.69	1.64	1.58	110.8
Poland	0.48	0.55	0.49	0.49	0.5	0.50	104.2

Source: https://www.theglobaleconomy.com/rankings/wb_political_stability/

Table 5.29 – Political stability index recalculated data

Political stability index	2018	2019	2020	2021	2022	Average	2022 to 2017, %
Political stability index							
Maximum	5	5	5	5	5	5.0	100.0
Lider (Liechtenstein)	3.98	3.98	4.12	4.19	4.14	4.1	104.0
Poland	2.98	3.05	2.99	2.99	3.00	3.0	100.7

$$\text{Poland Kd} = 1 + 0.7 * 0,005 = 1.004$$

$$\text{Poland IS} = 3 / 5 * 100 * 1.004 = 60.2$$

Table 5.30 – State legitimacy index, 0 (high) - 10 (low)

State legitimacy index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
State legitimacy index							
Maximum	0	0	0	0	0	0	N/D
Lider (Switzerland)	0.7	0.5	0.5	0.3	0.3	0.46	42.9
Poland	4.1	4.2	4.3	4	3.7	4.06	90.2

Source: https://www.theglobaleconomy.com/rankings/state_legitimacy_index/

The State Legitimacy Index is measured on a scale similar to the Human Flight and Brain Drain Index. The higher the value of the indicator, the worse the situation with state legitimacy.

$$\text{Kd} = 1 + 9,8 * 0,005 = 1.049$$

Given that this index utilizes an inverse scale, the value of the indicator will be calculated as follows:

$$\text{IS} = (10 - 3,7) / 10 * 100 * 1.049 = 66,1$$

Table 5.31 – Corruption Perceptions Index, 100 = no corruption

Corruption Perceptions Index	2019	2020	2021	2022	2023	Average	2022 to 2018, %
Corruption Perceptions Index							
Maximum	100	100	100	100	100	100	100.0
Lider (Denmark)	87	88	88	90	90	88.6	103.4
Poland	58	56	56	55	54	55.8	93.1

Source: <https://www.transparency.org/en/cpi/2023>

$$\begin{aligned} \mathbf{Kd} &= 1 - 6.9 * 0,01 = 0.931 \\ \mathbf{IS}_{PR} &= 54 / 100 * 100 * 0.931 = 50.3 \end{aligned}$$

Table 5.32 – Open Government

Open Government	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Open Government							
Maximum	1	1	1	1	1	1	100.0
Lider (Norway)	0.88	0.89	0.89	0.87	0.88	0.88	100.0
Poland	0.63	0.6	0.59	0.6	0.58	0.60	92.1

Source: <https://worldjusticeproject.org/rule-of-law-index/global/2023/Open%20Government/>

$$\begin{aligned} \mathbf{Kd} &= 1 - 7.9 * 0,005 = 0.961 \\ \mathbf{IS} &= 0.58 / 1 * 100 * 0.961 = 55.7 \end{aligned}$$

Table 5.33 – Regulatory quality index (-2.5 weak; 2.5 strong)

Regulatory quality index	2018	2019	2020	2021	2022	Average	2023 to 2019, %
Regulatory quality index							
Maximum	2.5	2.5	2.5	2.5	2.5	2.5	100.0
Lider (Singapore)	2.12	2.15	2.21	2.23	2.21	2.18	104.2
Poland	0.87	1.01	0.85	0.83	0.72	0.86	82.8

Source: https://www.theglobaleconomy.com/rankings/wb_regulatory_quality/

Table 5.34 – Regulatory quality index recalculated data

Regulatory quality index	2018	2019	2020	2021	2022	Average	2023 to 2019, %
Regulatory quality index							
Maximum	5	5	5	5	5	5	100.0
Lider (Singapore)	4.62	4.65	4.71	4.73	4.71	4.7	101.9
Poland	3.37	3.51	3.35	3.33	3.22	3.4	95.5

$$Kd = 1 - 4.5 * 0,005 = 0.978$$

$$IS = 3.22 / 5 * 100 * 0.978 = 63.0$$

The final calculations for the group of Political determinants are presented in the table below.

Table 5.35 – Summary assessment of the group of political determinants

Indicator	IS	SC	IS * SC
Political stability index	60.2	1	60.2
State legitimacy index	66.1	0.9	59.5
Corruption Perceptions Index	50.3	1	50.3
Open Government	55.7	0.9	50.1
Regulatory quality index	63.0	0.8	50.4
Total	295.25	4.6	270.5
Total Group Score	58.8		

Socio-demographic determinants

Table 5.36 – Public services index 0 (high) - 10 (low)

Public services index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Public services index							
Maximum	0.0	0.0	0.0	0.0	0.0	0	###
Lider (Iceland)	1.0	0.7	1.2	0.9	0.9	0.94	90.0
Poland	2.1	2.0	3.0	3.3	3.0	2.68	142.9

Source: https://www.theglobaleconomy.com/rankings/public_services_index/

$$\begin{aligned} \mathbf{Kd} &= 1 - 42,9 * 0,005 = 0.786 \\ \mathbf{IS} &= (10 - 3.0) / 10 * 100 * 0.786 = 55.0 \end{aligned}$$

Table 5.37 – Health Care Index

Health Care Index	2020	2021	2022	2023	2024	Average	2024 to 2020, %
Health Care Index							
Maximum	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lider (Taiwan)	86.7	86.4	86.4	85.9	86.0	86.3	99.2
Poland	61.0	58.3	57.8	57.6	55.4	58.0	90.8

Source: https://www.numbeo.com/health-care/rankings_by_country.jsp?title=2024

$$\begin{aligned} \mathbf{Kd} &= 1 - 9.2 * 0,01 = 0.908 \\ \mathbf{IS} &= 55.4 / 100 * 100 * 0.908 = 50.3 \end{aligned}$$

Table 5.38 – Crime Index

Crime Index	2020	2021	2022	2023	2024	Average	2024 to 2020, %
Crime Index							
Maximum	100.0	100.0	100.0	100.0	100.0	100	100.0
Lider (Qatar)	11.9	12.3	13.8	14.8	16.0	13.76	134.5
Poland	28.5	29.3	29.8	29.2	30.7	29.5	107.7

Source: https://www.numbeo.com/crime/rankings_b788y_country.jsp?title=2024

The higher the indicator, the more dangerous the criminal situation in the country.

$$\begin{aligned} \mathbf{Kd} &= 1 - 7.7 * 0,005 = 0.961 \\ \mathbf{IS} &= (100 - 30.7) / 100 * 100 * 0.9 = 66.6 \end{aligned}$$

Table 5.39 – Group grievance index, 0 (low) - 10 (high)

Group grievance index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Group grievance index							
Maximum	0.0	0.0	0.0	0.0	0.0	0	####
Lider (Finland)	1.2	0.9	0.6	0.3	0.3	0.66	25.0
Poland	6.2	5.9	5.6	5.3	5.0	5.6	80.6

Source: https://www.theglobaleconomy.com/rankings/group_grievance_index/

$$Kd = 1 + 19.4 * 0,01 = 1.194$$

$$IS = (10 - 5.0) / 10 * 100 * 1.194 = 59.7$$

The higher the indicator, the more social tension in the country.

The final calculations for the group of Socio-demographic determinants are presented in the table below.

Table 5.40 – Summary assessment of the group of socio-demographic determinants

Indicator	IS	SC	IS * SC
Public services index	55.0	1.0	55.0
Health Care Index	50.3	1.0	50.3
Crime Index	66.6	0.9	60.0
Group grievance index	59.7	0.8	47.7
Total	231.6	3.7	213.0
Total Group Score	57.6		

Infrastructure determinants

Table 5.41 – Logistics performance index (1=low to 5=high)

Logistics performance index	2018	2019	2020	2021	2022	Average	2023 to 2019, %
Logistics performance index							
Maximum	5.0	5.0	5.0	5.0	5.0	5	100.0
World	2.72	N/D	N/D	N/D	2.92	2.82	107.4
Poland	3.21	N/D	N/D	N/D	3.50	3.355	109.0

Source: <https://data.worldbank.org/indicator/LP.LPI.INFR.XQ>

The Logistics Performance Index is not calculated every year. The analyzed period includes data for two years, 2018 and 2022. It is difficult to ascertain the situation in the interim years, but the percentage increase allows us to infer that the growth trend was consistent.

$$Kd = 1 + 9.0 * 0.01 = 1.09$$

$$IS = 3.5 / 5 * 100 * 1.09 = 76.3$$

Table 5.42 – Mobile phone subscribers.

Mobile phone subscribers	2018	2019	2020	2021	2022	Average	2023 to 2019, %
Mobile phone subscribers							
Lider (Hong Kong)	266.0	286.2	291.5	319.4	291.9	291.0	109.7
Loser (Mozambique)	47.8	48.8	49.6	42.7	42.1	46.2	88.0
United Arab Emirates	219.7	212.8	197.8	194.7	212.2	207.4	96.6
Poland	125.40	125.70	128.40	132.10	131.90	128.7	105.2

Source: https://www.theglobaleconomy.com/rankingsmobile_phone_subscribers_per_100_people/

The range of values for this indicator across countries is too broad, from 291.9 (Hong Kong) to 42.1 (Mozambique). This indicates the need for data normalization and alignment with the law of normal distribution.

Checking the data distribution for compliance with the three-sigma rule revealed an anomalous magnitude of the indicator for the leader. For this reason, Hong Kong was excluded from the analysis. The comparison will be conducted relative to the country occupying the second place in the ranking – United Arab Emirates.

$$Kd = 1 + 5.2 * 0.005 = 1.026$$

$$IS = 131.9 / 212.2 * 100 * 1.026 = 63.8$$

Table 5.43 – Fixed broadband internet subscribers

Fixed broadband internet subscribers	2018	2019	2020	2021	2022	Average	2023 to 2019, %
Fixed broadband internet subscribers							
Lider(Gibraltar)	58.13	59.65	64.23	67.23	70.24	63.90	120.8
Monaco	53.16	55.29	56.54	57.67	58.96	56.32	110.9
Poland	20.38	20.36	21.78	22.66	22.97	21.63	112.7

Source: https://www.theglobaleconomy.com/rankings/Internet_subscribers_per_100_people/

This indicator was also normalized to conform with the law of normal distribution. As a result, the leader was excluded from the analysis, and comparison was conducted with the second position in the list.

$$Kd = 1 + 12.7 * 0.01 = 1.127$$

$$IS = 22.97 / 58,96 * 100 * 1.127 = 43.9$$

Access to electricity (% of population) – Since 2009, access to electricity in Poland has been provided at 100%.

$$Kd = 1$$

$$IS = 100 / 100 * 100 * 11 = 100$$

<https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=PL>

https://www.theglobaleconomy.com/rankings/access_to_electricity/

The final calculations for the group of Infrastructure determinants are presented in the table below.

Table 5.44 – Summary assessment of the group of Infrastructure determinants

Indicator	IS	SC	IS * SC
Logistics performance index	76.3	1	76.3
Mobile phone subscribers	63.8	0.9	57.4
Fixed broadband internet subscribers	43.9	0.9	39.5
Access to electricity	100	0.8	80.0
Total	284	3.6	253.2
Total Group Score	70.3		

Technological determinants

At this stage, we have decided to retain only The Global Innovation Index in the group of technological factors. This decision is justified by several reasons:

1. Technological development indicators overlap with infrastructure development indicators (such as mobile phone subscribers, broadband internet subscribers, etc.), which have already been covered.

2. The Global Innovation Index is a comprehensive indicator that takes into account numerous aspects of technological environment development in a country.

3. This methodology assumes the availability and reliability of information. Adding additional parameters to this group significantly complicates the process of obtaining reliable data.

Table 5.45 – The Global Innovation Index (GII)

Global Innovation Index	2019	2020	2021	2022	2023	Average	2023 to 2019, %
Global Innovation Index							
Maximum	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lider (Switzerland)	67.2	66.1	65.5	64.6	67.6	66.2	100.5
Poland	41.3	40.0	39.9	37.5	37.7	39.3	91.3

Source: https://www.wipo.int/global_innovation_index/en/2023/

$$\mathbf{Kd} = 1 - 8.7 * 0.005 = 0.956$$

$$\mathbf{IS} = 37.7 / 100 * 100 * 0.956 = 36.1$$

The final calculations for the group of Technological determinants are presented in the table below.

Table 5.46 – Summary assessment of the group of technological determinants

Indicator	IS	SC	IS * SC
Global Innovation Index	36.1	1	36.1
Total	36.1	1	36.1
Total Group Score	36.1		

Geographic determinants

Geographical location of the country

Poland is located in the heart of Central Europe between the Baltic Sea in the north and the Sudetes and Carpathian Mountains in the south, for the most part in the basin of the Vistula and the Oder. Poland belongs to the Central European time zone, GMT + 1 hour, except for between March and October when it switches to daylight saving time [32].

The total area of Poland is 322 575 km². Its land territory covers 311 888 km², internal marine waters – 2005 km², and territorial sea – 8682 km². The administrative area is 312 679 km², and encompasses the area within administrative borders of voivodships, apart from land territory also some internal marine waters (Vistula Lagoon, Szczecin Lagoon, areas of port waters) [33]. By geographical area, Poland is the ninth largest country in Europe, and the sixth largest in the European Union as a whole.

The length of border is 3511 km, including 3071 km of land borders, and 440 km of sea borders. Poland borders on Russia (210 km), Lithuania (104 km), Belarus (418 km), Ukraine (535 km), Slovakia (541 km), Czech Republic (796 km) and Germany (467 km). At 1,163 km it is the longest exterior land border of the European Union [32, 33].

One of the most important characteristics of the economic and geographical position of a country is its location in relation to potential markets for finished products and services. In this context, the location of Poland in the Central European part gives it significant competitive advantages.

On the one hand, the state is a member of the European Union, which gives it access to the markets of the other 26 member countries of the agreement with a population of over 440 million people. On the other hand, it has a common border with two member states of the Eurasian Economic Union, with a common market exceeding 184 million consumers. It should also be noted that the Republic of Poland is an active participant in the European Economic Area, which opens access to the markets of Norway, Iceland and Liechtenstein.

Within the scope of our research, it is necessary to note that in recent years, Poland's trade and diplomatic relations with its eastern neighbors, Belarus and Russia, have been in a state of crisis due to the war in Ukraine and the actions of the Belarusian authorities since the 2020 elections. This undoubtedly should impact the assessment of the geographical location's favorability.

However, history shows that any crisis will eventually be resolved. And after the restoration of cooperation between countries, Poland is in a position to become a connecting link between the West and the East in establishing a new system of trade relations.

Currently, we are inclined to assess the favorability of Poland's geographical location at **60 points** out of a possible 100.

Table 5.47 – Pollution Index

Pollution Index	2020	2021	2022	2023	2024	Average	2024 to 2020, %
Pollution Index							
Maximum	100.0	100.0	100.0	100.0	100.0	100	100.0
Lider (Finland)		11.50		12.00	12.00	11.9	104.3
		11.90					
		12.10					
Poland	54.50	54.30	54.70	54.50	57.50	55.1	105.5

Source: https://www.numbeo.com/pollution/rankings_by_country.jsp

$$\mathbf{Kd} = 1 - 5.5 * 0.005 = 0.973$$

$$\mathbf{IS} = (100 - 57.5) / 100 * 100 * 0.973 = 41.3$$

This indicator was decided to be included in the analysis due to recent trends and the adoption of a UN resolution on climate.

The final calculations for the group of Geographic determinants are presented in the table below.

Table 5.48 – Summary assessment of the group of geographic determinants

Indicator	IS	SC	IS * SC
Geographical location	60	1	60.0
Pollution Index	41.3	0.7	28.9
Total	101.3	1.7	88.9
Total Group Score	52.3		

Based on the values calculated for each group of indicators, we can compute a weighted assessment of the investment climate in the Republic of Poland.

Table 5.49 – Summary assessment of group results

Group	IS	SC	IS * SC
Economic and financial determinants	86.9	1	86.9
Legal determinants	67	1	67.0
Political determinants	58.8	1	58.8
Socio-demographic determinants	57.6		
	0.5		
	46.1		
Infrastructure determinants	70.3	0.9	63.3
Technological determinants	36.1	0.8	28.9
Geographic determinants	52.3	0.7	36.6
Total	429	6.4	399.1
Total Group Score	62.5		

Conclusion

Based on the conducted research, it can be asserted that at the current stage of development, the Republic of Poland, with a final score of 62.5 points, is classified into the category of countries with a favorable investment climate characterized by attractive prospects and manageable risks. Achieving this rating by the country is largely attributed to its economic and infrastructural development.

Nevertheless, despite the overall positive assessment, attention should be drawn to certain aspects that require increased scrutiny when planning investment activities in Poland.

Particular concern arises from the low level of the country's innovation development, assessed at 36.1 points. This could be partially attributed to the relatively small share of GDP expenditure on research and development (R&D).

Additionally, according to our calculations, sensitive areas include environmental pollution, the healthcare system, and the level of corruption in the country. The labor market also demonstrates certain difficulties, which may impact operational activities.

In aggregate, the listed factors represent both potential opportunities for enhancing Poland's investment attractiveness in the long term and challenges that investors may encounter at the present moment.

Thus, the application of the methodology for evaluating the investment climate developed by us in practice has demonstrated its consistency.

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RECOMMENDATIONS FOR COUNTRIES BASED ON INVESTMENT CLIMATE ASSESSMENT

6.1. RECOMMENDATIONS FOR BELARUS

During the analysis, it was determined at the preliminary stage that the Republic of Belarus is currently not an attractive country for foreign investments.

We identified two red flags that severely negatively characterize the state of the legal environment in the area of property rights protection, as well as the political situation in the country. Additionally, problematic areas include the existence of various investment restrictions, a high level of perceived corruption, and the overall condition of the legal environment.

According to the methodology, red flags are triggered only if an indicator is not only at a low level but also shows a clear trend of deterioration. This leads to the conclusion that Belarus needs to significantly reassess its strategy and direction of development if the country wants to regain its investment attractiveness for foreign capital.

In this study, we focused on what we consider to be the most significant problems that require primary attention.

The effective functioning of the legal environment is based on adherence to the principle of the rule of law. This principle is enshrined in Article 7 of the Constitution of the Republic of Belarus [1]. However, the values of the analyzed indicators suggest that in reality, this principle is often distorted or entirely ignored.

Currently, according to the Democracy Index (score – 1.99, rank – 151), a strict authoritarian regime has developed in Belarus. There is simply

no electoral process or pluralism in the country, with this indicator scoring 0.00 [2]. International practice shows that under such a regime, the rule of law rarely prevails. It is interpreted, amended, and bent in ways that benefit the incumbent ruler.

Since the World Justice Project (WJP) began measuring the rule of law in the country, Belarus has slipped in its global rankings, from 50th place out of 102 countries in 2015 to 104th place out of 142 countries in 2023. On both global and regional scales, it ranks very low on such elements as constraints on government powers (139/142), open government (135/142), and fundamental rights (128/142). According to WJP's survey-based data, Belarus rates particularly poorly for respect for lawful transition of power, civic participation, freedom of expression, and respect for due process [3]. At the same time, Belarus has formally ratified most of the key universal human rights documents, including the International Covenant on Civil and Political Rights of 1966.

A natural consequence of the violation of basic rights and freedoms is the disregard for property rights. As our calculations have shown, the value of the Property Rights Index has almost halved from 2019 to 2023.

This essentially led to the formation of a legal and economic environment in the country where the state holds exclusive administrative rights through relevant functional agencies and sectoral ministries. This creates an unprecedentedly wide scope for exerting pressure on businesses to achieve desired outcomes, as well as for manipulating decisions within companies.

In the current realities of the Republic of Belarus, no business can be insulated from external interference by state authorities. The reasons for such interference are often contrived and lack genuine justification. The consequences, however, are quite tangible, including the potential loss of the business.

In the current realities of the Republic of Belarus, no business can be insulated from external interference by state authorities. The reasons for such interference are often contrived and lack genuine justification. The consequences, however, are quite tangible, including the potential loss of the business.

As confirmation, both historical cases and recent events can be cited. It should be noted that the following examples and discussions are based on the authors' observations. Obtaining any real, fact-based information that reflects the current reality is not feasible at this historical stage.

Examples of the risks associated with doing business in the Republic of Belarus include the cases of OJSC “Belgazprombank”, the online hypermarket

“21 Vek”, LLC “Solar Land”, the private enterprise “Yurkas”, CJSC “Perfume and Cosmetics Factory “Modum-Our Cosmetics”, and others.

Analysis of information available from public sources suggests that the catalyst in the case of OJSC “Belgazprombank”, owned by the Russian group “Gazprombank”, was the decision of its former chairman of the board, Viktor Babariko, to run for the presidency of the Republic of Belarus.

In May 2020, he resigned from his position as Chairman of the Board of “Belgazprombank”. By June 11, employees of the Department of Financial Investigations of the State Control Committee (DFR) had arrived at the bank's headquarters. The bank's management was charged under Part 2 of Article 243 “Evasion of Taxes and Fees on an Especially Large Scale” and Part 2 of Article 335 “Legalization of Funds Obtained by Criminal Means on an Especially Large Scale”.

It is important to note the characteristics of bank's activities prior to June 2020. This can be easily traced through the information presented on the official website in the “Achievements and Awards” section:

May 2020: The bank received an award from the reputable international publication Global Finance magazine in the category “2020 Innovator in Personal Banking” for the development and launch of the Cashalot Catch mobile gaming app.

April 2020: An asset securitization transaction, the first of its kind in the Belarusian financial services market, was recognized as the “Deal of the Year” and awarded first place in the corresponding category of the fifth industry award “Bank of the Year”.

November 2019: Acknowledgement received for contributions to the sustainable development of Belarus.

November 2019: Belgazprombank won the “New Silk Road Finance Awards 2019” in the category “Best Local Bank in the Region for BRI” (Best local bank in the region for BRI) by the prestigious business publication Asiamoney, etc. [8].

Another aspect that deserves mention is Belgazprombank's contribution to the development of national culture and provision of sponsorship assistance. According to the annual report, in 2019 the bank allocated 12.7 million rubles for charity and sponsorship. For comparison, Belarusbank, the largest bank in the country, which surpasses Belgazprombank by six times in terms of assets and 3.8 times in terms of profit, allocated 9.6 million rubles for these purposes [8].

It should also be noted that, according to A. Lukashenko, the illegal activities of the bank's top management were known as early as 2016. Nevertheless,

Belgazprombank continued to operate normally and received both national and international awards.

After the arrival of the DFR employees at the office, the situation began to develop rapidly. The National Bank of the Republic of Belarus (NBRB) decided to appoint a temporary administration to manage the bank starting on June 15, 2020, headed by Nadezhda Yermakova, former Chairperson of the NBRB Board.

On June 18, Viktor Babariko was detained and placed in the KGB pre-trial detention center, where he was charged. On July 14, the Central Election Commission of the Republic of Belarus denied his registration as a presidential candidate. On July 6, 2021, Viktor Babariko was sentenced to 14 years in prison. On October 31, 2023, the UN Human Rights Committee recognized the violation of Viktor Babariko's right to liberty, guaranteed by Article 9 of the International Covenant on Civil and Political Rights.

This incident did not lead to the liquidation of the business, but it effectively resulted in a change of control. The actions of the Belarusian authorities in this case essentially resemble a corporate raid.

One of the most recent and widely publicized cases was that of the company “Solar Land”. According to the “Kartoteka” service, the company “Solar Land” was registered in 2015 for the construction and operation of a future photovoltaic power station (PVS) [10]. A 100% stake in it belongs to the British firm Cameliaside. This firm was created as a green energy project in Belarus by the British investment companies United Green Group and Altostarta.

An investment agreement with the Belarusian authorities for the construction of the largest photovoltaic power station in the Cherykaw district was signed in 2014. Construction began in 2018, and the station was commissioned in September 2021. The total investment costs for the project were estimated at 170 million USD.

Since 2022, this private solar power plant has been selling electricity to the state. According to the law, electricity produced from renewable energy sources was paid to the producing company at an increased tariff [9]. However, in 2022, Belarus passed a law that suspended the application of increased coefficients to tariffs for electricity from renewable sources and the state's obligation to purchase the energy they produce.

The investor refused to operate under the new conditions, leading to the disconnection of the power plant from the state energy system. Solar Land lost access to the facility. The investor then attempted to recover the money spent on

equipment supply and project work. The unsuccessful attempt resulted in the liquidation of Solar Land. Currently, the company's assets are under seizure.

In March 2024, the power plant itself was put up for auction for 79.75 million rubles. However, so far, no buyers have been found [11].

The cases of “21 Vek”, “Yurkas”, and “Modum” appear more mundane. The owners of these companies were detained and accused of tax evasion, a criminal charge that is most common in the business environment. Notably, these successful businesses came under persecution at a time when the state needed to cover the budget deficit.

The facts presented above clearly demonstrate that the risks of losing property rights as well as conducting business in modern Belarus are quite high. The state's monopoly on administration, the lack of any restrictions on interference in company affairs, and the unprecedented ability to influence judicial decisions significantly reduce the investment attractiveness of the republic.

In our view, this situation is largely due to the high level of interdependence among the power structures.

As with the rule of law principle, the legislative acts of the country stipulate that the principle of separation of powers into legislative, executive, and judicial branches is a fundamental principle of the implementation of state power. The essence of this principle is to ensure that power is not concentrated in the hands of a single state body, but is divided among the three branches of government. These bodies are independent within their powers: they interact with each other, check and balance each other [4]. In reality, this separation and autonomy exist only on paper. A vivid confirmation of this was the actions of supposedly independent structures following the 2020 presidential elections.

In accordance with the current legislation, when interacting with the legislative branch, the President has the right of legislative initiative and is authorized to sign or veto laws. The President has the power to issue special acts with the force of law, known as decrees. Decrees, edicts, and orders of the President are binding throughout the territory of Belarus.

The President influences the formation and activities of the executive branch. With the consent of the House of Representatives, the President appoints the Prime Minister. The President determines the structure of the Government of the Republic of Belarus, appoints and dismisses Deputy Prime Ministers, ministers, and other members of the Government, decides on the resignation of the Government or its members, has the right to preside over meetings of the

Government of the Republic of Belarus, and can annul acts of the Government. Decisions made by the President are binding for the Government.

The President participates in the formation of the judicial branch by appointing judges of the Supreme Court with the consent of the Council of the Republic. The President appoints six judges of the Constitutional Court, as well as other judges [4].

It is important to clearly understand that the consent of the House of Representatives or the Council of the Republic is nothing more than a formality.

To understand the real extent of the President's influence on various spheres of the country's life, it is enough to look at the personnel decisions that are directly coordinated by him. In addition to high-ranking officials and judges, the positions requiring approval include the chairpersons of district executive committees, university rectors, editors and directors of publishing houses, heads of enterprises in various sectors, and many others [5, 6].

According to expert data from The World Justice Project (WJP) regarding civil and criminal justice systems in the republic, published in the Rule of Law Index report, Belarus's positions in the global ranking have significantly deteriorated in recent times. Since 2020, the country has lost 17 positions in the civil justice ranking, dropping to 60th place, and 34 positions in the criminal justice ranking, dropping to 89th place [3].

Additionally, for the indicator of improper government influence, the country has the lowest ranking among all the analyzed components: 137th place with an index score of 0.2 for civil justice and 140th place with an index score of 0.03 for criminal justice out of 142 countries. This indicates an extremely strong influence of the state on judicial decisions.

Based on the presented facts, we believe that the first two steps towards successfully transforming Belarus into a country attractive to foreign investors should be: 1) the prompt decentralization of power and the granting of independence to its three branches, and 2) the real implementation of the principle of the rule of law in all spheres of activity on this basis."

In theory, a presidential republic is characterized by the clearest embodiment of the principle of separation of powers. All three branches of power – legislative, executive, and judicial – are highly distinct. At the same time, a presidential republic typically has an effective system of checks and balances, characterized by the fact that the parliament generally cannot dismiss the government (ministers). In turn, the president cannot dissolve the parliament (or any of its chambers). The inability of the parliament to dismiss individual executive

officials ensures the stability of the executive branch (and the government as a whole) and makes it more independent from the parliament, which fully aligns with Montesquieu's idea of the importance of the relative independence of the executive branch from the legislative branch. At the same time, the president needs the support of the parliament to effectively perform his duties [7].

In terms of its state structure, Belarus is a presidential republic, but with an extremely high concentration of power in the hands of the president, which negatively affects the effectiveness of governmental institutions. The powers of representatives of the various branches of government are largely reduced to the formal approval of decisions. Such a situation implies that, in the context of the Republic of Belarus, the process of separation of powers will primarily involve a substantial reduction of the president's powers, followed by the transfer of legislative, executive, and judicial authority to the respective bodies, granting them real autonomy in decision-making.

It is important to understand that the problem lies not in the absence of a legislative framework for the separation of powers, but in the actual enforcement of the laws enshrining these principles. At the same time, it should be noted that the changes adopted following the referendums of 1995, 1996, and 2004 significantly limited the application of these principles by granting the president expanded powers.

Regarding the political situation, it should be noted that the 2020 presidential elections became a significant negative event for the country. Most Western European countries, the USA, Canada, and others did not recognize the election results and strongly condemned the harsh suppression of peaceful protests.

The refusal of the government of the Republic of Belarus to comply with the demands of international organizations and unions, the incident with the forced landing of a Ryanair passenger plane, unprecedented pressure on independent media, the liquidation of numerous non-profit organizations, the creation of an artificial migration crisis at the border with the European Union, passive complicity in the Russian Federation's military invasion of Ukraine, and a number of other factors have led to the imposition of sanctions on both government officials and many economic entities. This, in turn, has resulted in a systemic crisis affecting all spheres of Belarusian society (political, legal, social, and economic) without exception and has significantly undermined the position of the Belarusian state on the international stage.

In Belarus, the current situation is such that the country is governed by an illegitimate regime. All decisions made by the current government, from the perspective of most trading partner countries and international law, lack legal validity and are highly likely to be annulled or revised after a change in power. This significantly increases the level of uncertainty for potential investors and, consequently, negatively impacts their willingness to invest capital in the country's economy.

In our opinion, under the current leadership, no real steps towards improving the investment climate in the republic should be expected. The reason lies in the fact that the present crisis is the result of many years of deliberate construction of a highly centralized system, where power is concentrated in the hands of the president.

We absolutely agree with the international community, which is united in the opinion that the basis for real, not merely formal, transformations in the Republic of Belarus should be the conduct of free democratic elections under the supervision of representatives of international organizations. As confirmation of this thesis, one can cite the speeches of several leaders of democratic states at the 76th session of the UN General Assembly.

The facts presented above indicate that, in the case of the Republic of Belarus, it is necessary to undertake a series of fundamental reforms aimed at transforming the current autocratic system and steering it towards a democratic path before taking any actions to improve the investment climate.

We believe that the foundation of such reforms should be the practical implementation of the principles of power alternation based on free democratic elections, the rule of law, and the separation of powers across all spheres and levels. Only after these principles are effectively instituted can we proceed to develop a more concrete strategy for enhancing the country's investment attractiveness. Otherwise, any decisions made to provide business guarantees, restructure the economy, introduce new incentives for attracting foreign capital, and other related measures will likely be temporary and largely formal. It is evident that promises without substantive guarantees will not persuade businesses to invest in an economy characterized by elevated risks.

6.2. RECOMMENDATIONS FOR POLAND

The study of the state and dynamics of the main factors determining the investment attractiveness of a country allows us to state that, as of today, the Republic of Poland has developed a highly favorable investment climate.

Compared to the current realities in Belarus, an investor planning to conduct business in Poland can expect, despite the presence of certain negative trends, that business will be conducted within a competitive legal framework.

Among the most significant negative aspects, in our opinion, are the insufficiently high level of innovation in the country and the negative trend regarding the perception of corruption.

It should be noted that in identifying the most significant negative aspects deserving of primary attention, we focused not only on the value of specific indicators but also on their dynamics, the significance coefficient of the factor within the group, and the significance of the group itself.

In order to enhance the country's level of innovation, which is reflected in the Global Innovation Index, several strategic steps need to be taken in Poland, in our opinion.

One such step should be to increase investment in research and development (R&D). One source of this increase could be the growth of government funding for science and technological development. According to data from The Global Economy, despite the upward trend, government budget expenditures on R&D remain low, not exceeding 1.5% of GDP [12], while in leading countries this figure is over 3%, and in some cases even over 5%.

Stimulating private investment through tax incentives and subsidies is also advisable. Additionally, support funds for startups and innovative enterprises could be established. Increasing investment levels will lead to a rise in the number of innovative projects, thereby improving the overall level of innovation in the country.

The development of universities and research centers also plays a crucial role. Universities should be supported in creating innovative research programs and encouraged to collaborate with industry. This can include increasing funding for international scientific exchanges and internship programs. Consequently, young scientists and specialists will be able to adopt best practices, positively impacting the country's innovative activities.

Moreover, improving intellectual infrastructure, including the development of patent systems and the protection of intellectual property, will create more favorable conditions for innovative activities.

In our view, all these measures combined will allow the country to increase its level of innovation and, consequently, improve its standing in the Global Innovation Index.

In the course of our research, we identified a consistent trend of deterioration in the Corruption Perceptions Index throughout the analyzed period. A longer-term examination of this indicator showed that the country currently has the worst Corruption Perceptions Index value in its history since observations began in 2012 [13].

The Global Corruption Barometer study, published by Transparency International in 2021, indicated that almost three quarters of Poles (72%) say that corruption is a big problem in the country. Some 37% think that the level of corruption increased in the 12 months before the study. According to two thirds of respondents from Poland, the government is not dealing well with corruption. The respondents identified the government administration (34%), the office of the prime minister (32%), and the parliament (31%) as the most corrupt public institutions [14].

It is evident that the Government Programme for Counteracting Corruption for the years 2018-2020 did not work effectively.

Regarding the causes of the current situation, the authors' opinion aligns with that of Transparency International experts. For a long time, the ruling party has consistently promoted reforms that weakened the independence of the judiciary, leading to the erosion of the rule of law and democratic oversight, consequently creating conditions conducive to corruption.

The reforms carried out by PiS also led to a deterioration in the country's position in international rankings, both in terms of civil and criminal justice. Additionally, there was a significant decline in the indicators of improper government influence in both branches of law.

In our view, under the current circumstances, one of the main components of reducing the level of corruption is the reform of the judicial and legal systems towards reducing state influence and further separation of powers, in accordance with the fundamental principles of the EU.

In 2023, a coalition of opposition parties won the majority of votes in the Polish parliament, leading to a change of the prime minister. At this stage,

it is still difficult to assess the effectiveness of the new government; however, the change suggests a potential shift in the development trajectory.

Another step aimed at improving the situation should be increasing the transparency and accountability of government bodies. This can be achieved by implementing electronic management and document flow systems, which minimize the human factor and reduce opportunities for corruption. Publishing reports on the activities of government bodies and the use of budgetary funds will increase public trust in the authorities and improve the perception of the country by the international community.

Additionally, educational and public initiatives to raise awareness about corruption and its consequences will help create public pressure on the authorities and reduce the level of tolerance for corruption.

6.3. ASSESSMENT OF THE AUTHOR'S METHODOLOGY ACCORDING TO THE APPLICABILITY MATRIX

The methodology we developed covers all seven groups of factors to varying degrees. The greatest attention is given to those groups that received higher significance coefficients. Although the level of information coverage is lower than that of the World Bank Group methodologies, it can be characterized as above average.

All the data on indicators included in the assessment are publicly available and are published by reputable organizations, which indicates the ease of access to the data necessary for analysis.

The analysis primarily utilizes statistical characteristics of various components of the investment climate. Only the geographical location requires direct expert evaluation. However, since many determinants are international indices that are comprehensive indicators already incorporating both expert assessments and direct interaction with stakeholders, the breadth of the approaches used can also be characterized as above average.

In our opinion, the calculation algorithm is fairly simple and is based on basic mathematical operations and primarily linear analysis of indicator changes over time.

The above characteristics allow us to provide the following evaluation of the author's methodology – Tables 6.1 and 6.2.

Table 6.1 – Characteristics of author's investment climate assessment methodology

Methodology	Information coverage	Availability of information	Variety of the approaches in use	Ease of use
Author's Methodology	3	4	3	3

Table 6.2 – Data for the compilation of Applicability Matrix

Methodology	Informational component	Operational component
Author's Methodology	3.5	3

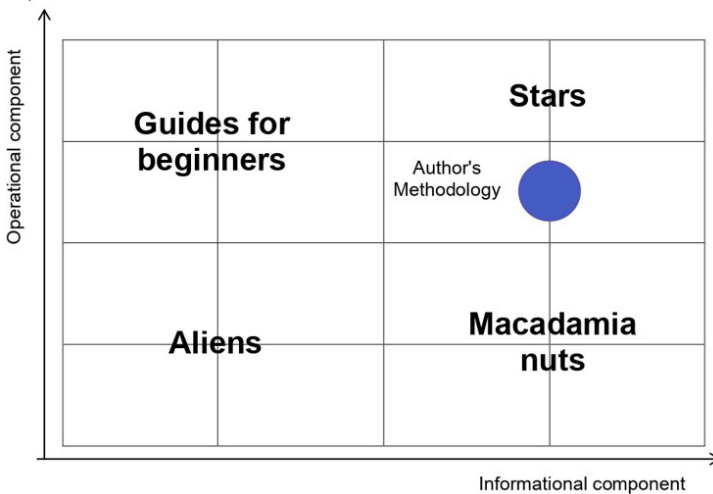


Figure 6.1 Applicability matrix Author's Methodology for assessing the investment climate of countries

As can be seen, the methodology we proposed falls into the “Stars” category and is characterized by a fairly high level of information coverage and relative ease of use. Thus, the goal set at the initial stage of the methodology development can be considered achieved.

In addition to the informational and operational components, an advantage of the methodology we developed is that it considers not only the current values of the indicators but also the trends and directions of their changes over time. This comprehensive approach enables the identification of both potential risks and advantages, providing a dynamic perspective on the investment climate.

By incorporating trend analysis, our methodology can offer insights into emerging patterns that static assessments might overlook.

This forward-looking capability makes the methodology particularly effective in assessing the investment climate of transitional and post-crisis economies, where conditions can change rapidly and unpredictably. Traditional methodologies often fail to capture these nuances, focusing solely on current data without accounting for the momentum and direction of change. In contrast, our approach allows stakeholders to anticipate future developments and make more informed decisions.

Overall, the integration of trend and direction analysis enhances the robustness and predictive power of the assessment, ensuring that it remains relevant and useful even in volatile economic environments. This positions our methodology as a superior tool for evaluating investment climates, providing a strategic advantage to investors and policymakers alike.

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CONCLUSION

Previous research on the assessment of the investment climate focuses on highlighting their advantages and disadvantages and on developing various classifications (A.Blank, V.Sovelenko, B.Morgan, N.Williams, J.Misala, K.Starzyk, M.Weresa and others). Hence, the motive for the research undertaken was to develop a more universal and easy-to-use methodology for assessing the investment climate, taking into account the opinion of potential investors and the specificity of economies in the transition period.

The research included an analysis of the main determinants influencing the investment environment based on the analysis of investment climate assessment methods and a stakeholder survey. Various approaches to assessing individual determinants of the investment climate of countries in transition were analyzed and combined into an integrated assessment methodology. Subsequently, various methodologies were tested, possible inconsistencies were identified and eliminated, and then an appropriate methodology for assessing the investment climate was developed using the example of Belarus. As a result, the most problematic areas of the country's investment environment were identified and a system of recommendations was developed aimed at improving the investment climate in Belarus and restoring bilateral Polish-Belarusian relations. The research undertaken is innovative and original. The innovativeness of the research consists in taking into account the opinions of potential investors regarding the assessment of the investment climate, taking into account the speed and direction of economic changes in the methodology, and accumulating best practices in order to achieve the synergy effect. The originality lies in empirical research that diagnoses both the opinions of experts and the needs of capital owners when choosing an investment object.

CONCLUSION

The proposed methodology for assessing the investment climate can be used by capital owners to justify investment decisions in transitional economies. The recommendations may be useful to the official bodies of Belarus as the main directions for the development of investment infrastructure in order to stimulate investment activity and restore bilateral Polish-Belarusian relations.

ANNEX A

Table A1 – Summary table of strengths and shortcomings of investment climate assessment methodologies

Methodology	Strengths	Shortcomings
Universal (general) methodologies		
Harvard Business School	Universality; Relative simplicity of the approach; Availability of information necessary for analysis; Provides a basic understanding of the situation; International recognition;	Narrowness of approach; Low level of information coverage; Subjectivity of the results; Assessment of existing risks, without due consideration of the potential of the territory;
Euromoney	Universality; Wider information coverage than HBS; A quantitative indicator was added to the expert assessments; Ranking of indicators by significance for the final result; International recognition;	Narrowness of approach; Low level of information coverage; Subjectivity of the results; Assessment of existing risks, without due consideration of the potential of the territory;
	Variability of the set of the analyzed indicators	
Forbes	Ranking of indicators by significance for the final result; Small business development evaluation; Increase in the list of analyzed infrastructure indicators; Possibility of comparative evaluation; International recognition;	Narrowness of approach; Subjectivity of the results; Opacity of the assessment; Labor-consuming nature; Low level of information coverage; Narrow focus of the assessment;

Index BERI	<p>Universality; Ranking of indicators by significance for the final result; Possibility of comparative evaluation; Relative simplicity of the analysis algorithm; International recognition.</p>	<p>Narrowness of approach; Low level of information coverage; Lack of a unified approach to the interpretation of basic indicators and evaluation criteria; Difficulty in obtaining certain data necessary for qualitative analysis; Subjectivity of the results;</p>
VCPEI	<p>Information coverage is wider than that of other universal methodologies; Recognition of the methodology by Forbes magazine experts;</p>	<p>Narrowness of approach; Low level of information coverage; Complexity of the analysis algorithm; Subjectivity of the results; The need to obtain narrow-profile information;</p>
	Variability of the set of the analyzed indicators	
	Specialization	
Specialized methodologies		
Bank of Austria	<p>Certain balance in the approach; Ranking of indicators by significance for the final result; High level of information coverage; International recognition;</p>	<p>Subjectivity of the results; Complexity of the analysis algorithm; The need to attract specialists from different fields; Duplication and interweaving of indicators; Difficulty in obtaining certain data necessary for qualitative analysis;</p>
	Specialization	
RAEX-Analytics	<p>Certain balance in the approach; Taking into account both the risks and the potential of the host country; High level of information coverage; International recognition;</p>	<p>Complexity of the analysis algorithm; Does not imply the possibility of assessing a single country or region; Little attention is paid to political risks; Lack of transparency in approaches to assessing indicators; Unobvious separation of factors; A certain amount of subjectivity remains; Difficulty in obtaining certain data necessary for qualitative analysis;</p>
	Variability of the set of the analyzed indicators	
	Specialization	

RSPP and KPMG	Certain balance in the approach; Broad scope of analysis areas, despite a small number of factors;	Opacity; Complexity of the analysis algorithm; Low level of information coverage; Subjectivity of the results; Difficulty in obtaining certain data necessary for qualitative analysis;
	Specialization	
The National Rating Agency (NRA) Methodology	Information coverage is above average; Certain balance in the approach; Confirmed accuracy;	Complexity of the analysis algorithm; Subjectivity of the results; Low share of statistical indicators; Difficulty in obtaining certain data necessary for qualitative analysis;
	Specialization	
The Agency for Strategic Initiatives	Certain balance in the approach; Hierarchy of evaluation; Accumulation of additional data;	Complexity of the analysis algorithm; Low level of information coverage is below; Subjectivity of the results; Difficulty in obtaining certain data necessary for qualitative analysis;
	Variability of the set of the analyzed indicators	
	Specialization	

ANNEX B

Questions for a survey:

I. General question:

1. How many employees are employed in Your Company (firm)?
 - a. 1-9
 - b. 10-49
 - c. 50-249
 - d. Over 250
2. The country of origin of the company's capital?

.....

II. Questions related to the experience of foreign investment:

- 3. Does Your company have branches (productions) abroad (experience of direct foreign investment)?
 - a. Yes
 - b. No
- 4. If so, in which countries?
.....

III. Questions about the expediency of involving specialized organizations to obtain information:

- 5. Do you consider it appropriate to use the services of specialized rating agencies to obtain information about the country of investment?
 - a. Yes
 - b. No
- 6. If so, for what reason (you can select more than one option or specify your own)?
 - a. The possibility of obtaining a high-quality expert assessment at a relatively low cost
 - b. This gives a broader assessment of risks and prospects
 - c. Specialized agencies have access to hard-to-get information
 - d. Other.....
- 7. If not, what is the reason (you can select more than one option or specify your own)?
 - a. High cost of obtaining such data
 - b. Incomplete information
 - c. Our company prefers its own analysis
 - d. Other.....
- 8. Has your company ever used the services of specialized agencies or outside experts to assess the investment attractiveness of the country (region) proposed for investment?
 - a. Yes
 - b. No
- 9. If yes, then rate your experience of cooperation with such agencies from 0 to 10 points, where 0 is extremely negative, 10 is exclusively positive.
.....
- 10. In case your company intends to make foreign direct investment, does it consider hiring specialized rating agencies or external experts to obtain the necessary information about the host country (region)?
 - a. Yes
 - b. No

IV. Questions about factors:

In case your company intends to make foreign direct investment, which of the factors from each of the following groups will be decisive for you (you can choose several or all options, as well as specify your own):

11. Financial and Economic
 - a. GDP/GNP (including per capita)
 - b. Level of taxation and non-tax payments
 - c. The state of the labor market
 - d. Inflation rate
 - e. Availability of loans (short, medium and long-term)
 - f. Other.....
12. Political
 - a. Political stability
 - b. Level of corruption
 - c. Government intervention in the economy
 - d. Availability, reliability and transparency of information
 - e. Benevolence of government policy towards business
 - f. Other.....
13. Legal
 - a. Discriminatory measures and control of foreign capital in relation to national capital
 - b. Repatriation of capital (threat of nationalization)
 - c. Protection of property rights (and other ownership rights)
 - d. Effectiveness of the legal environment
 - e. Independence of the judiciary
 - f. Other.....
14. Socio-demographic
 - a. Unemployment rate
 - b. The level of education of the population and the quality of human capital
 - c. Availability and composition of the labor force at working age
 - d. Crime rate
 - e. Development of social infrastructure (service, education, medicine, etc.)
 - f. Other.....
15. Infrastructure
 - a. General development of physical infrastructure
 - b. Development of transport infrastructure (auto, railway, air, etc.)
 - c. Communication infrastructure development
 - d. Simplicity and cost of connection to the power grid

- e. Development of investment infrastructure (FEZ, Technoparks, etc.)
- f. Other.....
- 16. Technological
 - a. Level of innovation development
 - b. Incidence of cellular communications and the Internet
 - c. R&D Costs
 - d. Corporate R&D
 - e. Number of patent applications (innovation activity)
 - f. Other.....
- 17. Natural and geographical
 - a. Geographical location
 - b. Level of raw material independence
 - c. The level of environmental pollution (water, air, soil, etc.)
 - d. Balance of various minerals and other natural resources
 - e. Climate characteristics
 - f. Other.....
- 18. Any other indicators that you consider important in assessing the investment climate of the host country.....
.....

V. Questions about rating methodologies:

- 19. Do you know that there are different methods for assessing the investment climate (attractiveness) of countries (regions)?
 - a. Yes
 - b. No
- 20. Have you heard about any of the following approaches for assessing the investment climate (attractiveness)?
 - a. Harvard Business School methodology
 - b. "Euromoney" magazine methodology
 - c. BERI Index
 - d. Forbes magazine methodology
 - e. The Venture Capital and Private Equity Country Attractiveness Index
 - f. Business Enabling Environment (BEE) by the World Bank Group
 - g. International Finance Corporation (World Bank Group)
 - h. Methodology of the Bank of Austria ("Regional Risk Rating in Russia")
 - i. Methodology of the company "RAEX-Analytics"
 - j. Methodology of RSPP and KPMG

-
21. Has your company used any methodologies of assessing investment attractiveness when planning investment activities?
- Yes
 - No
22. If yes, what methodologies did your company use?
.....
23. When choosing a methodology (approach) for analyzing the investment attractiveness (climate) of the host country, if it is necessary to independently conduct such an analysis, which criteria will be most significant for you (rate from 0 to 10 points):
- Information coverage (to what extent the questions you are interested in are disclosed).....
 - Simplicity (complexity) of the analysis algorithm.....
 - Availability of information necessary for analysis.....
 - The variety in the analysis methods in use (statistical comparisons, expert assessments, surveys, etc.).....
 - International recognition of the methodology.....
 - Proof of the effectiveness of the methodology.....
24. In your opinion, is possible to conduct a full-fledged assessment of the investment climate of the country (region) based solely on the opinions of experts?
- Yes
 - No
25. From your perspective, what analysis tools should a qualitative methodology for assessing the investment climate rely on? (you can choose several or all options, as well as specify your own):
- Expert assessments
 - Statistical analysis of the dynamics of quantitative indicators
 - Specialized stakeholder questionnaires
 - Other.....

ANNEX C

Table C1 – List of Indicators for Screening Assessment

No	Indicator	Source of information
1	GDP	The World Bank
2	GDP per capita	The World Bank
3	Tax Rate	Trading Economics The Tax Foundation
4	Investment freedom index	TheGlobalEconomy.com
5	FDI Regulatory Restrictiveness Index	OECD
6	International Property Rights Index Property rights index	Property Rights Alliance TheGlobalEconomy.com
7	Political stability index	TheGlobalEconomy.com
8	Corruption Perceptions Index	Transparency International
9	Unemployment Rate	The World Bank TheGlobalEconomy.com

Table C2 – List of Indicators for Detailed Assessment

No	Indicator	A source of information
Economic and financial determinants		
1	GDP	The World Bank
2	GDP per capita	The World Bank
3	Tax Rate	The Tax Foundation
4	Inflation	The World Bank
5	Business freedom index	TheGlobalEconomy
6	Financial freedom index	TheGlobalEconomy
7	Unemployment Rate	The World Bank
8	Human Development Index	TheGlobalEconomy Human Development Index
9	Labor freedom index	TheGlobalEconomy
Legal determinants		
10	Investment freedom index	TheGlobalEconomy
11	Fundamental Rights	World Justice Project
12	International Property Rights Index Property rights index	Property Rights Alliance TheGlobalEconomy
13	Independence of the judicial system – Civil Justice	World Justice Project
14	Independence of the judicial system – Criminal Justice	World Justice Project

Political determinants		
15	Political stability index	TheGlobalEconomy
16	State legitimacy index	TheGlobalEconomy
17	Corruption Perceptions Index	Transparency International TheGlobalEconomy
18	Availability and reliability of information (Open Government)	World Justice Project
19	Regulatory quality index	TheGlobalEconomy
Socio-demographic determinants		
20	Public services index	TheGlobalEconomy
21	Health Care Index	NUMBEO
22	Crime Index	NUMBEO
23	Level of social tension (Group grievance index)	TheGlobalEconomy
Infrastructure determinants		
24	Logistics performance index	The World Bank
25	Mobile phone subscribers, per 100 people	TheGlobalEconomy
26	Internet subscribers, per 100 people	TheGlobalEconomy
27	Access to electricity, percent of the population	The World Bank TheGlobalEconomy
Technological determinants		
28	Global Innovation Index	The Global Innovation Index (GII)
Geographic, Climate and Resource factors		
29	Geographical location of the country	Expert or direct assessment by the investor based on the specifics of the anticipated investments.
30	Pollution Index by Country	NUMBEO

The aim of the undertaken research was to develop a more universal and easy-to-use methodology for assessing the investment climate, taking into account the opinion of potential investors and the specificity of economies in the transition period; based on it, developing practical recommendations aimed at improving the investment climate in Belarus and restoring bilateral Polish-Belarusian cooperation.

The monograph employed a research method based on literature investigations in the field of international economics, as well as statistical analysis and statistical inference. The research findings reveal the primary economic and non-economic aspects of a country's investment climate. They also show a rising trend in Belarus and Poland's investment attractiveness, implying that these countries may become particularly appealing to potential investors in the near future. However, keep in mind that investment decisions are made not only based on an assessment of the country's investment climate, but also on the risk associated with these investments.

From introduction



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