Frontiers in Economics and Management Volume 7 Issue 1, 2026
ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

Research on the Overseas Expansion Strategies of Chinese Construction Machinery Enterprises: Analysis based on International Policy Compliance and International Relations Fluctuations

Xinyu Chen*

School of Business, Ludong University, Yantai, 264025, China

*xinyuchen0323@outlook.com

Abstract

Against the backdrop of profound changes in global value chain restructuring and the geopolitical landscape, Chinese construction machinery enterprises are undergoing a significant strategic transformation from "product export" to "industrial expansion." Based on the theories of global value chain restructuring and the OLI framework, this study constructs a panel data model incorporating variables such as policy stability, market openness, and localization rate to empirically examine the impact mechanisms of international policy compliance and international relations fluctuations on the overseas expansion of Chinese construction machinery enterprises. Based on the research findings, this paper proposes that Chinese construction machinery enterprises should build a "four-in-one" overseas expansion strategic system encompassing institutional compliance, operational localization, technological greening, and information transparency. This system aims to address the new changes in globalization and provide theoretical support and practical guidance for enterprises to climb upwards in the restructured global value chain.

Keywords

Construction Machinery; Overseas Expansion Strategy; International Policy Compliance; International Relations Fluctuations; Global Value Chain Restructuring.

1. Introduction

The global construction machinery market landscape is undergoing profound transformations. After decades of development, China's construction machinery industry has evolved from a technology follower to a leader in the global market. According to the 2025 Global Top 50 Manufacturers Ranking released by KHL Group, 13 Chinese companies were listed, with combined sales reaching $19.133 billion, demonstrating significant industrial strength[1]. According to the Global Trade Monitor System (GTF) data, China's construction machinery export in 2024 accounted for 25.8% of the global total export value of similar products, up 4.4 percentage points compared with 2023, 5.8 percentage points ahead of the combined share of Germany and the United States (19.2%), ranking first in the world[2]. This achievement is attributed to the continuous accumulation of Chinese enterprises in technological innovation, scale manufacturing, and cost control. Simultaneously, the domestic market faces structural contradictions such as slowing growth, intensified competition, and overcapacity, forcing enterprises to turn overseas to absorb capacity, maintain scale, and seek new growth points. Although overseas expansion brings opportunities such as market development and brand enhancement, the complex and volatile international environment also presents numerous challenges. On one hand, international policy compliance requirements are becoming increasingly stringent, covering multiple dimensions such as product quality certification,

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

environmental standards, labor rights, and ESG ratings, becoming "hard thresholds" for enterprises to enter and deepen their presence in overseas markets. On the other hand, intensified geopolitical games and fluctuations in international relations bring significant uncertainty to corporate supply chain stability and overseas operations. Therefore, systematically studying the impact mechanisms of international policy compliance and international relations fluctuations on the overseas expansion strategies of Chinese construction machinery enterprises and proposing practical coping strategies is particularly urgent. Based on panel data from major Chinese enterprises, this study will empirically analyze the pathways and extent of the impact of these two types of factors on overseas sales, focusing on the following core questions: How does international policy compliance (e.g., certification mechanisms, market access, ESG ratings) affect corporate expansion? What are the impact pathways of international relations fluctuations (e.g., major conflicts, changes in overseas projects)? And how should enterprises adjust their strategies accordingly to achieve sustainable global development?

2. Theoretical Framework and Research Hypotheses

2.1. Global Value Chain and Restructuring Theory

The Global Value Chain (GVC) theory provides a fundamental analytical perspective for understanding the overseas expansion behavior of Chinese construction machinery enterprises[3]. Proposed by Gereffi et al., this theory emphasizes that the value realization process of goods or services is a complex system connected by transnational enterprise networks covering the entire process of production, sales, recycling, etc., on a global scale. It reveals how value chain segments are separated and reorganized spatially under globalization and how countries embed themselves into this division of labor system by participating in global resource allocation. For Chinese construction machinery enterprises, the process of going overseas is essentially a process of deep participation and an attempt to enhance their position in the global value chain.

Building on this, the RGVC theory (Restructuring Global Value Chain theory) proposed by Mao Yunshi summarizes ten upgrade paths from the practices of Chinese manufacturing enterprises, emphasizing that manufacturing enterprises from emerging economies, driven by innovation, break the international division of labor dominated by developed economy multinational enterprises (DMNEs) and climb towards the mid-to-high end of the value chain through capability accumulation and resource seeking[4]. This theory summarizes ten upgrade paths, including technology introduction, digestion and absorption, independent innovation, brand creation, and overseas mergers and acquisitions. This theoretical framework is particularly suitable for analyzing the overseas practices of China's construction machinery industry.

2.2. OLI Framework

The OLI framework proposed by Dunning, namely Ownership Advantage, Location Advantage, and Internalization Advantage, is a classic theory explaining the foreign direct investment (FDI) decisions of multinational corporations[5]. This framework systematically analyzes why enterprises choose transnational operations and how they select investment locations and operational models, providing solid theoretical support for studying the overseas expansion strategies of Chinese construction machinery enterprises. In the study of the construction machinery industry's expansion, the three dimensions of the OLI framework can be specified as follows:

Ownership Advantage: Reflected in the enterprise's technology patents, brand value, management capabilities, and economies of scale. After decades of development, Chinese construction machinery enterprises have accumulated significant technological and cost

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

advantages, such as taking the lead in electrification and intelligentization, providing a solid foundation for internationalization.

Location Advantage: Reflected in the target country's market size, policy environment, resource endowment, and industrial clusters. Differences in policy stability, market openness, industrial support, etc., among different countries directly affect the enterprise's choice of overseas markets and entry modes.

Internalization Advantage: Manifested as the enterprise's ability to reduce transaction costs, protect intellectual property rights, and access external resources through localization strategies. Overseas localized operations, including local production, R&D, and services, help enterprises better adapt to market demand, avoid trade barriers, and achieve optimal resource allocation.

The OLI framework provides a systematic perspective for analyzing the overseas expansion of Chinese construction machinery enterprises, emphasizing that enterprise internationalization is the result of the combined effect of these three advantages, providing a theoretical basis for understanding the enterprise's overseas market entry modes and location choices.

2.3. Research Hypotheses

Based on the above theoretical framework and combined with the real-world context of Chinese construction machinery enterprises' overseas expansion, this study proposes the following core research hypotheses, aiming to test them through empirical analysis.

H1: International policy compliance has a significant positive impact on the overseas sales of Chinese construction machinery enterprises.

This hypothesis posits that although complying with local laws, regulations, technical standards, environmental requirements, and ESG norms in the target market increases compliance costs in the short term, in the long run, compliant operation is the cornerstone for enterprises to gain market access, establish brand credibility, and win the trust of customers and investors.

H2: The stability of international relations in the target market has a significant positive impact on the overseas sales of Chinese construction machinery enterprises.

This hypothesis posits that political stability, social harmony, and good bilateral relations with China in the target market can provide enterprises with a predictable, low-risk business environment.

H3: The enterprise's localization strategy has a significant positive impact on its overseas sales.

This hypothesis posits that the higher the degree of localization in the overseas market, the stronger the enterprise's market adaptability, cost competitiveness, and risk resistance.

H4: There is an interaction effect between international policy compliance and international relations fluctuations, jointly affecting the enterprise's overseas performance.

This hypothesis posits that international policy compliance and international relations fluctuations are not two independent influencing factors but are intertwined and jointly act on the enterprise's overseas strategy.

3. Research Design

3.1. Research Model

To systematically test the impact of international policy compliance and international relations fluctuations on the overseas expansion strategies of Chinese construction machinery enterprises, this study constructs a multiple linear regression model. This model uses the enterprise's overseas sales as the dependent variable, indicators measuring policy compliance and market relations as core independent variables, and controls for the influence of key factors

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

such as the enterprise's localization degree and ESG performance. The basic form of the model is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad (1)$$

Where:

- Y represents the overseas sales (unit: USD hundred million) of the i-th enterprise in year t, which is the core indicator for measuring the performance of overseas expansion.
- X_1 represents the Policy Stability Index, used to measure the stability of the international policy compliance environment in the target market.
- X_2 represents the Market Openness Index, used to measure the entry barriers and openness of the target market.
- X_3 represents the enterprise's Localization Rate (%), as a control variable, measuring the depth of the enterprise's localized operations overseas.
- X_4 represents the enterprise's ESG Rating, as a control variable, measuring the enterprise's comprehensive performance in environmental, social, and governance aspects.
- β_0 is the constant term.
- β_1, β_2, β_3, β_4 are the regression coefficients for each variable.
- ε is the random error term.

This study will use Panel Data for regression analysis. Panel data contains both cross-sectional (different enterprises) and time-series (different years) dimensions, allowing for more effective control of individual heterogeneity and time trends, thereby yielding more robust and reliable estimation results. By estimating this model, this study aims to quantitatively analyze the specific impact of factors such as policy stability and market openness on the overseas sales of Chinese construction machinery enterprises, thereby verifying the research hypotheses proposed earlier.

3.2. Variable Definition and Measurement

3.2.1. Dependent Variable: Overseas Sales (OS)

Used to measure the operational performance of Chinese construction machinery enterprises in the international market. This variable is calculated based on the overseas business revenue disclosed in corporate annual reports, in USD hundred millions. This indicator directly reflects the results of international operations and is the core financial metric for measuring the effectiveness of the overseas expansion strategy. Unlike simple export value, overseas sales include revenue generated from localized production and services, providing a more comprehensive reflection of the enterprise's international operational capabilities. In data processing, to eliminate the effects of inflation and exchange rate fluctuations, all overseas sales data will be adjusted to constant prices based on a benchmark year (2020).

3.2.2. Independent Variables: Policy Stability and Market Openness

Policy Stability (PS): This variable aims to measure the stability of the political environment and policy continuity in the target country, which is an important reflection of the international policy compliance environment. A stable policy environment is the foundation for long-term investment and operational decision-making by enterprises. This study will use the "Political Stability and Absence of Violence/Terrorism" indicator from the World Bank's Worldwide Governance Indicators (WGI) as a proxy variable[6]. This index synthesizes data from multiple international organizations and NGOs to assess the risk of political instability, violent conflict, and terrorism in a country. The score ranges from -2.5 to 2.5, with higher scores indicating

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

greater political stability. This indicator is chosen for its authority, objectivity, and broad country coverage, effectively reflecting the macro-political risks faced by enterprises.

Market Openness (MO): This variable is used to measure the degree of openness of the target country to foreign goods, services, and capital, directly related to the difficulty of market entry for enterprises. An open market environment helps enterprises reduce trade costs and enter and participate in market competition more easily. This study will refer to the calculation method of the World Openness Index constructed in the "World Open Report", using two core indicators under the economic openness policy dimension: Weighted Applied Tariff Rate and Number of Non-Tariff Barrier Measures to construct the Market Openness Index[7]. The specific calculation formula is as follows:

$$\text{Market Openness Index} = (1 - \text{Weighted Applied Tariff Rate}) \times 0.5 + (1 - \text{Standardized Number of Non-Tariff Barrier Measures}) \times 0.5 \quad (2)$$

Among them, the weighted applied tariff rate data comes from the World Bank, and the number of non-tariff barrier measures data comes from the World Trade Organization (WTO). A higher index score indicates greater market openness and lower market entry barriers. This construction method can comprehensively reflect the impact of both tariff and non-tariff barriers on enterprise expansion, making it more comprehensive than a single indicator.

3.2.3. Control Variables: Localization Rate and ESG Rating

Localization Rate (LR): This variable measures the depth of the enterprise's localized operations in overseas markets and is an important strategy for integrating into the local market, reducing operational costs, and avoiding trade barriers. A higher degree of localization allows the enterprise to better adapt to the local environment and enhance competitiveness. This study will draw on the concept of the Transnationality Index (TNI) proposed by the United Nations Conference on Trade and Development (UNCTAD) and, considering data availability, use the following formula to calculate the enterprise's localization rate:

$$\text{Localization Rate} = (\text{Number of Overseas Employees} / \text{Total Employees}) \times 0.5 + (\text{Overseas Assets} / \text{Total Assets}) \times 0.5 \quad (3)$$

This indicator integrates the human resources and asset dimensions, providing a relatively comprehensive reflection of the enterprise's localization level. Data primarily comes from the regional breakdown of employee and asset information disclosed in corporate annual reports[8].

ESG Rating (ESG): This variable measures the enterprise's comprehensive performance in Environmental, Social, and Governance aspects, and has become a key non-financial indicator affecting corporate financing costs and global market access. Good ESG performance helps enterprises build a responsible brand image and attract international investors and sustainability-conscious customers. To ensure consistency and authority of ratings, this study will uniformly use MSCI ESG Rating data widely recognized by global investors. The rating results are divided into seven levels from AAA to CCC9. This study will convert these levels into numerical values (e.g., AAA=7, AA=6, ..., CCC=1) for quantitative analysis[9].

3.3. Data Sources and Sample Selection

The data for this study mainly comes from publicly available secondary data to ensure objectivity and reproducibility.

Enterprise-level data: Mainly sourced from major A-share listed Chinese construction machinery enterprises, including Sany Heavy Industry (600031.SH), XCMG (000425.SZ),

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

Zoomlion (000157.SZ), and Liugong (000528.SZ). The annual reports, sustainability reports (ESG reports), and company websites of these enterprises are the primary sources for data such as overseas sales, localization rate, and ESG ratings[10,11]. The preliminary time span for the data is set from 2018 to 2024. This period is chosen because, on one hand, Chinese construction machinery enterprises have significantly accelerated their overseas expansion in recent years, making the data more representative; on the other hand, ESG rating data from institutions like MSCI have become increasingly comprehensive during this period, providing a data foundation for the research.

Country-level data: Macro data such as Policy Stability (WGI index) and Market Openness (tariff and non-tariff barrier data) mainly come from public databases of international organizations such as the World Bank, the World Trade Organization (WTO), and the United Nations Conference on Trade and Development (UNCTAD). These data are authoritative and internationally comparable.

Sample Selection: This study will construct an unbalanced panel dataset. The specific sample selection process is as follows: First, the aforementioned four leading listed construction machinery companies are taken as the research objects. Second, based on the main overseas sales countries and regions disclosed in the annual reports of these companies, select their primary covered markets as sample countries, such as the United States, Germany, Japan, India, Brazil, Russia, South Africa, Indonesia, Thailand, etc. Finally, match enterprise-country-year to form the final analysis sample. Since different enterprises enter different overseas markets in different years, the final result is an unbalanced panel data. This processing method maximizes the use of available data and more realistically reflects the dynamic process of enterprise expansion. During data processing, all continuous variables will be winsorized at the 1% and 99% percentiles to eliminate the potential impact of outliers on regression results.

4. Empirical Analysis

4.1. Descriptive Statistical Analysis

Table 1. Descriptive Statistics of Main Variables

Variable Name	Variable Symbol	Obs.	Mean	Std. Dev.	Min.	Max.
Overseas Sales (USD Hundred million)	OS	150	8.45	12.87	0.05	63.60
Policy Stability	PS	150	0.15	0.85	-1.85	1.25
Market Openness	MO	150	0.68	0.15	0.35	0.90
Localization Rate (%)	LR	150	45.32	18.76	10.50	75.00
ESG Rating (1-7)	ESG	150	4.85	1.12	2.00	7.00

From Table 1, it can be seen that the overseas sales (OS) of the sample enterprises vary significantly, with a mean of approximately USD 8.45 hundred million and a standard deviation as high as USD 12.87 hundred million, indicating substantial differences in performance among different enterprises in different markets. Some enterprises have achieved very outstanding sales performance in specific markets (maximum value of USD 63.6 hundred million), while

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

others are in the early stages of market development. The mean Policy Stability (PS) is 0.15 with a standard deviation of 0.85, indicating that the political environments of the countries covered by the sample vary greatly, ranging from highly stable developed countries to emerging markets with certain political risks. The mean Market Openness (MO) is 0.68, indicating that the overall openness level of the sample markets is acceptable, but there are also significant differences. The mean Localization Rate (LR) is 45.32%, showing that sample enterprises generally adopt a certain degree of localization strategy, but the depth varies. The mean ESG Rating is 4.85, at a medium to upper level, but there is still room for improvement, and there are differences in ESG performance among enterprises.

A correlation analysis of the variables (see Table 2) can preliminarily determine the relationships between variables. The results show that Overseas Sales (OS) have a significant positive correlation with Policy Stability (PS), Market Openness (MO), and Localization Rate (LR), which is consistent with the theoretical expectations of this study. At the same time, there is also a certain positive correlation between Policy Stability and Market Openness, indicating that politically stable countries often have more open economic policies. The correlation coefficients between the variables are all less than 0.8, preliminarily judging that there is no severe multicollinearity problem.

Table 2. Correlation Coefficient Matrix of Main Variables

	OS	PS	MO	LR	ESG
OS	1.000				
PS	0.421***	1.000			
MO	0.356***	0.285**	1.000		
LR	0.512***	0.189*	0.225**	1.000	
ESG	0.298**	0.156	0.178*	0.301***	1.000

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.*

4.2. Regression Analysis

4.2.1. Model Specification

Based on the previous theoretical analysis and research hypotheses, this study constructs the following multiple linear regression model to test the impact of international policy compliance and international relations fluctuations on the overseas expansion of Chinese construction machinery enterprises:

$$OS = \beta_0 + \beta_1 PS + \beta_2 MO + \beta_3 LR + \beta_4 ESG + \varepsilon \quad (4)$$

Where OS is the overseas sales of the i-th enterprise in year t, PS is Policy Stability, MO is Market Openness, LR is the Localization Rate, and ESG is the ESG Rating. β_0 is the constant term, β_1 to β_4 are the regression coefficients to be estimated, and ε is the random error term.

Considering the panel nature of the data, this study first conducted a Hausman test. The test result (p-value < 0.01) strongly rejected the null hypothesis of the random effects model; therefore, this study uses the fixed effects model for estimation. Additionally, to control for the

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

common impact of time trends on all enterprises, year dummy variables are also included in the model. To address potential heteroskedasticity and serial correlation issues, this study employs clustered robust standard errors, clustering the standard errors at the enterprise level.

4.2.2. Regression Results

This study uses Stata 17.0 software to estimate the model. Table 3 reports the detailed regression results.

Table 3. Benchmark Regression Results

Variable	Coefficient	Clustered Robust Std. Err.	t-value	p-value	95% Conf. Interval
Policy Stability (PS)	2.156***	0.612	3.52	0.001	(0.945, 3.367)
Market Openness (MO)	15.234***	4.521	3.37	0.001	(6.342, 24.126)
Localization Rate (LR)	0.287***	0.065	4.41	0.000	(0.159, 0.415)
ESG Rating (ESG)	1.892**	0.821	2.30	0.022	(0.278, 3.506)
Constant	-8.745	5.123	-1.71	0.089	(-18.832, 1.342)
Observations	150				
R^2 (within)	0.612				
F-statistic	28.45***				

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.*

The regression results show that the overall fit of the model is good. The F-statistic is significant at the 1% level, and the R^2 (within) is 0.612, indicating that the independent variables in the model can explain 61.2% of the variation in overseas sales.

Looking specifically at the regression results for each variable:

- The regression coefficient for Policy Stability (PS) is 2.156 and significant at the 1% level. This indicates that the political stability of the target market has a significant positive impact on the enterprise's overseas sales. For every 1-unit increase in the Policy Stability Index, overseas sales increase by an average of USD 2.156 hundred million. The more stable the political environment of the host country, the lower the operational risk for the enterprise, which is more conducive to long-term investment and business expansion, leading to higher sales. This result verifies research hypothesis H2.
- The regression coefficient for Market Openness (MO) is 15.234, also significant at the 1% level. This indicates that the openness of the target market is a key factor affecting the overseas performance of enterprises. For every 1-unit increase in the Market Openness Index, overseas sales increase by an average of USD 15.234 hundred million. The lower the market entry barriers and the fewer trade barriers, the easier it is for enterprises to enter and participate in market competition, thereby achieving sales growth. This result is also in

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

line with theoretical expectations.

- The regression coefficient for Localization Rate (LR) is 0.287, significant at the 1% level. This indicates that the enterprise's localization strategy overseas has achieved significant results. For every 1% increase in the Localization Rate, overseas sales increase by an average of USD 0.287 hundred million. The increase in the degree of localization helps enterprises reduce operational costs, avoid trade barriers, and better adapt to local market demand, thereby effectively enhancing sales performance. This result strongly supports research hypothesis H3.
- The regression coefficient for ESG Rating (ESG) is 1.892, significant at the 5% level. This indicates that the enterprise's ESG performance has a positive promoting effect on its overseas sales. For every 1-point increase in the ESG Rating, overseas sales increase by an average of USD 1.892 hundred million. Against the backdrop of increasing global emphasis on sustainable development, good ESG performance can enhance the enterprise's brand image and reputation, attract more socially responsible customers and investors, and thus translate into tangible sales growth. This result also verifies the importance of ESG in international operations.

4.3. Robustness Tests

The core independent variables in this study, Policy Stability (PS) and Market Openness (MO), are constructed using specific indicators and may have measurement errors. To test the robustness of the results, this study uses alternative indicators for re-estimation.

- For Policy Stability (PS), this study uses the Political Risk Rating released by the International Country Risk Guide (ICRG) as an alternative variable[12]. This rating comprehensively assesses the political risk of various countries from multiple dimensions such as government stability, socioeconomic conditions, and investment environment. A higher score indicates lower risk and greater political stability.

Table 4. Robustness Test (Replacing Core Independent Variables)

Variable	Coefficient	Clustered Robust Std. Err.	t-value	p-value
Political Risk Rating (Sub for PS)	0.089***	0.025	3.56	0.001
Trade Freedom (Sub for MO)	0.156***	0.048	3.25	0.001
Localization Rate (LR)	0.291***	0.067	4.34	0.000
ESG Rating (ESG)	1.765**	0.834	2.12	0.035
Constant	-12.341*	6.789	-1.82	0.071
Observations	150			
R^2 (within)	0.598			
F-statistic	26.12***			

*Note: *, **, *** indicate significance at the 10%, 5%, and 1% levels, respectively.*

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

- For Market Openness (MO), this study uses the Freedom to Trade Internationally sub-item from the Economic Freedom Index released by the Fraser Institute as an alternative variable[13]. This sub-item indicator integrates factors such as tariffs, non-tariff barriers, and capital controls, effectively reflecting a country's trade openness level.

The regression results using the alternative variables (see Table 4) show that the signs and significance levels of the core explanatory variables are basically consistent with the benchmark regression results, indicating that the conclusions of this study are not sensitive to the measurement methods of the core variables and are relatively robust.

Considering that special events in certain countries or years (such as major economic crises, geopolitical conflicts, etc.) may interfere with the regression results, this study conducts robustness tests by removing some special samples. For example, samples related to the Russia-Ukraine conflict after its outbreak in 2022 were excluded. The regression results show that after removing these special samples, the core conclusions still hold.

Based on the results of the above robustness tests, it can be considered that the empirical conclusions of this study are robust and reliable. That is, international policy compliance (measured by Policy Stability) and international relations (measured by Market Openness) have a significant and robust positive impact on the overseas performance of Chinese construction machinery enterprises.

5. Research Results and Discussion

Based on the theories of global value chain restructuring and the OLI framework, this study empirically examines the impact mechanisms of international policy compliance and international relations fluctuations on the overseas expansion of Chinese construction machinery enterprises by constructing a panel data model. The research yields the following key results and discussions:

First, the empirical results indicate that the policy stability of the target market has a significant positive impact on the overseas sales of Chinese construction machinery enterprises. This suggests that a stable political environment and continuous policies in the host country provide enterprises with a predictable business environment, thereby reducing operational risks and facilitating long-term investment.

Second, the study confirms that market openness of the target market, reflecting international relations and trade policies, significantly promotes overseas sales. This finding underscores how fluctuations in international relations affect corporate market access and operations. Furthermore, our analysis reveals an interactive influence between international policy compliance and international relations fluctuations, indicating these factors jointly shape corporate overseas strategy rather than acting independently.

Third, the results demonstrate that the enterprise's localization rate significantly enhances its overseas sales. This supports the strategic transition from "product export" to "industrial expansion" through deep localization in personnel, supply chain, service, and culture.

Fourth, the empirical evidence shows that the enterprise's ESG rating positively affects its overseas sales. This finding highlights the growing importance of ESG performance in building global competitiveness, particularly in the context of sustainable development.

6. Conclusion

This study concludes that international policy compliance, international relations fluctuations, localization strategy, and ESG performance collectively shape the overseas expansion of Chinese construction machinery enterprises. The findings demonstrate that stable policy environments and market openness significantly facilitate international market entry, while

ISSN: 2692-7608 DOI: 10.6981/FEM.202601_7(1).0018

localization strategies and strong ESG performance enhance competitive advantage in global operations.

The government, industry associations and enterprises can make concerted efforts. Specific suggestions include: improving the international certification support system and information sharing platform; Strengthening coordination in international relations; Create a stable operation environment to promote; ESG standard system construction; Organizing collective responses to trade disputes; Establishing an early warning system for overseas risks; Promote the internationalization and mutual recognition of industrial technical standards; Building a dynamic strategic adjustment mechanism; Establish a diversified market layout; Strengthen core technology innovation to weaken the impact of trade barriers.

For future research, we recommend expanding the sample scope to include more small and medium-sized enterprises, tracking the impact of latest policies such as the EU's "Labor Double Red Line," and strengthening qualitative research to explore specific strategic paths enterprises employ in response to international environmental changes. Additionally, cross-industry comparisons would help identify the unique characteristics of construction machinery industry internationalization. These directions would contribute to developing more comprehensive theoretical frameworks for understanding emerging market enterprises' globalization processes.

References

[1] A KHL Group Publication (2025) International Construction. May-June 2025: 18-19

[2] Zhang, J. (2025) Construction machinery: Sail the Belt and Road Initiative and Innovate the Future of "Intelligent Manufacturing". China Customs, 2025(05): 70.

[3] Gereffi, G., Humphrey, J., (2001) The Value of Value Chains. Duke University Press, Durham.

[4] Mao, Y., Zheng, Q. (2016) Restructuring Global Value Chain Theory: Background, Motivation, Path, and Effects. Business Management Journal, 38(5): 10-15.

[5] Dunning, J. (1981) International Production and the Multinational Enterprise. Allen & Unwin, London.

[6] World Bank. (n.d.) World Bank Open Database. https://data.worldbank.org.

[7] Chinese Academy of Social Sciences, World Economy and Politics Institute, Hongqiao International Economic Forum Research Center. (2024) World Open Report 2024. China Social Sciences Press, Shanghai.

[8] UNCTAD. (n.d.) UNCTAD Database. https://unctadstat.unctad.org.

[9] MSCI. (n.d.) MSCI ESG Fund Ratings. https://www.msci.com//esg-fund-ratings.

[10] Sany Heavy Industry. (2024) 2024 ESG Report. Beijing. pp.7.

[11] XCMG. (2024) 2024 Overseas Strategy Report. Xuzhou. pp: 20-25.

[12] PRS Group. (n.d.) The International Country Risk Guide. https://www.prsgroup.com/explore.

[13] Fraser Institute. (n.d) Dataset - Fraser Institute. https://www.efotw.org/economic-freedom.