

Review Paper

Innovative Mechanisms of Shaping the Migration Attractiveness of Ukraine Regions

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ABSTRACT

The article examines the concept of migration attractiveness of the regions in its correlation with investment attractiveness and its corresponding factors of influence. It is stressed that the example of Ukraine is a unique in its kind, not experienced critical deteriorative influence of either hybrid war or active hostilities on the migration attractiveness of the regions. As a result of literature research and studies of Ukrainian data, it is proposed to use methodologies for assessment of investment attractiveness when designing mechanisms of shaping migration attractiveness of the country' regions, and apply matrix systemic approach, taking into account, among other factors, sustainability (ESG) patterns.

HIGHLIGHTS

- The article is devoted to the analysis of modern patterns of migration attractiveness of countries regions
- The obtained results demonstrated the necessity of applying a matrix systemic approach shaping migration attractiveness of the country' regions, based on the paradigms of investment attractiveness.
- The practical significance of the research consists in systematization of today approaches to understanding the phenomenon of migration attractiveness of regions and the factors shaping it.

Keywords: Migration, Migration attractiveness, Investment attractiveness, Innovative mechanisms, Region, Regional potential, Social Capital

Over the past few decades, international migration has increased to previously unheard-of proportions, creating a globe that is becoming more socially and ethnically diverse. Strong political discussions on immigration policy center on the economic repercussions of these flows, although our knowledge of these effects is still lacking. Foreign direct investment (FDI) has emerged as a key component of global production at the same time. Attracting and keeping foreign direct investment (FDI) is a top priority for local authorities, as FDI-facilitated technology transfers serve as a means of funding for domestic companies as well as a conduit for global technical advancement. Global networks of parent-subsidiary ties and ethnic connections

are created in parallel by migration and foreign direct investment. Nonetheless, recent research has demonstrated that these two networks have an impact on one another (Buchardi *et al.* 2019).

In an effort to lower the unemployment rate, close the trade deficit by increasing exports, transfer technology, support industrial development, improve the country's attractiveness as a whole, and other goals, the regions are putting more and more effort into luring foreign direct investment

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(Arivazhagan *et al.* 2023). One of the main objectives of the region's investment policy is to create a favorable investment climate and investment attractiveness, which provide the prerequisites for the best use of socio-economic relations and scientific and technical renewal of productive forces through active investment activities. The migration attractiveness of the region and, accordingly, the region's ability to attract migrants and develop its social capital are directly dependent on the investment attractiveness of the region (Nadler *et al.* 2016). This is due to the fact that investment attractiveness is a factor in the dynamic development of the region, and, consequently, its attractiveness for migrants.

Attractiveness for businesses, capital, visitors, skilled individuals, students, and other types of flows both supply and demand is becoming a more crucial factor in regional economic development (Zilinska, *et al.* 2022). Globalization causes countries and regions to become more integrated, which increases relationships and flows of people, investments, and goods. This phenomenon is known as global value chains, and it creates new models of productive organization at the international level (Baldwin 2016; Comotti *et al.* 2020). A area might gain more from the process of globalization for its economic development the more it can draw these flows and actively participate in them.

Meanwhile, differences in the socio-economic development of each region dictate the need to formulate a balanced regional migration and investment policy. All this is possible only with the help of a comprehensive, systematic assessment of the state of the region and identifying its strengths and weaknesses (Avedyan *et al.* 2023).

Specifically, the knowledge that the pure endogenous approach may not be successful as a development strategy especially for lagging areas explains the significance of exogenous influences for regional development. As an illustration, consider the Southern Italian regions, where over 20 years of endogenous entrepreneurship-focused development strategies have failed to appreciably accelerate economic development (Resmini, 2017). Instead, these areas saw a loss of productive elements (entrepreneurs, human capital, etc.) due to phenomena like brain drain, which has obviously harmed their potential for economic growth

(Troschinsky *et al.* 2020). Due to these considerations, numerous academics came to the conclusion that Southern Italy needed a development plan that was heavily reliant on exogenous forces in order to increase its attractiveness and capacity to draw in and retain productive elements.

However, the investment attractiveness of a region as a category is a complex and multifaceted concept. There is a fairly common position in the scientific community when the investment attractiveness of a region is studied in conjunction with the investment climate. Their presence forms the prerequisites for the emergence of sustainable investment motivations that determine the feasibility and effectiveness of investments (Mustafakulov, 2017; Yermachenko *et al.* 2023). In turn, the investment climate of the region represents a system of relations formed under the influence of a wide range of interrelated processes and conditions of investment activity.

At the same time, when the investment potential exceeds the level of investment risk, the region can be classified as investment attractive and, conversely, when investment risks exceed the investment potential, this indicates the investment unattractiveness of this region for investors (Ambroziak, 2014).

However, the high turbulence of socio-economic processes, which was a consequence of both the geopolitical situation and the influence of the COVID-19 pandemic, determines the need to transform the "traditional" model for assessing and forming the migration and investment attractiveness of regions. The unique case of Ukraine – the country being in the state of hybrid war since 2014 and in active hostilities since 2022 – represents meaningful example for researching and understanding the innovative mechanisms of shaping the migration attractiveness of regions.

LITERATURE REVIEW

Territorial attractiveness has been the subject of much research, however most of these studies have only looked at one particular form of flow investments, businesses, tourists, creative individuals, students, etc. This indicates that these aspects of territorial attraction have typically been examined and analyzed individually and in part by academics. For instance, a great deal of research has only focused on a region's appeal to foreign

direct investments. Additionally, there are countless research and analyses on the subject of a region's tourist attraction, which is the focus of the entire field of tourism economics (Byrkovych *et al.* 2023). However, thorough analytical approaches and studies of this subject have been quite uncommon.

Owing to the topic's significant and expanding importance, it is worthwhile to address it using an integrated and multidimensional analytical strategy, which entails calculating and researching a region's overall, global attractiveness. As we will demonstrate, this method looks novel in the pertinent literature and, in our opinion, can provide policymakers fresh incentives and a fresh viewpoint.

The development of modern methods and approaches to assessing the attractiveness of a region and identifying priority directions in the development of the region is currently relevant (Denysiuk *et al.* 2023). Despite the fact that there is a fairly large number of scientific works on assessing the attractiveness of a region, it is impossible to single out any method that can be taken as a basis when regional authorities adopt a strategy that will affect increasing the migration and investment attractiveness of the region.

From the general diversity of views regarding the interpretation of "regional potential", three main approaches can be distinguished (OECD, 2023):

1. Cost approach, according to which potential is considered as the region's ability to consume capital;
2. Resource approach, within which the potential of the region is considered as a set of investment resources intended to realize the existing economic opportunities of the region;
3. Result approach, the emphasis in which is on assessing the region's available resources and the effectiveness of their use within the investment process.

Slobodan Djajic back in 2010 researched how attractive investment opportunities available to temporary migrants at home affect their saving behavior and the optimal duration of stay abroad. He illustrated that the behavior of temporary migrants reflects the interaction between their preferences and the opportunities available in labor and capital markets of both countries (Djajic, 2010).

The opinion of the authors seems justified, who understand the potential of a region as investment opportunities and directions of investment, determined by the availability of appropriate economic resources and factors of production located in the territory of a given region, as well as the set of conditions for investing and implementing investment activities (Smalskys *et al.* 2022).

Many authors explore the attractiveness of a region as a system of economic relations regarding investment to generate profit or other satisfactory indicator (Deyneha *et al.* 2016). Nevertheless, this concept is partly justified, since it is more suitable for the term "investment market".

There is also another concept that is usually used to assess attractiveness. This is a study of socio-economic, investment, and, accordingly, migration attractiveness as a combination of indicators.

Two approaches can be distinguished when identifying the investment attractiveness of a region and its components.

The creators of the first approach compare the two concepts of "investment climate" and "investment attractiveness" of the region. For example, some experts propose the following concept: "investment attractiveness is identical to the concept of investment climate and includes investment potential (objective capabilities of the country) and investment risk (investor operating conditions)" (Hoang and Goujon, 2018). It should be emphasized that such a concept makes it possible to discover criteria following which an investor can make an investment decision. Each investor, examining existing investment objects, assesses their potential profitability and risk. By comparing the ratio of risk and return on any investment object with what is required to achieve the investment goal, the investor comes to the conclusion about the desirability of investments specifically for him at a given point in time (Hoang and Goujon, 2018).

According to another approach, the investment attractiveness of a region, along with investment activity in it, represents one of the structural elements of the investment climate (Bende-Nabende, 2019).

Since non-commercial risks alone are not fully sufficient for an objective assessment, the following concept can be used if considered more

broadly: regional investment attractiveness is a set of economic, objective, social and natural characteristics, means, opportunities and restrictions that determine the flow of capital into region and assessed by investment activity (Artige and Nicolini, 2010). As a result, the second definition actually complements the first one: investment potential and investment risk form regional investment attractiveness, regional investment attractiveness determines investment activity, and the investment climate, in turn, is determined by investment activity and investment attractiveness.

The most important for improving the investment climate and investment attractiveness of the region are the developed target models, which are based on the best regional practices. The graphic model consists of two closed geometric figures. One of them is based on the indicators existing in the region for the indicators that are required to be achieved by the end of next year at a baseline level (Gaman *et al.* 2022). If a region strives to become a leader in this area, it must exceed these indicator values. In the leading regions, the differences between the figures are smaller, since their indicators form the basis for the development of target models.

In the presence of investment risks in the region, the possibility of insufficient use of regional investment potential is revealed (Gavkalova *et al.* 2022). Legal risk refers to legislative and legal factors that affect the investment activity of the subject, for example, shortcomings, ambiguity of legislative acts, the effectiveness of legislative guarantees, etc. Management risks have an impact on the political component of the investment process. Changes are attributed to them, both in foreign policy and in the political situation within the state (Artige and Nicolini, 2010).

On the one hand, investment risks have an impact on investment potential, but on the other hand, investment potential controls the level of investment risks; it follows that these indicators are interdependent, and with their help, regional integral attractiveness is established, which organically includes migration attractiveness (Kalyayev *et al.* 2019).

However, in conditions of military conflict, the set and essence of indicators of investment attractiveness and investment risk changes significantly. The

war in Ukraine, which had a hybrid nature since 2014 and turned into active hostilities in 2022, is a “textbook” (and, perhaps, unique to date) example of such a transformation.

METHODS

The theoretical basis of the study was consisted of the existing conceptual approaches to studying the investment and migration potential of regions and increasing their attractiveness. The theoretical and methodological basis of the study was the works of scientists devoted to the problems of assessing investment attractiveness and development of regions, regional and national economies, sustainability, social capital and migration flows.

RESULTS

Undoubtedly, the level of regional potential depends on the overall economic potential of the region, which determines the factors and conditions for the effective implementation of the investment potential of all sectors of the regional economy and social sphere (Tiesheva and Smyrnov, 2023). However, the investment potential of a region can change its characteristics under the influence of various economic, social, and political factors (Gupta, M. *et al.* 2021). All these factors, when assessing investment attractiveness, can have both a stimulating effect and a dissimulating effect on the possibility of carrying out investment activities in a given region.

When forming attractive regions, not only the potential of their territory is used, but also various political and economic instruments. One of these tools is regional marketing. Regional marketing means creating a favorable image of the region through participation in various exhibitions, forums and events of national and international scale, as well as attracting new economic agents to the region (Karpa *et al.* 2021). The main objectives of marketing the region are: attracting investment for the development of production and the social sphere; creating conditions for training highly qualified specialists and retaining them in the region; assistance in business development, which in the future will bring additional funds to the regional budget. Evidently, this attracts also migration, especially business and investment migration (Khomiuk *et al.* 2020). The development

of regional marketing contributes to the favor of investors, thereby increasing their interest in the region, which has the most favorable effect on its development. The conditions created by regional authorities directly determine how many investors they can attract to the region, and how many of them they can retain for a long time (Klymenko *et al.* 2016). The attractiveness of a region for business entities is one of the most important conditions for the stable development of regions, and business entities themselves are one of the driving forces of regions' economic growth.

Garas, A. *et al.* (2016), investigating the relation between migration and FDI in the OECD from a complex network perspective, claim that bilateral FDI between any two countries is further affected positively by the complex web of 'third party' corridors/migration stocks of the international migration network.

Currently, one of the most widely known and frequently used methods is the Euromoney magazine rating. This methodology includes 9 groups of indicators, with the help of which the following is assessed:

- ♦ Economic efficiency (on a scale from 0 to 10, significance - 25%);
- ♦ Level of political risk (on a scale from 0 to 10, significance - 25%);
- ♦ The state of total debt (on a scale from 0 to 10, significance - 10%);
- ♦ Ability to service debt (on a scale from 0 to 10, significance - 10%);
- ♦ Creditworthiness (on a scale from 0 to 10, significance - 10%);
- ♦ Availability of bank lending (on a scale from 0 to 10, significance - 5%);
- ♦ Availability of short-term financing (on a scale from 0 to 10, significance - 5%);
- ♦ Availability of long-term loan capital (on a scale from 0 to 10, significance - 5%);
- ♦ The likelihood of force majeure circumstances occurring (on a scale from 0 to 10, significance is 5%).

The values of the indicators are determined using expert assessments or by calculation and analysis on a 10-point scale and then weighted in accordance

with the significance of the indicator and its contribution to the final assessment.

For developing countries and countries with economies in transition, the Business Environmental Risk Intelligence (BERI) investment rating is often used, based on a survey of 100 experts from various countries who assess the climate of countries three times a year using 15 criteria and their weights:

1. Political stability (criterion weight - 3.0);
2. Economic growth (criterion weight - 2.5);
3. Currency convertibility (criterion weight - 2.5);
4. Wage/productivity costs (criterion weight - 2.0);
5. Availability of short-term loans in local markets (criterion weight - 2.0);
6. Availability of long-term loans/investment capital (criterion weight - 2.0);
7. Attitude towards foreign investment and profit transfer (criterion weight - 1.5);
8. Craving for nationalization (criterion weight - 1.5);
9. Inflation (criterion weight - 1.5);
10. The state of the balance of payments (criterion weight - 1.5);
11. Compliance with business agreements and the possibility of their implementation (criterion weight - 1.5);
12. Bureaucratic barriers (criterion weight - 1.0);
13. Quality of local management (criterion weight - 1.0);
14. Transport communications (criterion weight - 1.0);
15. Quality of services and reliability of contract partners (criterion weight - 0.5).

For each criterion, a score is scored from 0 (unacceptable condition) to 4 (extremely favorable condition). If the sum of all points is above 70, then the country is considered stable, with 55-70 points a country with moderate risk and certain difficulties, from 40 to 55 points high risk and a poor business climate for foreign enterprises, while with a score below 40 points, the country is considered unsuitable for foreign investment.

The investment climate is also characterized by the Confidence Index, which is calculated using the methodology of the consulting company A. T. Kearney. To determine this indicator, data from a survey of 10,000 of the world's largest transnational companies included in the Global 10,000 list are used. The index is calculated as a weighted average of four answer options (high/medium/low level of interest or no interest) to the question about the strategy for investing foreign direct investment in the country in the next one to three years.

Standard & Poor's methodology assesses an issuer's ability to timely fulfill its debt obligations. Long-term ratings range from the highest category of AAA (very high ability to meet its debt obligations on time and in full) to the lowest category of D (default on debt obligations). The methodology uses indicators of total income and the current budget balance, the level of sovereignty of government bodies, and GRP per capita; direct debt (as a percentage of income), etc.

Also among the most well-known methods for assessing the investment climate, there are the ratings of Moody's Investors Services, Arthur Andersen, Standard & Poor's, IBCA, Fitch Ratings, the World Bank ratings "New Business Density" and "Doing Business", the rating of the World Economic Forum "The Global Competitiveness Index", rating of the competitive environment PMR ("Product Market Regulation"), methods of the agency "Credit Risk International", "The Economist", etc.

Companies seek to enjoy various offers worldwide by optimizing their organizations and by being established where there are the best comparative advantages (Kostiukevych *et al.* 2020). There are various research works on the theoretical foundations of the firms' investment decisions abroad. Among these works, there is the eclectic theory that was developed by John H. Dunning and which is also called O.L.I. paradigm that is based on three types of benefits to multinationalisation namely: The ownership (O) specific advantages, the locational attractions (L), and the advantage in of internalization (I) (Barros *et al.* 2013).

Additionally, a number of empirical studies use panel data or opinion surveys to gauge how appealing a territory is. As a matter of fact, the perceptions of attractiveness are influenced by

the following: a gauge of economic performance, the observation of establishment decisions, or the factors that influence those decisions earlier in the process (Gupta, S. *et al.* 2021).

Also, five categories of attractiveness are distinguished:

1. The "macro" approach, based on global factors, typically focuses on how appealing a nation or an area is. The econometric approach and investor opinion approaches are both products of this methodology. The barometers with the greatest publicity are: Ernst and Young, Business Competitiveness Index (World Economic Forum);
2. The "meso" technique, which aims to investigate the variables that make a specific location within a specific industry appealing;
3. The "micro" approach, which compares the advantages of opening several locations in the same region;
4. The image-based approach, which examines how a territory's reputation or image influences leaders' decisions about where to locate their operations;
5. The "decision-making" approach which is based on academic and empirical research to study processes of decision-making.

Such well established methods as PESTLE analysis and SWOT analysis are also widely used.

An important factor in the "matrix" for assessing the attractiveness of a region today is the concept of sustainability. The introduction of ESG principles is considered today as a factor in increasing the attractiveness of the region (Bende-Nabende, 2019).

The state of the economy is not the main consideration in efforts to draw in human capital. Less desirable areas typically have higher unemployment rates among workers with less education and have lower GDP per capita rates. However, a region's level of attractiveness is not a guarantee of its economic prosperity (Kryshtanovych *et al.* 2022). Additionally, it would seem that allowing tourism in an area could be a significant step in drawing residents or, conversely, returning migrants given the broad correlation that exists between tourist arrival rates and net-migration.

Attracting human capital is one thing, but utilizing it to produce steady, sustainable growth rates is quite another (Kubiniy *et al.* 2021). For instance, in-migrants with advanced degrees can be underutilized in low-skilled positions, undervaluing them as a human resource. Areas that rely on these newcomers to support economic growth but fail to properly integrate them risk weakening their own resilience (Kulikov *et al.* 2022). The first stage is to comprehend the demands and characteristics of in-migrants. Encouraging individuals to pursue their career goals advances personal, regional, and national development (United Nations Publications, 2020).

According to ESPON (2012), the map for Europe suggests that greater net in-migration rates throughout Europe are generally correlated with greater rates of visitor arrivals. The attributes of a location that are linked to drawing in particular tourist kinds or age groups of migrants go beyond only economic considerations; they also include amenity value, heritage, and accessibility as components of an all-encompassing set of elements that contribute to the area's appeal (Kussainov *et al.* 2023). Age, origin, and whether they are immigrants or visitors are significant additional factors.

It is very interesting that in the first half of 2023, in Kyiv alone, about 4 thousand temporary or permanent residence permits for foreigners and immigration permits to Ukraine were issued (Gudj, 2023). Hundreds of thousands of foreigners were not frightened by the war. Despite the efforts of hostile propaganda to present Ukraine as unfriendly to other peoples, natives of the most diverse countries continue to choose this state as the most attractive for living, employment, or starting their own business.

Foreigners see the capital as the most attractive for staying and doing business. In the 6 months of the current year, the Central Interregional Administration of the Internal Revenue Service issued 1,948 temporary residence permits, 1,306 permanent residence permits, and 689 immigration permits to Ukraine in the city of Kyiv and the Kyiv region (Guzj, 2023).

The reasons for documenting foreigners are mostly family reunification and employment. Also, volunteering and work in public non-

governmental organizations remain a separate basis for documenting temporary residence permits during the war. Such foreign citizens provide support to Ukraine, each according to their field of work and specifics.

According to the historical conditions, the largest number of documented foreigners are citizens of former CIS countries: Georgia, Azerbaijan, and Uzbekistan. Also, citizens who received visas are those from Turkey, India, and China (Kharlamova *et al.* 2022).

Naturally, there is a slowdown in the arrival of foreigners to Ukraine to work in foreign branches and representative offices. But, despite the dangerous environment, foreign citizens do not stop doing business in Ukraine, because Ukraine has always had an attractive investment climate as an agrarian, industrial state and as a scientific and educational center of an important transit corridor for trade between Europe and Asia. Ukraine has an extensive network of railways, highways, sea and river ports. And in the cost price of any goods, works and services, transport costs and logistics are an important component (Roskladka *et al.* 2023). Therefore, there is interest of foreign investors in the infrastructure of the state and, as a result, the increase in migration flows of foreign workers.

In 2014, the top five in both investment and migration attractiveness included Lviv, Ivano-Frankivsk, Odessa, Vinnytsia and Kiev regions, while Donetsk and Lugansk regions were among the "outsiders". Today, the regions in the western part of Ukraine have practically not changed the patterns of their investment attractiveness, and the Kiev region is gradually regaining its positions lost in 2022 due to the full-scale invasion of the Russian Federation, despite the continuing threat of massive rocket attacks. Thus, neither industrial and scientific potential, nor infrastructure, nor security factors in themselves are decisive for migration attractiveness (Levytska *et al.* 2022). The hybrid war in the eastern part of the country did not have a significant impact on either the investment or migration attractiveness of other regions of the country, and ongoing active military operations did not deprive the country of its migration attractiveness (Litvinova *et al.* 2020). This necessitates the use of a matrix system approach to assessing and developing the migration potential of Ukrainian regions. For example, against

the background of other regions, the demo situation in Zakarpattia region has many features, which significantly distinguishes it not only from other western regions, but also from the whole of Ukraine. Favorable geographic and ecological conditions of the location of the region, polyethnicity of the population, and other internal factors determine the regional migration attractiveness (Maksymenko *et al.* 2020). It is also obvious that the presence of investment attractiveness and high-quality human capital is a dominant factor compared to the factor of military security and political stability.

DISCUSSION

The basis of substantiating the priorities of the mechanism of formation of the migratory attractiveness of the regions of Ukraine should be a holistic understanding of the causes of labor and business migration in the distribution of positive and negative nature.

One aspect that can be viewed from various perspectives is the question of how to conceptualize territorial appeal (Lee, 2016; Musolino, 2018). First, it can be considered “revealed attractiveness”, which is connected to the real inflows of people into a given region. These incoming flows “reveal” its appeal when they happen. The degree and idiosyncrasies of its appeal are determined by the magnitude and qualities of these flows. A significant number of foreign direct investments (FDIs) registered in a particular region, for instance, “reveals” the region’s appeal as a commercial site. Furthermore, a sizable proportion of non-resident university students “reveal” how desirable that area is as a location for higher learning.

Second, the idea of territorial attraction can also be understood as “perceived attractiveness”, which describes the way individuals or groups view, interpret, and assess a location in which they have a specific interest. For instance, this pertains to international corporations seeking investment opportunities, prospective migrant laborers seeking to relocate in pursuit of improved employment prospects, vacationers deciding where to go on vacation, etc. (Mishchuk *et al.* 2020). This second conceptualization holds that we deal with perception, cognition, and image of a location rather than knowledge regarding actual flows of people, investments, and other events related to the concept

of “revealed attractiveness”. It is something that may be examined and understood by dipping into other scientific fields, such as psychology, sociology, and behavioral geography.

Territorial attractiveness can also be seen as “real attractiveness” in a third paradigm. In this context, we refer to all the elements (government, institutions, human capital, infrastructure, services, and innovative capacity) that are thought to contribute to a place’s appeal, or the “host region”. These elements are also referred to as location considerations when they relate to FDI attractiveness (Dziemianowicz *et al.* 2019). It makes sense that these elements also contribute to the explanation of territorial appeal, as previously established.

The various levels of territorial attractiveness, or the kinds of flows that a region might draw, likewise influence the concept’s various “facets” (Novak *et al.* 2022). For instance, there are flows of tourists, immigrant workers, investments (cash used to acquire control of a business, establish a new plant, or invest in real estate), and even other particular groups of people, like university students, researchers, and talented individuals (referred to as the “creative class”).

Lastly, it is important to remember that territorial attractiveness can be studied at several spatial sizes, ranging from the macro-scale (countries) to the micro-geographical scale (cities, municipalities, etc.) (Lee, 2016).

Finally, it is important to clarify that territorial competitiveness and territorial attractiveness are two different concepts (Novak-Kalyayeva *et al.* 2018). The latter, evidently, is singular in nature: it is merely factual, pertaining to real economic processes. It is not perceived, that is, it has no interest in things like perception or image.

Within the proposed concept of regional territorial attractiveness, a new territorial attractiveness index can be suggested, conceptually characterized in Table 1.

Moreover, ecological sustainability increases the attractiveness of a region, especially regarding the moving decisions of skilled migrants. One of the proposed solutions that has been gaining particular popularity recently is a focus on ensuring sustainable development of regions, which is based on the synergistic interaction of ESG principles

Table 1: A new territorial attractiveness index

Nature of the concept	Underlying phenomenon	
Revealed attractiveness	Inflows (or retention of outflows)	<i>Types of flows</i>
		FDI
		Migrants
		Human capital flows (highly skilled workers, students, researchers, etc.)
		Tourist flows
		Others
Perceived attractiveness	Perception/Image of a place	<i>Type of perceiving actors</i>
		Business community
		Tourists
		Other categories of people (workers, residents, students, etc.)
Real attractiveness	Location factors (attractors)	<i>Type of location factors</i>
		Accessibility
		Institutional quality
		Connectivity
		Human capital
		Quality of living
		Environmental and cultural assets
		Others

(Oliinyk *et al.* 2021). The modern approach to the concept of sustainable development, obviously as a result of the influence of problems inherent in the current period of time, has changed the trajectory from “stability” to “rational use of resources”, in which the most important attention is paid to the issues of leveling the negative impact on the environment and ensuring the development of the social sphere (Panasiuk, I. *et al.* 2020). The concept of sustainable development is based on the interaction of three main platforms environmental, economic, and social, which ensures the development of the socio-economic system, “without jeopardizing the ability of future generations to meet their needs” (Bende-Nabende, 2019).

In the regional aspect, the context of the balance of the main components (economics, ecology, and social sphere) is preserved, despite the fact that quite often there is a shift in emphasis towards precisely “regional sustainability” or “regional resilience” as “the vitality of the region, its ability to withstand and respond adequately to shocks and challenges of various origins” (Geddes *et al.* 2019). This ability of the region is determined, first of all, by increasing its competitiveness and attractiveness

for investors and migrants, achieved as a result of the implementation of ESG principles (Panasiuk, O. *et al.* 2021). Among other factors of influence, one should note gentrification, which is closely connected namely with ESG policies.

Thus, innovative mechanisms of shaping the migration attractiveness of Ukraine regions should have a matrix systemic nature and take into account all complex ties and correlations, with the projection to investment attractiveness of regions.

CONCLUSION

A pertinent issue for regional economic growth is how appealing a region or territory is to businesses, investors, tourists, students, skilled individuals, and other groups. This is because global relationships and flows are becoming more and more significant. This subject is becoming more and more important, so a new thorough analytical technique that goes beyond partial approaches is needed. The method offered in this study to approach this problem from a different angle is the creation of a synthetic index that gauges territorial attractiveness from a multidimensional standpoint.

REFERENCES

- Ambroziak, A.A. 2014. Review of the Literature on Determinants of the Locational Attractiveness of Regions. In: Ambroziak, A. (eds) *New Cohesion Policy of the European Union in Poland. Contributions to Economics*. Springer, Cham. https://doi.org/10.1007/978-3-319-05335-6_1
- Arivazhagan, D. et al. 2023. An Assessment of Challenges of Digitalization of Agrarian Sector. *Lecture Notes in Networks and Systems*, 621 LNNS, 48–57.
- Artige, L. and Nicolini, R. 2010. Market potential, productivity and foreign direct investment: Some evidence from three case studies. *Eu. Planning Stud.*, **18**(2): 147-168.
- Avedyan, L. et al. 2023. The effectiveness of the development of territories in the state regional system politicians. *Financial and Credit Activity Problems of Theory and Practice*, **4**(51): 333–344.
- Baldwin, R. 2016. *The great convergence: information technology and the new globalization*. Belknap Press of Harvard University Press.
- Barros, C.P. et al. 2013. Foreign direct investment in the Asian Economies, Working Paper No. 13–20. London: Brunel University.
- Bende-Nabende, A. 2019. *Globalisation, FDI, regional integration and sustainable development: Theory, evidence and policy*. Routledge.
- Buchardi, K. et al. 2019. Migrants, Ancestors and Foreign Investments. *Rev. of Econ. Stud.*, **86**(4): 1448 - 1486.
- Byrkovych, T. et al. 2023. Economic Effectiveness of State Policy in Reforming Higher Library and Information Education in Ukraine. *Econ. Aff. (New Delhi)*, **68**(01s): 599-616.
- Comotti, S., Crescenzi, R. and Iammarino, S. 2020. Foreign direct investment, global value chains and regional economic development in Europe. Final Report. European Commission, Directorate-General for Regional and Urban Policy, July. https://ec.europa.eu/regional_policy/sources/docger/brochure/foreign_direct_investment_en.pdf
- Denysiuk, Z. et al. 2023. State Policy of Cultural and Art Projects Funding as a Factor in the Stability of State Development in the Conditions of Globalization. *Econ. Aff. (New Delhi)*, **68**(01s): 199-211.
- Deyneha, I. et al. 2016. Regional features of marketing mix formation in rural green tourism. *Actual Prob. of Econ.*, **9**(183): 184-194.
- Djajic, S. 2010. Investment opportunities in the source country and temporary migration. *The Canadian J. of Econ.*, **43**(2): 663-682.
- Dziemianowicz, W., Łukomska, J. and Ambroziak, A.A 2019. Location factors in foreign direct investment at the local level: the case of Poland. *Reg. Stud.*, **53**(8):1183-1192.
- ESPON, 2012. Attractiveness of regions to migrants and visitors. <https://www.espon.eu/topics-policy/publications/maps-month/attractiveness-regions-migrants-and-visitors>
- Gaman, P. et al. 2022. Institutional Platform to Ensure the Interaction between the Subjects of Combating Medical and Biological Emergencies Mechanism. *Econ. Aff. (New Delhi)*, **67**(04s): 765-775.
- Garas, A. et al. 2016. The relation between migration and FDI in the OECD from a complex network perspective. *Adv. in Complex Syst.*, **19**(6-7).
- Gavkalova, N.L. et al. 2022. Functioning of United Territorial Communities and Identification of Main Problems of Organizational Support of Local Budget Management. *Financial and Credit Activity Problems of Theory and Practice*, **2**(43): 107–117.
- Geddes, A. et al. 2019. *The dynamics of regional migration governance*. Edward Elgar Publishing.
- Gupta, M. et al. 2021. Application of Fuzzy Logic Data Analysis Method for Business Development. *Lecture Notes in Networks and Systems*, 194 LNNS. 75–93.
- Gupta, S. et al. 2021. Detection of Fake News Problems and Their Evaluation Through Artificial Intelligence. *Lecture Notes in Networks and Systems*, 194 LNNS. 94–101.
- Guzj, V. 2023. Why Ukraine remains attractive to migrants even during war. *Ekonomichna Pravda*, July 19. <https://www.epravda.com.ua/rus/columns/2023/07/19/702351/>
- Hoang, H. and Goujon, M. 2018. Determinants of Intra-Region and Extra-Region Foreign Direct Investment Inflow in ASEAN: A Spatial Econometric Analysis. *Applied Spatial Analysis and Policy*, pp. 965-982.
- Iammarino, S., Rodriguez-Pose, A. and Storper, S. 2019. Regional inequality in Europe: evidence, theory and policy implications. *J. of Econ. Geography*, **19**(2): 273-298.
- Kalyayev, A. et al. 2019. Global Security Governance: Conceptual Approaches and Practical Imperatives, Proceedings of the 33rd International Business Information Management Association Conference, IBIMA 2019: Education Excellence and Innovation Management through Vision 2020, 10-11 April, Spain, Granada, 4484-4495.
- Karpa, M. et al. 2021. Entrepreneurship education of the formation of the e-commerce managers professional qualities. *Int. J. Entrepreneurship*, **25**(7).
- Kharlamova, G. et al. 2022. Cluster Analysis of Ukrainian Regions Regarding the Level of Investment Attractiveness in Tourism. In: Ignatenko, O. et al. *ICTERI 2021 Workshops. ICTERI 2021. Communications in Computer and Information Science*, vol 1635. Springer, Cham. https://doi.org/10.1007/978-3-031-14841-5_10
- Khomiuk, N. et al. 2020. Planning of socioeconomic development of the territories (experience of European Union). *Int. J. Management (IJM)*, **11**(4): 638-646.
- Klymenko, V.V. et al. 2016. Regional aspects of middle class development in Ukraine. *Actual Prob. of Econ.*, **4**(178): 178–188.
- Kostiukevych, R. et al. 2020. The impact of European integration processes on the investment potential and institutional maturity of rural communities. *Econ. and Soc.*, **13**(3): 46-63.

- Kryshtanovych, M. *et al.* 2022. Problems of European integration in the construction of EU security policy in the context of counter-terrorism. *Int. J. Safety and Security Engineering*, **12**(4): 501-506.
- Kubiniy, N. *et al.* 2021. Modeling the process of forming the safety potential of engineering enterprises. *Int. J. of Safety and Security Engineering*, **11**(3): 223-230.
- Kulikov, P. *et al.* 2022. Post-war Economy of Ukraine: Innovation and Investment Development Project. *Econ. Aff. (New Delhi)*, **67**(5): 943-959.
- Kussainov, K. *et al.* 2023. Anti-corruption Management Mechanisms and the Construction of a Security Landscape in the Financial Sector of the EU Economic System Against the Background of Challenges to European Integration: Implications for Artificial Intelligence Technologies. *Econ. Aff. (New Delhi)*, **68**(1): 509-521.
- Lee, K. 2016. The conceptualization of country attractiveness: a review of research. *Int. Rev. of Administrative Sci.*, **82**(4):807-826.
- Levytska, S. *et al.* 2022. A Risk-Oriented Approach in the System of Internal Auditing of the Subjects of Financial Monitoring. *Int. J. Appl. Econ., Finance and Accounting*, **14**(2): 194-206.
- Litvinova, I. *et al.* 2020. The negative impact of corruption on the economic security of states. *Int. J. Manage (IJM)*, **11**(5): 1058-1071.
- Maksymenko, T. *et al.* 2020. Adaptive management of entrepreneurship model as a component of enterprise resource planning. *Academy of Entrepreneurship J.*, **26**(3).
- Mishchuk, H. *et al.* 2020. Impact of the shadow economy on social safety: The experience of Ukraine. *Econ. and Soc.*, **13**(2): 289-303.
- Musolino, D. 2018. The north-south divide in Italy: Reality or perception? *Eu. Spatial Res. and Pol.*, **25**: 29-53.
- Musolino, D. and Kotosz, B. 2023. A new territorial attractiveness index at the international scale: Design, application and patterns in Italy. *The Annals of Regional Science*. Springer.
- Mustafakulov, S. 2017. Investment Attractiveness of Regions: Methodic Aspects of the Definition and Classification of Impacting Factors. *Eu. Scientific J.*, **13**(10): 433-449.
- Nadler, R. *et al.* Eds., 2016. Return migration and regional development in Europe: Mobility against the stream. Palgrave Macmillan.
- Novak, A. *et al.* 2022. Financial and Economic Security in the Field of Financial Markets at the Stage of European Integration. *Int. J. Professional Business. Rev.*, **7**(5): e0835.
- Novak-Kalyayeva, L. *et al.* 2018. Practical potential of theory and methodology of public administration on AHE basis of human rights. Proceedings of the 32nd International Business Information Management Association Conference, IBIMA 2018 – Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth. 15-16 November 2018, Seville, Spain.
- OECD 2023. Rethinking regional attractiveness in the new global environment. OECD.
- Oliinyk, O. *et al.* 2021. The impact of migration of highly skilled workers on the country's competitiveness and economic growth. *Montenegrin J. of Econ.*, **17** (3): 7-19.
- Omarov, A. *et al.* 2022. Features of creative burnout among educational workers in public administration system. *Creativity Stud.*, **15**(1): 116-129.
- Panasiuk, I. *et al.* 2020. Modelling and Simulation of the Thermal Performance of Metal Framed Walls. IEEE International Conference on Advanced Trends in Information Theory, ATIT 2019 – Proceedings, pp. 309-312.
- Panasiuk, O. *et al.* 2021. Virtual Laboratories for Engineering Education. 11th International Conference on Advanced Computer Information Technologies, ATIT 2021 – Proceedings, pp. 637-641.
- Resmini, L. 2017. Patterns of FDI in Southern European Periphery. In: Fonseca, M., Fratesi, U. (eds). *Regional Upgrading in Southern Europe: spatial disparities and human capital*. Springer-Verlag, Berlin, pp. 129-149.
- Roskladka, A., Roskladka, N., Romanyuk, O., Troianovska-Korobeinikova, T. and Savytska, L. 2023. System Analysis of the Internal and External Migration Processes in Ukraine. In: Babichev, S., Lytvynenko, V. (eds). *Lecture Notes in Data Engineering, Computational Intelligence, and Decision-making*. ISDMCI 2022. Lecture Notes on Data Engineering and Communications Technologies, vol. 149. Springer, Cham. https://doi.org/10.1007/978-3-031-16203-9_18
- Smalskys, V. *et al.* 2022. Innovative Development of Renewable Energy During The Crisis Period and Its Impact on the Environment. *Virtual Econ.*, **5**(1): 65-77.
- Tiesheva, L. and Smyrnov, I. 2023. A Company's Digital Goodwill: The Concept and Valuation Possibilities. *Econ. Aff. (New Delhi)*, **68**(2): 1279-1290.
- Troschinsky, V. *et al.* 2020. International experience of public administration in the area of national security. *J. Legal, Ethical and Regulatory. Issues*, **23**(3).
- United Nations Publications, 2020. *Foreign Direct Investment and Sustainable Development in International Investment Governance*. United Nations.
- Yermachenko, V. *et al.* 2023. Theory and Practice of Public Management of Smart Infrastructure in the Conditions of the Digital Society' Development: Socio-economic Aspects. *Econ. Aff. (New Delhi)*, **68**(1): 617-633.
- Zilinska, A. *et al.* 2022. Efficiency in the Context of Ensuring Sustainable Territorial Development. *Financial and Credit Activity Problems of Theory and Practice*, **4**(45): 234-243.

