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Assessment of investment attractiveness of foreign markets in selected Central and Eastern European countries using the multi-criteria Three-Field Plot method

Abstract

Research background and purpose: In contemporary conditions, driven by increasing business internationalization and the globalization of the world economy, managers at various organizational levels are required to conduct comprehensive analyses of the relationships among different groups of factors influencing the investment attractiveness of individual countries. The purpose of this article is to propose an analytical tool in the form of the multi-criteria Three-Field Plot method to support the selection of foreign markets as potential locations for foreign direct investment.

Design / Methodology / Approach: The study applies the Three-Field Plot method to visualize and analyze complex interrelationships among multiple criteria affecting investment attractiveness. The empirical analysis focuses on selected Central and Eastern European countries.

Findings: The application of the Three-Field Plot enables the identification of key determinants and their interdependencies that shape the investment attractiveness of foreign markets, providing a clearer and more structured basis for comparative assessment.

Value added and limitations: The proposed approach adds value by offering an intuitive and integrated visual tool for strategic investment analysis that enhances managerial decision-making. A potential limitation is that the method depends on the selection and availability of relevant indicators, which may influence the results.

Keywords: *multi-criteria three-field plot method, foreign expansion of enterprises, foreign direct investment (FDI)*

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Classification: F2, F21, F6, F5, O52

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1. Introduction

The aim of this article is to propose an analytical tool in the form of the multi-criteria Three-Field Plot method, which enables the visual identification of key factors relevant to the selection of markets as potential locations for foreign direct investment. The application of this method significantly enhances strategic analysis by providing a clear visualization of complex interconnections and mutual relationships among the analyzed criteria. The analysis presented in this article focuses on Central and Eastern European countries, which, due to their institutional characteristics and pace of economic development, constitute an important area of interest for foreign investors.

Thus, the objective of this article is to propose an analytical tool in the form of the Three-Field Plot method that can support decision-making processes regarding potential directions of international activity and the degree of engagement in foreign markets. The proposed method constitutes an integrated analytical approach and provides a comprehensive tool for assessing the potential of international markets.

In this article, using the proposed method, key criteria influencing the expansion decisions of Polish enterprises in Central and Eastern European countries were identified. The proposed method enhances the quality of strategic analyses by providing a clear visualization of complex interdependencies and relationships among the analyzed criteria.

2. Literature review

The foreign expansion of contemporary enterprises should essentially be considered on two levels. The first relates to the approach proposed by Johanson and Vahlne (2017a), referred to in the literature as the Uppsala model. According to this model, firms typically expand first into geographically or psychically close markets in order to minimize operational risk, and subsequently move to more distant markets (Carneiro et al., 2008). The same principle applies to the gradual entry into foreign markets. This gradualism primarily results from limited knowledge of conditions in the new market, reluctance to take risks, and a high degree of uncertainty (Rogaczewski, 2025). This model assumes a gradual pattern of foreign expansion structured into four stages: sporadic exporting, export activities conducted through independent intermediaries, the establishment of sales subsidiaries, and the establishment of production units (most often manufacturing plants) (Johanson & Wiedersheim-Paul, 1975; Górska-Grginovic, 2013). According to Wach (2021), the first stage is characterized by the firm's lack of commitment of its resources (capital and know-how) to export activities, which results in a lack of experience and market knowledge. In the second stage, firms acquire such knowledge by engaging more frequently in export activities. The subsequent stage

involves a controlled flow of information, which means that firms derive numerous benefits from the foreign market that influence the further internationalization process. The final stage concerns a broader commitment of resources to international operations. As emphasized by Vahlne and Johanson (2017b), the Uppsala model is a process operating at the level of the individual firm, that is, at the micro level. The second approach proposed by Dunning refers to the eclectic paradigm. Through his theory, Dunning (1994) sought to extend the single-cause explanation of particular forms of internationalization. To this end, he combines monopoly advantage theory, internalization theory, and location theories. According to Dunning and Lundan (2008), a firm will undertake foreign direct investment only when three conditions are simultaneously satisfied, namely ownership, internalization, and location advantages. Otherwise, internationalization will be carried out solely through exports and licensing. In summary, ownership advantages constitute a necessary condition for internationalizing activities. When a firm possesses only ownership advantages, it will choose contractual forms of resource transfer among the broad spectrum of market entry modes. If the firm also has internalization advantages, exporting becomes feasible. Furthermore, if location advantages exist abroad, foreign direct investment is undertaken.

It is worth emphasizing that process models (e.g. the Uppsala model) as well as Dunning's eclectic theory indicate the gradual and sequential nature of firms' international activities over a longer time horizon. Internationalization theories address contemporary challenges; however, reliance on only one of them is insufficient. They should be considered in a comprehensive manner. The development of internationalization theories reflects the increasingly complex reality of firms operating on a global scale. Traditional models of international trade based on cost differentials or factor endowments are no longer sufficient to explain phenomena such as foreign direct investment (FDI), technology transfer, or the simultaneous presence of firms in multiple markets. Internationalization theories should therefore be viewed as complementary rather than competing. They thus create a multidimensional picture of internationalization processes. It can therefore be argued that contemporary internationalization increasingly relies on intangible resources such as knowledge, brand, and data, which broadens the classical understanding of monopoly advantages. In the author's view, contemporary phenomena such as digital transformation, the growing importance of artificial intelligence, big data, and e-commerce require a reinterpretation of classical models in relation to modern management methods, tools, and market strategies. In the context of internationalization models, the need for their mutual integration should be emphasized. Gradual entry into foreign markets is no longer a standardized or uniform process.

Contemporary firms, especially in high-tech sectors, often bypass the traditional stages of the Uppsala model and enter global markets immediately as "born globals," making use of digital channels, B2B platforms, and research collaboration.

Nevertheless, the gradual increase in commitment (e.g. testing solutions in one country before scaling globally) is still present, particularly in manufacturing firms or those with limited resources. It can therefore be stated that the type and scope of foreign activity determine the choice of a specific internationalization model. Analyzing firms' internationalization through the lens of classical theories allows for a deeper understanding of the motives, processes, and conditions that shape foreign expansion. Contemporary business practice combined with classical theories shows that although many conditions have changed (e.g. globalization, digitalization, shorter product life cycles), the theoretical foundations remain valid as interpretative tools. Firms internationalize in a complex manner, guided simultaneously by cost, resource-based, strategic, and institutional advantages, which reinforces the relevance of a multidimensional approach such as Dunning's eclectic paradigm. The investment attractiveness of contemporary markets is a complex concept encompassing numerous factors that are relevant not only for planned investments but also for a wide range of economic activities. Ultimately, it is the investor who makes the binding decision regarding a market's attractiveness by considering multiple criteria. The investment attractiveness of a given country is primarily determined by institutional and legal factors (legal stability, investor protection, and the tax system), political factors (political stability, regulatory risk, and security), infrastructural factors (transport, logistics, and digitalization), social and demographic factors (labor force qualifications, education, and demographic structure), as well as economic factors (GDP, economic growth, labor costs, inflation, and market size). According to Miśkiewicz (2018), economic factors also include the degree of economic liberalization, the level of fiscal burden, the existence of socio-economic balance, and the relationships between the state, enterprises, and trade unions. In turn, Nowicki (2013) defines investment attractiveness as the ability of a given geographical area to attract investors. The level of investment attractiveness is shaped by, and should be understood as, the coexistence and mutual interaction of multiple factors. By comparison, Godlewska-Majkowska (2012) views investment attractiveness as a phenomenon of key importance for regional and local development. According to her, an area should be regarded as attractive when it is characterized by location-specific advantages that are important to a given investor and thus attracts investments that generate a development effect through the creation of an economic base and an increase in the socio-economic potential of the region. According to Jantón-Drozdowska and Majewska (2016), among others, investment attractiveness is perceived as a set of advantages and constraints of a given investment location. In this perspective, investment attractiveness is the result of the combined impact of multiple heterogeneous determinants that together shape the environmental conditions influencing firms' operations in a given area. Its assessment constitutes a key element in the process of selecting a location for foreign

investments. International investors, when making capital allocation decisions, first analyse the level of investment attractiveness and the risk specific to a given region, and then assess the potential and conditions of the local market.

Location attractiveness closely corresponds to one of the pillars of the OLI eclectic paradigm, referred to in the literature as the L component. According to Dunning (1998), countries' location advantages constitute one of the most important aspects of firms' foreign production. Dunning emphasizes that the factors explaining the level of investment attractiveness are not universal but vary depending on the motives for undertaking foreign direct investment, the industry structure of the investment, as well as the home and host countries of the investor. This view is also supported by Buckley et al. (2015), who argue that the choice of investment location is strongly linked to the firm's internationalization strategy and the degree of integration of activities within its international corporate structure.

The investment attractiveness of individual countries can be assessed using various indices and indicators that allow for the evaluation of a potential host country. They primarily enable the analysis of the conditions for doing business and make it possible to assess the level of competitiveness and attractiveness of individual states. Examples of such indices include the Doing Business index and the Global Competitiveness Index. It is worth noting that these tools, as confirmed by numerous studies in the literature, may be affected by certain methodological limitations. Authors emphasize (Di Fatta et al., 2017; Lall, 2001) that a high level of data aggregation may lead to an oversimplified representation of economic reality and limit the ability to identify the interrelationships between individual determinants of countries' investment attractiveness. According to Aiginger and Vogel (2015), the universal nature of composite indicators and the subjective selection of weights do not necessarily account for regional specificity or reflect the diverse investment motives of firms. In response to these shortcomings, numerous attempts have been made to modify existing indices and indicators in order to adapt them to contemporary conditions. One such example is the New Global Competitiveness Index (New GCI) (Porter et al., 2008), which nevertheless still does not allow for an in-depth, multi-criteria, and relational analysis of investment attractiveness conditions comparable to that provided by the Three-Field Plot. Given the limitations of traditional indices and rankings and the need for a multi-criteria analysis of the relationships among determinants of investment attractiveness, it is justified to apply an approach that enables the simultaneous examination of their structure and the intensity of their interconnections. The Three-Field Plot method meets these requirements by offering an integrated and visual analysis of the relationships among the distinguished analytical fields.

Based on the foregoing considerations, it is justified to focus further analysis on a specific geographical region characterized by particular development conditions and a differentiated level of investment attractiveness, namely the countries of Central and

Eastern Europe. These countries constitute an important research area in the context of foreign direct investment, primarily due to their shared transformational experience as well as the pronounced differences in their levels of economic development. Central and Eastern European countries attract foreign investors mainly because of access to the EU single market, competitive factor costs, and a significant improvement in the institutional environment. Recent research also emphasizes the growing importance of digital transformation, institutional quality, and global value chains in shaping investment attractiveness in emerging markets (UNCTAD, 2025; World Bank, 2021). At the same time, contemporary studies confirm that investment attractiveness is determined by a complex interaction of economic, institutional, and macroeconomic factors (Ngo & Pham, 2025; Falisová & Glova, 2025).

Despite the extensive body of literature on investment attractiveness and foreign direct investment location decisions, existing analytical tools and composite indices do not sufficiently capture the complex interdependencies between different groups of determinants. Most approaches rely on aggregated indicators and predefined weighting schemes, which limit their ability to reflect the multidimensional and relational nature of investment decision-making. Therefore, there is a research gap in methods that enable the integrated, multi-criteria, and visual analysis of relationships among key determinants of investment attractiveness. This study addresses this gap by proposing the multi-criteria Three-Field Plot method as a tool supporting foreign market selection. Based on the identified research gap, the study is guided by the following research questions:

RQ1: What is the structure of relationships between key determinants of investment attractiveness identified using the Three-Field Plot method?

RQ2: Which analytical field plays a dominant role in shaping investment attractiveness in the analyzed countries?

To address these research questions, the Three-Field Plot method was applied, as described in the following section.

Previous empirical studies and comparative analyses indicate that the investment attractiveness of Central and Eastern European countries is characterized by a high degree of complexity and multidimensionality, and that its assessment requires consideration of the relationships among different groups of determining factors (Estrin & Uvalic, 2014; Buch et al., 2003; Campos & Kinoshita, 2008).

Despite the extensive literature on investment attractiveness and foreign direct investment location decisions, several methodological limitations remain. Recent studies indicate that commonly used composite indices and rankings tend to rely on aggregated indicators, which may simplify the complexity of investment environments and obscure the relationships between individual determinants (Ngo & Pham, 2025; UNCTAD, 2025).

Although multi-criteria decision-making methods such as AHP or TOPSIS are frequently applied, they are primarily designed to rank alternatives based on weighted criteria and do not explicitly account for the structure of relationships between variables (Zavadskas et al., 2016).

In this context, it seems that approaches enabling the simultaneous analysis of different groups of factors and their interdependencies are still relatively underdeveloped. This is particularly relevant given the growing importance of interaction effects between institutional, economic, and structural conditions (Falisová & Glova, 2025).

For this reason, the present study applies the Three-Field Plot method, which makes it possible to analyze relationships between countries, determinants, and investment-related outcomes in a more integrated way.

3. Methods

3.1. The Three-Field Plot as an analytical framework

The Three-Field Plot method was applied as the main analytical tool in order to capture relationships between three groups of elements: countries, determinants of investment attractiveness, and investment-related benefits.

In contrast to traditional approaches that typically lead to a single ranking or composite index, this method focuses on the structure and distribution of connections between variables. This perspective is particularly useful in the analysis of investment attractiveness, which is shaped by the interaction of multiple factors rather than by isolated indicators (World Bank, 2021; Ngo & Pham, 2025).

Today, the investment decision-making process requires managers at different organizational levels to conduct a systemic and comprehensive analysis of the complex interrelationships among multiple groups of factors that determine the investment attractiveness of countries and regions. Polish enterprises seeking to expand their investment activities beyond the domestic market face the urgent need to simultaneously consider the full set of political, economic, and institutional factors shaping the investment environment. Therefore, in order to properly assess the synergies among the determinants of countries' investment attractiveness and to enable Polish firms to make well-informed choices regarding their directions of business activity, the Three-Field Plot method was applied. It allows for the visualization of relationships and flows among three sets of analytical categories. In this perspective, the Three-Field Plot constitutes an instrument for a comprehensive and visual analysis of complex, multidimensional relationships among three classes of objects and/or parameters. The research process was structured chronologically and divided into three main stages, including data identification and selection, construction of the analytical model, and identification of areas with the highest

synergy potential. The proposed method, applicable not only to the analysis of Polish enterprises, enables a graphical and systematic representation of both direct and indirect relationships among the key groups of factors shaping investment attractiveness. It also allows for a transparent comparison of alternative investment locations, the identification of dominant relationships and potential weaknesses, and a rational justification of decision choices based on the most important criteria relevant to a given investor. The research process was structured into three main stages: data identification and selection, construction of the analytical model, and interpretation of the resulting structure of relationships.

3.2. Data sources. Selection of countries and indicators

The empirical analysis is based on secondary data obtained from international databases such as the World Bank, Eurostat, and OECD, complemented by national statistical sources where necessary.

The study includes selected Central and Eastern European countries: Belarus, Ukraine, Russia, Romania, Slovakia, Bulgaria, Hungary, Lithuania, Czech Republic, Poland, Germany. Germany was included as a benchmark due to its strong and stable investment position in the region and its role as a reference point for comparative analysis. The selection of countries reflects both their economic relevance and their importance as potential directions of foreign expansion for Polish enterprises.

The indicators were selected based on their relevance in the literature on investment attractiveness and foreign direct investment location decisions. The selection was guided by theoretical frameworks and empirical studies addressing the determinants of foreign market attractiveness. The indicators were grouped into three analytical fields:

- political and institutional factors,
- economic factors,
- investment-related benefits.

This grouping reflects the multidimensional nature of investment attractiveness and enables a structured analysis of relationships between determinants. For example, indicators such as political stability, GDP growth, labor costs, and access to finance were included as representative variables.

The set of indicators included variables frequently identified in the literature as key determinants of investment attractiveness, such as political stability, regulatory quality, GDP growth, inflation rate, labor costs, access to finance, and market size (UNCTAD, 2025). Their selection was intended to ensure consistency with both theoretical frameworks and recent empirical studies.

3.3. Data normalization

In order to ensure comparability between variables expressed in different units, all indicators were normalized using the min-max transformation. For stimulants, the following formula was applied:

$$x' = (x - x_{\min}) / (x_{\max} - x_{\min})$$

For destimulants, such as inflation or indicators of risk, the transformation was reversed:

$$x' = (x_{\max} - x) / (x_{\max} - x_{\min})$$

As a result, all variables were expressed on a scale from 0 to 1, which allowed for their integration within a single analytical framework.

3.4. Construction of the Three-Field Plot

The Three-Field Plot was constructed by linking three analytical dimensions: countries, determinants, and investment benefits. The method enables the simultaneous visualization of relationships between these three groups of elements.

The connections presented in the diagram reflect the identified relationships between determinants and their potential effects in the context of specific countries. These relationships were established based on the analyzed data and their interpretation in light of the literature.

The resulting diagram provides a synthetic representation of the structure of interdependencies, allowing for the identification of dominant relationships, clusters of factors, and potential areas of synergy. The analysis is primarily qualitative and visual in nature, with emphasis placed on the structure and configuration of connections rather than on their precise quantitative measurement.

The construction of the Three-Field Plot required the adoption of explicit rules for establishing relationships between elements. A connection between a country and a given determinant was identified when the normalized value of the corresponding indicator exceeded the sample mean. Relationships between determinants and investment-related benefits were established based on both empirical co-occurrence and their relevance as indicated in the literature. This made it possible to reflect not only statistical relationships but also their economic interpretation. No explicit weighting scheme was applied. All indicators were treated equally in order to avoid introducing subjective bias and to maintain the transparency of the analysis. The interpretation of the resulting diagram was based on the number and distribution of connections, as well as on the concentration of links

within particular analytical fields.

4. Results

It can be observed that the analyzed countries (Table 1) differ not only in the number of relationships but also in their structure. Germany clearly stands out in terms of the density of connections, which confirms its role as a benchmark economy in the region. Among the Central and Eastern European countries, relatively strong linkages can be observed in the case of Poland and the Czech Republic, while countries such as Ukraine show a lower number of connections, which may reflect less favorable investment conditions.

Table 1. Summary of relationships identified using the Three-Field Plot method

Country	Number of connections	Dominant determinant group	Interpretation
Germany	High	Institutional/Economic	Benchmark country
Poland	Medium-High	Economic	Strong regional position
Czech Republic	Medium-High	Economic/Institutional	Relatively stable environment
Hungary	Medium	Economic	Moderate attractiveness
Ukraine	Low-Medium	Political	Higher investment risk

Source: own elaboration

This method enables the visualization of complex interconnections among the analyzed components. The use of traditional tools, such as analytical tables or factor analysis, becomes difficult to interpret and sometimes limited when dealing with extensive cross-dependency matrices between parameters. Moreover, it leads to the loss of the ability to simultaneously and synthetically compare the entire set of features, which differ both in their importance and in their values. The proposed three-level analytical framework enables a more transparent identification of countries characterized by significant investment advantages. It also allows for the detection of areas in which deficiencies in political stability and credibility can be observed.

The use of this method facilitates the creation of a so-called “opportunity map” for investors by indicating the most favorable configuration of factors. Moreover, it allows for the assessment of synergy effects, which occur when the combination of two or more factors produces an outcome that exceeds the sum of their individual

effects. The application of the Three-Field Plot visual modeling method makes these synergies among key determinants of investment attractiveness clearly visible. For example, if a country is characterized simultaneously by access to finance, political stability, and regulatory transparency, these relationships are reflected in the convergence of connections leading to specific groups of benefits. This undoubtedly provides managers with a clearer picture of the actual investment potential of the analyzed locations.

The proposed solution is characterized by high practical applicability, as it supports the selection process and the making of well-founded managerial decisions. Owing to its flexibility, the analysis can be adapted to specific decision-making priorities, for instance by rapidly modifying selected factors, identifying key benefits, or introducing weighting coefficients appropriate to different investment scenarios.

To conduct a comparative investment analysis of the Central and Eastern European countries and Germany, which serves as a benchmark for the region, the Three-Field Plot method was applied, and the results of the analysis are presented in Figure 1.

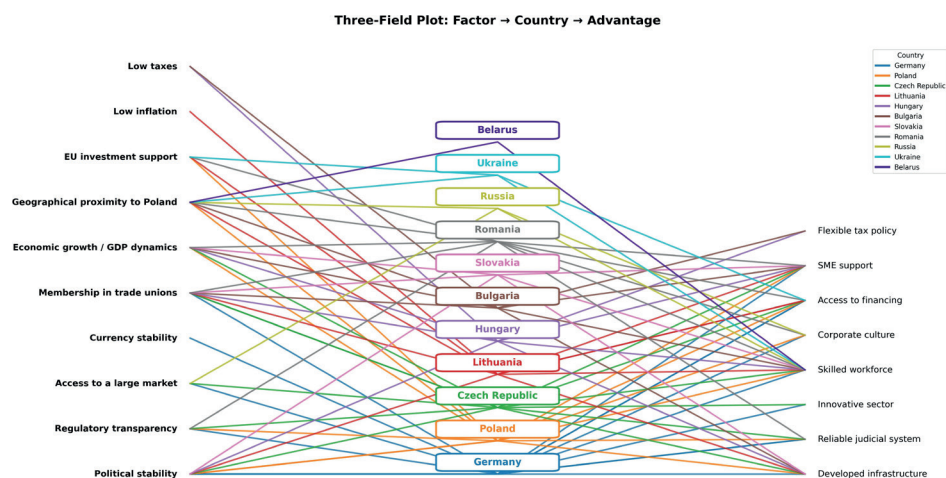


Figure 1. Three-Field Plot diagram

Source: own elaboration

The structure and intensity of relationships among the considered determinants of investment attractiveness differ significantly between the CEE countries and Germany. The inclusion of Germany in the comparison serves as a benchmark representing an economy with a well-established investment position in the region. The results indicate

an uneven distribution of relationships between analytical fields and suggest the presence of a dominant structure.

The practical application of the proposed visual modeling method lies in its ability to increase the effectiveness of managerial analyses and to support investment decision-making regarding capital allocation in specific countries. The tool enables the operational adjustment of the visualization framework to changing external conditions. This approach extends the visual analysis tools used in investment management practice and can be applied as an independent method for making well-grounded investment decisions.

5. Discussion

The analysis conducted using the Three-Field Plot method provides key insights into the main determinants influencing firms' foreign expansion. There is no doubt that the proposed approach, which includes the identification of European markets as potential locations for international activity and a set of criteria for assessing their attractiveness, constitutes significant support for managers in determining priorities for international expansion. The results are consistent with previous studies (e.g. Estrin & Uvalic, 2014; Campos & Kinoshita, 2008), which indicate the differentiated investment attractiveness of Central and Eastern European countries.

The obtained results are generally consistent with recent studies, which emphasize that the investment attractiveness of Central and Eastern European countries is shaped by a complex interaction of economic, institutional, and structural factors (Falisová & Glova, 2025; Ngo & Pham, 2025).

At the same time, the present analysis makes it possible to look at these relationships from a slightly different perspective, focusing not only on the level of attractiveness but also on the structure of connections between determinants.

The proposed tool could be complemented by the use of a so-called heat map, which would visually display the intensity of the analyzed variables through a color scale. Such a tool would be an excellent complement and would strengthen the justification for selecting foreign expansion directions. While the Three-Field Plot does not explicitly show the intensity of values and requires the selection of variables, this intensity would be clearly visible in a heat map.

The proposed approach has significant practical value for senior management, analysts, and strategists of Polish firms operating under time constraints and the need to quickly select alternative courses of action. Graphical clarity reduces the risk of subjective errors in managerial decision-making, greatly facilitates communication between different units of a firm, and enables a more substantiated discussion of strategic choices of investment opportunities in the most attractive markets. It should be emphasized that economic or institutional benefits often materialize only in combination with specific political

and legal conditions (for example, support instruments for SMEs can be effectively implemented only when a transparent judicial system exists in the host country). In this regard, the Three-Field Plot clearly reveals such indirect linkages among the analyzed factors.

The Three-Field Plot is not merely a visualization tool but a fully-fledged analytical method of visual modeling that supports managerial decision-making in investment location choices. For Polish entrepreneurs who seek not only capital allocation but also long-term strategic outcomes, the application of this methodology enables a new level of well-founded investment selection based on a systemic and comprehensive assessment of the synergies among political, economic, and institutional factors. The model also serves as a tool for risk assessment and for evaluating the validity of the analyzed investment locations. The applied tool makes it possible not only to identify synergy effects among the determinants of investment attractiveness but also to detect potential “bottlenecks.”

The Three-Field Plot offers an advantage over traditional composite indices by enabling the simultaneous visualization of relationships between determinants, rather than relying solely on aggregated scores. The value of the proposed approach lies in the possibility of analyzing investment attractiveness in a more relational way. By focusing on connections between determinants, the method complements traditional approaches based on aggregated indicators and allows for a better understanding of how different factors jointly influence investment decisions.

This study has several limitations. First, the results depend on the selection of indicators, which may introduce a degree of subjectivity. Second, the analysis is based on static data and does not capture dynamic changes over time. Third, the Three-Field Plot method focuses on visual relationships, which may require complementary quantitative analysis. Future research could extend the analysis to other regions, incorporate dynamic datasets, and compare the Three-Field Plot method with other multi-criteria decision-making tools.

Despite these limitations, the proposed method provides a valuable contribution to the analysis of investment attractiveness.

6. Conclusions

An unquestionable advantage of using the Three-Field Plot as a multi-factor visual modeling approach is that it integrates three key dimensions simultaneously. This makes it possible to account for the critically important elements of an effective investment process in a comprehensive and systemic manner. This issue is of crucial importance for potential investors, as the selection of investment directions is often based on the simultaneous assessment of several groups of parameters - ranging from socio-economic

and political stability to the evaluation of legal regulations and the actual benefits of investment activity.

The proposed tool supports the decision-making process in selecting foreign markets, thereby reducing the risk associated with allocating capital abroad. This visual analytical tool constitutes a complementary addition to other methods used to assess investment potential in foreign markets. Contemporary investment decision-making requires managers at different levels of management to conduct a systemic and comprehensive analysis of the complex interrelationships among various groups of factors that determine the investment attractiveness of a given country or region.

Polish enterprises seeking to expand their investment activities beyond the domestic market face the need to simultaneously consider a full set of political, economic, and institutional factors shaping the investment environment. In the author's opinion, it is worth considering the use of alternative or complementary tools that facilitate decision-making in the selection of investment markets, such as the Butterfly Chart, heat maps, or dendrograms. The application of these tools can increase the accuracy and reliability of investment decisions.

In this sense, the study responds to the need for more integrated approaches to the analysis of investment attractiveness, as highlighted in recent literature, by demonstrating that the Three-Field Plot method can be used to capture relationships between determinants that are not directly visible in traditional ranking-based analyses.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the author used ChatGPT/DeepL to assist with grammar and clarity checks. After using this tool, the author reviewed and edited the content as necessary and takes full responsibility for the content of the publication.

References

- Aiginger, K., & Vogel, J. (2015). Competitiveness: from a misleading concept to a strategy supporting Beyond GDP goals. *Competitiveness Review*, 25(5), 497-523. <https://doi.org/10.1108/CR-06-2015-0052>
- Bevan, A. A., & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*, 32(4), 775-787. <https://doi.org/10.1016/j.jce.2004.08.006>
- Buch, C. M., Kokta, R. M., & Piazzolo, D. (2003). Foreign direct investment in Europe: Is there redirection from the South to the East?. *Journal of Comparative Economics*, 31(1), 94-109. [https://doi.org/10.1016/S0147-5967\(02\)00013-6](https://doi.org/10.1016/S0147-5967(02)00013-6)

- Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. (2015). The determinants of Chinese outward foreign direct investment. In P. J. Buckley & P. N. Ghauri (Eds.), *International business strategy: Theory and practice* (pp. 574–600). Routledge.
- Campos, N. F., & Kinoshita, Y. (2008). *Foreign direct investment and structural reforms: Evidence from Eastern Europe and Latin America* (IMF Working Paper No. 2008/026). International Monetary Fund. <https://doi.org/10.5089/9781451868883.001>
- Carneiro, J., Rocha, A. D., & Silva, J. F. D. (2008). Challenging the Uppsala internationalization model: a contingent approach to the internationalization of services. *BAR-Brazilian Administration Review*, 5, 85-103. <https://doi.org/10.1590/S1807-76922008000200002>
- Danciu, V. (2012). Models for the internationalization of the business: A diversity based approach. *Management & Marketing*, 7(1).
- Di Fatta, D., Musotto, R., & Vesperi, W. (2017). Government performance, ethics and corruption in the Global Competitiveness Index. In *Governing business systems: theories and challenges for systems thinking in practice* (pp. 141-151). Springer International Publishing. https://doi.org/10.1007/978-3-319-66036-3_8
- Dunning, J. H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review*, 9(2), 163-190.
- Dunning, J. H., & Lundan, S. M. (2008). *Multinational enterprises and the global economy*. Edward Elgar Publishing.
- Estrin, S., & Uvalic, M. (2014). FDI into transition economies: are the Balkans different?. *Economics of Transition*, 22(2), 281-312. <https://doi.org/10.1111/ecot.12040>
- Falisová, D., & Glova, J. (2025). Determinants of Foreign Direct Investment: Insights from selected EU countries. *Journal of Entrepreneurship & Sustainability Issues*, 12(3). <http://doi.org/10.9770/w2945934328>
- Godlewska-Majkowska, H. (2012). *Metodyka parametryzacji atrakcyjności inwestycyjnej regionów* [A Methodology for the Parametric Assessment of Regional Investment Attractiveness]. SGH.
- Górska, M. (2013). Does the Uppsala internationalization model explain the internationalization process of professional business service firms? *CBU International Conference Proceedings*, 1, 1–8. <https://doi.org/10.12955/cbup.v1.8>
- Jantoń-Drozdowska, E., & Majewska, M. (2016). Investment attractiveness of Central and Eastern European countries in the light of new locational advantages development. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 11(1), 97-119. <http://doi.org/10.12775/EQUIL.2016.005>
- Johanson, J., & Vahlne, J.E. (2017). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. In *International business* (pp. 145–154). Routledge.
- Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm: Four Swedish cases. *Journal of Management Studies*, 12(3), 305-322. <https://doi.org/10.1111/j.1467-6486.1975.tb00514.x>
- Lall, S. (2001). Competitiveness indices and developing countries: an economic evaluation of the global competitiveness report. *World development*, 29(9), 1501-1525. [https://doi.org/10.1016/S0305-750X\(01\)00051-1](https://doi.org/10.1016/S0305-750X(01)00051-1)
- Miśkiewicz, D. (2018). Ekonomiczne determinanty atrakcyjności inwestycyjnej w tle ograniczeń budżetowych [Economic Determinants of Investment Attractiveness in the Context of Budget

- Constraints]. *Współczesne Problemy Ekonomiczne. Globalizacja. Liberalizacja. Etyka*, (16), 39-57. <https://doi.org/10.18276/wpe.2018.16-03>
- Ngo, M. T., & Pham, T. V. A. (2025). Unpacking the Determinants of Foreign Direct Investment: A Systematic Literature Review (2008–2024) and Future Research Agenda. *Review of Business and Economics Studies*, 13(4), 56-79.
- Nowicki, M. (Ed.) (2013). *Atrakcyjność inwestycyjna województw i podregionów Polski 2013* [Investment Attractiveness of Polish Voivodeships and Subregions 2013]. Instytut Badań nad Gospodarką.
- Porter, M. E., Delgado, M., Ketels, C., & Stern, S. (2008). Moving to a new global competitiveness index. *The Global Competitiveness Report, 2009*, 43-63.
- Rogaczewski, R. (2025). The process of Internationalization and Methods of Measuring it in Business Activities Process. *Humanitas Zarządzanie*, 1. <https://doi.org/10.5604/01.3001.0055.1175>
- United Nations Conference on Trade and Development (UNCTAD). (2025). *World Investment Report 2025: International investment in the digital economy*. UNCTAD.
- Vahlne, J. E., & Johanson, J. (2017b). From internationalization to evolution: The Uppsala model at 40 years. *Journal of International Business Studies*, 48(9), 1087-1102.
- Wach, K. (2021). The evolution of the Uppsala model: Towards non-linearity of internationalization of firms. *International Entrepreneurship Review*, 7(2), 7-19. <https://doi.org/10.15678/IER.2021.0702.01>
- World Bank (2021). *Global Investment Competitiveness Report 2020/2021*. World Bank.
- Zavadskas, E. K., Govindan, K., Antucheviciene, J., & Turskis, Z. (2016). Hybrid multiple criteria decision-making methods: A review of applications for sustainability issues. *Economic research-Ekonomska istraživanja*, 29(1), 857-887. <http://doi.org/10.1080/1331677X.2016.1237302>