Determinants of Inward Foreign Direct Investment (FDI) In Malaysia's Green Technology Industry: A Conceptual Framework

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DOI: https://doi.org/10.47772/IJRISS.2026.100900657

Received: 03 October 2026; Accepted: 08 October 2026; Published: 20 October 2026

ABSTRACT

The shift toward low-carbon development calls for investments in renewable energy, energy efficiency, clean transportation, waste management and cleaner manufacturing. Foreign direct investment or FDI can help make this shift happen by bringing in capital, advanced technologies and know-how in production. But how much FDI actually supports technology depends on the economic and institutional conditions in the host country. This conceptual paper looks at how market size, political stability and environmental regulation affect FDI in the green technology sector in Malaysia. Using Institutional Theory the study argues that the institutional and economic environment shapes foreign investor decisions by affecting expected returns, investment risks, regulatory rules and how attractive green-tech projects are. Market size shows how big the commercial opportunities are for investors. Political stability gives a sense of how predictable and safe the investment environment's. Environmental regulation reflects the rules that may raise compliance costs or create a need for technologies and green solutions. The study uses a research design with secondary annual time-series data from Malaysia. Data will come from sources like the World Bank's World Development Indicators and Worldwide Governance Indicators UN Trade and Development (UNCTAD) the Malaysian Investment Development Authority (MIDA) and other relevant Malaysian government agencies. Market size will be measured using GDP, political stability will be measured using the Political Stability and Absence of Violence/Terrorism indicator and environmental regulation will be measured using a suitable environmental-policy or regulatory-stringency indicator. FDI, in technology, will be measured by tracking annual foreign investment in officially recognized green-technology or climate-related activities. The analysis will include statistics, correlation tests, multicollinearity checks and stationarity tests followed by the Autoregressive Distributed Lag (ARDL) approach to examine both short-run and long-run relationships. The proposed framework adds to the existing literature by combining institutional factors to explain what drives FDI in green technology in Malaysia and provides insights that can inform policy and investment strategies. a basis for policies aimed at attracting environmentally beneficial foreign investment.

Keywords: Market size, political stability, environmental regulation, foreign direct investment and institutional theory.

INTRODUCTION

The transition towards low-carbon production requires investment in renewable energy, energy efficiency, clean transportation, waste management and cleaner manufacturing. Developing economies often face financing constraints that slow capital formation in these sectors (Ameli et al., 2021). Inward foreign direct investment (FDI) can help address these constraints by adding productive capital and transmitting technologies and production knowledge (Amendolagine et al., 2021; Ofori et al., 2022). These benefits are conditional, however, because their scale depends on the activity receiving investment, the technology introduced and the host economy's capacity to absorb spillovers (Famanta et al., 2024; Wang et al., 2021).

FDI in green technology refers here to long-term cross-border productive investment directed towards technologies, assets or activities that reduce environmental damage or support low-carbon production. This definition separates FDI in green technology from aggregate FDI. A rise in total inflow does not necessarily expand renewable generation, cleaner manufacturing or environmental services, and it may include activities with limited environmental value. The distinction therefore concerns both the destination and the quality of foreign capital.

Malaysia is an appropriate setting for this analysis. Its manufacturing base and participation in regional production networks create opportunities for foreign investment, while its energy transition requires substantial low-carbon capital and technology (Fernandez et al., 2024). Evidence from ASEAN+3 economies associates market conditions and environmental factors with FDI, but the magnitude and direction differ across national settings (Shaari et al., 2023). Malaysian evidence also indicates that sustainable investment performance cannot be evaluated through aggregate inflows alone (Ling et al., 2020). These findings support a sector-specific inquiry into the economic conditions that make green projects commercially viable.

Foreign investors compare the expected return from a Malaysian location with the return available elsewhere. Market size affects expected revenue and the utilisation of capital-intensive facilities. Political stability affects uncertainty, the country-risk premium and the value of waiting before committing sunk capital. Environmental regulation can raise compliance costs, but it can also create demand for renewable energy, efficient equipment and pollution-control services. Green projects make these channels especially important because they often require large initial expenditure and depend on long-term policy settings (Gregoriou et al., 2021; Kyaw, 2022).

Existing studies often examine general FDI determinants, environmental consequences or institutional quality as separate questions. Much less attention has been given to how market demand, political risk and environmental regulation combine to determine inward FDI specifically directed towards green technology in Malaysia. Aggregate findings are not automatically transferable because environmental regulation can deter pollution-intensive capital while attracting suppliers of green solutions. This paper addresses that conceptual gap by integrating the three mechanisms through risk-adjusted expected profitability.

Problem Statement

Malaysia needs external and domestic investment to expand low-carbon infrastructure and strengthen green production (Fernandez et al., 2024). Although inward FDI can supplement domestic capital, aggregate investment statistics do not reveal whether foreign capital is entering activities that advance the energy transition. They also do not distinguish investment that transfers cleaner technology from investment that raises output without supporting decarbonization.

The determinants of FDI in green technology may differ from those of conventional FDI. A large market can raise prospective revenue, while political uncertainty can increase the return required by investors and delay irreversible projects (Gregoriou et al., 2021). Environmental regulation creates a more complex effect: it raises costs for regulated production but can expand the market for technologies that help firms comply (Chen et al., 2024; Qiu et al., 2021). Analyzing these mechanisms separately leaves policy makers without a coherent account of their joint effect on investment appraisal.

The central problem is therefore the absence of an integrated economic framework explaining how market size, political stability and environmental regulation jointly shape inward FDI in green technology in Malaysia. Without this integration, policy may emphasize investment volume while overlooking risk-adjusted returns, regulatory credibility and the technological quality of incoming capital.

Research Objectives

1. To identify the relationship between market size towards inward foreign direct investment of green technology industry in Malaysia.

2. To identify the relationship between political stability towards inward foreign direct investment of green technology industry in Malaysia.

3. To identify the relationship environmental towards inward foreign direct investment of green technology industry in Malaysia.

LITERATURE REVIEW

Inward FDI in Green Technology Industry

The economic importance of inward FDI in green technology arises from capital accumulation and the possibility of technology spillovers. Foreign firms may transfer equipment, technical knowledge and production practices to affiliates and domestic suppliers (Amendolagine et al., 2021). Evidence from developing economies links FDI in green technology with improved environmental performance, although host-country conditions affect the magnitude of the relationship (Famanta et al., 2024). The composition of investment and the domestic innovation system therefore determine whether potential spillovers materialize (Wang et al., 2021).

Recent evidence reinforces the need to separate FDI in green technology from aggregate capital inflows. Research covering Southeast Asian economies connects FDI with green recovery, but it also shows that the relationship depends on the energy structure and institutional setting of the host economy (Phung et al., 2023). A cross-country study of 65 economies finds that aggregate FDI can impede the shift towards renewable energy when industrial transfer and technology spillovers remain concentrated in conventional production; stronger governance moderates this adverse effect (Fang et al., 2024). The implication is that investment volume alone is an inadequate measure of progress towards a green transition.

Studies that identify FDI in green technology more directly report more favorable outcomes. FDI in green technology is associated with improved environmental performance across a multinational sample, although the effects become clearer over time (Nhuong et al., 2024). Evidence from European economies also links FDI in green technology with environmental innovation and indicates that institutional quality strengthens the relationship (Nhuong et al., 2025). These studies concern outcomes rather than location choice, but they clarify why host economies seek investment with identifiable environmental content.

This paper therefore treats inward FDI in green technology as the outcome to be explained rather than assuming that all FDI is environmentally beneficial. This approach directs attention to the commercial and institutional conditions under which investors commit capital to green activities in Malaysia.

Market Size (MS)

Market size is the scale of effective demand available to firms in the host economy. It is commonly represented by real output, income or market growth and affects expected sales and the capacity to spread fixed costs across a larger volume of production. Cross-country evidence identifies market size as one of the more robust determinants of FDI (Chakrabarti, 2001). Research on Malaysia also links output and market conditions to inward investment (Ang, 2008).

The mechanism is particularly relevant to green technology because many projects have high fixed costs. Demand for clean electricity, efficient machinery and low-carbon transport can improve capacity utilization and shorten the expected payback period. Malaysia's access to regional and export markets may further enlarge the effective market beyond domestic demand. Market size therefore strengthens the commercial case for local green production, although it cannot fully offset political uncertainty or weak regulatory credibility (Azam & Haseeb, 2021).

For green investment, effective market size includes policy-supported demand as well as current household and business expenditure. Renewable-energy procurement, emissions standards and feed-in arrangements can convert environmental objectives into expected revenue. Firm-level evidence from Southeast Asia shows that feed-in tariffs influence renewable-energy investment decisions, illustrating how policy can enlarge the

commercially relevant market (Azhgaliyeva et al., 2024). Recent evidence that the environmental benefits of FDI in green technology become more visible over time also suggests that investors assess the durability, rather than only the initial size, of green demand (Nhuong et al., 2024).

Political Stability (PS)

Political stability refers to the predictability of government, public order and policy implementation. In economic terms, it affects the distribution of expected cash flows, and the risk premium investors require. Meta-analytic evidence associates political stability, the rule of law and institutional quality with FDI attractiveness (Bailey, 2018). Studies of developing economies show that political and institutional risks affect foreign investment (Busse & Hefeker, 2007; Uddin et al., 2019). Political stability represents an important component of the institutional environment because MNCs generally make investment decisions with consideration of uncertainty surrounding government policy, institutions and long-term operating conditions.

Green projects can be especially sensitive to policy uncertainty because their revenue may depend on licenses, grid access, environmental standards and investment incentives (Gohdes et al., 2022). When expenditure is sunk and assets are location-specific, uncertainty increases the value of delaying investment. Political stability consequently affects both the timing of commitment and the return threshold applied to a project.

Recent studies place governance quality at the centre of the FDI-energy relationship. Evidence from sub-Saharan Africa shows that governance conditions shape the contribution of FDI to renewable-energy development (Dossou et al., 2023). Cross-country evidence likewise indicates that governance capacity can mitigate the adverse effect of aggregate FDI on the transition towards renewable energy (Fang et al., 2024). These findings do not make governance identical to political stability. They nevertheless show that predictable public authority, credible rules and effective implementation determine whether foreign investment supports long-duration green projects.

Environmental Regulation

Environmental regulation includes standards and economic instruments intended to correct pollution externalities. It can influence FDI through two competing channels. The cost channel raises abatement, reporting and compliance expenditure and may deter cost-sensitive production. The market-creation channel increases demand for cleaner technologies and may stimulate environmental innovation (Brown et al., 2022; Ma et al., 2023).

Environmental regulation is particularly important because it determines the rules of the game for firms operating in the host country. Research by Li et al. (2021) found that inward FDI had a positive effect on green innovation in Chinese regions, supporting a pollution-halo interpretation in their setting. The study also found that different types of environmental regulation produced different effects

The Pollution Haven Hypothesis predicts that differences in regulatory costs may shift pollution-intensive production towards locations with less stringent rules (Copeland & Taylor, 2004; Keller & Levinson, 2002). The Pollution Halo perspective instead emphasizes the cleaner technologies and production practices that multinational firms can transfer to host economies (Eskeland & Harrison, 2003). For FDI in green technology, stringent but credible regulation may attract firms whose products help regulated users reduce emissions. The net effect depends on whether green demand and productivity benefits outweigh compliance and administrative costs (Chen et al., 2024; Qiu et al., 2021).

Recent evidence supports a conditional rather than linear interpretation. For the BRICS economies, environmental regulation changes the relationship between FDI and renewable-energy consumption, with direction depending on whether regulatory conditions pass relevant thresholds (Tan & Uprasen, 2023). Evidence from Chinese cities similarly links FDI and environmental regulation to green development efficiency, indicating that regulation affects both the composition of incoming capital and its local economic consequences (Yu & Liu, 2024). Research on environmental regulation and green total factor productivity also reports heterogeneous effects across locations and regulatory settings (Chen et al., 2024).

For Malaysia, the main issue is therefore not simply whether regulation is strict or lenient. Investors also evaluate the clarity of standards, enforcement consistency, administrative cost and expected demand created by compliance. A stable regulatory path can improve the credibility of future revenue for green suppliers, whereas abrupt or uneven implementation can increase uncertainty even when the environmental objective is economically justified. This distinction connects environmental regulation to the paper's risk-adjusted profitability mechanism.

Institutional Theory

Institutional Theory provides an appropriate theoretical foundation for explaining how the institutional environment influences foreign direct investment (FDI) and green technology development. The theory suggests that organizational and investment decisions are shaped by formal regulations, social norms and shared cognitive frameworks within the host country. Scott's institutional framework identifies three pillars of institutions: regulative, normative and cultural-cognitive, which collectively provide stability, legitimacy and guidance for organizational behaviour (Scott, 2008).

In the context of FDI, institutional quality is important because foreign multinational corporations require predictable regulations, political stability, effective governance, protection of property rights and reliable enforcement mechanisms when making long-term investment decisions. Trevino et al. (2008) further demonstrated that institutional processes can influence the legitimacy of host economies and inward FDI decisions. In the context of green technology, the regulative pillar is particularly important because environmental regulations, emission standards and green investment policies can influence firms' incentives to adopt cleaner technologies and undertake green innovation.

Empirical evidence also indicates that FDI and environmental regulation can influence green technology innovation, although the direction and magnitude of these effects may vary according to institutional and industrial conditions (Yuan et al., 2021). Therefore, Institutional Theory suggests that a strong and credible institutional environment can enhance the ability of Malaysia to attract FDI that contributes to technology transfer, green innovation and sustainable technological development. Accordingly, institutional quality can be incorporated into the conceptual framework as an important contextual factor linking FDI with green technology development.

In contrast, weak institutional environments may encourage short-term or resource-seeking investment and reduce the likelihood that advanced technologies will generate positive spillovers in the host economy. This argument is supported by recent evidence from ASEAN countries showing that institutional quality significantly moderates the relationship between FDI and green technology innovation, with FDI contributing more positively to green innovation when institutional quality is sufficiently strong (Dang & Nguyen, 2025).

Therefore, Institutional Theory suggests that the contribution of FDI to green technology development is not determined solely by the volume of foreign investment but also by the quality of institutions that govern and support investment activities. In the Malaysian context, political stability, regulatory quality, environmental regulation, rule of law, government effectiveness and protection of intellectual property can therefore be considered important institutional conditions that determine whether FDI can effectively contribute to green technology development.

Theoritical Framework

Institutional Theory explains that investment decisions are influenced by the formal and informal institutions of a host country, including political conditions, regulations, laws, norms, and the overall institutional environment. Scott's institutional perspective identifies regulative, normative, and cultural-cognitive pillars, which shape organizational behaviour and the legitimacy of a host market (Scott, 2008). Treviño et al. (2008) further demonstrate that institutional processes influence inward FDI because foreign investors consider the institutional environment when evaluating a country's investment attractiveness.

In this framework, market size represents the economic attractiveness of Malaysia to foreign investors. A larger domestic market provides multinational enterprises with greater opportunities to sell products and services and achieve economies of scale, thereby increasing the attractiveness of FDI. From an Institutional Theory perspective, market size represents an important economic condition that shapes the attractiveness of the host country to foreign investors. A larger market provides greater demand and opportunities for economies of scale, thereby increasing the potential returns from green technology investments. When these market opportunities are supported by stable and predictable institutional arrangements, foreign investors may be more willing to commit capital to long-term green technology projects. Hence, market size is expected to have a positive influence on inward green technology FDI.

Political stability represents the institutional environment that provides investors with greater policy predictability and reduces uncertainty associated with long-term investment. Treviño et al. (2008) identify political uncertainty as an important institutional factor associated with inward FDI. Political stability can be explained through Institutional Theory as an indicator of the predictability and reliability of the host country's institutional environment. Stable political institutions reduce uncertainty concerning government policies, regulations, investment incentives and the enforcement of business agreements. This is particularly important for green technology FDI because such investments often involve substantial capital commitments and long investment horizons. Therefore, greater political stability can reduce perceived investment risk and encourage foreign investors to undertake green technology projects in Malaysia.

Environmental regulation represents the regulative dimension of institutions because environmental standards, government policies, monitoring and enforcement establish the conditions under which foreign firms operate. Effective environmental regulation can encourage foreign investors to adopt cleaner production processes and green technologies. Recent research also indicates that environmental regulation is closely connected with FDI and green technological development. Environmental regulation can also be understood through Institutional Theory because regulations establish formal institutional expectations that influence firms' investment decisions and technological behaviour. While stringent environmental regulations may increase compliance costs and potentially discourage some forms of investment, they can simultaneously create market opportunities for green technology firms by increasing demand for renewable energy, energy-efficient technologies, pollution-control systems and cleaner production. Consequently, the effect of environmental regulation on green technology FDI may depend on whether investors perceive the regulatory environment as a constraint or as a predictable institutional framework that creates opportunities for green investment.

Therefore, the framework proposes that market size, political stability and environmental regulation influence FDI in green technology, while the quality of the host-country institutional environment determines the attractiveness and operating conditions for foreign investors. Recent evidence further supports the relevance of institutional quality to FDI and green technology innovation, suggesting that stronger institutions can enhance the ability of FDI to contribute to green technological development.

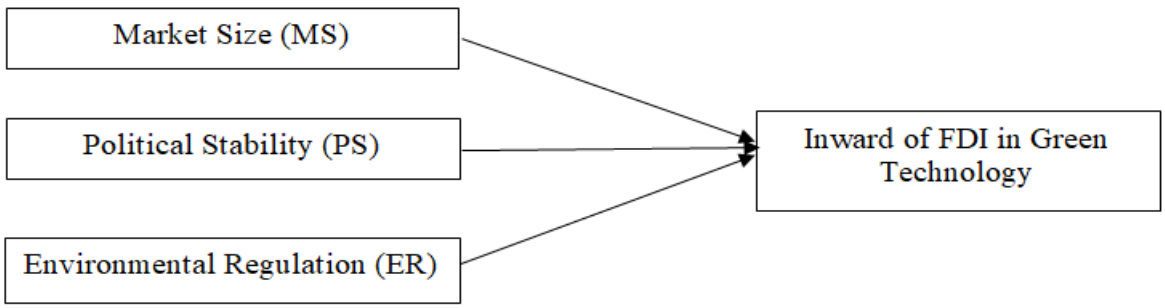


Diagram 1.0 Theoretical Framework based on Theory of Institutional

METHODOLOGY

This study adopts a quantitative research design using secondary annual time-series data to examine the influence of market size, political stability, and environmental regulation on foreign direct investment (FDI) in green

technology in Malaysia. Data will be obtained from reliable sources, including the World Bank's World Development Indicators (WDI) and Worldwide Governance Indicators (WGI), UNCTAD, MIDA, and relevant Malaysian government agencies. Market size will be measured using real GDP, political stability using the World Bank's Political Stability and Absence of Violence/Terrorism indicator, and environmental regulation using an appropriate environmental-policy or regulatory-stringency indicator.

FDI in green technology will be measured based on annual foreign investment in officially identified green-technology or climate-related sectors. The study will use all available annual observations for Malaysia during the selected study period. Descriptive statistics, correlation analysis, multicollinearity and stationarity tests will be conducted, followed by the Autoregressive Distributed Lag (ARDL) approach to examine short- and long-run relationships among the variables. Diagnostic and stability tests will also be conducted to ensure the reliability of the model. This methodology is appropriate because the study focuses on macroeconomic and institutional determinants of green-technology FDI at the national level.

CONCLUSION

The study is expected to provide meaningful policy implications for Malaysian policymakers by identifying the key economic and institutional factors that can attract higher-quality, technology-oriented, and environmentally sustainable foreign direct investment (FDI) in the green technology sector. Guided by Institutional Theory, the study provides a theoretical foundation for understanding how market size, political stability, and environmental regulation influence foreign investors' decisions. Using quantitative secondary time-series data and the Autoregressive Distributed Lag (ARDL) approach, the study aims to examine both the short- and long-term relationships between these three determinants and green technology FDI in Malaysia. The findings may assist policymakers in strengthening market opportunities, maintaining political stability, and developing effective environmental regulations that encourage long-term green investment. Overall, the study is expected to contribute useful insights for Malaysia in attracting green, technology-oriented, and sustainable foreign investment that supports the country's long-term economic and environmental development.

REFERENCES

1. Ameli, N., Dessens, O., Winning, M., Cronin, J., Chenet, H., Drummond, P., Calzadilla, A., Anandarajah, G., & Grubb, M. (2021). Higher cost of finance exacerbates a climate investment trap in developing economies. Nature Communications, 12(1), 4046. https://doi.org/10.1038/s41467-021-24305-3
2. Amendolagine, V., Lema, R., & Rabellotti, R. (2021). Green foreign direct investments and the deepening of capabilities for sustainable innovation in multinationals: Insights from renewable energy. Journal of Cleaner Production, 310, 127381. https://doi.org/10.1016/j.jclepro.2021.127381
3. Ang, J. B. (2008). Determinants of foreign direct investment in Malaysia. Journal of Policy Modeling, 30(1), 185–189. https://doi.org/10.1016/j.jpolmod.2007.06.014
4. Azam, M., & Haseeb, M. (2021). Determinants of foreign direct investment in BRICS: Does renewable and non-renewable energy matter? Energy Strategy Reviews, 35, 100638. https://doi.org/10.1016/j.esr.2021.100638
5. Azhgaliyeva, D., Le, H., Olivares, R. O., & Tian, S. (2024). Renewable energy investments and feed-in tariffs: Firm-level evidence from Southeast Asia. Applied Energy, 374, 123986. https://doi.org/10.1016/j.apenergy.2024.123986
6. Bailey, N. (2018). Exploring the relationship between institutional factors and FDI attractiveness: A meta-analytic review. International Business Review, 27(1), 139–148. https://doi.org/10.1016/j.ibusrev.2017.05.012
7. Brown, J. R., Martinsson, G., & Thomann, C. (2022). Can environmental policy encourage technical change? Emissions taxes and R&D investment in polluting firms. The Review of Financial Studies, 35(10), 4518–4560. https://doi.org/10.1093/rfs/hhac003
8. Busse, M., & Hefeker, C. (2007). Political risk, institutions and foreign direct investment. European Journal of Political Economy, 23(2), 397–415. https://doi.org/10.1016/j.ejpoleco.2006.02.003
9. Chakrabarti, A. (2001). The determinants of foreign direct investments: Sensitivity analyses of cross-country regressions. Kyklos, 54(1), 89–114. https://doi.org/10.1111/1467-6435.00142

10. Chen, L., Hu, L., He, F., & Zhang, H. (2024). Environmental regulation, foreign direct investment, and green total factor productivity: An empirical test based on Chinese city-level panel data. Sustainability, 16(13), 5620. https://doi.org/10.3390/su16135620
11. Copeland, B. R., & Taylor, M. S. (2004). Trade, growth, and the environment. Journal of Economic Literature, 42(1), 7–71. https://doi.org/10.1257/002205104773558047
12. Dang, T. T. G., & Nguyen, T. D. (2025). Foreign direct investment inflows and green technology innovation: The role of institutional quality. International Journal of Sustainable Development and Planning. https://doi.org/10.18280/ijsdp.201201
13. Dossou, T. A. M., Kambaye, E. N., Asongu, S. A., Alinsato, A. S., Berhe, M. W., & Dossou, K. P. (2023). Foreign direct investment and renewable energy development in sub-Saharan Africa: Does governance quality matter? Renewable Energy, 219, 119403. https://doi.org/10.1016/j.renene.2023.119403
14. Eskeland, G. S., & Harrison, A. E. (2003). Moving to greener pastures? Multinationals and the pollution haven hypothesis. Journal of Development Economics, 70(1), 1–23. https://doi.org/10.1016/S0304-3878(02)00084-6
15. Famanta, M., Randhawa, A. A., & Yajing, J. (2024). The impact of FDI in green technology on environmental quality in less developed countries: A case study of load capacity factor based on PCSE and FGLS techniques. Heliyon, 10(7), e28217. https://doi.org/10.1016/j.heliyon.2024.e28217
16. Fang, X., Yang, Z., Zhang, Y., & Miao, X. (2024). Foreign direct investment and the structural transition of energy consumption: Impact and mechanisms. Humanities and Social Sciences Communications, 11, 1759. https://doi.org/10.1057/s41599-024-04280-y
17. Fernandez, M. I., Go, Y. I., Wong, M. L. D., & Früh, W. (2024). Malaysia's energy transition and readiness towards attaining net zero: Review of the potential, constraints, and enablers. Renewable Energy Focus, 51, 100640. https://doi.org/10.1016/j.ref.2024.100640
18. Gohdes, N., Simshauser, P., & Wilson, C. (2022). Renewable entry costs, project finance and the role of revenue quality in Australia's National Electricity Market. Energy Economics, 114, 106312. https://doi.org/10.1016/j.eneco.2022.106312
19. Gregoriou, A., Nguyen, B. D., Nguyen, T., Le, H., & Hudson, R. (2021). Economic policy uncertainty and cross-border mergers and acquisitions. International Review of Financial Analysis, 78, 101911. https://doi.org/10.1016/j.irfa.2021.101911
20. Keller, W., & Levinson, A. (2002). Pollution abatement costs and foreign direct investment inflows to U.S. states. The Review of Economics and Statistics, 84(4), 691–703. https://doi.org/10.1162/003465302760556503
21. Kyaw, K. (2022). Effect of policy uncertainty on environmental innovation. Journal of Cleaner Production, 363, 132645. https://doi.org/10.1016/j.jclepro.2022.132645
22. Li, et al. (2021). Heterogeneous impacts of environmental regulations and foreign direct investment on green innovation across different regions in China. Science of the Total Environment, 759, 143744. https://doi.org/10.1016/j.scitotenv.2020.143744.
23. Ling, P.-S., Lim, M. K., & Tseng, M.-L. (2020). Assessing sustainable foreign direct investment performance in Malaysia: A comparison of policy makers' and investors' perceptions. Sustainability, 12(20), 8749. https://doi.org/10.3390/su12208749
24. Ma, Y., Sha, Y., Wang, Z., & Zhang, W. (2023). The effect of the policy mix of green credit and government subsidy on environmental innovation. Energy Economics, 118, 106512. https://doi.org/10.1016/j.eneco.2023.106512
25. Nhuong, B. H., Bao, H. D., & Ha, L. T. (2024). Embracing green foreign direct investment in a journey toward global sustainable economy: An empirical approach using statistical analysis. International Journal of Energy Economics and Policy, 14(5), 435–446. https://doi.org/10.32479/ijeep.16635
26. Nhuong, B. H., Bao, H. D., Linh, V. M., & Ha, L. T. (2025). Do green foreign direct investments promote environmental innovation in European countries? International Journal of Renewable Energy Development, 14(1), 10–24. https://doi.org/10.61435/ijred.2025.60421
27. Ofori, I. K., Figari, F., & Ojong, N. (2023). Towards sustainability: The relationship between foreign direct investment, economic freedom and inclusive green growth. Journal of Cleaner Production, 406, 137020. https://doi.org/10.1016/j.jclepro.2023.137020

28. Ofori, I. K., Gbolonyo, E. Y., & Ojong, N. (2022). Foreign direct investment and inclusive green growth in Africa: Energy efficiency contingencies and thresholds. Energy Economics, 117, 106414. https://doi.org/10.1016/j.eneco.2022.106414
29. Phung, T. Q., Rasoulinezhad, E., & Thu, H. L. T. (2023). How are FDI and green recovery related in Southeast Asian economies? Economic Change and Restructuring, 56(6), 3735–3755. https://doi.org/10.1007/s10644-022-09398-0
30. Qiu, S., Wang, Z., & Geng, S. (2021). How do environmental regulation and foreign investment behavior affect green productivity growth in the industrial sector? An empirical test based on Chinese provincial panel data. Journal of Environmental Management, 287, 112282. https://doi.org/10.1016/j.jenvman.2021.112282
31. Scott, W. R. (2008). Institutions and organizations: Ideas and interests (3rd ed.). Sage.
32. Shaari, M. S., Asbullah, M. H., Abidin, N. Z., Karim, Z. A., & Nangle, B. (2023). Determinants of foreign direct investment in ASEAN+3 countries: The role of environmental degradation. International Journal of Environmental Research and Public Health, 20(3), 1720. https://doi.org/10.3390/ijerph20031720
33. Tan, Y., & Uprasen, U. (2023). The effect of foreign direct investment on renewable energy consumption subject to the moderating effect of environmental regulation: Evidence from the BRICS countries. Renewable Energy, 201, 135–149. https://doi.org/10.1016/j.renene.2022.11.066
34. Trevino, L. J., Thomas, D. E., & Cullen, J. (2008). The three pillars of institutional theory and FDI in Latin America: An institutionalization process. International Business Review, 17(1), 118–133.
35. Uddin, M., Chowdhury, A., Zafar, S., Shafique, S., & Liu, J. (2019). Institutional determinants of inward FDI: Evidence from Pakistan. International Business Review, 28(2), 344–358. https://doi.org/10.1016/j.ibusrev.2018.10.006
36. Wang, M., Zhang, X., & Hu, Y. (2021). The green spillover effect of inward foreign direct investment: Market versus innovation. Journal of Cleaner Production, 328, 129501. https://doi.org/10.1016/j.jclepro.2021.129501
37. Yuan, H., et al. (2021). Do foreign direct investment and environmental regulation improve green technology innovation? An empirical analysis based on panel data from the Chinese manufacturing industry. Environmental Science and Pollution Research.
38. Yu, G., & Liu, K. (2024). Foreign direct investment, environmental regulation and urban green development efficiency: An empirical study from China. Applied Economics, 56(23), 2738–2751. https://doi.org/10.1080/00036846.2023.2200232