Greenfield Investment and Green Economic Growth

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The intensification of countries' growth causes the depletion of natural resources, biodiversity degradation, ecological imbalances, damage, and disasters. The aggravation of ecological issues requires the development of mechanisms for simultaneous achievement of economic, social, and ecological goals. The energy sector is the core direction of economic decarbonization. Therefore, green economic growth requires economic development due to the extension of innovative technologies for renewable energies and relevant investment for that. The concept of "green economic growth" is linked to the paradigm of sustainable development and reflects economic growth considering the rational use of natural capital, prevents and reduces pollution and developed opportunities to improve social well-being due to providing carbon-neutral economy. The concept of "greenfield investment" is wider and complex definitions, the scholars define it as the investment on environmental, social and governance projects which aims to achieve sustainable development goals in long-term.

Keywords: sustainable development ; green investment ; renewable energy ; green economic growth ; greenfield investment

1. Introduction

Within the paradigm of sustainable development goals, countries in the European Union (EU) have accepted the green deal policy, which aims to decarbonize economic growth by 2050 [1][2]. Thus, the EU will become the first region with carbon-free economic development. However, although countries in the EU provide coherent policies, the EU has disparities and gaps in reducing carbon emissions and consequently achieving sustainable development goals (SDGs) [3][4][5].

It should be noted that the transition to green economic growth requires green innovations and technologies that reduce environmental degradation, particularly carbon emissions. Scholars [6][7][8][9][10] confirm that green innovations have a statistically significant impact on declining carbon dioxide emissions and boost the achievement of SDGs. At the same time, past studies [11] emphasize that countries with strong institutions and effective implementation of sustainable development principles have higher capabilities for extending green innovations. In addition, new innovations and technologies require additional resources (financial, labor, etc.). Prior studies [12][13] have highlighted the crucial role of greenfield investment in boosting green innovations and technologies. Adeel-Farooq et al. [14] confirmed that greenfield investment negatively affects environmental performance in Asia countries. At the same time, economic growth positively affects environmental performance. However, Neto et al. [15] concludes that economic growth boosts the greenfield investment, however the reverse effect is not confirmed. At the same time, they showed that greenfield investment could have indirect effects on countries economic growth in developed and developing countries. Bayar Y. [16] also showed that greenfield investment promotes the economic growth in EU countries. At the same time, the countries have disparities in attracting external and allocating internal green investment [17]. Consequently, it could restrict the green economic growth of the country. On the other hand, countries with a high level of green economic growth are more attractive for investors. In this case, it is relevant to indicate if the greenfield investment has the direct effect on green economic growth. It should be noted that the scientific community has not accepted universal approaches for assessing green economic growth: (1) approaches based on the world indexes SDG Index, Global Sustainable Competitiveness Index, and Global Green Economy Index [18][19][20][21]; (2) approaches based on green GDP [22][23]; and (3) approaches based on desirable and undesirable outcomes [24][25].

2. Assessment of Green Economic Growth

The results of the theoretical background on green economic growth show that most authors analyze it as a synergistic effect on simultaneous economic and ecological development [6][10][23][24][25][26][27][28]. Scholars [26] use SO_2, wastewater and smoke–dust emissions to measure green economic growth. At the same time, they confirm that innovations could boost green economic growth. The study [27] applies energy efficiency and stochastic frontier techniques to estimate green

economic growth. Based on these findings, they conclude that reforms in Chinese energy sectors were effective and caused an increase in energy efficiency, which boosted green economic growth. Dizon K. E and Norona M. [29] confirm that a country's green economic growth depends on SMEs' green development. Thus, using the structural equation model, they define green economic growth as the latent variable with the following constructs: intra- and intergenerational equity; equity and inclusiveness; job creation and economic diversification; environmental integrity; efficiency; and green technological advancement [29]. Considering the findings, they conclude that environmental integrity has the highest statistically significant load on green economic growth. At the same time, scholars [29] emphasize that initialization plays the core role in providing green economic growth. Gao X. [30] applies spatial clustering and blockchain techniques to identify the abnormal and pic points of green economic growth of the country, and based on the findings, the scholarly cluster region depends on green economic growth. It should be noted that green economic growth is analyzed within the productivity of green factors and the efficiency of green economies. A similar approach to estimate green economic growth is used by [28]. Thus, scholars apply the green total productivity factor as a long-term reference-point to achieve sustainable development goals. Guo S. and Diao Y. [31] estimate the green economic growth of regions of the Yangtze River economic belt. They construct an integrated index that consists of economic quality, green growth, green industry, and green benefits. Based on the entropy method, scholars conclude that the Pan-Yangtze River Delta urban agglomeration has the highest value of green economic growth, which is caused by coherent ecological and economic policies. Kuang Y. and Lin B. [32] applied the quasi-difference–in-difference method for the assessment of green economic growth. Scholars [32][33] used an integrated index constructed from energy efficiency, economic productivity, and emissions reduction. A previous study [34] developed an index to estimate green economic growth that merges three dimensions: environmental efficiency (wastewater, SO_2 and industrial smoke emissions), resource efficiency (water and electricity consumption) and governance capacity (scale of greening, recycling of domestic waste, and cost for eliminating industrial pollution). Contrary to the abovementioned research, scholars [35] calculate green economic growth based not only on economic (GDP, GDP per capita, and share of tertiary industry in GDP) and ecological (green urban area, forest area, and green park) indicators but also on social (population growth rate, unemployment rate, and income per capita) indicators.

3. Greenfield Investment and Green Economic Growth

The results of the analysis of the theoretical landscape of green economic growth show that researchers have identified a vast range of indicators that catalyze green economic growth: fiscal decentralization [36][37]; digitalization and artificial intelligence [38][39][40][41][42]; good governance [43]; green innovations [44][45][46][47][48]; environmental regulation [49][50][51][52]; green finance [53][54][55][56]; renewable energy [57][58][59][60][61][62][63]; green consciousness, education and awareness [64][65][66][67][68][69][70][71]; and investment and business climate [72][73][74][75][76][77].

Scholars [28] applied FMOLS and DOLS techniques to empirically justify the statistically significant impact of innovations, green policies, government efficacy, and renewable energy consumption on green economic growth. In addition, they highlight that the implementation of green innovations requires greenfield investment. Studies [36][37] show that in China, fiscal decentralization could differentially impact green economic growth depending on the efficacy of environmental regulations and green innovation implementation. At the same time, researchers [38] confirmed that Big Data, cloud computing, and artificial intelligence could enhance green economic growth in China. However, they confirm that the government should actively develop digital infrastructure and improve the country's digital capabilities. Prior studies [42][43][47] prove that digital technologies positively affect enhancing green economic growth. However, the innovation effect on green economic growth is not statistically significant in China. Furthermore, green economic growth is positively conducive to innovation in the long term, and this effect is not confirmed in the long term. Controversial conclusions have been confirmed by researchers [78]. Considering the results of two-step GMM techniques, they conclude that R&D expenditures positively promote green economic growth in the long term, and this impact does not conform in the short term.

Green finance is a core determinant of greenhouse gas emissions, which is the core dimension of green economic growth [54][55][58][76] Studies [54][55][58][76] confirm that green finance promotes innovation and technologies that allow the decline of environmental degradation, a safe economic growth rate and the achievement of green development. The pool of researchers [69][71][77] proves the positive statistically significant effect of renewable energies on green economic growth. However, scholars [78] confirm the inverted N-shaped relationship between renewable energies and green economic growth for 27 EU members from 2008 to 2017. Thus, based on the results of the SBM-GML technique, researchers show that the growth of renewable energy in the interval of 0.67%–10.87% is conducive to green economic growth; in other cases (less than 0.675 or higher than 10.87%), it causes a decline [78]. In addition, they use the following control variables: population density, government expenditure and unemployment rate. Based on the meta-analysis of the investigation on green finance and green economic growth, Desalegn G. and Tangl A. [79] theoretically justify that green investment

promotes a country's green economic growth. The authors of [80] applied the ARDL model to check the long- and short-term effects of green investment on green economic growth. Considering the findings for Asian countries, scholars indicate that green investment positively impacts green economic growth in the long term. It should be emphasized that the accepted agreement between China and the EU on the Comprehensive Agreement on Investment [80] allows for achieving the common goals of decoupling carbon emissions and intensifying green economic growth. This is also confirmed by previous studies [81][82][83]. Furthermore, scholars [83] underline that green investment could be effective if the government provides effective environmental policies and planning and control mechanisms for environmental investments, expenditure, and projects. Past studies [84][85][86][87][88][89][90][91][92][93] have analyzed the impact of green investment at the local or company level. Based on empirical findings, scholars [84][85][86][87][88][89][90][91][92][93] show that green investment is conducive to a company's green performance, which is the core element for a country's green economic growth.

References

1. European Green Deal. 2022. Available online: https://www.consilium.europa.eu/en/policies/green-deal/ (accessed on 20 October 2022).
2. A European Green Deal. 2022. Available online: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en (accessed on 20 October 2022).
3. Cojocaru, T.M.; Ionescu, G.H.; Firoiu, D.; Cismaș, L.M.; Oţil, M.D.; Toma, O. Reducing Inequalities within and among EU Countries—Assessing the Achievement of the 2030 Agenda for Sustainable Development Targets (SDG 10). Sustainability 2022, 14, 7706.
4. Czyżewski, B.; Matuszczak, A.; Polcyn, J.; Smędzik-Ambroży, K.; Staniszewski, J. Deadweight loss in environmental policy: The case of the European union member states. J. Clean. Prod. 2020, 260, 121064.
5. Czyżewski, B.; Polcyn, J.; Brelik, A. Political orientations, economic policies, and environmental quality: Multivalued treatment effects analysis with spatial spillovers in country districts of Poland. Environ. Sci. Policy 2022, 128, 1–13.
6. Feng, G.F.; Niu, P.; Wang, J.Z.; Liu, J. Capital market liberalization and green innovation for sustainability: Evidence from China. Econ. Anal. Policy 2022, 75, 610–623.
7. Calza, F.; Parmentola, A.; Tutore, I. Types of Green Innovations: Ways of Implementation in a Non-Green Industry. Sustainability 2017, 9, 1301.
8. Raza, A.; Sui, H.; Jermsittiparsert, K.; Żukiewicz-Sobczak, W.; Sobczak, P. Trade Liberalization and Environmental Performance Index: Mediation Role of Climate Change Performance and Greenfield Investment. Sustainability 2021, 13, 9734.
9. Schiederig, T.; Tietze, F.; Herstatt, C. Green innovation in technology and innovation management–An exploratory literature review. RD Manag. 2012, 42, 180–192.
10. Saunila, M.; Ukko, J.; Rantala, T. Sustainability as a driver of green innovation investment and exploitation. J. Clean. Prod. 2018, 179, 631–641.
11. Huang, H.; Wang, F.; Song, M.; Balezentis, T.; Streimikiene, D. Green innovations for sustainable development of China: Analysis based on the nested spatial panel models. Technol. Soc. 2021, 65, 101593.
12. Castellani, D.; Marin, G.; Montresor, S.; Zanfei, A. Greenfield foreign direct investments and regional environmental technologies. Res. Policy 2022, 51, 104405.
13. Amendolagine, V.; Lema, R.; Rabellotti, R. Green foreign direct investments and the deepening of capabilities for sustainable innovation in multinationals: Insights from renewable energy. J. Clean. Prod. 2021, 310, 127381.
14. Adeel-Farooq, R.M.; Bakar, N.A.A.; Raji, J.O. Green field investment and environmental performance: A case of selected nine developing countries of Asia. Environ. Prog. Sustain. Energy 2018, 37, 1085–1092.
15. Neto, P.; Brandão, A.; Cerqueira, A. The impact of FDI, cross-border mergers and acquisitions, and greenfield investments on economic growth. IUP J. Bus. Strategy 2008, 1, 24–44.
16. Bayar, Y. Greenfield and brownfield investments and economic growth: Evidence from central and Eastern European Union countries. Naše Gospod./Our Econ. 2017, 63, 19–26.
17. Alon, I.; Bretas, V.P.; Sclip, A.; Paltrinieri, A. Greenfield FDI attractiveness index: A machine learning approach. Compet. Rev. Int. Bus. J. 2022, 37, 85–108.
18. Adamowicz, M. Green Deal, Green Growth and Green Economy as a Means of Support for Attaining the Sustainable Development Goals. Sustainability 2022, 14, 5901.

19. Rybalkin, O.; Lavrinenko, O.; Ignatjeva, S.; Danilevica, A. Introduction of EEPSE green economy index for the analysis of regional trends. Entrep. Sustain. Issues 2021, 9, 415–435.
20. Barbier, E.B. The green economy post Rio 20. Science 2013, 33, 887–888.
21. OECD. Green Growth Indicators 2017; OECD Publishing: Paris, France, 2017.
22. Song, X.; Zhou, Y.; Jia, W. How do economic openness and R&D investment affect green economic growth?—Evidence from China. Resour. Conserv. Recycl. 2019, 146, 405–415.
23. Sohag, K.; Taşkın, F.D.; Malike, M.N. Green economic growth, cleaner energy and militarization: Evidence from Turkey. Resour. Policy 2019, 63, 101407.
24. Zeng, J.J.; Tong, W.S. How do energy policies affect the development of industrial green economy. China Popul. Environ. 2018, 28, 19–28.
25. Kalantaripor, M.; Najafi Alamdarlo, H. Spatial Effects of Energy Consumption and Green GDP in Regional Agreements. Sustainability 2021, 13, 10078.
26. Cao, W.; Zhang, Y.; Qian, P. The effect of innovation-driven strategy on green economic development in China—An empirical study of smart cities. Int. J. Environ. Res. Public Health 2020, 17, 1520.
27. Chen, X.; Li, H.; Qin, Q.; Peng, Y. Market-oriented reforms and China's green economic development: An empirical study based on stochastic frontier analysis. Emerg. Mark. Financ. Trade 2021, 57, 949–971.
28. Khan, S.A.R.; Yu, Z.; Umar, M. A road map for environmental sustainability and green economic development: An empirical study. Environ. Sci. Pollut. Res. 2022, 29, 16082–16090.
29. Dizon, K.E.; Noroña, M.I. The effects of green economic development (GED) interventions on the intention of recycled paper-based producers to adopt sustainable business practices (SBP) in the Philippines. In Proceedings of the International Conference on Industrial Engineering and Operations Management, Rome, Italy, 2–5 August 2021; pp. 2155–2166.
30. Gao, X. Urban green economic development indicators based on spatial clustering algorithm and blockchain. J. Intell. Fuzzy Syst. 2021, 40, 7049–7060.
31. Guo, S.; Diao, Y. Spatial-temporal evolution and driving factors of coupling between urban spatial functional division and green economic development: Evidence from the Yangtze River economic belt. Front. Environ. Sci. 2022, 10, 2312.
32. Kuang, Y.; Lin, B. Natural gas resource utilization, environmental policy and green economic development: Empirical evidence from China. Resour. Policy 2022, 79, 102992.
33. Zhou, P.; Ang, B.W.; Wang, H. Energy and CO2 emission performance in electricity generation: A nonradial directional distance function approach. Eur. J. Oper. Res. 2012, 221, 625–635.
34. Pan, L.; Yu, J.; Lin, L. The temporal and spatial pattern evolution of land-use carbon emissions in China coastal regions and its response to green economic development. Front. Environ. Sci. 2022, 10, 1654.
35. Peng, M.; Fan, J. Statistical evaluation of green economic development based on rough set calculation method. J. Phys. Conf. Ser. 2021, 1994, 012042.
36. Wang, B.; Liu, F.; Yang, S. Green economic development under the fiscal decentralization system: Evidence from China. Front. Environ. Sci. 2022, 10, 1437.
37. Ye, M.; Chen, W.; Guo, L.; Li, Y. "Green" economic development in China: Quantile regression evidence from the Yangtze River economic belt. Environ. Sci. Pollut. Res. 2022, 29, 60572–60583.
38. Wang, L.; Wu, Y.; Huang, Z.; Wang, Y. How big data drives green economic development: Evidence from China. Front. Environ. Sci. 2022, 10, 2281.
39. Kwilinski, A.; Lyulyov, O.; Dzwigol, H.; Vakulenko, I.; Pimonenko, T. Integrative Smart Grids' Assessment System. Energies 2022, 15, 545.
40. Miśkiewicz, R.; Matan, K.; Karnowski, J. The Role of Crypto Trading in the Economy, Renewable Energy Consumption and Ecological Degradation. Energies 2022, 15, 3805.
41. Miśkiewicz, R.; Rzepka, A.; Borowiecki, R.; Olesiński, Z. Energy Efficiency in the Industry 4.0 Era: Attributes of Teal Organizations. Energies 2021, 14, 6776.
42. Yang, W.; Chen, Q.; Guo, Q.; Huang, X. Toward sustainable development: How digitalization, technological innovation, and green economic development interact with each other. Int. J. Environ. Res. Public Health 2022, 19, 12273.
43. Miskiewicz, R. Clean and Affordable Energy within Sustainable Development Goals: The Role of Governance Digitalization. Energies 2022, 15, 9571.

44. Dźwigoł, H.; Wolniak, R. Controlling in the Management Process of a Chemical Industry Production Company. Przem. Chem. 2018, 97, 1114–1116.

45. Ingber, L. Quantum path-integral qPATHINT algorithm. Open Cybern. Syst. J. 2017, 11, 119–133.

46. Hezam, I.M.; Mishra, A.R.; Rani, P.; Saha, A.; Smarandache, F.; Pamucar, D. An integrated decision support framework using single-valued neutrosophic-MASWIP-COPRAS for sustainability assessment of bioenergy production technologies. Expert Syst. Appl. 2023, 211, 118674.

47. Miśkiewicz, R. The Impact of Innovation and Information Technology on Greenhouse Gas Emissions: A Case of the Visegrád Countries. J. Risk Financ. Manag. 2021, 14, 59.

48. Vanickova, R. Innovation corporate energy management: Efficiency of green investment. Mark. Manag. Innov. 2020, 2, 56–67.

49. Miskiewicz, R. Efficiency of electricity production technology from postprocess gas heat: Ecological, economic and social benefits. Energies 2020, 13, 6106.

50. Hussain, H.I.; Haseeb, M.; Kamarudin, F.; Dacko-Pikiewicz, Z.; Szczepańska-Woszczyna, K. The role of globalization, economic growth and natural resources on the ecological footprint in Thailand: Evidence from nonlinear causal estimations. Processes 2021, 9, 1103.

51. Nawawi, M.; Samsudin, H.; Saputra, J.; Szczepańska-Woszczyna, K.; Kot, S. The Effect of Formal and Informal Regulations on Industrial Effluents and Firm Compliance Behavior in Malaysia. Prod. Eng. Arch. 2022, 28, 193–200.

52. Szczepańska-Woszczyna, K.; Gedvilaitė, D.; Nazarko, J.; Stasiukynas, A.; Rubina, A. Assessment of Economic Convergence among Countries in the European Union. Technol. Econ. Dev. Econ. 2022, 28, 1572–1588.

53. Kharazishvili, Y.; Kwilinski, A.; Sukhodolia, O.; Dzwigol, H.; Bobro, D.; Kotowicz, J. The systemic approach for estimating and strategizing energy security: The case of Ukraine. Energies 2021, 14, 2126.

54. Prokopenko, O.; Miśkiewicz, R. Perception of “green shipping” in the contemporary conditions. Entrep. Sustain. Issues 2020, 8, 269–284.

55. Polcyn, J.; Us, Y.; Lyulyov, O.; Pimonenko, T.; Kwilinski, A. Factors Influencing the Renewable Energy Consumption in Selected European Countries. Energies 2022, 15, 108.

56. Melnychenko, O. Energy Losses Due to Imperfect Payment Infrastructure and Payment Instruments. Energies 2021, 14, 8213.

57. Kotowicz, J.; Węcel, D.; Kwilinski, A.; Brzęczek, M. Efficiency of the power-to-gas-to-liquid-to-power system based on green methanol. Appl. Energy 2022, 314, 118933.

58. Dźwigol, H.; Dźwigoł-Barosz, M.; Zhyvko, Z.; Miśkiewicz, R.; Pushak, H. Evaluation of the energy security as a component of national security of the country. J. Secur. Sustain. Issues 2019, 8, 307–317.

59. Saługa, P.W.; Szczepańska-Woszczyna, K.; Miśkiewicz, R.; Chład, M. Cost of equity of coal-fired power generation projects in Poland: Its importance for the management of decision-making process. Energies 2020, 13, 4833.

60. Saługa, P.W.; Zamasz, K.; Dacko-Pikiewicz, Z.; Szczepańska-Woszczyna, K.; Malec, M. Risk-adjusted discount rate and its components for onshore wind farms at the feasibility stage. Energies 2021, 14, 6840.

61. Kostyrko, R.; Kosova, T.; Kostyrko, L.; Zaitseva, L.; Melnychenko, O. Ukrainian Market of Electrical Energy: Reforming, Financing, Innovative Investment, Efficiency Analysis, and Audit. Energies 2021, 14, 5080.

62. Coban, H.H.; Lewicki, W.; Miśkiewicz, R.; Drożdż, W. The Economic Dimension of Using the Integration of Highway Sound Screens with Solar Panels in the Process of Generating Green Energy. Energies 2023, 16, 178.

63. Cyfert, S.; Chwiłkowska-Kubala, A.; Szumowski, W.; Miśkiewicz, R. The process of developing dynamic capabilities: The conceptualization attempt and the results of empirical studies. PLoS ONE 2021, 16, e0249724.

64. Kharazishvili, Y.; Kwilinski, A.; Grishnova, O.; Dzwigol, H. Social safety of society for developing countries to meet sustainable development standards: Indicators, level, strategic benchmarks (with calculations based on the case study of Ukraine). Sustainability 2020, 12, 8953.

65. Dzwigol, H. Research Methodology in Management Science: Triangulation. Virtual Econ. 2022, 5, 78–93.

66. Dzwigol, H. Methodological and Empirical Platform of Triangulation in Strategic Management. Acad. Strateg. Manag. J. 2020, 19, 1–8.

67. Us, Y.; Pimonenko, T.; Lyulyov, O.; Chen, Y.; Tambovceva, T. Promoting Green Brand of University in Social Media: Text Mining and Sentiment Analysis. Virtual Econ. 2022, 5, 24–42.

68. Miśkiewicz, R. The importance of knowledge transfer on the energy market. Polityka Energetyczna 2018, 21, 49–62.

69. Szczepańska-Woszczyna, K.; Gatnar, S. Key Competences of Research and Development Project Managers in High Technology Sector. Forum Sci. Oeconomia 2022, 10, 107–130.

70. Trzeciak, M.; Kopec, T.P.; Kwilinski, A. Constructs of Project Programme Management Supporting Open Innovation at the Strategic Level of the Organization. J. Open Innov. Technol. Mark. Complex. 2022, 8, 58.

71. Miśkiewicz, R. Knowledge and innovation 4.0 in today's electromobility. In Sustainability, Technology and Innovation 4.0; Makieła, Z., Stuss, M.M., Borowiecki, R., Eds.; Routledge: London, UK, 2021; pp. 256–275.

72. Dzwigol, H.; Aleinikova, O.; Umanska, Y.; Shmygol, N.; Pushak, Y. An Entrepreneurship Model for Assessing the Investment Attractiveness of Regions. J. Entrep. Educ. 2019, 22, 1–7.

73. Tih, S.; Wong, K.-K.; Lynn, G.S.; Reilly, R.R. Prototyping, Customer Involvement, and Speed of Information Dissemination in New Product Success. J. Bus. Ind. Mark. 2016, 31, 437–448.

74. Kianpour, M.; Kowalski, S.J.; Øverby, H. Systematically Understanding Cybersecurity Economics: A Survey. Sustainability 2021, 13, 13677.

75. Zhang, M.; Li, B. How do R&D inputs affect green economic development? evidence from China. Technol. Anal. Strateg. Manag. 2022, 34, 1353–1368.

76. Xia, L.; Liu, Y.; Tian, Y. Green finance strategies for mitigating GHG emissions in China: Public spending as a new determinant of green economic development. Front. Environ. Sci. 2022, 10, 1710.

77. Dzwigol, H.; Dzwigol-Barosz, M. Sustainable Development of the Company on the basis of Expert Assessment of the Investment Strategy. Acad. Strateg. Manag. J. 2020, 19, 1–7.

78. Xie, F.; Liu, Y.; Guan, F.; Wang, N. How to coordinate the relationship between renewable energy consumption and green economic development: From the perspective of technological advancement. Environ. Sci. Eur. 2020, 32, 71.

79. Desalegn, G.; Tangl, A. Enhancing Green Finance for Inclusive Green Growth: A Systematic Approach. Sustainability 2022, 14, 7416.

80. Mo, Y.; Ullah, S.; Ozturk, I. Green investment and its influence on green growth in high polluted Asian economies: Do financial markets and institutions matter? Econ. Res. Ekon. Istraz. 2022, 35, 1–11.

81. Qian, X. Investment for green growth: An analysis of the CAI environmental provisions. J. World Invest. Trade 2022, 23, 628–650.

82. Drożdż, W.; Kinelski, G.; Czarnecka, M.; Wójcik-Jurkiewicz, M.; Maroušková, A.; Zych, G. Determinants of Decarbonization—How to Realize Sustainable and Low Carbon Cities? Energies 2021, 14, 2640.

83. Hu, A.; Zhou, S. Green development: Functional definition, mechanism analysis and development strategy. Zhongguo Renkou Ziyuan Yu Huan Jing/China Popul. Resour. Environ. 2014, 24, 14–20.

84. Chen, J.; Geng, Y.; Liu, R. Carbon emissions trading and corporate green investment: The perspective of external pressure and internal incentive. Bus. Strategy Environ. 2022.

85. Chygryn, O.; Bilan, Y.; Kwilinski, A. Stakeholders of Green Competitiveness: Innovative Approaches for Creating Communicative System. Mark. Manag. Innov. 2020, 3, 358–370.

86. Vaníčková, R.; Szczepańska-Woszczyna, K. Innovation of business and marketing plan of growth strategy and competitive advantage in exhibition industry. Pol. J. Manag. Stud. 2020, 21, 425–445.

87. Coban, H.H.; Lewicki, W.; Sendek-Matysiak, E.; Łosiewicz, Z.; Drożdż, W.; Miśkiewicz, R. Electric Vehicles and Vehicle–Grid Interaction in the Turkish Electricity System. Energies 2022, 15, 8218.

88. Done, I.; Chivu, L.; Andrei, J.; Matei, M. Using labor force and green investments in valuing the Romanian agriculture potential. J. Food Agric. Environ. 2012, 10, 737–741.

89. Sun, H.; Wan, Y.; Zhang, L.; Zhou, Z. Evolutionary game of the green investment in a two-echelon supply chain under a government subsidy mechanism. J. Clean. Prod. 2019, 235, 1315–1326.

90. Chygryn, O.; Krasniak, V. Theoretical and applied aspects of the development of environmental investment in Ukraine. Mark. Manag. Innov. 2015, 3, 226–234.

91. Wu, S.; Zhou, X.; Zhu, Q. Green credit and enterprise environmental and economic performance: The mediating role of eco-innovation. J. Clean. Prod. 2023, 382, 135248.

92. Zhang, D.; Kong, Q. Renewable energy policy, green investment, and sustainability of energy firms. Renew. Energy 2022, 192, 118–133.

93. Zhu, X.; Du, J.; Boamah, K.B.; Long, X. Dynamic analysis of green investment decision of manufacturer. Environ. Sci. Pollut. Res. 2020, 27, 16998–17012.