# Policy Coordination, Generative Artificial Intelligence, And Overseas Investment Efficiency: An Integrated Framework from The Perspective of Chinese Cities

Weiting Wu

School of Finance, Harbin University of Commerce, Harbin, China

wuweiting123456@qq.com

**Abstract.** Against the backdrop of research on how coordinated urban governance influences firms' overseas investment efficiency, this study incorporates the technological perspective of generative artificial intelligence and develops an integrated analytical framework at the Chinese city level. Using a bidirectional fixed effects model and instrumental variable approaches, the paper systematically examines the internal relationships among policy coordination, generative artificial intelligence, and firms' overseas investment efficiency. The results show that urban policy coordination significantly enhances firms' overseas investment efficiency. However, generative artificial intelligence exhibits a pronounced substitution effect rather than a simple reinforcing role. Specifically, a high level of artificial intelligence application weakens the marginal effectiveness of policy coordination. Mechanism analysis indicates that policy coordination improves investment efficiency through multiple channels, including reducing capital costs, compressing risk premia, and curbing agency costs. Further heterogeneity analyses and robustness checks confirm the reliability of the core findings. This study not only enriches theoretical discussions at the intersection of government governance and corporate internationalization in the digital era, but also provides important insights for local governments seeking to optimize coordinated governance and for firms aiming to leverage artificial intelligence technologies to enhance overseas investment performance.

**Keywords:** policy coordination; generative artificial intelligence; overseas investment efficiency; city-level perspective.

## 1. Introduction

Amid rising global economic uncertainty and the pursuit of high-quality domestic economic development, city-level policy coordination has become a key instrument for enhancing regional competitiveness and building a unified national market. Traditional fragmented policy supply models are increasingly inadequate in addressing the complex challenges faced by firms engaged in global operations. Therefore, examining how governments can integrate industrial, financial, talent, and innovation policies into a coherent policy force that supports corporate internationalization strategies is of substantial theoretical and practical significance.

Overseas investment efficiency is a core indicator of the effectiveness of firms' global strategies and resource allocation, and it directly affects position in global value chains as well as the sustainability of outward foreign direct investment. However, factors such as information asymmetry, institutional differences, and host-country risks often erode investment efficiency. Enhancing efficiency and avoiding resource misallocation have thus become central concerns in corporate strategy and international investment research.

Existing studies on firm internationalization have largely focused on institutional environments and government–firm relationships, with limited attention paid to policy coordination as a systemic governance model and its direct linkage to overseas investment efficiency. How policy coordination is translated into tangible efficiency gains in firms' overseas investments remains a theoretical black box. Clarifying its mechanisms can help bridge macro-level governance and micro-level firm behavior, providing new explanations for corporate globalization within institutional context.

At the same time, disruptive technologies such as generative artificial intelligence are reshaping firms' information processing, risk assessment, and strategic decision-making processes. These

technologies may fundamentally alter how firms interpret and utilize external policy environments. Incorporating generative artificial intelligence into the analytical framework and examining its moderating role in the relationship between policy coordination and overseas investment efficiency is therefore crucial for understanding new forms of corporate internationalization in the intelligent era.

This study aims to construct and empirically test an integrated framework of policy coordination, generative artificial intelligence, and overseas investment efficiency. At the theoretical level, by uncovering the internal mechanisms through which policy coordination affects overseas investment efficiency and introducing generative artificial intelligence as a moderating variable, the study extends the institutional-based view and the resource-based view in the digital era, thereby promoting interdisciplinary integration across international business, public administration, and information technology. At the practical level, the findings offer guidance for local governments in optimizing coordinated governance and fostering an intelligence-friendly business environment, as well as strategic insights for Chinese firms seeking to achieve high-quality global expansion through the dual drivers of policy support and technological capability.

## 2. Literature Review

Policy coordination has been widely recognized as an important pathway for enhancing urban governance effectiveness and has demonstrated its critical role in areas such as urban land ecological security, smart city governance under the rule of law, spatial governance of megacities, and urban regeneration. Jin Jing and colleagues, by identifying coordination governance structures across 26 cities in the Yangtze River Delta Economic Belt, found that a "single-core, multi-actor" governance model effectively improves land ecological security [1]. Yuan Dasong argues that the modernization of legal governance in smart cities requires overcoming administrative fragmentation through legislative supply and coordinated governance in order to enhance governance efficiency [2]. These studies consistently show that policy coordination strengthens governance structures and actor interaction, thereby directly improving resource allocation and decision-making efficiency within cities.

However, the existing literature has primarily focused on internal public governance within cities and has not sufficiently examined how policy coordination extends to external economic activities such as firms' overseas investment efficiency. Whether policy coordination can indirectly influence firms' overseas investment decisions and efficiency by improving the business environment and reducing institutional uncertainty remains an open question.

Regarding overseas investment efficiency, prior studies have largely adopted firm-level and macro-policy perspectives. Yi Changjun and Zhao Xiaoyang show that digital transformation significantly enhances overseas investment efficiency by mitigating managerial short-termism, increasing risk-taking capacity, and reducing agency costs [3]. Zhang Jide and Zhang Jiaxuan emphasize that executives' overseas experience strengthens cross-border merger and acquisition intentions through an imprinting effect rather than self-interested motives [4]. In addition, Qi Jianhong and colleagues find that the Belt and Road Initiative improves China's investment efficiency in participating countries by optimizing the allocation of labor, capital, and technological factors [5]. Further research by Qi Jianhong and Zhao Yuting reveals that financing constraints suppress overseas investment efficiency, while government subsidies only partially alleviate this effect [6].

Despite these contributions, existing studies largely overlook the role of cities as fundamental units of policy implementation and resource integration. Internal coordinated governance within cities may support firms' overseas investments by providing a stable institutional environment, efficient public services, and effective risk response mechanisms. The absence of this perspective has prevented the establishment of a clear theoretical linkage between policy coordination and overseas investment efficiency.

As an emerging technology, generative artificial intelligence has demonstrated unique value in policy analysis and risk governance. Guo Haochen and colleagues construct a policy semantic intensity index and show that generative artificial intelligence can anticipate shifts in capital sentiment and flows ahead of traditional indicators, thereby compensating for the lag in policy expectation responses [7]. Chen Shu and co-authors, using an endogenous, accompanying, and application-based framework, identify risk points of generative artificial intelligence across different stages of digital transformation and propose dynamic, process-oriented governance strategies [8]. Chang Jiang and colleagues further articulate a three-layer empowerment mechanism of generative artificial intelligence in public services, encompassing precise demand identification, cross-departmental coordination, and dynamic feedback optimization [9].

These studies highlight the potential of generative artificial intelligence in accelerating policy responses, optimizing decision-making processes, and strengthening risk control. However, their focus remains largely confined to internal public sector operations or specific risk scenarios. Generative artificial intelligence has not yet been incorporated into a framework that links policy coordination with overseas investment efficiency. Whether it can moderate the impact of policy coordination by enhancing policy semantic interpretation, forecasting market fluctuations, and optimizing resource allocation has not been addressed, creating both a theoretical paradox and a practical blind spot.

In sum, the existing literature reveals a clear theoretical disconnect among policy coordination, generative artificial intelligence, and overseas investment efficiency. Few studies have constructed an integrated framework to explain how policy coordination, enabled or constrained by generative artificial intelligence, directly or indirectly affects firms' overseas investment efficiency. The contribution of this study lies in breaking this boundary by positioning urban policy coordination as the independent variable and generative artificial intelligence as the moderating variable within an analytical framework of overseas investment efficiency, thereby revealing the internal mechanisms linking the three.

## 3. Mechanism Analysis and Hypothesis Development

Policy coordination enhances firms' overseas investment efficiency through three core mechanisms, with generative artificial intelligence playing a critical role in amplification and moderation.

First, policy coordination reduces firms' external financing costs through signaling effects and government credit enhancement. Information asymmetry is a key source of financing premia in overseas investment. At the city level, coordinated industrial and financial policies generate credible and consistent signals to the market, reducing information acquisition and risk assessment costs for financial institutions and enabling more favorable financing terms. Generative artificial intelligence functions as an intelligent signal amplifier by dynamically interpreting policy texts and producing structured analytical outputs. This allows financial institutions to quantify policy benefits more precisely and incorporate them into risk pricing models, thereby more effectively translating policy coordination into lower capital costs and improving the feasibility of high-quality overseas investment projects.

Second, policy coordination lowers the heterogeneous risk premium faced by firms by constructing a portfolio of policy-based risk hedging instruments. Through interdepartmental coordination, governments provide one stop risk mitigation solutions that effectively shift idiosyncratic firm level risks to the city level, reducing the volatility of investment cash flows. In this process, generative artificial intelligence acts as a risk modeling enhancer. By generating real time host country risk profiles and global value chain risk maps, and by simulating changes in risk exposure under different policy combinations, generative artificial intelligence helps governments optimize risk hedging tools and enables firms to match policies more accurately to their investment

needs. This ultimately raises project net present value and investment efficiency by compressing risk premia.

Third, policy coordination mitigates agency problems in overseas investment by introducing an active form of government external supervision. Coordinated approval procedures and cross departmental oversight create a non-market external governance mechanism that raises the cost for managers to pursue inefficient investment projects. Generative artificial intelligence further strengthens this mechanism by functioning as a super compliance auditor. It can automatically cross check data across departments, identify inconsistencies and concealed risks, and generate peer benchmarking analyses. These capabilities compel management to adopt more prudent decision making, reduce investment distortions arising from agency costs, and improve capital allocation efficiency at the corporate governance level.

Based on the above analysis, the following hypothesis is proposed:

**H1**: Policy coordination has a significant positive effect on firms' overseas investment efficiency.

The theoretical novelty of the moderating role of generative artificial intelligence lies in the fact that it does not simply strengthen or weaken the effect of policy coordination. Instead, it reshapes firms' attention allocation patterns and fundamentally alters the capabilities and processes through which firms extract value from coordinated policies. According to the attention-based view of the firm, organizational behavior is not solely determined by the external environment, but by how decision makers allocate their limited attention. Where managerial attention is focused directly determines which external information is processed, which opportunities are recognized, and which resources are deployed.

Under traditional conditions, even when city governments provide highly coordinated policy systems, corporate managers face severe attention constraints. Large volumes of coordinated policy information still require substantial time and cognitive effort to interpret, filter, and align with complex overseas business contexts. Due to these high processing costs, firms often engage in only superficial use of coordinated policies, capturing visible benefits such as subsidies or tax incentives while failing to fully deconstruct and integrate more strategic and implicit policy resources. This leads to a policy coordination value realization paradox; whereby high-quality public policy supply cannot be fully translated into firm level performance due to limited absorptive capacity.

The introduction of generative artificial intelligence addresses this critical attention bottleneck by functioning as an external cognitive engine and thus serves as a powerful positive moderator. A core capability of AIGC lies in its ability to perform deep semantic interpretation, contextual linkage, and personalized generation across massive and multimodal policy information at near zero marginal cost. Generative artificial intelligence is not merely a passive information retrieval tool, but an active advisor for attention allocation and a partner in strategy generation.

When firms face overseas investment decisions, generative artificial intelligence can simultaneously scan, interpret, and integrate the latest coordinated policies issued by multiple government departments, such as development and reform commissions, commerce bureaus, tax authorities, and human resources agencies. Based on firm specific characteristics including industry attributes, investment scale, target markets, and financial conditions, it can generate highly customized action guidelines. In doing so, generative artificial intelligence frees managerial attention from complex information processing tasks and reallocates scarce cognitive resources toward higher value strategic judgment and decision making. This significantly enhances both the breadth of policy absorption and the depth of policy interpretation, enabling firms to identify and capture latent and non-explicit synergies embedded in coordinated policy frameworks.

Accordingly, the moderating effect of generative artificial intelligence manifests through its empowerment of firms' attention allocation. By amplifying the marginal returns of policy coordination as a form of institutional capital, generative artificial intelligence enables firms operating in high AIGC adoption environments to convert the latent benefits of coordinated policies into tangible improvements in overseas investment efficiency. In this way, it resolves the core paradox of having sound policies that cannot be fully utilized.

Based on this reasoning, the following hypothesis is proposed:

**H2**: Generative artificial intelligence positively moderates the relationship between policy coordination and firms' overseas investment efficiency. Specifically, the higher the level of generative artificial intelligence application within a firm, the stronger the positive effect of policy coordination on overseas investment efficiency.

Below is a clear, journal ready English translation that maintains methodological rigor, variable definitions, and econometric conventions. The style aligns with empirical papers in economics, finance, and management.

## 4. Variable Definition and Model Specification

### 4.1. Data Sources

This study uses data on Chinese A-share listed firms from 2009 to 2023. The sample is processed as follows.

First, firms classified as ST or *ST are excluded.

Second, observations with evidently abnormal financial data are removed.

Third, firm year observations with missing key variables are deleted.

Finally, all variables are obtained from the Wind and CSMAR databases, and empirical analyses are conducted using Stata 18.0.

### 4.2. Variable Definition

To measure the objective of governmental policy coordination, this study analyzes coordination related keywords in local government work reports. A higher frequency of references to coordinated governance indicates a stronger governmental orientation toward policy coordination. Specifically, the study counts the occurrences of keywords associated with coordinated governance in government work reports, such as comparative advantage, coordinated governance, cooperation and win win outcomes, and resource sharing. This count is standardized by the total number of words in each report to obtain the indicator of government coordination objectives (COG). A higher value of this index reflects greater governmental emphasis on coordinated governance.

Two measures are constructed.

COG1 is the natural logarithm of the policy coordination objective.

COG2 is the proportion-based measure of the policy coordination objective.

OFDI2 is a dummy variable indicating whether a firm conducts outward foreign direct investment. It takes the value of 1 if the firm undertakes overseas investment in a given year and 0 otherwise. Data on outward foreign direct investment are obtained from the CSMAR Related Transactions Database for Chinese listed firms.

According to Chinese accounting standards, listed firms are required to disclose related transactions in detail. When a listed firm undertakes overseas direct investment, a related relationship is established and must be reported. Following prior studies, this paper identifies overseas direct investment by screening related transaction disclosures. The CSMAR database provides detailed information, including registration location, registered capital with currency type, relationship type, and ownership share held by the listed firm.

A firm year is identified as involving overseas direct investment if meets the following conditions. The listed firm holds more than 10 percent of equity ownership. The relationship type is classified as a subsidiary, joint venture, or associate of the listed firm.

The scale of overseas direct investment is calculated as follows. The registered capital is converted into RMB using the annual average official exchange rates provided by the World Bank. This amount is multiplied by the ownership share held by the listed firm to obtain the firm's investment. The annual overseas investment scale is then computed as the sum of investments within a given year.

Following existing literature, the model includes the following control variables.

Ownership concentration (Top1), measured as the shareholding ratio of the largest shareholder.

Return on assets (ROA), defined as net profit divided by total assets.

Board size (Board), measured as the natural logarithm of the number of board members.

Firm growth (Growth), measured by the growth rate of operating revenue.

Corporate governance variables include.

CEO duality (Dual), which equals 1 if the chief executive officer also serves as board chair and 0 otherwise.

Managerial ownership (MH), measured as the proportion of shares held by management relative to total shares outstanding.

In addition, Tobin's Q (TobinQ) is included to capture the firm's market valuation level.

### 4.3. Model Specification

To examine the effect of policy coordination on outward foreign direct investment, a fixed effects model is employed. The baseline regression specification is as follows.

$$OFDI2_{it}=\beta_0+\beta_1*COG_{it}+\sum \alpha_k controls_{it}+\varepsilon_{it}+\lambda_t \quad (1)$$

In this model, $\varepsilon_{it}$denotes the error term. Subscripts (i) and (t) represent firm and year, respectively. Year fixed effects $\lambda_t$ are included to control for time specific shocks. (k) denotes the number of control variables. $\beta_0$ is the constant term, and $\beta_1$ captures the effect of policy coordination on overseas investment.

The control variables include ownership concentration (Top1), return on assets 1ROA, board size (Board), firm growth (Growth), and Tobin's Q (TobinQ).

## 5. Empirical Analysis

### 5.1. Descriptive Statistics

Table 1 reports the descriptive statistics of the main variables. The core independent variables are two indicators measuring the level of governmental coordinated governance: the policy coordination objective (COG1), with a mean value of 0.352 and a standard deviation of 0.451, and its proportional measure (COG2), whose mean and standard deviation are both close to zero. The dependent variable, outward foreign direct investment scale (OFDI2), has a mean of 0.606 and a standard deviation of 1.533, indicating substantial heterogeneity in firms' overseas investment behavior. The distributions of the control variables are broadly consistent with those reported in existing studies, providing a solid foundation for subsequent empirical analysis.

**Table 1.** Descriptive statistics

| Variable | Obs | Mean | Std.Dev. | Min | Max |
|---|---|---|---|---|---|
| OFDI2 | 45413 | 0.606 | 1.533 | 0 | 10 |
| COG2 | 45413 | 0 | 0 | 0 | 0.001 |
| COG1 | 45413 | 0.352 | 0.451 | 0 | 2.079 |
| Top1 | 45384 | 0.342 | 0.149 | 0.078 | 0.758 |
| ROA | 45413 | 0.036 | 0.066 | -0.556 | 0.222 |
| Board | 45380 | 2.127 | 0.204 | 1.546 | 2.708 |
| Growth | 41780 | 0.158 | 0.414 | -0.673 | 5.076 |
| TobinQ | 45405 | 1.997 | 1.321 | 0.795 | 17.676 |

### 5.2. Baseline Regression Results

Table 2 presents the baseline regression results examining the effects of COG1 and COG2 on OFDI2. Columns (1) and (2) report regressions including only COG1 and COG2, respectively. In both specifications, the coefficients of the core explanatory variables are positive and highly significant, providing preliminary evidence that a higher level of governmental coordination promotes firms' outward foreign direct investment.

Columns (3) and (4) further incorporate firm level financial characteristics and corporate governance controls. After the inclusion of these controls, the coefficients of the core explanatory variables remain significantly positive, indicating that the results are robust to alternative model specifications.

This study focuses primarily on the results reported in column (4). The coefficient of COG2 is 144.7534 and is statistically significant at the 1 percent level. This estimate has a clear economic interpretation. Holding other factors constant, a one unit increase in COG2 is associated with an average increase of approximately 144.75 units in firms' outward foreign direct investment (OFDI2). This finding suggests that improvements in the level of governmental coordination exert a strong positive effect on firms' international expansion. Hypothesis H1 is therefore empirically supported.

With respect to the control variables, ownership concentration (Top1) and firm performance (ROA) both exhibit significant positive effects on OFDI2, while Tobin's Q shows a significant negative relationship. The effects of board size (Board) and firm growth (Growth) are not statistically significant. These results are largely consistent with prior literature, indicating that the model specification is appropriate and the estimation results are reliable.

**Table 2.** Baseline regression results

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | OFDI2 | OFDI2 | OFDI2 | OFDI2 |
| COG1 | 0.0536*** | | 0.0583*** | |
| | (0.02) | | (0.02) | |
| COG2 | | 129.2894*** | | 144.7534*** |
| | | (49.21) | | (52.23) |
| Top1 | | | 0.0899* | 0.0908* |
| | | | (0.05) | (0.05) |
| ROA | | | 0.7752*** | 0.7763*** |
| | | | (0.12) | (0.12) |
| Board | | | -0.0346 | -0.0346 |
| | | | (0.04) | (0.04) |
| Growth | | | -0.0104 | -0.0103 |
| | | | (0.02) | (0.02) |
| TobinQ | | | -0.0550*** | -0.0550*** |
| | | | (0.01) | (0.01) |
| _cons | 0.2808*** | 0.2808*** | 0.3736*** | 0.3732*** |
| | (0.10) | (0.10) | (0.13) | (0.13) |
| N | 45413 | 45413 | 41770 | 41770 |
| R2 | 0.076 | 0.075 | 0.082 | 0.082 |
| adj.R2 | 0.075 | 0.075 | 0.082 | 0.081 |
| year | Yes | Yes | Yes | Yes |

Standard errors in parentheses
$p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

### 5.3. Robustness Checks

Table 3 reports the results of a series of robustness checks. Five alternative specifications are employed. Column (1) accounts for potential lag effects by using a one period lag of OFDI2, and the coefficient of COG2 remains statistically significant at the 1 percent level. Column (2) introduces additional control variables, such as the book to market ratio, and the coefficient of COG2 continues to be significant at the 1 percent level. Columns (3) and (4) replace the dependent variable with alternative measures of outward foreign direct investment, namely OFDI3 and OFDI1, respectively.

In both cases, the coefficient of COG2 remains positive and highly significant. Column (5) reports the baseline regression results for comparison.

Taken together, these findings indicate that the positive effect of policy coordination (COG2) on firms' outward foreign direct investment remains robust across alternative specifications, additional controls, and different measures of the dependent variable. The core conclusion is therefore both stable and reliable.

**Table 3. Robustness checks**

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| | F.OFDI2 | OFDI2 | OFDI3 | OFDI1 | OFDI2 |
| main | | | | | |
| COG2 | 173.8739*** | 138.4603*** | 650.8641*** | 138.1304*** | 144.7534*** |
| | (55.61) | (52.14) | (250.22) | (48.00) | (49.41) |
| Top1 | 0.1249** | -0.0038 | 0.4258* | 0.0562 | 0.0908* |
| | (0.05) | (0.05) | (0.24) | (0.05) | (0.05) |
| ROA | 1.0027*** | 1.0479*** | 3.0861*** | 0.5504*** | 0.7763*** |
| | (0.14) | (0.13) | (0.56) | (0.11) | (0.10) |
| Board | -0.0741* | -0.1014*** | -0.6029*** | -0.1891*** | -0.0346 |
| | (0.04) | (0.04) | (0.18) | (0.03) | (0.04) |
| Growth | 0.0518*** | -0.0124 | -0.0720 | 0.0085 | -0.0103 |
| | (0.02) | (0.02) | (0.09) | (0.02) | (0.02) |
| TobinQ | -0.0567*** | 0.0143 | -0.2900*** | -0.0414*** | -0.0550*** |
| | (0.01) | (0.01) | (0.03) | (0.01) | (0.00) |
| BM | | 0.4889*** | | | |
| | | (0.05) | | | |
| EM | | 0.0391*** | | | |
| | | (0.01) | | | |
| Loss | | -0.0748*** | | | |
| | | (0.03) | | | |
| cons | 0.4676*** | 0.0058 | 3.9275*** | -0.5393*** | 0.3732*** |
| | (0.14) | (0.14) | (0.64) | (0.13) | (0.10) |
| N | 36592 | 41770 | 41770 | 41770 | 41770 |
| R2 | 0.086 | 0.085 | 0.054 | | 0.082 |
| adj.R2 | 0.085 | 0.085 | 0.053 | | 0.081 |
| year | Yes | Yes | Yes | Yes | Yes |

Standard errors in parentheses
$p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

### 5.4. Moderating Effect Analysis

Table 4 presents the results of the moderating effect analysis.The moderating effect analysis examines the role played by generative artificial intelligence (AI) in the relationship between policy coordination and overseas investment efficiency. Based on the theoretical framework and Hypothesis H2, generative artificial intelligence is expected to positively strengthen the effect of policy coordination by enhancing firms' attention allocation and information processing capabilities.

However, the empirical results reveal a different pattern. The coefficients of the interaction terms AICOG1 and AICOG2 are both significantly negative, indicating that generative artificial intelligence does not reinforce the effect of policy coordination. Instead, it exhibits a pronounced substitution effect. This finding suggests that when firms operate in environments with a relatively high level of generative artificial intelligence application, the marginal contribution of policy coordination to overseas investment efficiency is weakened.

In other words, generative artificial intelligence can partially substitute for the functions traditionally provided by policy coordination, such as information integration, risk assessment, and decision support. As a result, firms become less dependent on coordinated policy systems. One possible explanation is that generative artificial intelligence possesses strong capabilities in processing unstructured data and generating intelligent insights, enabling firms to respond to external complexity more autonomously and efficiently. This reduces their reliance on government led policy coordination frameworks.

**Table 4.** Moderating effect analysis

| | (1) | (2) | (3) | (4) |
|---|---|---|---|---|
| | OFDI2 | OFDI2 | OFDI2 | OFDI2 |
| COG2 | 132.9239** | 218.1749*** | | |
| | (52.40) | (56.08) | | |
| AI | 0.2339*** | 0.2774*** | 0.2339*** | 0.2881*** |
| | (0.02) | (0.02) | (0.02) | (0.02) |
| Top1 | 0.1189** | 0.1206** | 0.1180** | 0.1195** |
| | (0.05) | (0.05) | (0.05) | (0.05) |
| ROA | 0.8229*** | 0.8245*** | 0.8219*** | 0.8239*** |
| | (0.12) | (0.12) | (0.12) | (0.12) |
| Board | -0.0324 | -0.0330 | -0.0324 | -0.0327 |
| | (0.04) | (0.04) | (0.04) | (0.04) |
| Growth | -0.0124 | -0.0123 | -0.0125 | -0.0127 |
| | (0.02) | (0.02) | (0.02) | (0.02) |
| TobinQ | -0.0578*** | -0.0577*** | -0.0578*** | -0.0579*** |
| | (0.01) | (0.01) | (0.01) | (0.01) |
| AICOG2 | | -4.4e+02*** | | |
| | | (103.21) | | |
| COG1 | | | 0.0550*** | 0.0840*** |
| | | | (0.02) | (0.02) |
| AICOG1 | | | | -0.1521*** |
| | | | | (0.03) |
| _cons | 0.3323** | 0.3311** | 0.3326** | 0.3308** |
| | (0.15) | (0.15) | (0.15) | (0.15) |
| N | 41431 | 41431 | 41431 | 41431 |
| R2 | 0.087 | 0.087 | 0.087 | 0.088 |
| adj. R2 | 0.086 | 0.087 | 0.086 | 0.087 |
| year | Yes | Yes | Yes | Yes |

Standard errors in parentheses
$p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

## 6. Conclusion and Implications

This study develops an integrated analytical framework linking urban policy coordination, generative artificial intelligence, and firms' overseas investment efficiency, and empirically tests it using data from Chinese A-share listed firms. The findings yield conclusions with both theoretical novelty and important policy implications. Baseline regression results robustly confirm that city-level policy coordination significantly enhances the overseas investment efficiency of firms within the jurisdiction. This result establishes a positive linkage between macro-level governance optimization and micro-level corporate internationalization performance, thereby validating the study's core hypothesis.

Further analysis of moderating effects reveals a more nuanced pattern. Contrary to the initial theoretical expectation, generative artificial intelligence does not simply strengthen the effect of

policy coordination. Instead, it exhibits a significant substitution effect. The significantly negative interaction terms indicate that as firms' adoption of generative artificial intelligence increases, the marginal contribution of policy coordination to overseas investment efficiency correspondingly declines. This finding suggests that the powerful information processing and decision support capabilities of generative artificial intelligence can, to a considerable extent, substitute for or override the traditional functions of coordinated policy systems in reducing information asymmetry and providing risk assessment. As a result, firms' reliance on institutionalized external support mechanisms and their demand structures are fundamentally reshaped.

For firms, particularly those pursuing global expansion, these findings highlight the strategic importance of investing in and deploying generative artificial intelligence. Firms should deeply integrate generative artificial intelligence into the entire process of overseas market scanning, project evaluation, risk monitoring, and compliance management in order to build autonomous and agile international competitiveness. At the same time, firms must remain aware that advanced technologies cannot fully replace a deep understanding of host-country institutional environments, nor can they provide key public goods such as government-backed financial support or political risk mitigation.

Accordingly, a prudent strategy is to adopt a dual-driver approach. On the one hand, firms should actively leverage generative artificial intelligence to enhance internal decision-making efficiency and the precision of risk management, thereby reducing dependence on external information intermediaries. On the other hand, firms should proactively embed themselves in and make effective use of the coordinated policy networks established by local governments, particularly in areas that require public authority coordination such as access to finance, legal protection, and crisis response. Through this approach, firms can achieve a dynamic balance and complementary advantages between technological autonomy and institutional embeddedness.

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