

THE IMPACT OF HOST COUNTRY DIGITAL ECONOMY DEVELOPMENT ON CHINESE ENTERPRISES' OFDI: EVIDENCE FROM RCEP MEMBER COUNTRIES

Chunrong Yan

Shanghai Polytechnic University, People's Republic of China
cryan@sspu.edu.cn
ORCID: 0009-0008-9974-3723

Yuxin Sun

Shanghai Polytechnic University, People's Republic of China
2420996077@qq.com
ORCID: 0009-0009-9744-2959

Abstract: *This paper investigates how the digital economy development of RCEP host economies affects Chinese firms' outward foreign direct investment (OFDI), using micro data of A-share listed firms from 2010 to 2023. We construct a digital economy index via the entropy method, covering digital infrastructure, digital innovation environment, and digital export potential, and employ Probit, moderating effect and instrumental variable models for empirical analysis. The results show that host countries' digital economy significantly promotes Chinese enterprises' OFDI, with digital infrastructure and digital export potential as key drivers. The promotion effect is stronger for firms with overseas experience, in developed host economies and technology-intensive industries. Bilateral institutional distance and host innovation capacity positively moderate the linkage. Digital economy can offset institutional barriers and form synergy with innovation. This study provides empirical support for Chinese firms to optimize OFDI layout in the RCEP region.*

Key words: *Host Country Digital Economy; Outward Foreign Direct Investment (OFDI); RCEP Member Countries*

JEL classification: *F21; F23; O33; L86; F15*

1. INTRODUCTION

With the rapid development of digital technologies, the digital economy has emerged as a major force reshaping the global economic landscape. According to the China Digital Economy Development Research Report released

by the China Academy of Information and Communications Technology, the scale of China's digital economy reached 59.2 trillion yuan in 2024, accounting for 43.8% of GDP. Furthermore, the *Global Digital Economy White Paper* indicates that the total digital economy of the five countries—the United States, China, Germany, Japan, and South Korea—exceeded 33 trillion US dollars in 2023, with its share of GDP rising to 60%. The digital economy is gradually becoming the core engine driving global economic recovery and growth. Against this backdrop, the widespread application of digital technologies has profoundly transformed corporate production methods and business models, while also exerting a far-reaching impact on the international investment behavior of multinational corporations. With the formal entry into force of the Regional Comprehensive Economic Partnership (RCEP), the process of regional economic integration has accelerated, creating a broader institutional platform and market space for Chinese enterprises to “go global.” Therefore, conducting an in-depth exploration of how the digital economy development of host countries within the RCEP region influences Chinese enterprises' outward foreign direct investment (OFDI) decisions is of great theoretical and practical significance for grasping new trends in international investment in the digital age, optimizing the overseas footprint of Chinese enterprises, and implementing the “Going Global” strategy with high quality.

2. LITERATURE REVIEW

In recent years, the academic community has paid extensive attention to the relationship between the

digital economy and foreign direct investment. Existing research has primarily focused on both macro and micro levels, examining the promotional effects of the digital economy on outbound foreign direct investment (OFDI), its mechanisms of action, heterogeneous characteristics, and spatial effects. Some studies have focused on the development level of host countries' information and communications infrastructure. Using cross-country panel data, Yang Dongxu (2022)^[1] found that host countries' information and communications infrastructure significantly promotes China's OFDI, with this effect being particularly pronounced in upper-middle-income countries. The mechanism lies in expanding investment demand and reducing investment costs. Xu Xiangyu and Lin Shanlang (2025)^[2], using a sample of 55 countries along the Belt and Road, verified the positive impact of digital infrastructure on China's OFDI in high-tech manufacturing and noted that "digital locational advantages" significantly enhance investment attractiveness. Guo and Qi (2025)^[3] employed the entropy-weighted TOPSIS method to measure digital infrastructure and found that it significantly increased the scale of cross-border mergers and acquisitions by Chinese firms, operating through mechanisms that expand information access channels and stabilize supply chain relationships. Mai (2025)^[4] also demonstrated through empirical research in Vietnam, that host country digital transformation promotes FDI inflows by reducing transaction costs, increasing transparency, and improving the business environment.

At the broader level of the digital economy, Liu Zhenlin (2023)^[5], using panel data from 125 host countries, found that China tends to invest in countries with higher levels of digital economic development, and this effect is more pronounced in countries with high income, high human capital, and high financial openness. The mechanisms include trade cost effects and investment facilitation effects. Zhang Junyan et al. (2023)^[6], using data from listed companies and incorporating the proximity-concentration trade-off theory, found that the host country's digital economic development significantly enhances its attractiveness for Chinese outbound foreign direct investment (OFDI). In terms of mechanisms, this is achieved by increasing local rates of return on capital and reducing cultural and institutional costs. Notably, the digital economy is particularly attractive to firms with low productivity, low digitalization levels, and those entering a host country for the first time, indicating that it lowers the barriers to cross-border investment. Jiang Ying et al. (2025)^[7], using a stochastic frontier gravity model, found that the host country's digital economic development exerts both promotional

and inhibitory effects. However, the net effect is positive, and it overall enhances the efficiency of Chinese OFDI, with market size effects and technology spillover effects being the primary promotional mechanisms. Gao Li and Li Fuyou (2026)^[8] further found that the host country's digital economic development significantly enhances the OFDI performance of Chinese firms, with mechanisms including reduced information asymmetry, optimized supply chain cost management, and the alleviation of financing constraints. Additionally, some studies have approached the issue from the perspective of digital trade (Zhou Jing and Teng Fengfan, 2025^[9]; Zhou Ruifan et al., 2022^[10]), or have explored micro-level mechanisms (Zhang Mingzhe, 2023)^[11]. Jiang Wei and Song Hui (2025)^[12] found in their study of RCEP partner countries that improvements in digital infrastructure significantly promote Chinese OFDI and reinforce the positive impact of local market size on market-expansion-oriented OFDI.

In summary, existing research has systematically examined the promotional role, mechanisms, and heterogeneous characteristics of host countries' digital economic development on China's OFDI. However, the following shortcomings remain: First, most studies focus on countries along the "Belt and Road" or EU member states, lacking systematic empirical research at the micro-firm level within the RCEP region. Second, existing literature primarily emphasizes the impact of the digital economy on investment scale or marginal returns. A systematic analysis of how it influences firms' investment location choices, investment patterns, and underlying mechanisms still requires further exploration.

Therefore, this paper draws upon the Eclectic Paradigm of International Production (Dunning, 1988)^[13] and the New New Trade Theory (Melitz, 2003^[14]; Helpman et al., 2004)^[15], and constructs an analytical framework. Using investment data from 2010 to 2023 on Chinese A-share listed companies in RCEP member states, this study empirically examines the impact, heterogeneity, and mechanisms of host country digital economic development on Chinese corporate OFDI. The marginal contributions are: (1) expanding the research perspective to the RCEP region; (2) examining firm-level location choices; (3) introducing bilateral institutional distance and host innovation capacity as moderating variables.

3. RESEARCH HYPOTHESES

3.1. HOST COUNTRY DIGITAL ECONOMIC DEVELOPMENT AND FIRM OFDI LOCATION SELECTION

First, reducing information asymmetry and transaction costs. The digital economy enhances the efficiency and transparency of information dissemination, enabling firms to more accurately assess the host country's market environment and investment risks. In the process of firms "going global," the cost of obtaining information on host country policies, regulations, market demand, and the business environment directly affects the efficiency of investment decision-making. The higher the level of digital economic development in the host country, the more fully relevant information is disseminated through digital channels, and the lower search costs faced by firms. Second, improving access to financing. The development of digital finance helps enterprises broaden their financing channels and alleviate financing constraints on foreign investment (Foley & Manova, 2015)^[16]. Buch et al. (2014)^[17] found at the micro level that financing constraints are a major obstacle to corporate transnational expansion; the development of alleviate the financial pressure of foreign investment.

Third, promoting technology spillovers and enhancing innovation capabilities. The higher the level of digital economic development in the host country, the greater the likelihood that firms will acquire local technological resources and achieve reverse technology spillovers. Based on Melitz's (2003) New New Trade Theory framework, firms with different productivity levels face varying sunk costs and entry barriers when entering international markets. The host country's digital economic development can lower the actual barriers to foreign investment by reducing information acquisition costs and enhancing the efficiency of knowledge spillovers, thereby enabling more relatively low-productivity firms to participate in international direct investment. Helpman et al. (2004) further incorporated firm heterogeneity into the analytical framework for FDI decision-making, revealing the critical role of firm productivity levels in the choice between the two internationalization modes: exports and FDI.

Based on the above analysis, this paper proposes the following hypothesis:

Hypothesis 1: The level of digital economic development in the host country has a significant positive effect on Chinese firms' OFDI.

3.2. THE MODERATING ROLE OF BILATERAL INSTITUTIONAL DISTANCE

Institutional quality is a critical factor influencing corporate cross-border investment. The greater the institutional distance, the stronger the legitimacy pressures and information frictions firms face in the host country. However, the development of the

digital economy can to some extent "bridge" the institutional gap. By enhancing information transparency, streamlining administrative procedures, and improving market regulatory efficiency, the digital economy helps mitigate the "outsider disadvantage" caused by institutional distance. Sun Li and Chang Tianhui (2023)^[18] further found that the host country's institutional quality has a positive moderating effect on the investment-promoting effects of the digital economy, particularly at the expansion margin. Therefore, in host countries with significant institutional differences, the investment-promoting effects of the digital economy may be even more pronounced.

Based on this, this paper proposes:

Hypothesis 2: Bilateral institutional distance positively moderates the impact of the host country's digital economic development on corporate OFDI, meaning that in host countries with greater institutional distance, the investment-promoting effect of the digital economy is stronger.

3.3. THE MODERATING ROLE OF THE HOST COUNTRY'S INNOVATION CAPACITY

Innovation capacity is a key indicator of a country's technological progress and knowledge intensity. Host countries with high innovation capacity typically possess more robust R&D systems, higher-quality human capital, and more active knowledge spillover effects. The investment-promoting effect of the digital economy is further amplified in a high-innovation environment for the following reasons.

On the one hand, high innovation capacity provides fertile ground for the deep application of digital technologies, enhancing firms' ability to absorb and transform technology. On the other hand, the digital economy itself is a manifestation of innovation capacity, and together they constitute a key attraction for strategic asset-seeking OFDI by firms. Research by Zhou Jing and Wu Kexin (2021)^[19] indicates that the level of a host country's digital economic development influences China's outward foreign direct investment (OFDI) by affecting human capital and innovation capacity.

Based on this, this paper proposes:

Hypothesis 3: The host country's innovation capacity positively moderates the impact of digital economic development on corporate OFDI; that is, in host countries with stronger innovation capacity, the investment-promoting effect of the digital economy is more pronounced.

4. MEASUREMENT OF DIGITAL ECONOMIC DEVELOPMENT LEVELS

Currently, no unified international measurement system exists for digital economy development. Widely used indicators include DESI, NRI, and ICT Development Index. Drawing on Wang Xia (2025)^[20] and Yu Luyao et al. (2025)^[21], this study selects three primary indicators—digital infrastructure, digital innovation environment, and digital export potential—along with 13 secondary indicators.

Due to data gaps for Myanmar and Laos, the analysis focuses on 12 RCEP member states (excluding China) from 2010 to 2023. Linear interpolation was used for missing data.

4.1. DETERMINATION OF INDICATOR WEIGHTS

Drawing on the research by Hu Yanli et al. (2024)^[22], this study employs the entropy method to measure the weights of the secondary indicators within the digital economic development index system. The results of this measurement are shown in Table 1.

4.2. STATUS OF DIGITAL INFRASTRUCTURE DEVELOPMENT IN RCEP PARTNER COUNTRIES

Based on the constructed index, we estimate digital economy levels of RCEP member states from 2010 to 2023.

Results show distinct tiered characteristics. Japan, South Korea, Singapore, and Australia occupy the first tier (scores >0.33). Malaysia, New Zealand, Philippines, Vietnam, and Thailand form the second tier (0.17-0.28). Brunei, Indonesia, and Cambodia are in the third tier (<0.13).

Structural analysis reveals differentiated comparative advantages. Japan and South Korea

lead in digital infrastructure and innovation environment.

Singapore and Malaysia excel in digital export potential. Overall, internal disparities remain significant, providing insights for understanding comparative advantages in digital trade and investment.

Table 1. Indicator System for the Level of Digital Economic Development

Primary Indicators	Weight	Second-Level Indicators	Weight
Digital Infrastructure	13.59%	Internet Penetration Rate	2.05%
		Number of Internet Users (as a Percentage of the Population)	1.92%
		Fixed broadband penetration rate	6.56%
		Mobile broadband penetration rate	3.07%
Digital Innovation Environment	45.64%	Frontier Technologies Readiness Index	2.18%
		Higher Education Enrollment Rate	4.90%
		Number of patent applications	24.56%
		Number of scientific journals	14.01%
Digital export potential	40.76%	High-tech export value	12.04%
		GDP per capita	9.45%
		Percentage of ICT exports in total exports	9.74%
		Percentage of ICT goods imports in total product imports	3.86%
		Percentage of ICT services exports in total services exports	5.68%

Source: ITU, WDI, and UNCTAD databases

Table 2. Scores for Digital Economic Development Indicators of RCEP Member States

Country	Digital Infrastructure	Digital Innovation Environment	Digital Export Potential	Average of Total Values from 2010 to 2023	Ranking
Japan	0.0974	0.3905	0.1453	0.6332	1
South Korea	0.1072	0.2937	0.1969	0.5978	2
Singapore	0.0897	0.0785	0.2647	0.4328	3
Australia	0.0925	0.1560	0.0906	0.3391	4
Malaysia	0.0544	0.0465	0.1700	0.2709	5
New Zealand	0.0911	0.0640	0.0737	0.2288	6
Philippines	0.0303	0.0280	0.1665	0.2249	7
Vietnam	0.0445	0.0303	0.1392	0.2139	8
Thailand	0.0451	0.0484	0.0784	0.1718	9
Brunei	0.0599	0.0186	0.0453	0.1238	10
Indonesia	0.0251	0.0413	0.0420	0.1083	11
Cambodia	0.0198	0.0210	0.0167	0.0575	12

5. RESEARCH DESIGN

5.1. MODEL CONSTRUCTION

This study adopts the research methodology of Liu Xiaodi (2024) and employs a probit model for benchmark regression. The model is constructed as follows:

$$OFDI_{ijt} = \beta_0 + \beta_1 Digital_{jt} + \sum_{k=2}^4 \beta_k Control_{jt} + \sum_{k=5}^8 \beta_k Control_{it} + \lambda_t + \varepsilon_{ijt} \quad (1)$$

In particular, Chinese firms are denoted by i , RCEP countries by j , and the year by t . β_0 is the constant term; the dependent variable $OFDI_{ijt}$ represents the probability that firm i makes OFDI to RCEP country j in year t ; $Digital_{jt}$ is the core explanatory variable, representing the level of digital economic development in RCEP country j in year t ; $Control_{jt}$ is the country-level control variable; $Control_{it}$ is the firm-level control variable; λ_t is the time fixed effect; and ε_{ijt} is the random disturbance term.

This study employs three-dimensional unbalanced panel data at the firm, country, and year levels for empirical analysis. Since the firm-level control variables do not change across host countries during the sample period, controlling for country fixed effects simultaneously in a Probit model would result in severe multicollinearity issues. This would lead to a significant reduction in the sample size due to perfect prediction, rendering the baseline regression model unable to obtain valid estimates. To address the aforementioned identification challenges, this study primarily controls for time fixed effects in the baseline regression to account for common shocks that do not vary across firms but fluctuate over time. Additionally, firm-level robust standard errors are employed to ensure the robustness and reliability of the estimation results.

Based on Equation (1), this paper introduces an interaction term between bilateral institutional distance and the host country's innovation capacity to test the moderating effect of RCEP countries' digital economic development levels on Chinese firms' foreign direct investment. The econometric model is specified as follows:

$$OFDI_{ijt} = \beta_0 + \beta_1 Digital_{jt} + \beta_2 adjust_{ijt} + \beta_3 adjust_{ijt} \times Digital_{jt} + \sum_{k=2}^4 \beta_k Control_{jt} + \sum_{k=5}^8 \beta_k Control_{it} + \lambda_t + \varepsilon_{ijt} \quad (2)$$

where $adjust_{ijt}$ is the moderating variable, and the interaction term between $adjust_{ijt}$ and $Digital_{jt}$ represents the moderating effect of the moderating variable on Chinese firms' FDI when the level of digital economic development in RCEP countries increases or decreases. To mitigate the issue of

multicollinearity, this paper centers the interaction term.

5.2. VARIABLE SELECTION AND DATA DESCRIPTION

Dependent Variable: The dependent variable is outbound foreign direct investment (OFDI). Drawing on Liu Xiaodi (2024), OFDI is set to 1 if a firm made greenfield investments or engaged in cross-border mergers and acquisitions in RCEP countries between 2010 and 2023; otherwise, it is set to 0. Data are sourced from the FDI Markets and Zephyr databases. Samples with severe missing values in corporate financial information or investment amounts were excluded; enterprises from Hong Kong (China), Taiwan (China), and tax havens were excluded; and samples of ST or *ST companies were removed, resulting in a final dataset of 1,806 transactions involving Chinese enterprises' outward foreign direct investment.

Explanatory Variable: The independent variable is the level of digital economic development ($Digital$) in RCEP countries. This variable is measured based on the composite score of digital economic development calculated in the preceding section.

Control Variables: This study selects control variables at both the firm and country levels. At the country level, these include: geographical distance ($Distance$), defined as the logarithm of the geographical distance between the host country's capital and the home country's capital; labor abundance ($Labor$), represented by the logarithm of the host country's total labor force; and host country market size (GDP), measured by the logarithm of the host country's annual GDP. At the firm level, the variables include: Firm Scale ($Scale$), measured by the logarithm of the total number of employees at listed companies; Revenue Growth Rate (RGR); Debt-to-Asset Ratio (DAR); and Ownership Type ($Property$), where non-state-owned enterprises are assigned a value of 0 and state-owned enterprises a value of 1. Regarding data sources, national-level data are drawn from the CEPII and WDI databases, while firm-level data are sourced from the CSMAR database.

Moderating Variables
1 is Bilateral Institutional Distance: Data is sourced from the World Governance Index (WGI) developed by the World Bank, which comprises six sub-indicators: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and anti-corruption institutions. Drawing on the approach of Aleksynska and Havrylchuk (2013)^[24], the simple average of the six WGI dimensions is used as the institutional level value. Drawing on the methodology of Jiang Dianchun et al. (2021)^[25],

the institutional distance between China and the investment destination country is calculated based on the indicators of each dimension, as shown in Equation (3):

$$ID_{jt} = \frac{1}{N} \sqrt{\sum_{m=1}^N \left\{ (D_{jmt} - D_{cmt})^2 / V_m \right\}} \quad (3)$$

where the subscript j denotes the host country, c denotes the source country (i.e., China), and m denotes the indicators across different dimensions of the database. D_{jmt} represents the value of country j on indicator m in year t , V_m represents the variance of indicator m , and N is the number of indicators. A larger calculated value of ID_{jt} indicates a greater difference in the institutional environments between China and host country j in year t .

Moderating Variables 2 is Host Country Innovation Capacity: Data is sourced from the World Intellectual Property Organization (WIPO) and measured using the Global Innovation Index (GII). It provides a comprehensive evaluation of the innovation ecosystems of countries worldwide across seven dimensions: institutions, human capital and research, infrastructure, market maturity, business maturity, knowledge and technology output, and creative output. This study directly employs the final composite score of the GII to measure the level of the host country's innovation capacity. A higher score indicates a more robust innovation environment and stronger innovation output capacity.

6. EMPIRICAL ANALYSIS

6.1. BENCHMARK REGRESSION

Table 3. Benchmark Regression Results

Variable	(1)	(2)	(3)	(4)
Digital	0.390*** (0.128)	0.394*** (0.127)	0.779*** (0.167)	0.023*** (0.005)
Distance			0.282*** (0.051)	0.008*** (0.002)
Labor			0.111*** (0.027)	0.003*** (0.001)
GDP			-0.061** (0.026)	-0.002** (0.001)
Scale			0.067*** (0.025)	0.002*** (0.001)
RGR			-0.002** (0.001)	-0.000** (0.000)
DAR			0.118 (0.151)	0.004 (0.005)
Property			-0.084 (0.065)	-0.003 (0.002)
_cons	-2.387*** (0.050)	-2.490*** (0.158)	-6.977*** (0.906)	
Control variables	NO	NO	YES	
Fixed effects	NO	YES	YES	
Observed values	21684	21684	21684	21684
Pseudo R2	0.003	0.016	0.034	

Note: *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively; standard errors in parentheses are robust standard errors clustered at the firm level. Unless otherwise specified, the same applies to the following table.

Table 3 reports the baseline regression results on the impact of the host country's digital economic development level on Chinese firms' foreign direct investment in RCEP countries. The Hausman test indicates that a fixed-effects model is appropriate. Column (1) uses a Probit model to preliminarily examine the relationship between the core explanatory variables and the dependent variable; Column (2) includes year fixed effects; and Column (3) further incorporates control variables along with year fixed effects, to enhance the model's explanatory power and robustness. Column (4) presents the average marginal effects

of the estimated coefficients. All models employ firm-level cluster-robust standard errors.

Columns (1) through (3) show that the estimated coefficients for "Digital" are all positive and statistically significant at the 1% level, indicating that the host country's level of digital economic development has a significant positive effect on Chinese firms' OFDI. As control variables and fixed effects are incorporated, the coefficient for "Digital" increases gradually with the refinement of the model specification, suggesting that the findings are robust. Using Column (3) as the baseline, a one-unit increase in the host country's

digital economy level raises the probability of Chinese firms making OFDI by approximately 77.9%. This indicates that, after controlling for the host country's labor force, market size, and firm characteristics, the net effect of the digital economy becomes even more pronounced. This implies that the digital economy not only directly influences firms' investment decisions but may also exert a reinforcing effect on OFDI through mechanisms such as improving the host country's overall investment environment and reducing information asymmetry. Column (4) shows that for every 1-unit increase in the host country's digital economy development level, the probability of Chinese firms making OFDI into that country increases by an average of 2.29%. This result validates Hypothesis 1, namely that the host country's digital economy development level has a significant positive impact on Chinese firms' OFDI. Within the RCEP region, the digital economy has become a key driver of location choice for Chinese firms.

6.2. ROBUSTNESS TESTS

To verify the robustness of the baseline regression results, this study conducted tests using four methods: changing the econometric model, principal component analysis, one-period lag of the explanatory variable and substituting key explanatory variables. The results of the robustness tests are shown in Table 4 and Table 5.

6.2.1. Changing the Econometric Model

Column (1) presents a re-estimation using the Logit model. The Logit model is suitable for nonlinear panel data, which aligns with the characteristics of the sample in this study. The regression results show that the coefficient of the core explanatory variable Digital is 1.917 and is significantly positive at the 1% level, consistent with the conclusions of the baseline regression. This indicates that the promotional effect of the digital economy on corporate OFDI is robust across models.

6.2.2. Principal Component Analysis

Column (2) re-constructs the digital economic development level index using principal component analysis. Drawing on the methodology of Guo Chen (2023)[26], we conduct a comprehensive assessment of the digital economic development levels of RCEP member states.

The results show that the coefficient of the Digital variable derived from principal component analysis is 0.185, which remains significantly positive at the 1% level, further confirming the robustness of the baseline regression results.

6.2.3. One-period lag of the explanatory variable

Column (3) presents the results using the one-period lagged core explanatory variable (L_Digital). To address potential reverse causality between the host country's digital economy and firms' OFDI, we re-estimate the baseline model with the lagged digital economy index. The coefficient of L_Digital is 0.800 and remains significantly positive at the 1% level, confirming the robustness of the baseline finding after mitigating endogeneity concerns.

Table 4. Replacement of the Econometric Model and Principal Component Analysis

Variable	Changed Econometric Model	Principal Component Analysis
	(1)	(2)
Digital	1.917*** (0.436)	
Digital (Principal Component Analysis)		0.185*** (0.031)
_cons	-16.264*** (2.385)	-8.082*** (1.098)
Control variables	YES	YES
Fixed effects	YES	YES
Observed values	21684	21684
Pseudo R2	0.033	0.048

6.2.4 Substituting Core Explanatory Variables

To further validate the robustness of the indicator construction, this study conducted regression analyses using the three constituent factors of the digital economy development level—namely, digital infrastructure (DInf), digital innovation environment (DEnv), and digital export potential (DExp)—as substitute variables for "Digital."

The coefficient for digital infrastructure (DInf) was 3.424, which was significant at the 1% level; the coefficient for the digital innovation environment (DEnv) was 0.278, which did not pass the significance test; The coefficient for Digital Export Potential (DExp) was 3.249, significant at the 1% level.

The results in Table 5 indicate that digital infrastructure and digital export potential have a significant positive impact on corporate OFDI, while the impact of the digital innovation environment is not yet statistically significant.

Overall, the substitution of core explanatory variables did not alter the basic conclusion regarding the promotional effect of the digital economy on corporate OFDI, further supporting the robustness of the baseline regression.

Table 5. Substitution of Core Explanatory Variables

Variable	Replacement of Core Explanatory Variables		
	(1)	(2)	(3)
DInf	3.424*** (0.898)		
DEnv		0.278 (0.234)	
DExp			3.249*** (0.434)
_cons	-6.262*** (0.872)	-6.268*** (0.880)	-10.040*** (1.346)
Control variables	YES	YES	YES
Fixed effects	YES	YES	YES
Observed values	21684	21684	21684
Pseudo R2	0.031	0.027	0.049

6.3. HETEROGENEITY TESTS

6.3.1. Firm-Level Analysis

Drawing on the research methodology of Di Lingyu and Bu Danlu (2021)^{Error! Reference source not found.}, this study splits the sample by whether firms have overseas operations. Table 6 Columns (1)-(2) show that digital economy development positively affects OFDI for both groups, but with different magnitudes: coefficient is 0.842 for firms with overseas experience and 0.673 for those without. This suggests that while the digital economy's information and efficiency benefits help all firms expand abroad, experienced firms are better positioned to leverage host country digital infrastructure to identify opportunities and overcome the liability of newness, thus enjoying a stronger marginal effect.

6.3.2. Analysis at the Host Country Level

Digital economy levels vary significantly across countries. Based on World Bank criteria, this study classifies host countries into developed and developing nations. As shown in Table 6 (3)-(4), digital economy development in both country groups significantly promotes Chinese OFDI, but the coefficients for developed countries are substantially larger. This likely reflects that developed countries have more advanced digital ecosystems, innovation networks, and consumer markets. Chinese firms investing there seek strategic assets and global innovation chain integration, benefiting from high-quality digital infrastructure, technology spillovers, and reduced search costs. In contrast, investments in developing countries are more market- or efficiency-seeking, where digital economy gains are significant but relatively weaker.

This also aligns with the findings of Jiang Dianchun and Tang Haodan (2021), who concluded that host countries with higher levels of

digitalization possess greater appeal for technology-seeking OFDI.

Table 6. Firm-Level Heterogeneity and Host-Country-Level Heterogeneity

Variable	Overseas Operations	No Overseas Operations	Developed Countries	Developing Countries
	(1)	(2)	(3)	(4)
Digital	0.842*** (4.22)	0.673** (2.77)	6.117*** (5.88)	2.013** (3.23)
Control variables	YES	YES	YES	YES
Fixed effects	YES	YES	YES	YES
_cons	-6.788*** (-6.56)	-7.590*** (-5.16)	-17.78*** (-6.81)	-13.31** (-5.07)
Observed values	14,532	7152	9,035	12,649
Pseudo R ²	0.0437	0.0374	0.0593	0.0755

6.3.3. Industry-Level Analysis

Based on the characteristics of factor intensity, this study classifies the sample into capital-intensive, technology-intensive, and labor-intensive industries. The regression results in Table 7 indicate that the promotional effect of the level of digital economic development on OFDI varies by industry, exhibiting a gradient pattern of “technology-intensive > capital-intensive > labor-intensive.”

Table 7. Heterogeneity at the Industry Level

Variable	Capital-Intensive	Technology-intensive	Labor-intensive
	(1)	(2)	(3)
Digital	0.585 (1.75)	1.250*** (5.35)	0.240 (0.82)
Control variables	YES	YES	YES
Fixed effects	YES	YES	YES
_cons	-7.070*** (-4.10)	-5.605*** (-3.68)	-8.653*** (-5.63)
Observed values	6504	9636	5544
Pseudo R ²	0.0482	0.0691	0.0438

The coefficient for technology-intensive industries is the highest at 1.250 and is highly significant at the 1% level. This indicates that the development of the digital economy creates a strong synergy with OFDI in technology-intensive industries. These industries rely heavily on R&D, data, and knowledge flows; the development of the host country's digital economy provides them with a critical environment for digital innovation and a platform for technological exchange. The coefficient for capital-intensive industries is 0.585. The development of the digital economy helps optimize supply chain management and the operation and maintenance of large-scale assets, thereby promoting the overseas expansion of

capital-intensive enterprises to some extent, though this effect is relatively weaker than that observed in technology-intensive industries. The coefficient for labor-intensive industries is 0.240, indicating the weakest impact. This may be because the primary motivation for OFDI in this sector is the pursuit of low-cost labor, and the role of digital economic development in reducing information asymmetry has a relatively limited marginal impact on core investment decisions.

6.4. MECHANISM TESTING

To test the hypothesis proposed earlier, this paper further examines the moderating effects of bilateral institutional distance and host country innovation capacity. The regression results are presented in columns (1) to (2) of Table 8.

Table 8. Mechanism Testing

Variable	Bilateral Institutional Distance	Host Country Innovation Capacity
	(1)	(2)
Digital	2.924*** (5.87)	1.836*** (5.88)
adjust	-1.774*** (-5.40)	0.00980** (2.92)
Digital×adjust	3.125** (2.60)	0.105*** (4.14)
_cons	-12.85*** (-9.79)	-7.806*** (-5.99)
Control variables	YES	YES
Fixed effects	YES	YES
Observed values	21684	21684
Pseudo R2	0.0482	0.0561

6.4.1 Moderating Effect of Bilateral Institutional Distance

Column (1) shows that bilateral institutional distance has a significantly negative direct effect on Chinese OFDI, increasing outsider disadvantage and compliance costs. However, the interaction term is significantly positive, indicating that institutional distance positively moderates the digital economy's promotion of OFDI. When institutional differences are large, firms face higher information barriers. A developed digital economy serves as an institutional substitute by enhancing transparency and providing digital compliance tools, reducing risks from unfamiliar environments. Thus, for countries with institutions vastly different from China's, the marginal attractiveness of digital development for OFDI is stronger. Therefore, Hypothesis 2 is supported.

6.4.2. Moderating Effect of Host Country Innovation Capacity

Table 8, Column (2) shows that host country innovation capacity has a significantly positive direct effect on OFDI. The interaction term is also

significantly positive, indicating that innovation capacity positively reinforces the digital economy's OFDI-promoting effect. Strong innovation capacity provides a vibrant ecosystem and knowledge spillovers, while the digital economy facilitates knowledge dissemination. For Chinese firms seeking strategic assets, a host country with both high innovation capacity and high digitalization offers combined advantages, amplifying the digital economy's pull effect on OFDI. Therefore, Hypothesis 3 is supported.

CONCLUSION

This study finds that host country digital economy development significantly promotes Chinese enterprises' OFDI within the RCEP region, with digital infrastructure and digital export potential as core drivers. The promotion effect is stronger for firms with overseas experience, in developed host economies, and in technology-intensive industries. Both bilateral institutional distance and host country innovation capacity exert positive moderating effects.

Policy recommendations: At the government level, tailor strategies to different tiers of host countries. For first-tier countries, support technology-intensive enterprises in R&D centers and digital M&As. For second-tier countries, encourage participation in local digital infrastructure and integrate production capacity with digital trade. For third-tier countries, use asset-light models to cultivate markets. At the industry level, establish overseas investment funds for technology-intensive industries, build cross-border digital supply chain platforms for capital-intensive industries, and provide digital transformation subsidies for labor-intensive industries. For host countries with large institutional distance, establish an RCEP public service platform and promote mutual recognition agreements on digital governance. For high-innovation host countries, set up joint innovation funds.

At the enterprise level, treat host country digital economy level as a core location indicator. Prioritize highly digitalized developed countries for overseas expansion. Technology-intensive enterprises should target Japan, South Korea, and Singapore for technology M&As. Capital-intensive enterprises choose Malaysia and Vietnam to optimize supply chains. Labor-intensive enterprises may test third-tier markets via cross-border e-commerce. Increase digital transformation investment and build cross-border digital management platforms.

For government-enterprise collaboration, establish an RCEP information sharing platform for digital economy investment, develop specialized financial

products, and set up a digital investment dispute resolution mechanism.

REFERENCES

- [1] Yang, Dongxu. (2022). Does Host Country's ICT Infrastructure Promote China's OFDI? *Journal of Nanjing University of Finance and Economics*, (2), 86-96.
- [2] Xu, Xiangyu, & Lin, Shanlang. (2025). Impact of Host Country's Digital Infrastructure on China's High-tech Manufacturing OFDI: A Study Based on 55 Countries along the Belt and Road. *Economic Survey*, 42(3), 58-71.
- [3] Guo, Ying, & Qi, Jianhong. (2025). Host Country's Digital Infrastructure and Chinese Enterprises' Cross-Border M&A. *Economic Survey*, 42(4), 76.
- [4] Mai, Huong Giang. (2025). Digital transformation as a catalyst for foreign direct investment: evidence from an emerging economy. *Cogent Economics & Finance*, 13(1).
- [5] Liu, Zhenlin. (2023). A Study on the Impact of Host Country's (Region's) Digital Economy Development on China's Outward Foreign Direct Investment. *Contemporary Finance & Economics*, (4), 118-130.
- [6] Zhang, Junyan, Jia, Yucheng, & Zhang, Cheng. (2023). Digital Economy in Host Countries and Location Choice of China's OFDI: A Study Based on Listed Firm Data. *Journal of Shanghai University of Finance and Economics*, 25(4), 49-62.
- [7] Jiang, Ying, Yin, Guikun, & Yang, Zhongzhen. (2025). The Impact of Host Country's Digital Economy Development on the Efficiency of China's OFDI: Measurement Based on Stochastic Frontier Gravity Model and Two-sided Stochastic Frontier Model. *International Economics and Trade Research*, 41(10), 91-107.
- [8] Gao, Li, & Li, Fuyou. (2026). Host Country's Digital Economy Development and the Performance of Chinese Enterprises' OFDI. *International Economics and Trade Research*, 42(1), 90-107.
- [9] Zhou, Jing, & Teng, Fengfan. (2025). How Digital Trade Development Empowers Enterprises' Overseas Investment. *World Economy and Politics Forum*, (1), 104-123.
- [10] Zhou, Ruifan, Hong, Xiangjun, & Lin, Xian. (2022). China's Outward Foreign Direct Investment and Digital Economy Innovation in the Belt and Road. *Journal of Shanxi University of Finance and Economics*, 44(6), 70-83.
- [11] Zhang, Mingzhe, & Zhang, Hui. (2023). Digital Economy along the Belt and Road and Location Choice of Chinese Enterprises' OFDI. *Journal of Shanxi University (Philosophy and Social Science Edition)*, 46(5), 152-160.
- [12] Jiang, Wei, & Song, Hui. (2025). Digital Infrastructure Development in RCEP Partner Countries and the Location Choice of China's OFDI. *International Economic Cooperation*, 41(2), 76-88+92.
- [13] Dunning, John H. (1977). Trade, Location of Economic Activity and the MNE: A Search for an Eclectic Approach. In *The International Allocation of Economic Activity* (pp. 395-418). Palgrave Macmillan UK.
- [14] Melitz, Marc J. (2003). The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity. *Econometrica*, 71(6), 1695-1725.
- [15] Helpman, Elhanan, Melitz, Marc J., & Yeaple, Stephen R. (2004). Export Versus FDI with Heterogeneous Firms. *American Economic Review*, 94(1), 300-316.
- [16] Foley, C. Fritz, & Manova, Kalina. (2015). International trade, multinational activity, and corporate finance. *Annual Review of Economics*, 7, 119-146.
- [17] Buch, Claudia M., Kesternich, Iris, Lipponer, Alexander, & Schnitzer, Monika. (2014). Financial constraints and foreign direct investment: Firm-level evidence. *Review of World Economics*, 150, 393-420.
- [18] Sun, Li, & Chang, Tianhui. (2023). Can Host Country's Digital Economy Development Promote Chinese Enterprises' OFDI? An Empirical Study Based on Micro-enterprises. *International Business (Journal of University of International Business and Economics)*, (3), 61-79.
- [19] Zhou, Jing, & Wu, Kexin. (2021). Does Host Country's Digital Economy Development Promote China's Outward Foreign Direct Investment? *Journal of Nanjing University of Finance and Economics*, (2), 88-98.
- [20] Wang, Xia, & Yuan, Chenchen. (2025). The Impact of Digital Economy Development on China's Service Trade Exports: An Empirical Study Based on RCEP Countries. *Journal of Commercial Economics*, (16), 136-142.
- [21] Yu, Luyao, & Liang, Ze. (2025). Research on the Impact of Digital Economy on the Status of Manufacturing Global Value Chains in Belt and Road Countries. *Journal of Xi'an University of Finance and Economics*, 38(4), 52-66.
- [22] Hu, Yanli, Guo, Chen, & Chen, Jun. (2024). The Impact of Digital Economy Development in RCEP Member Countries on China's Export Efficiency. *Jiangnan Tribune*, (5), 28-37.

- [23] Liu, Xiaodi, Zhang, Hong, & Li, Qingyang. (2024). Digital Transformation Empowers Chinese Enterprises' OFDI: An Analytical Framework Based on the Eclectic Theory of International Production. *International Economics and Trade Research*, 40(4), 86-101.
- [24] Aleksynska, Mariya, & Havrylchyk, Olena. (2013). FDI from the South: The Role of Institutional Distance and Natural Resources. *European Journal of Political Economy*, 29, 38-53.
- [25] Jiang, Dianchun, & Tang, Haodan. (2021). Digital Cross-border M&A: Characteristics and Driving Forces. *Finance & Trade Economics*, 42(9), 129-144.
- [26] Guo, Chen, & Chen, Jun. (2023). A Study on the Impact of Digital Economy Development Level on Export Trade between China and RCEP Member Countries. *Prices Monthly*, (4), 49-55.
- [27] Di, Lingyu, & Bu, Danlu. (2021). Introduction of Foreign Shareholders and Internationalization Strategy of State-owned Enterprises: Taking Overseas Sales Revenue as an Example. *World Economy Studies*, (5), 83-102+136



This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License