

Research on the Impact of Enterprises' Outward Foreign Direct Investment on Green Technology Innovation

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Abstract—With the transformation of China to green and low-carbon development mode, how to promote the green innovation of enterprises has become a research hotspot. At the same time, under the wave of economic globalization, China actively promotes foreign direct investment. Under the advocacy of national policies, foreign direct investment has also become an important project in business investment. Based on the panel data of all A-share listed companies from 2007 to 2022, this paper reviews existing research literature and verifies the impact of OFDI on green innovation technology through theory and demonstration. The conclusion is that outward foreign direct investment has a positive impact on green technology innovation, and the effect is significant. Based on this effect, this paper provides some suggestions and references for enterprises to formulate green innovation strategy and internationalization strategy.

Keywords—outward foreign direct investment, green technology innovation, financing constraint

I. INTRODUCTION

A. Research Background

Against the backdrop of transforming economic development models, China's traditional extensive growth model can no longer adapt to the country's current realities. At this stage, high-quality development has become a top priority in China's comprehensive national construction. The report to the 20th National Congress of the Communist Party of China (CPC) emphasizes that promoting the green and low-carbon transformation of economic and social development is a critical step toward high-quality development. This strategic deployment not only reflects a profound understanding of ecological environmental protection but also demonstrates a firm commitment to achieving sustainable development. Realizing the "dual carbon" goals (carbon peaking and carbon neutrality) necessitates the active participation of micro-level enterprises. In this context, how to drive enterprises to engage in green technological innovation to improve resource utilization efficiency and mitigate environmental pollution has become a focal point of shared concern for governments and enterprises worldwide.

Amid the tide of economic globalization, China has seized opportunities to fully leverage its factor endowments, actively participated in international trade and cooperation, and vigorously promoted Outward Foreign Direct Investment (OFDI). According to the 2022 Statistical Bulletin of China's Outward Foreign Direct Investment jointly released by the Ministry of Commerce, the National Bureau of Statistics, and the State Administration of Foreign Exchange, China's cumulative OFDI reached \$163.12 billion in 2022, ranking second globally, and has accounted for more than 10% of the

world's total for seven consecutive years. Under the advocacy of national policies, many enterprises have formulated globalization strategies, achieved globalized production and market reach, and made OFDI a key component of their business investment portfolios.

B. Research Significance

1) Theoretical significance

At present, there is abundant research on two-way FDI (represented by OFDI and IFDI) and technological innovation in China. Based on a systematic review and synthesis of existing literature, this study focuses on the relationship between Outward Foreign Direct Investment (OFDI) as a component of two-way FDI and green technological innovation. By integrating the current status of OFDI scale and green technological innovation efficiency among Chinese listed companies, this research constructs a theoretical and empirical analytical framework for the interconnection between the two. Additionally, differing from most studies that adopt macro or meso perspectives, this research approaches the issue from the micro-level perspective of enterprises, refining research questions to align more closely with practical realities and aiming to provide substantive recommendations for enterprises' green development.

2) Practical significance

Green technological innovation is of critical importance for enterprises' long-term development. Engaging in green technological innovation not only helps enterprises enhance economic efficiency and sustainable development capabilities but also strengthens international competitiveness, shapes a positive corporate image, and mitigates future risks. First, green technological innovation can improve enterprises' economic efficiency. Green technologies reduce resource consumption in production processes, thereby lowering production costs. Moreover, green technological innovation reflects enterprises' social responsibility and environmental awareness, helping to establish a favorable corporate image. This, in turn, fosters closer relationships with consumers, increasing their willingness to purchase the enterprise's products. Second, green technological innovation is a vital pathway to achieve societal sustainable development. Through the development and application of green technologies such as clean energy, environmental protection materials, and energy-saving technologies, enterprises can reduce overexploitation of natural resources and environmental degradation, promoting coordinated development between economic growth and environmental protection. Third, driven by the global environmental protection trend, the international

community's demand for green products is growing rapidly. To enhance international competitiveness in global markets, enterprises must commit to researching and developing innovative products that comply with international green standards. This strategy enables enterprises not only to meet international market demands but also to effectively expand market share and deepen their internationalization strategies.

Finally, with the increasing strictness of environmental regulations, enterprises must continuously update and upgrade environmental protection equipment and technologies to improve environmental performance and reduce costs. Through green technological innovation, enterprises can proactively prepare for future challenges, thereby reducing potential environmental risks.

II. LITERATURE REVIEW

A. Research on Green Technological Innovation

Green technology refers to technologies or processes that reduce ecological environmental pollution and damage, and utilize environmental protection materials or clean energy. Green technological innovation, meanwhile, denotes technological innovation aimed at following ecological and economic laws and protecting the environment.

Scholars have proposed diverse perspectives on the driving factors of green technological innovation. For instance, Li and Wang (2024) argue that environmental protection taxes can promote green technological innovation in specialized, sophisticated, distinctive, and innovative enterprises. Zhou (2024) suggests that the financial ecological environment can accelerate talent agglomeration and improve government governance levels, thereby promoting enterprises' green technological innovation. Sun (2024) contends that the digital economy can enhance the efficiency of green technological innovation through automated production and information-based management. Yang *et al.* (2024) maintain that cities' focus on green development can drive corporate green technological innovation through three pathways: environmental regulation, CSR strategic responses, and corporate green investment. Zhao and Li (2024) propose that ESG ratings can improve enterprises' green technological innovation levels by reducing agency costs, alleviating financing constraints, and enhancing management's environmental awareness. Wang and Li (2024) argue that equity incentives can influence enterprises' green technological innovation output by improving internal control quality and reducing earnings management levels. Yao and Sun (2024) find that public opinion on humanistic networks has a significant positive impact on the quality of enterprises' green technological innovation, presenting a U-shaped trend of first decreasing and then increasing, with environmental regulation and market pressure serving as the main internal mechanisms. Sirinant (2024) emphasizes the importance of artificial intelligence, asserting that integrating more AI into green technologies will significantly improve enterprises' green innovation performance.

B. Research on Green Technological Innovation

Regarding the relationship between Outward Foreign Direct Investment (OFDI) and green technological innovation, academia has long held two contrasting views:

the "promotion theory" and the "inhibition theory."

Promotion Theory posits that OFDI drives enterprises' green technological innovation. Recent studies by domestic and foreign scholars include: Sultana and Turkina (2023) argue that with the strengthening of globalization, OFDI has become an important tool for acquiring knowledge and innovation from other countries. Zheng *et al.* (2022) find that OFDI significantly promotes enterprises' green innovation, particularly among enterprises in developed countries and regions. Green technological innovation is divided into "substantive" and "superficial" dimensions, with OFDI having a stronger impact on substantive green innovation than on the superficial level. Kong *et al.* (2019) demonstrate that the reverse technology spillover of Chinese enterprises' OFDI can significantly promote green technological innovation. However, market segmentation distorts local market transaction costs, indirectly affecting enterprises' green technological innovation.

Inhibition Theory argues that OFDI hinders enterprises' green technological innovation. Recent domestic studies include: Liang and Luo (2019) point out that the technology spillover of R&D capital from China's OFDI restricts the improvement of green technological innovation efficiency. As labor-intensive enterprises account for a much larger proportion of overseas investments than technology-intensive ones, and technology-acquisitive investments are even smaller, it is more difficult for China to absorb host countries' technology spillovers through OFDI than through FDI. Wang *et al.* (2020) show that before reaching a critical threshold, OFDI significantly inhibits the green patent output of Chinese enterprises. When the level of intellectual property protection is low, the innovative products of China's OFDI enterprises are easily copied, severely hindering the international transmission and feedback of green technologies, and thus having a negative impact on China's green patent output.

III. THEORETICAL FRAMEWORK AND RESEARCH HYPOTHESES

Based on a review and synthesis of existing research, this paper summarizes the mechanism through which Outward Foreign Direct Investment (OFDI) influences green technological innovation.

A. Reverse Technology Spillover Effect

When enterprises engage in overseas direct investment, they gain exposure to foreign advanced green technologies and environmental concepts. Through learning, imitation, and absorption, they can enhance their own green technological innovation capabilities and acquire competitive advantages. Enterprises may also introduce foreign advanced green technologies to domestic markets, helping domestic firms improve their green technological innovation capabilities.

B. Market Demand Effect

OFDI enables enterprises to tap into new foreign markets and expand product sales scales. As some consumers increasingly demand environmental protection, enterprises will invest more in green technological innovation to adapt to market needs and develop green products that align with

market demands.

C. Industrial Chain Integration Effect

During the OFDI process, enterprises must comply with the environmental regulations and standards of the host countries. Through local government supervision, enterprises are prompted to attach greater importance to environmental protection and increase investments in green technologies, thereby better adapting to the needs of local economic development.

D. Environmental Regulation Effect

During the OFDI process, enterprises are required to comply with the environmental regulations and standards of the host countries. Supervision by local governments enhances enterprises' emphasis on environmental protection and increases their investment in green technologies, thereby enabling better adaptation to the needs of local economic development.

In summary, the following research hypothesis is proposed:

H₁: Enterprises' engagement in Outward Foreign Direct Investment (OFDI) as an international business activity has a positive impact on green technological innovation.

IV. EMPIRICAL ANALYSIS

A. Variable Selection and Data Sources

To conduct the empirical analysis, this study selects all Chinese A-share listed companies from 2007 to 2022 as the research sample. After precise matching and collation of the sample companies' data, and excluding samples with missing or incomplete core variables, a total of 8,846 valid samples are finally obtained. Among them, data on enterprises' green technological innovation efficiency are sourced from the National Bureau of Statistics and the National Intellectual Property Administration; data on Outward Foreign Direct Investment (OFDI) are drawn from the Statistical Bulletin on China's Outward Foreign Direct Investment; and data on financing constraints and corporate financial indicators are obtained from the CSMAR database.

1) Dependent variable: Enterprise green technological innovation

Following the research paradigm of Xiao *et al.* (2022), this study subdivides the green innovation process into two closely linked sub-stages: the green technology R&D stage and the green technology industrialization stage. In these two stages, green technology R&D efficiency (gcd) and green technology industrialization efficiency (gron) are defined as evaluation indicators, respectively.

At the green technology R&D stage, the initial inputs include the scale of enterprise R&D personnel and R&D expenditure, with the number of green patent applications and authorizations used as intermediate outcome measurement indicators.

At the green technology industrialization stage, the above intermediate outcomes are converted into inputs, and the final outputs are measured by indicators such as enterprise sales revenue, improvements in pollution emissions, and energy consumption efficiency.

To accurately evaluate the efficiency of these two stages,

the DEA-SBM model is employed to ensure the accuracy and scientificity of the results.

Through analysis, it is found that the efficiency of green technology R&D reflects enterprises' subjective emphasis on green technological innovation more than the efficiency of green technology achievement application. Therefore, enterprise green technology R&D efficiency (gcd) is selected as a key indicator to evaluate enterprise green technological innovation. A larger value indicates a higher degree of green technological innovation by the enterprise.

2) Core explanatory variable: enterprise Outward Foreign Direct Investment (OFDI)

This paper uses the numerical value of enterprises' OFDI scale to measure the degree of outward foreign direct investment. Analyzing the scale of enterprises' overseas investments can reveal their level of participation in international competition. If an enterprise's investment scale far exceeds the industry average, it often signifies a strong willingness to expand global operations and sufficient resources and motivation to make strategic investment decisions.

3) Control variables

Drawing on existing research in the field, the following control variables are selected to ensure the rigor and accuracy of the study:

a) Enterprise Scale (Size)

Measured by the natural logarithm of annual total assets. Larger enterprises can reduce production costs through economies of scale, occupy more market resources, and thus have stronger capabilities for green technological innovation.

b) Return on Total Assets (ROA)

Measured by the proportion of net profit in the average balance of total assets. A higher net profit rate means enterprises have more funds available for green technological innovation.

c) Total Asset Turnover (ATO)

Calculated as the ratio of net sales revenue to the average total assets over a certain period. A higher total asset turnover indicates stronger sales capabilities, better asset investment efficiency, and greater capacity for green technological innovation.

d) Tobin's Q (TobinQ)

Measured by the ratio of an enterprise's market value to its replacement value. When Tobin's Q is greater than 1, it means the enterprise's market value exceeds its replacement cost, and the enterprise will increase investment expenditure; conversely, it means the enterprise will reduce investment expenditure.

B. Model Construction

1) Benchmark regression model

To test the hypothesis proposed earlier and analyze whether enterprises' Outward Foreign Direct Investment (OFDI) can positively influence their green technological innovation level, this study constructs the following econometric model by referring to the methodology of Han *et al.* (2023):

$$\text{gcd}_{it} = \alpha + \beta \text{OFDI}_{it} + \gamma \sum \text{Controls}_{it} + \mu_i + \varepsilon_{it} \quad (1)$$

In the model, α represents the intercept term and β denotes the parameters to be estimated; gcd_{it} is the dependent variable indicating the green technological innovation level of enterprise i in year t ; $OFDI_{it}$ is the core explanatory variable measuring the extent of outward foreign direct investment by enterprise i in year t ; $Controls_{it}$ includes four enterprise-level control variables, namely firm size (Size), return on total assets (ROA), total asset turnover (ATO), and Tobin's Q (TobinQ); using the individual fixed effects model, μ_i captures enterprise-specific fixed effects and ε_{it} represents the random error term.

Notably, this study differs from the original reference model in that it uses listed enterprises rather than national provinces as individual units in the model, with a greater focus on the impact of Outward Foreign Direct Investment (OFDI) on green technological innovation at the micro-enterprise level. In the original model, the explained variable was a regional green innovation indicator, whereas this paper refines the concept of green innovation by taking green technological innovation as the entry point and using the corporate green technology R&D rate to reflect the level of green technological innovation. Additionally, this study selects control variables different from those in the original model, thus better aligning with the subsequent analysis of model construction.

C. Data Processing and Result Analysis

1) Descriptive statistics of variables

Table 1. Descriptive statistics of variables

Variables	Mean	SD	Med	Min	Max
gcd	0.527	0.219	0.517	0.133	0.999
OFDI	16.20	3.522	16.70	0.362	21.09
Size	22.48	1.416	22.23	19.35	28.64
ROA	0.0430	0.0710	0.0400	-1.324	0.969
ATO	0.753	0.645	0.621	0.0210	11.97
TobinQ	1.974	1.383	1.577	0.641	26.82

Table 1 presents a descriptive analysis of all listed enterprises with OFDI activities and green technological innovation during the period of 2007–2022, listing the mean, standard deviation, median, maximum, and minimum values for all variable samples. After excluding invalid samples, the entire sample comprises 8,846 observations. According to the descriptive statistics table, the mean value of the explained variable, green technology R&D efficiency (gcd), is only 0.527, indicating that the overall green technology R&D efficiency of listed enterprises in the sample is relatively low. The maximum value is 0.999, and the minimum value is 0.133, suggesting a significant disparity in green technological innovation capabilities among enterprises. Enterprises with low R&D efficiency need to continuously strive to enhance their green technological innovation capabilities. For the core explanatory variable, corporate Outward Foreign Direct Investment (OFDI), the maximum value is 22.3499, and the minimum value is 0.362, reflecting substantial differences in OFDI levels across individual

enterprises.

2) Model Specification Test

Table 2. Model Specification Test

Test methods	Statistical indicators	Statistical value	p-value	Results
F-test	F (1690, 7030)	4.04	0.0000	The fixed effects model
LM test	chibar2(01)	715.49	0.0000	Random effects model
Hausman test	chi2(5)	1756.62	0.0000	The fixed effects model

First, an F-test is conducted for the initial OLS pooled regression model. The model test results in the table show that the F-statistic is 4.04, rejecting the null hypothesis at the 1% significance level, indicating that the fixed effects model is more appropriate. A further LM test is performed with the pooled OLS regression model as the default. The test yields an LM statistic of 715.49, which is significant and rejects the null hypothesis at the 1% significance level, suggesting that the random effects model is more suitable than the pooled OLS regression model. Finally, a Hausman test is conducted to choose between the random effects and fixed effects models. The null hypothesis assumes no individual fixed effects, but the test statistic of 1756.62 significantly rejects the null hypothesis, confirming the superiority of the fixed effects model. In summary, the individual fixed effects model is more appropriate for the sample data.

3) Analysis of Regression Results

Table 3. Pooled OLS and Individual Fixed Effects Regression Results

Variables	gcd	gcd
OFDI	0.004*** (5.43)	0.003*** (2.61)
Size	0.007*** (3.68)	0.177*** (40.70)
ROA	-0.151*** (-4.44)	-0.317*** (-8.39)
ATO	-0.018*** (-4.90)	-0.004 (-0.46)
TobinQ	0.004** (2.24)	-0.003 (-1.35)
Constant	0.324*** (7.98)	-3.470*** (-36.18)
Sample size	8,726	8,726
R-squared	0.012	0.224
Individual fixed effects	NO	YES
Number of stkcd		1,691

This study employs pooled OLS regression and an individual fixed effects model to regress the sample data, with results integrated into a single table. The findings show that regardless of the model used, a positive correlation exists between firms' Outward Foreign Direct Investment (OFDI) and their green technological R&D efficiency (gcd), which is significant at the 1% level. This indicates that when engaging in OFDI—a form of international business activity—firms can significantly exert a positive impact on green technological innovation, thereby validating the correctness of Hypothesis H1. According to the individual fixed effects model, holding other conditions constant, an increase in firms' OFDI significantly improves green technological

R&D efficiency. Specifically, a 1% increase in OFDI leads to a 0.003% rise in green technological R&D efficiency.

4) Robustness test

Table 4. Robustness test

Variables	gron	gron
OFDI	0.004*** (4.96)	0.005*** (4.33)
Size	0.006*** (3.25)	0.172*** (39.91)
ROA	-0.166*** (-4.92)	-0.289*** (-7.71)
ATO	-0.017*** (-4.67)	-0.002 (-0.19)
TobinQ	0.004** (1.97)	-0.002 (-0.80)
Constant	0.349*** (8.68)	-3.402*** (-35.72)
Sample size	8,726	8,726
R-squared	0.011	0.220
Individual fixed effects	NO	YES
Number of stkcd		1,691

To enhance the robustness and credibility of the research results, a strategy of transforming the dependent variable was adopted to conduct a robustness test. This approach aims to ensure that the research conclusions remain consistent under different variable specifications, thereby strengthening the reliability of the study. Referencing the methodology of Xiao *et al.* [23], the process of green innovation was subdivided into two closely linked sub-stages in this research: the first is the R&D stage of green technology, and the second is the transformation stage of green achievements. These two stages generate two key indicators respectively: green technology R&D efficiency (gcd) and green technology achievement application efficiency (gron). Since green technology R&D efficiency (gcd) is the indicator used in the main regression results, in the robustness test, green technology achievement application efficiency (gron) was substituted for the original dependent variable to perform regression analyses using both the pooled OLS and individual fixed effects models. As shown in the table, when green technology achievement application efficiency (gron) was used as the dependent variable in the robustness test, the direction and significance of the impact of enterprises' OFDI on green technological innovation did not change substantially, remaining significantly positive at the 1% level, which is consistent with the overall estimation results. This confirms that the conclusions drawn above are robust.

5) Heterogeneity analysis

Given that the selected sample consists of all A-share listed companies from 2007 to 2022, which is large in size, a classification of the full sample was conducted to analyze the impact of firm size on the research variables in greater detail. Specifically, firms were categorized into large-scale enterprises and small-scale enterprises by comparing their size with the overall sample median: those exceeding the median were classified as large-scale, while those below or at the median were grouped as small-scale. Group regressions were then performed for the two categories. To assess whether significant coefficient differences exist between the two groups of firms, the Chow test was employed as the analytical tool. The rigorous testing process revealed significant coefficient differences between the two groups.

Table 5. Heterogeneity analysis

	Small-scale enterprises	Large-scale enterprises
Variables	gcd	gcd
OFDI	0.0024 (0.0016)	0.0030* (0.0016)
Size	0.1572*** (0.0089)	0.2280*** (0.0078)
ROA	-0.3207*** (0.0617)	-0.1813** (0.0776)
ATO	-0.0109 (0.0183)	0.0055 (0.0111)
TobinQ	-0.0037 (0.0028)	-0.0178*** (0.0063)
Constant	-2.8722*** (0.1889)	-4.9090*** (0.1814)
R-squared	0.5072	0.5221
Test for differences in coefficients across groups	Chow Test =13.34	P-Value > F(6 , 8714) = 0.0000***

According to the regression results in the table above, the impact of firms' Outward Foreign Direct Investment (OFDI) on green technological innovation is not significant among small-scale enterprises, possibly due to scale constraints that prevent them from leveraging OFDI to improve their green technological innovation efficiency. In contrast, for large-scale enterprises, the impact of OFDI on green technological innovation is significant at the 10% level, indicating that large-scale enterprises can utilize OFDI to enhance their green technological innovation efficiency.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Summary of the Impact and Mechanism of OFDI on Green Technological Innovation

Based on a systematic review and synthesis of existing research, this study focuses on Outward Foreign Direct Investment (OFDI) within the framework of two-way FDI and its relationship with green technological innovation, with a specific emphasis on the micro-level entity of enterprises. Using panel data from all A-share listed companies between 2007 and 2022, this research constructs econometric models and employs both pooled OLS regression and individual fixed-effect models to investigate how enterprises' OFDI activities positively influence green technological innovation through international business operations. By integrating theoretical analysis with empirical research, the study systematically examines this issue and arrives at the following key conclusions:

First, observations from the sample data indicate that the overall R&D efficiency of green technology among listed enterprises in the sample is relatively low, and there exists a significant disparity in green technological innovation capabilities across firms. Sustained development in green technological innovation will require collaborative efforts from both the government and enterprises in the future. Additionally, while the scale differences between enterprises are relatively small, the levels of OFDI among individual firms vary substantially. Under the current circumstances, how to promote enterprises' OFDI remains a critical question for continuous exploration by policymakers and firms alike.

Second, results from the benchmark regression reveal that OFDI has a statistically significant positive effect on the

efficiency of green technological innovation. Specifically, increasing the intensity of OFDI can notably enhance the efficiency of green technological innovation—a role that cannot be overlooked. According to the empirical findings, regardless of whether the pooled OLS model or the individual fixed-effect model is used, there is a positive correlation between enterprises' OFDI and their green technology R&D efficiency (gcd), which is significant at the 1% level. *Ceteris paribus*, an increase in OFDI significantly improves green technology R&D efficiency: a 1% increase in OFDI leads to a 0.003% increase in green technology R&D efficiency. The mechanism through which OFDI influences green technological innovation primarily operates via four channels: reverse technology spillover effects, market demand effects, industrial chain integration effects, and environmental regulation effects. When engaging in OFDI, enterprises gain access to advanced green technologies in host countries, which they can absorb and imitate. Meanwhile, entering external markets expands both production and market scales. The expansion of production scale enables enterprises to integrate industrial chains and achieve economies of scale, thereby enhancing resource utilization efficiency and promoting resource conservation. The expansion of market scale exposes enterprises to new market demands—for example, consumers in developed countries may prefer environmentally friendly products, which motivates enterprises to engage in green technological innovation. Finally, environmental regulations in host countries, such as environmental protection laws and standards, also drive enterprises to continuously innovate in green technologies.

Third, results from subsequent empirical tests show that in the robustness checks, replacing the original dependent variable with green technology achievement application efficiency (gron) and re-estimating using both pooled OLS and individual fixed-effect models, the direction and significance of the impact of enterprises' OFDI on green technological innovation remain largely unchanged, still significantly positive at the 1% level. This is consistent with the overall estimation results, confirming the robustness of the conclusions drawn above. Heterogeneity analysis reveals that for small-scale enterprises, the impact of their OFDI on green technological innovation is not significant, which may be due to scale constraints that hinder their effective utilization of OFDI to improve green technological innovation efficiency. In contrast, among large-scale enterprises, the situation is entirely different: these enterprises exhibit a significantly positive impact of OFDI on green technological innovation at the 10% significance level, indicating that large-scale enterprises can more effectively leverage OFDI to enhance their own green technological innovation efficiency.

B. Policy Recommendations

Based on theoretical and empirical analysis, green technological innovation and Outward Foreign Direct Investment (OFDI) are crucial for firms' future development. Expanding the scale of OFDI can effectively enhance the efficiency of green technological innovation. Therefore, scientific decision-making in these two areas is essential to support enterprises and promote the healthy development of green technological innovation and OFDI among Chinese

firms.

1) In terms of green technological innovation

The government can establish special funds to incentivize firms to increase investments in green technology R&D and adopt green technologies, thereby reducing costs and improving efficiency. Meanwhile, it is necessary to improve the policy and regulatory framework for green technological innovation, strengthen its implementation and enforcement, and constrain firms' behaviors to urge them to reduce pollution emissions. When formulating strategies, firms should define clear environmental protection and sustainable development goals, prioritize green innovation, and promote their own sustainable development. Additionally, firms can enhance employees' awareness and participation in green technological innovation through training and advocacy, thereby stimulating innovative momentum.

2) In terms of Outward Foreign Direct Investment (OFDI)

The government should actively engage in international investment cooperation, deepen collaboration with countries along the Belt and Road Initiative and developed economies in Europe and America, and create more opportunities for Chinese firms to expand into overseas markets. Meanwhile, policy and financial support—such as tax reliefs and loan incentives—should be provided to reduce firms' investment costs and risks. A sound financial service system should also be established to offer diversified financing channels. Before engaging in OFDI, firms need to comprehensively assess political, legal, economic, and cultural factors in target destinations, establish and improve risk management mechanisms, and effectively address potential risks. Furthermore, firms should optimize their investment structures, avoid single-industry or single-region investment, and achieve diversified investments.

CONFLICT OF INTEREST

The author declares no conflict of interest.

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