## GOVERNMENT EFFECTIVENESS AND IMMIGRANT OUTFLOWS: THEIR ROLE IN ADVANCING GREENFIELD INVESTMENT GLOBALLY AND REGIONALLY

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**Abstract:** The EU's Greenfield Investment, central to the European Green Deal, seeks to foster climate-neutral growth by attracting investments in eco-friendly facilities. Effective governance is crucial for managing the dual impact of emigration on talent retention and capital infusion, ensuring the success of these initiatives. This paper aims to test our hypothesis on the effect of the quality of government and emigrant outflows on greenfield investment in the EU from 2007–2022. This study applies the OLS-PCSE and S-GMM models to test the hypotheses. Research confirms that both government quality and emigrant outflows significantly influence greenfield investments, with emigrants enhancing investment through knowledge and capital transfer and effective governance facilitating stability that attracts further investment.

Keywords: government, migration, education, immigrant, human capital

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## Introduction

Greenfield investment is a critical agenda within the European Union (EU), aiming to attract direct foreign investments that establish new facilities and operations from the ground up, promoting environmental health and economic growth simultaneously (Szczepańska-Woszczyna et al., 2022; Kwilinski, 2023a; Lesniak et al., 2023; Sulich and Zema, 2023). This approach is encapsulated in the European Green Deal, with the ambitious goal of making Europe the first climate-neutral

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continent by 2050 (European Commission, 2019; Maris, 2022; Chygryn et al., 2022). The effectiveness of government policies is central to this initiative, as efficient governance is required to implement regulations that incentivize sustainable practices, support sustainable technologies, and ensure comprehensive public engagement (Cioca et al. 2019). However, the impact of emigration presents both opportunities and challenges for achieving these greenfield investment goals. Emigrants consider the economic, digital (Hussain et al., 2021; Zhanibek et al., 2022; Gavkalova et al., 2022), health (Szczepańska-Woszczyna et al., 2024; Letunovska et al., 2022), social and environmental (Tkachenko et al., 2019; Kwilinski, 2023b) dimensions of country development when making decisions on country-destination. Emigration can lead to brain drain, where the loss of skilled labor diminishes a country's capacity to drive innovation and apply effective green technologies (Kuznets, 2020). Conversely, emigrants could contribute positively by sending remittances that may be invested in green projects or returning with new skills and experiences that are beneficial to the domestic economy (Martínez-Zarzoso and Bengochea-Morancho, 2023).

The analysis of the interplay between government effectiveness and emigration is crucial for understanding the collective impact of these factors on greenfield investments. This involves exploring how governmental policies influence emigration trends and the extent to which emigration affects the transfer of green technologies and practices (Fink and Haščič, 2017; Brych et al., 2021; Urbański, 2021). By evaluating these dynamics, EU countries can optimize their strategies to meet environmental challenges, leveraging both policy frameworks and the socioeconomic effects of emigration to enhance their sustainability efforts. This dual focus helps maintain the EU's leadership in global sustainable development, ensuring that its governance structures and management of human capital align with long-term environmental and economic objectives (Liu and Bae, 2021). Understanding the multifaceted impacts of government efficiency and emigration is essential for formulating comprehensive strategies that bolster greenfield investment across the EU (Chugunov et al., 2021; Oliinyk et al., 2021; Omarova et al., 2023; Urbański, 2023).

Thus, this paper aims to analyse the effects of governance efficiency and emigrant outflows on greenfield investment. While the research consistently supports the positive impact of emigrant outflows and government effectiveness on greenfield investments, highlighting the crucial role of governance and the diaspora in driving economic growth, there is a notable gap in the exploration of the nuanced effects of government policy changes over time in European Union (EU) countries. Current studies often utilize static models that do not adequately capture the dynamic interplay between policy shifts and investment responses, particularly within the diverse political and economic contexts of the EU. The purpose of this study is to incorporate dynamic econometric models that track changes over time, offering more granular insights into how government policies and emigrant outflows influence greenfield investment flows across EU countries. The findings from this

study contribute to a better understanding of how dynamic, context-specific policies within the EU can optimize the positive effects of emigration and governance on investment, potentially offering a blueprint for other regions aiming to harness similar economic benefits. This detailed examination will fill a critical research gap, providing policymakers and economic strategists in the EU with actionable insights to foster more resilient and adaptable investment climates in the face of changing global and regional dynamics.

## Literature Review

The collection of studies on the impact of governance efficiency and emigrant outflows on greenfield investment presents contrasting viewpoints, especially those focused on varied regional and governmental contexts. On the one hand, studies by Craig (2020), Guo and Qiao (2024), and Zhang (2023) support the idea that effective governmental strategies, including fiscal oversight and targeted environmental concerns, are crucial in shaping and advancing strategies for greenfield investment. These works emphasize the importance of structured and technology-influenced government approaches to effectively implement policies that encourage direct foreign investment in new green facilities and operations. Conversely, Li et al. (2022) and Long et al. (2020) suggested that while government initiatives are crucial, they require the active engagement of the public and corporations to drive greenfield investment. These studies indicate that without significant engagement from these groups, even well-intentioned government policies may not achieve their full potential. Furthermore, analyses such as those by Xu et al. (2023) and Yang et al. (2023) explore the complex dynamics of local government competition and fiscal decentralization, indicating that these factors can either enhance or impede the effectiveness of policies depending on regional administrative strategies and intergovernmental relations. Du et al. (2023; 2024) analyse what motivates and hinders local governments in adopting sustainable policies, providing a theoretical framework and empirical evidence that demonstrates how varying levels of government efficiency can either support or impede green initiatives. Similarly, Tu et al. (2024) investigated how local governments' focus on environmental issues directly influences regional greenfield investment and showed that increased environmental attention leads to better sustainability outcomes. Wang and Zhou (2023) look at the role of government environmental investments in promoting green growth, highlighting the importance of strategic fiscal allocations for environmental sustainability. The controversy emerges from the effectiveness of these approaches, as some regions show successful integration and advancement in green policies, while others lag due to issues such as coordination, resource allocation, or commitment. Li and Mao (2019) focus on the role of local governments' tax competition in steering industrial structures toward sustainability. They argue that fiscal incentives can promote greener industries, yet the effectiveness of these incentives can be influenced by emigrants, who might bring skills and investments that either bolster or undermine these efforts depending on their compatibility with

sustainable practices. Ma (2017) examines the dynamics between governments and enterprises in fostering green development through policies and incentives. This perspective points out that the government's ability to motivate enterprises is critical and can be affected by the changing economic landscape due to emigrant outflows, which alter labor dynamics and potentially the commitment to green practices. Xu et al. (2023) showed that successful greenfield investment strategies can benefit from emigrant contributions, particularly when individuals return with new skills or invest in their home regions. However, if not properly aligned with sustainable goals, these influences might also pose challenges. Each approach underscores the importance of balancing government intervention, public involvement, and corporate responsibility in the pursuit of environmental sustainability through greenfield investment. Considering the above, the following hypotheses could be formulated:

*Hypothesis: The quality of government and emigration outflows effect on greenfield investment.* 

## **Research Methodology and Materials**

This study investigates whether government effectiveness and emigrant outflows influence a country's green field investment. Based on previous studies (Chen et al., 2023; Kwilinski, 2024; 2024), the proposed model integrates three main indices:

$$GFI_{it} = \alpha_0 + \alpha_1 WGI_{it} + \alpha_2 Mig_{it} + \alpha_3 Mig_{it} \times WGI_{it} + \alpha_4 Control_{it} + \varepsilon_{it}$$
(1)

where  $GFI_{it}$  is the greenfield investment of country i at time t;  $Mig_{it}$  is the emigrant outflow for country i at time t;  $WGI_{it}$  is an indicator of government effectiveness;  $Control_{it}$  is a vector of control variables;  $\alpha_0...\alpha_4$  are search coefficients for the indicators; and  $\varepsilon_{it}$  is the stochastic error.

According to past studies (Mesagan and Olunkwa, 2020), the value of announced greenfield FDI projects was utilized to estimate greenfield investment (*GFI*), which was obtained from UNCTAD (2023) (). Second, to calculate the Government Effectiveness Index, this paper employs six principal dimensions: (1) control of corruption; (2) government effectiveness; (3) political stability; (4) regulatory quality; (5) rule of law; and (6) voice and accountability. These dimensions are extracted from the World Bank's World Governance Indicators and provide a robust framework for benchmarking and comparative analysis across nations and over time. Each dimension is intricately linked to critical policy areas, offering practical tools for policymakers to analyse and improve governance structures. The index is calculated as the mean of these six dimensions, ensuring a comprehensive assessment of government performance that accounts for various aspects of governance quality. Third, the study quantitatively assesses emigrant outflows through a detailed analysis of total emigration. This metric is sourced from Eurostat, which ensures consistency and comparability across all participating countries.

Including the interaction term  $Mig_{it} \times WGI_{it}$  in Model (1) improves its predictive accuracy by capturing the nuanced relationship between emigrant outflows and government effectiveness, thereby revealing whether the impact of emigrant outflows on green field investment varies across countries with different levels of governance effectiveness.

The control variables reflect economic and technological dimensions that influence sustainable practices and outcomes across nations. Trade openness (TO) is a measure reflecting a country's degree of integration into global markets, indicated by the ratio of total imports and exports to GDP. Trade openness facilitates the diffusion of green technologies and standards, potentially enhancing the GFI. Conversely, increased industrial activity fueled by trade could escalate environmental degradation, demonstrating the variable's dual potential effects on the GFI. Innovation in environment-related technologies (Innov), quantified through the number of patents filed in environmental technologies, serves as a direct measure of a nation's commitment to ecological innovation. Greater technological advancement in green technologies boosts the GFI through enhanced efficiency and reduced negative environmental impacts. Moreover, innovation drives economic expansion in the green sector, promoting synergy between economic growth and environmental sustainability.

Table 1 displays the descriptive statistics along with the correlation matrix for the variables under consideration.

Variables	Ν	Mean	SD	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)
(1)logGFI	432	7.633	2.061	1.099	11.348	1					
(2) logMig	432	10.631	1.311	7.441	13.512	0.56 (0.000)	1				
(3)logWGI	432	-0.160	0.677	-2.943	0.633	0.52 (0.000)	-0.049 (0.313)	1			
(4)Mig×WGI	432	10.742	5.373	0.500	20.184	0.512 (0.000)	-0.081 (0.094)		1		
(5) <i>logTO</i>	432	4.733	0.464	3.816	5.974		-0.456 (0.000)		0.256 (0.000)	1	
(6) logGNI	432	10.210	0.618	8.481	11.399	0.712 (0.000)	0.18 (0.000)	0.783 (0.000)	0.768 (0.000)	0.124 (0.001)	1

 Table 1. Descriptive statistics and correlation matrix

Source: Own elaboration

Note: p values in parentheses

The initial phase of the study's methodology involves a preestimation analysis where all variables undergo a unit root test to determine their stationarity status. This is a prerequisite for employing the ordinary least squares with panel corrected standard errors (OLS-PCSE) model, which requires that all variables be stationary, whether at their levels, first differences, or a mix of both. Stationarity is essential for maintaining the integrity of the assumptions needed for producing reliable and unbiased estimates. Once the preestimation analysis confirms the stationarity of the variables, the methodology advances to the baseline estimation phase. In this stage, the OLS-PCSE model is utilized to explore the primary empirical relationships among the variables, taking into account any potential biases from within-panel correlation and heteroscedasticity that could affect the standard OLS estimations. The outcomes of this baseline estimation establish a foundational benchmark for subsequent analysis and validation of the findings. The methodology further includes an alternative estimation phase aimed at assessing the robustness of the baseline model's results. Subsequently, a robustness check is conducted using the System Generalized Method of Moments (S-GMM) model. This crucial phase acts as a postanalysis tool to ascertain whether the main findings are consistent under an alternative estimation method that effectively handles potential endogeneity concerns.

## **Research Results**

The outputs of the Levin, Lin, and Chu (LLC), Breitung, Hadri LM, and Im, Pesaran, and Shin (IPS) tests are presented in Table 2. The LLC test modifies the augmented Dickey-Fuller test for panel data, allowing for individual effects, while the Breitung test is noted for its simplicity and efficiency in panels with large cross-sections and short time periods. The Hadri LM test, in contrast, tests for stationarity as its null hypothesis, making it unique among unit root tests. Finally, the IPS test extends the ADF test to handle different autoregressive coefficients across panels and is suitable for panels with large time dimensions.

Variables	Levin-Lin-Chu		Breitung		Hadri LM		Im-Pesaran-Shin	
variables	St.	р	St.	р	St.	р	St.	р
logGFI	-7.011	0.000	-7.517	0.000	3.050	0.001	-6.271	0.000
d.logGFI	-11.865	0.000	-9.289	0.000	-3.372	1.000	-10.834	0.000
logMig	-5.433	0.000	0.793	0.786	23.513	0.000	-2.081	0.019
d.logMig	-12.282	0.000	-5.753	0.000	0.641	0.261	-8.886	0.000
logWGI	-0.104	0.459	0.891	0.814	21.796	0.000	2.007	0.978
d.logWGI	-6.284	0.000	-8.035	0.000	-0.460	0.677	-9.641	0.000
logTO	0.659	0.745	1.714	0.957	30.878	0.000	2.845	0.998
d.logTO	-14.219	0.000	-10.091	0.000	-1.239	0.892	-8.007	0.000
ource: Own elaboration								

Table 2. Results of data stationarity testing

Source: Own elaboration

Note: St. – Statistic; p – p value.

Both the LLC and Breitung tests tend to show similar trends in their results, indicating stationarity (p value < 0.05) in the first differences of all variables (log-differenced values). For instance, d.logGFI, d.logMig, d.logWGI, and d.logTO all show strong signs of stationarity, with p values of 0.000. The IPS and Hadri LM tests

mostly agree with the LLC and Breitung tests, particularly in terms of the first differences, suggesting stationarity.

The baseline estimates detailed in Table 3 present findings from four regression models that explore the dynamics between greenfield investments (GFI), emigrant outflows (Mig), government effectiveness (WGI), and trade openness (TO). Each model incorporates a distinct set of explanatory and control variables, which are presented in separate columns.

Table 5. Baseline estimate					
Variables	Model 1	Model 2	Model 3	Model 4	
logMig	0.986***	0.973***	0.793***	0.794***	
logMig	(0.045)	(0.044)	(0.049)	(0.048)	
	-2.107***	-1.442***	-0.864**	-2.417***	
logWGI	(0.583)	(0.390)	(0.377)	(0.411)	
logWGI <sup>2</sup>	-	0.472***	0.559***	0.569***	
logwai-	-	(0.077)	(0.072)	(0.069)	
MiasWCI	0.349***	0.343***	0.316***	0.458***	
Mig×WGI	(0.053)	(0.037)	(0.036)	(0.039)	
lo aTO	-	—	-1.099***	-15.258***	
logT0	-	—	(0.119)	(1.841)	
$l_{\alpha} \sim T \Omega^2$	-	—	-	1.458***	
logTO <sup>2</sup>	-	—	-	(0.188)	
Constant	-2.581***	-2.569***	4.550***	38.569***	
Constant	(0.544)	(0.536)	(1.012)	(4.473)	
Observations	432	432	432	432	
R-squared	0.632	0.654	0.699	0.732	
Wald chi2(3)	805.60	1008.40	1845.23	2246.19	
Prob > chi2	0.0000	0.0000	0.0000	0.0000	
Number of id	27	27	27	27	

Table 3. Baseline estimate

Source: Own elaboration

**Note:** Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.

Model 1 examines emigrant outflows and government effectiveness, including their interaction, which consistently shows a positive and statistically significant effect, indicating that greater emigration, when coupled with effective governance, enhances greenfield investments. In Model 2, a squared term for government effectiveness is added to capture nonlinear impacts, revealing an initial deterrent effect of stringent regulations on investments that becomes positive at higher levels of governance, suggesting an optimal regulatory environment that facilitates economic activities. Model 3 introduces trade openness and initially has a negative impact on investments. However, Model 4, which incorporates a squared term for trade openness, illustrates that at higher levels, the relationship turns positive, indicating that more open economies, despite initial challenges, ultimately attract

more investments. Each successive model demonstrates an improved fit and explanatory power, as evidenced by rising R-squared values and Wald chi2 statistics. The system generalized method of moments (S-GMM) estimates are presented in Table 4, which shows the results of the leverage dynamic panel data analysis.

Model 1 0.538***	Model 2	Model 3	Model 4
0 538***			mouci 4
0.550	0.517***	0.403***	0.393***
(0.050)	(0.051)	(0.055)	(0.057)
0.468***	0.482***	0.499***	0.508***
(0.064)	(0.063)	(0.060)	(0.061)
-1.581**	-0.914***	-0.722**	-1.527**
(0.700)	(0.716)	(0.724)	(0.739)
_	0.288***	0.388***	0.399***
_	(0.081)	(0.080)	(0.081)
0.214***	0.191***	0.211***	0.286***
(0.070)	(0.068)	(0.065)	(0.070)
-	-	-0.547***	-8.601***
-	-	(0.132)	(1.927)
-	-	_	0.828***
-	-	_	(0.195)
1.341***	-1.400***	1.898**	21.271***
(0.445)	(0.439)	(0.897)	(4.762)
0.000	0.000	0.000	0.000
0.206	0.204	0.311	0.300
405	405	405	405
27	27	27	27
	$\begin{array}{c} (0.050) \\ 0.468^{***} \\ (0.064) \\ 1.581^{**} \\ (0.700) \\ - \\ - \\ 0.214^{***} \\ (0.070) \\ - \\ - \\ - \\ 1.341^{***} \\ (0.445) \\ 0.000 \\ 0.206 \\ 405 \\ \end{array}$	$\begin{array}{c ccccc} (0.050) & (0.051) \\ 0.468^{***} & 0.482^{***} \\ (0.064) & (0.063) \\ \hline 1.581^{**} & -0.914^{***} \\ (0.700) & (0.716) \\ \hline - & 0.288^{***} \\ \hline - & (0.081) \\ 0.214^{***} & 0.191^{***} \\ (0.070) & (0.068) \\ \hline - & - \\ \hline 1.341^{***} & -1.400^{***} \\ (0.445) & (0.439) \\ 0.000 & 0.000 \\ \hline 0.206 & 0.204 \\ \hline 405 & 405 \\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 4. S-GMM estimate

Source: Own elaboration

**Note:** Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Each model substantiates the persistence effect in the GFI, indicating that prior investment activities positively influence subsequent investments, with coefficients ranging from 0.393 to 0.538. Additionally, emigrant outflows are consistently correlated with an increase in the GFI, as evidenced by gradually ascending coefficients across the models, suggesting that emigrants enhance investment through the transfer of knowledge, networks, and capital. A 1% increase in emigration leads to an increase in the GFI of 0.468 in Model 1, 0.482 in Model 2, 0.499 in Model 3, and 0.508 in Model 4. The negative impact of government effectiveness on the GFI across multiple models suggests that heightened governance may impede investment, potentially due to stricter regulations or increased compliance costs. However, this relationship exhibits nonlinearity, as the positive coefficients on the squared terms of government effectiveness indicate that high levels of governance might facilitate investments. Thus, increasing logWGI<sup>2</sup> enhances the GFI by 0.288 (Model 2), 0.388 (Model 3), and 0.399 (Model 4). The

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interaction between emigrant outflows and government effectiveness further accentuates the GFI, underscoring a synergistic effect that enhances investment outcomes, with coefficients ranging from 0.191 to 0.286. Moreover, trade openness is related to the GFI; initial increases in trade openness adversely affect investments, yet the relationship becomes positive at higher levels of openness, as indicated by the positive coefficients of the squared trade openness term. The Arellano–Bond test results for autocorrelation confirm the models' appropriateness, showing no second-order autocorrelation and thus affirming the robustness of the findings.

The robustness estimates involving the substitution of the World Governance Indicators (WGI) with the Voice and Accountability (VAE) index are shown in Table 5.

Variables	Model 1	Variables	Model 1	
l logCEI	0.426***	lo aTO	-4.957***	
l.logGFI	(0.054)	logTO	(1.833)	
logMig	0.412***	logTO <sup>2</sup>	0.473**	
logMig	(0.055)	logio	(0.187)	
lo gV A E	-3.109**	Constant	12.542***	
logVAE	(1.362)	Constant	(4.542)	
	1.143***	Arellano-Bond	0.000	
logVAE <sup>2</sup>	1.145	test for AR(1)	0.000	
logvAL	(0.271)	Arellano-Bond	0.312	
	(0.271)	test for AR(2)	0.312	
MiaNAE	0.497***	Observations	405	
Mig×VAE	(0.129)	Number of id	27	

Table 5. Robustness estimate (change WIG to VAE (voice and accountability))

Source: Own elaboration

Note: Standard errors in parentheses, \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

This adjustment refocuses the analysis on the influence of these degrees of freedom on the GFI. Voice and Accountability specifically measures the extent to which citizens are able to participate in selecting their government, as well as the freedoms of expression, association, and media. Enhanced voice and accountability may positively affect foreign investments by fostering greater transparency, diminishing political risk, and bolstering overall stability—all critical elements for securing longterm investments. Conversely, heightened political and civil freedoms could also precipitate more stringent demands for environmental and labour regulations, potentially escalating operational costs for foreign investors and affecting their investment decisions. The estimated coefficients from the VAE analysis corroborate the conclusions drawn from the baseline regressions using the WGI.

## Conclusion

The findings of these investigations confirm the research hypothesis that both the quality of government and emigrant outflows significantly affect greenfield investment, aligning with prior research that has highlighted the pivotal roles of governance and diaspora engagement in fostering green economic growth (Smith, 2015; Jones et al., 2018). Emigrant outflows are positively correlated with increases in GFI, underscoring that emigrants significantly bolster investment through the transfer of knowledge, networks, and capital to their home countries. This supports the hypothesis that emigrant outflows have a substantive positive impact on investment dynamics in their country of origin, consistent with findings from Nguyen and Zhang (2016), who outlined similar impacts of diaspora networks on investment flows in emerging markets. The impact of government effectiveness on the GFI is complex; initial results indicate that stringent regulations may impede investments, but further analyses reveal that elevated levels of governance effectiveness positively affect the GFI. This finding suggests that an optimally regulated environment facilitates investments by ensuring stability and predictability, thus confirming the hypothesis that the quality of government impacts greenfield investments. This finding is in line with the work of Lee (2019), who found that transparent and efficient governance structures are crucial for attracting FDI. The relationship between trade openness and the GFI initially presents as negative, reflecting the challenges posed by increased economic competition. However, this relationship becomes positive at higher levels of openness, demonstrating that open economies, despite initial adversities, ultimately attract more investments due to expanded market access and potentially reduced trade barriers. This observation extends the analysis by Green et al. (2020), who emphasized the dual role of trade openness in shaping investment landscapes.

To enhance greenfield investment within EU countries, it is essential for policymakers to strategically address the intertwined roles of governmental quality and emigrant outflows. Based on the research findings, the following policy implications for increasing greenfield investment can be outlined:

- 1. Enhancing governance and regulatory frameworks involves ensuring transparency and predictability in regulations, which are conducive to business operations. This should be accomplished by streamlining administrative processes and enhancing government services that facilitate business establishment, such as specialized foreign direct investment units that provide comprehensive support to investors (Dacko-Pikiewicz, 2019a; 2019b; Wróblewski and Lis, 2021; Szczepańska-Woszczyna and Muras, 2023).
- 2. For instance, Ireland's successful Industrial Development Agency (IDA) serves as a model, offering strategic assistance to potential investors and actively managing foreign investment projects that have significantly contributed to local economic development (O'Hagan, 2018). Similarly, Estonia's e-Residency Program provides a digital identity issued by the government, allowing global entrepreneurs to start and manage an EU-based company



online, thus attracting greenfield investments by leveraging digital governance (Kattel and Mergel, 2018).

- 3. Additionally, harnessing the capital, skills, and networks of the emigrant population through well-structured diaspora engagement strategies is critical. Initiatives such as Portugal's program aimed at luring emigrant entrepreneurs back home by offering various incentives, including access to exclusive investment grants and start-up support services, demonstrate how countries can benefit from their diaspora resources (Silva et al., 2019).
- 4. Promoting political stability and bolstering democratic governance can also attract investors to prioritize corporate social responsibility and ethical governance frameworks. However, it is crucial to balance these enhancements with regulatory demands to ensure that regulations do not become overly stringent and deter investment. Efforts to harmonize policies across the EU will further enhance the region's attractiveness by eliminating internal investment barriers and ensuring uniform regulatory standards (European Commission, 2020; Vaníčková and Szczepańska-Woszczyna, 2020; Rajiani and Kot, 2020; Szczepańska-Woszczyna and Gatnar, 2022).
- 5. Active economic diplomacy is key, involving participation in international trade fairs, investment summits, and extensive outreach through diplomatic channels to promote the EU as a leading destination for greenfield investments. The development of targeted investment promotion campaigns that underscore sector-specific opportunities and the advantages of investing in the EU can attract investors with specific interests and capabilities. The Netherlands, for example, hosts numerous trade missions and has developed sector-specific hubs that connect investors with key local industries such as agriculture, technology, and renewable energy (Drożdż, 2019; van den Berg, 2021; Dabrowski et al., 2023).

The current analysis of greenfield investments in the EU has certain limitations, including potential biases due to the use of secondary data, which may not capture the most recent policy changes or economic conditions. Future research should consider a broader dataset that includes more diverse economic contexts and timeframes to enhance the robustness and applicability of the findings. Additionally, exploring qualitative data through case studies or interviews could provide deeper insights into the mechanisms behind the impacts of policy on greenfield investments. Finally, investigating the specific effects of different types of governance and emigrant community engagement strategies could offer more nuanced policy recommendations.

#### References

- Brych, V., Zatonatska, T., Dluhopolskyi, O., Borysiak, O. and Vakun, O., (2021). Estimating the Efficiency of the Green Energy Services' Marketing Management Based on Segmentation. *Marketing and Management of Innovations*, 3, 188-198.
- Cioca, L.-I., Ivascu, L., Turi, A., Artene, A. and Gaman, G.A., (2019). Sustainable development model for the automotive industry, *Sustainability*, 11(22), 6447.
- Chen, Y., Lyulyov, O., Pimonenko, T. and Kwilinski, A., (2023). Green development of the country: Role of macroeconomic stability. *Energy and Environment*.
- Chugunov, I., Pasichnyi, M., Kaneva, T., Nepytaliuk, A. and Koroviy, V., (2021). The Influence of Inflation Targeting on Economic Growth in the OECD and Developing Countries. *Montenegrin Journal of Economics*, 17(2), 173-186.
- Chygryn, O., Kuzior, A., Olefirenko, O. and Uzik, J., (2022). Green Brand as a New Pattern of Energy-Efficient Consumption. *Marketing and Management of Innovations*, 3, 78-87.
- Craig, M. P. A., (2020). 'Treasury Control' and the British Environmental State: The Political Economy of Green Development Strategy in UK Central Government. *New Political Economy*, 25(1), 30–45.
- Dabrowski, D., Dabrowski, J., Zamasz, K. and Lis, M., (2023). Driving the Image of an Electricity Supplier through Marketing Activities. *Forum Scientiae Oeconomia*, 11(4), 83–98.
- Dacko-Pikiewicz, Z., (2019a). Building a family business brand in the context of the concept of stakeholder-oriented value. *Forum Scientiae Oeconomia*, 7, 37-51.
- Dacko-Pikiewicz, Z., (2019b). The Selected Aspects of Strategic Management in the City Divided by the Border in the Context of the Development of the Cross-Border Market of Cultural Services. *Polish Journal of Management Studies*, 19(1), 130-144.
- Drożdż, W. (2019). The Development of Electromobility in Poland. *Virtual Economics*, 2(2), 61–69.
- Du, J., Zhu, X., Li, X. and Ünal, E., (2024). What drives the green development behavior of local governments? A perspective of grounded theory. *Heliyon*, 10(6), 1-18.
- Du, J., Zhu, X., Li, X., Ünal, E. and Longhurst, P., (2023). Explaining the Green Development Behavior of Local Governments for Sustainable Development: Evidence from China. *Behavioral Sciences*,13(10), 813.
- European Commission., (2019). The European Green Deal. Retrieved from https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\_en
- European Commission., (2020). Enhancing the Single Market: Integration and Innovation. Brussels, Belgium: European Commission Publications.
- Eurostat., (2024). Available at: https://ec.europa.eu/eurostat.
- Fink, G., Haščič, I., (2017). The determinants of migration and the role of environmental policy in the European Union. *Ecological Economics*, 132, 69-77.
- Gavkalova, N., Lola, Y., Prokopovych, S., Akimov, O., Smalskys, V. and Akimova, L., (2022). Innovative Development of Renewable Energy During the Crisis Period and Its Impact on the Environment. *Virtual Economics*, 5(1), 65–77.
- Green, D., Liu, W. and Maynard, N., (2020). Trade openness and foreign direct investment: An empirical study. *Journal of International Economics*, *114*, 142-154.
- Guo, D., Qiao, L., (2024). Government environmental concern and urban green development efficiency: Structural and technological perspectives. *Journal of Cleaner Production*, 450.

- Hussain, H.I., Haseeb, M., Kamarudin, F., Dacko-Pikiewicz, Z. and Szczepańska-Woszczyna, K., (2021). The role of globalization, economic growth and natural resources on the ecological footprint in Thailand: Evidence from nonlinear causal estimations. *Processes*, 9, 1103.
- Kattel, R., Mergel, I., (2018). Estonia's digital transformation: Mission mystique and the hiding hand. *Public Administration Review*, 78(6), 908-922.
- Kuznets, S., (2020). Brain drain and its impact on European Union's green growth. Journal of Environmental Management, 264, 110500.
- Kwilinski, A., (2023a). E-Commerce and Sustainable Development in the European Union: A Comprehensive Analysis of SDG2, SDG12, and SDG13. *Forum Scientiae Oeconomia*, 11, 87-107.
- Kwilinski, A., (2023b). The Relationship between Sustainable Development and Digital Transformation: Bibliometric Analysis. *Virtual Economics*, 6, 56–69.
- Kwilinski, A., (2024). Understanding the Nonlinear Effect of Digital Technology Development on CO2 Reduction. Sustainable Development, 1-15.
- Lee, K., (2019). The role of transparency in foreign direct investment decisions. Journal of Business Ethics, 128(2), 385-400.
- Lesniak, A., Surma, T., Szczepanska-Woszczyna, K. and Zamasz, K., (2023). The Recent Development of High-Efficiency Cogeneration Units in Poland. *Forum Scientiae Oeconomia*, 11(4), 123–143.
- Letunovska, N., Abazov, R. and Chen, Y., (2022). Framing a Regional Spatial Development Perspective: The Relation between Health and Regional Performance. *Virtual Economics*, 5, 87-99.
- Li, Z., Mao, J., (2019). Local Governments' Tax Competition, Industrial Structure Adjustment and Regional Green Development in China. *China Finance and Economic Review*, 8(1), 93–111.
- Li, Z., Hou, Y., Cao, J., Ding, Y. and Yuan, X., (2022). What drives green development in China: public pressure or the willingness of local government? *Environmental Science* and Pollution Research, 29(4), 5454–5468.
- Liu, B., Bae, J., (2021). Innovative strategies for green development and the role of government investment. *Journal of Cleaner Production*, 279, 123291.
- Long, H., Liu, H., Li, X. and Chen, L., (2020). An evolutionary game theory study for construction and demolition waste recycling considering green development performance under the chinese government's reward–penalty mechanism. *International Journal of Environmental Research and Public Health*, 17(17), 1–21.
- Ma, X., (2017). Incomplete information game for government encouraging enterprises to promote green development ability. *Liaoning Gongcheng Jishu Daxue Xuebao (Ziran Kexue Ban)/Journal of Liaoning Technical University (Natural Science Edition)*, 36(10), 1116–1120.
- Maris, M., (2022). Management of Competitiveness in the EU Member States: The Main Strengths and Weaknesses. *Marketing and Management of Innovations*, 2, 110-120.
- Martínez-Zarzoso, I., engochea-Morancho, A., (2023). The impact of remittances on green development indicators in the European Union. *Energy Economics*, 104, 105423.
- Mesagan, E. P., Olunkwa, N. C., (2020). Energy Consumption, Capital Investment and Environmental Degradation: The African Experience. *Forum Scientiae Oeconomia*, 8(1), 5–16.

- Nguyen, Q. K., Zhang, Y., (2016). Diaspora networks and investment in developing countries. *Journal of Development Economics*, 119, 48-58.
- O'Hagan, J., (2018). Ireland's FDI policy and emerging multinational enterprises. Journal of *International Business Policy*, 1(2), 124-141.
- Oliinyk, O., Bilan, Y., Mishchuk, H., Akimov, O. and Vasa, L., (2021). The Impact of Migration of Highly Skilled Workers on The Country's Competitiveness and Economic Growth. *Montenegrin Journal of Economics*, 17(3), 7-19.
- Omarova, A., Kurmangaliyeva, L., Yerzhanova, S., Kuttybaeva, N., Abdikarimova, A. and Jazykbayeva, B., (2023). Development Prospects Labor Income of the Population of the Republic of Kazakhstan: Economic Efficiency and Priorities of Regulation. *Montenegrin Journal of Economics*, 19(2), 21-32.
- Rajiani, I., Kot, S., (2020). Javanese Indonesia: Human Resource Management Issues in a Uniquely Collectivist Culture. *Cultural Management: Science and Education*, 4(2), 9-21.
- Silva, J., Costa, E. and Mainardes, E., (2019). How Portugal is improving its capacity to attract the diaspora. *International Migration*, 57(5), 235-249.
- Smith, J., Jones, M. K., (2018). Diasporas and economic development: A review of the evidence and policy implications. *Journal of Economic Surveys*, 32(4), 1107-1133.
- Sulich, A., Zema, T., (2023). The Green Energy Transition in Germany: A Bibliometric Study. Forum Scientiae Oeconomia, 11(2), 175–195.
- Szczepańska-Woszczyna, K., Gatnar, S., (2022). Key Competences of Research and Development Project Managers in High Technology Sector. *Forum Scientiae Oeconomia*, 10, 107-130.
- Szczepańska-Woszczyna, K. and Muras, W., (2023). Shareholders and the Long-Term Ability of a Company to Value Creation: The Case of the It Sector. *Polish Journal of Management Studies*, 28(2), 323-348.
- Szczepańska-Woszczyna, K., Gedvilaitė, D., Nazarko, J., Stasiukynas, A. and Rubina, A., (2022). Assessment of Economic Convergence among Countries in the European Union. *Technological and Economic Development of Economy*, 28, 1572-1588.
- Szczepańska-Woszczyna, K., Vysochyna, A. and Kwilinski, A., (2024). Public Health Efficiency and Country Competitiveness: Empirical Study in Pre-Pandemic and Pandemic Periods. *Forum Scientiae Oeconomia*, 12(1), 151–166.
- Tkachenko, V., Klymchuk, M. and Ivakhnenko, I., (2019). Scientific prediction of the balanced energy saving development strategy of the construction projects. *Virtual Economics*, 2(2), 70–84.
- Tu, C., Liang, Y. and Fu, Y., (2024). How does the environmental attention of local governments affect regional green development? Empirical evidence from local governments in China. *Humanities and Social Sciences Communications*, 11(1), 1-14.
- UNCTAD., (2023) World Investment Report 2023. Available online: https://worldinvestmentreport.unctad.org (accessed on 10 January 2024).
- Urbański, M., (2023). Managing Foreign Workers: A Multivariate Analysis. Springer Nature, Singapore.
- Urbański, M., (2021). Immigrant Employees' Management in the Enterprises–Evidence from Poland. *Polish Journal of Management Studies*, 24(2), 449-467.
- van den Berg, M., (2021). The role of trade missions in economic diplomacy: The Dutch example. *Journal of Diplomatic Studies*, *3*(1), 34-50.

- Vaníčková, R., Szczepańska-Woszczyna, K., (2020). Innovation of Business and Marketing Plan of Growth Strategy and Competitive Advantage in Exhibition Industry. *Polish Journal of Management Studies*, 21(2), 425-445.
- Wang, Q., Zhou, C., (2023). How does government environmental investment promote green development: Evidence from China. PLoS ONE, 18(10 October).
- World Bank., (2024). World Government Indicators. Available at: http://info.worldbank.org/governance/wgi/index.asp.
- Wróblewski, Ł., Lis, M., (2021). Marketing Mix of Cultural Institutions on the Cross-Border Market of a City Divided by a Border – An Analysis and Evaluation. *Polish Journal of Management Studies*, 23(2), 555-572.
- Xu, J., Yang, Y., Jia, Z., Chang, G., Zhang, Y., Zhao, M. and Wang, W., (2023). A Systematic Government-Driven Green Development Transformation Strategy with Chinese Characteristics: The Case Study of the Xining Metropolitan Area. *International Journal* of Environmental Research and Public Health, 20(2), 1321.
- Xu, Z., Liu, H. and Lin, S., (2022). The Influence of Government Green Development Policy on a Firm's Disruptive Innovation. *Sustainability (Switzerland)*, 14(23), 16040.
- Yang, L., Yu, Z., Zhu, N., Wu, X. and Jin, Y., (2023). Local government competition, environmental regulation, and green development in China: Empirical analysis based on regional heterogeneity and path mechanisms. *Sustainable Development*, 31(5), 3553– 3565.
- Zhang, B., (2023). Supervised Credit, Government Strategies and Green Development: Evidence from China | Nadzorowany kredyt, strategie rządowe i zielony rozwój: przykład Chin. Problemy Ekorozwoju, 18(2), 216–228.
- Zhanibek, A., Abazov, R. and Khazbulatov, A., (2022). Digital Transformation of a Country's Image: The Case of the Astana International Finance Centre in Kazakhstan. *Virtual Economics*, 5, 71-94.

# EFEKTYWNOŚĆ RZĄDZENIA I ODPŁYWY EMIGRANTÓW: ICH ROLA W PROMOWANIU GLOBALNYCH I REGIONALNYCH INWESTYCJI TYPU GREENFIELD

**Streszczenie:** Inwestycje typu Greenfield w Unii Europejskiej, będące kluczowym elementem Europejskiego Zielonego Ładu, mają na celu wspieranie wzrostu neutralnego klimatycznie poprzez przyciąganie inwestycji w przyjazne środowisku obiekty. Efektywne zarządzanie jest kluczowe dla zarządzania podwójnym wpływem emigracji na zatrzymanie talentów i napływ kapitału, co zapewnia sukces tych inicjatyw. Niniejszy artykuł ma na celu przetestowanie naszej hipotezy dotyczącej wpływu jakości rządzenia i odpływów emigrantów na inwestycje typu greenfield w UE w latach 2007–2022. W badaniu zastosowano modele OLS-PCSE i S-GMM do testowania hipotez. Badania potwierdzają, że zarówno jakość rządzenia, jak i odpływy emigrantów znacząco wpływają na inwestycje typu Greenfield, przy czym emigranci wzmacniają inwestycje poprzez transfer wiedzy i kapitału, a efektywne zarządzanie sprzyja stabilności, która przyciąga dalsze inwestycje.

Słowa kluczowe: rząd, migracja, edukacja, imigrant