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Impact of enterprise ambidexterity capability and experience learning on cross-border M&A performance: evidence from China

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Keywords: *ambidexterity capability; experience learning; cross-border M&A; institutional distance; M&A performance*

Abstract

Research background: Through cross-border mergers and acquisitions (M&A), enterprises in China can improve their technological innovation and organizational management capabilities to make up for the disadvantages of outsiders and enhance their international competitiveness. However, due to the lack of experience, the success rate of cross-border M&A of China enterprises is low, and the performance changes after M&A differ. How to maximize the advantages of

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cross-border M&A in obtaining technical resources and how to improve the performance of cross-border M&A are important issues that China's cross-border M&A enterprises and academic circles need to solve.

Purpose of the research: The aim of this study is to analyze the mechanism and boundary conditions of firms' capability to exploit resources (RTC) and capability to explore resources (REC) with regard to cross-border M&A performance from the perspective of experience learning based on organizational learning theory and resource-based theory.

Methods: With 173 China A-share listed companies with cross-border M&A events from 2010 to 2020 as samples, this study uses hierarchical regression analysis to test the impact of REC and RTC on cross-border M&A performance and its mechanism. In the robustness test, this study adopts the measures of changing dependent and independent variables lagged for one year for analysis. In the mechanism test, this study uses intermediary and mediation effect models.

Findings & value added: The results show that RTC and REC have positive effects on the performance of cross-border M&A. Prior experience learning (PE) and vicarious experience learning (VE) increase the probability of companies making cross-border M&A decisions and have positive effects on cross-border M&A performance. Moreover, PE and VE play a partial mediating role in the positive impact of REC and RTC on cross-border M&A performance, respectively. Formal and informal institutional distance weaken the positive effects of REC and RTC on the performance of cross-border M&A. Enterprises in emerging economies should adapt to the institutional environment of the host country to reduce the negative impact of institutional distance while taking advantage of experience learning when carrying out cross-border M&A.

Introduction

With the rapid development of China's economy in recent years, Chinese enterprises are constantly developing and expanding, the pace of "going global" is accelerating, and the number of cross-border mergers and acquisitions (M&As) is on the rise. In 2021, Chinese companies have completed 125 cross-border M&As, with a year-on-year increase of 12.61%. At present, China is one of the countries with the most intensive and extensive participation in cross-border M&As in the world. Through the cross-border M&As of foreign excellent enterprises, Chinese enterprises can obtain improvements in core competitiveness, including technology research and development, management strategy, brand promotion, and market awareness (Child & Suzana, 2005) to make up for the disadvantages of domestic and foreign market competition and enhance their international competitiveness. Although cross-border M&As as an entry mode have obvious advantages, research shows that the performance of most cross-border M&As is unsatisfactory. According to statistics, the failure rate of cross-border M&As is between 70% and 90% (Bhaumik *et al.*, 2018), and the changes in performance after M&As show large differences. This phenomenon has elicited the academic circle's attention and spurred research on the performance of cross-border M&As. For example, different studies have reported that the performance of cross-border M&As is considerably improved (Uddin & Boateng, 2009), decreased (Aybar & Ficici, 2009; Shar-

ma & Jonathan, 2002), or even unchanged (Dakessian *et al.*, 2013). Considering that cross-border M&As cross national borders, some scholars have conducted research on the factors that affect the performance of cross-border M&As, including political connections (Schweizer *et al.*, 2019), cultural differences (Dikova & Sahib, 2013), and institutional distance (Du & Boateng, 2015). These related studies have achieved useful results, but existing literature has ignored the enterprise's own level, especially the important role of the enterprise's own ability in cross-border M&A and experience learning. Judging from existing research and the actual situation of cross-border M&A of Chinese companies, corporate performance is also affected by the micro-level and learning characteristics of the firm. According to Golubov *et al.* (2015), due to differences in the ability of M&A companies to acquire resources, the M&A experience obtained by each company also differs. Therefore, M&A companies must pay attention to and make good use of learning experience to improve M&A capabilities, optimize resource allocation, and promote quality improvement and efficiency.

In reality, different enterprises differ in their ability to use cross-border M&A to acquire strategic resources and improve their competitive advantage, which is mainly reflected by the fact that enterprises have two different abilities in the use of cross-border resources, namely, exploiting resource capability and exploring resource capability (i.e., the ambidexterity capability of an enterprise). Moreover, Chinese companies' outbound investment and cross-border M&A are often perceived by stakeholders in host countries as "pursuing political goals," "unfair competition," and other negative perceptions (Cui & Jiang, 2012), resulting in Chinese companies facing a substantial liability of foreignness. Therefore, when enterprises carry out internationalization activities, relevant experience in internationalization activities exerts an important impact on them. Through experience learning, the foreignness liability of enterprises can be reduced. By learning and referring to the experience of other companies, a firm can obtain effective information as soon as possible, help in M&A decision-making, reduce the potential risks brought by various cross-border M&As, and improve the success rate of M&A. M&A experiential learning plays an important role in improving the process of converting external resources into multinational performance. Afterward, enterprises gradually master M&A skills by learning past M&A experience to improve their M&A success rate. Is this process affected by institutional distance? A few scholars have combined experience learning and institutional distance to study their joint effects on the performance of cross-border M&As.

How can Chinese companies improve their M&A performance through ambidexterity capabilities? What role does experience learning play in the

impact of ambidexterity capability on cross-border M&A performance, and is this role moderated by formal and informal institutional distance? These questions are the focus of this study, which attempts to explore them comprehensively. Since the “going global” strategy was officially put forward by the Chinese government in 2000, China enterprises have actively participated in international competition and cooperation, and their internationalization process has begun, thus providing data support for studying the overseas investments of China enterprises. On the one hand, the learning experience of the acquirer main company can help in fully tapping the learning opportunities and grasping the rules of overseas investment for enterprises in China or in emerging economies with cross-border M&A intentions. On the other hand, because Chinese firms have only a short time to carry out international operations, the development and experience accumulation of enterprises are not deep enough, and a set of mature theories related to this has not been formed yet. This research can improve the related theories on overseas M&A of enterprises in China and can provide important guidelines for enterprises from other emerging countries.

The remainder of the paper is organized as follows. Section 2 presents the theoretical background, framework, and hypotheses. The methodology is described in Section 3. In Section 4, the results and analysis are given. Section 5 provides the conclusion and limitations.

Theoretical analysis and hypothesis development

Enterprise ambidexterity capability and performance of cross-border M&A

The theory of organizational change posits that in an increasingly dynamic and complex business environment, successful organizations are characterized by the ability to effectively operate the current business and actively adapt to the demands of tomorrow (Kowalik & Pleśniak, 2022). Andriopoulos and Lewis (2009) introduced the concept of ambidexterity to the field of management to describe the organizational capability to simultaneously exploit and explore. March (1991) further posited that organizations use exploitation and exploration to describe such organizational capabilities. Exploitation capability includes activities that engage in efficiency, replication, selection, and implementation. Through exploitation capability, organizations successfully replicate their existing knowledge and apply it to business activities in existing fields, thus creating organizational reliability and stability by refining existing knowledge and inheriting traditional practices. Exploratory capacity refers to the ability to engage in activities, such

as variation, experimentation, flexibility, risk taking, and innovation. Exploratory competencies therefore involve the search for new organizational practices and activities to discover new technologies, new businesses, new processes, and new ways of production. The abilities to exploit and explore are two important but very different fundamental components that affect organizational performance (Osievskyy *et al.*, 2020). To maintain a long-term competitive advantage, an organization must achieve balance between the two learning behaviors of exploitation and exploration (Trąpczyński & Halaszovich, 2021). This balance reflects the organization's ambidexterity capability (Solís-Molina *et al.*, 2018).

An enterprise is a combination of various resources, and resources are the basis for maintaining an enterprise's competitive advantage and the basis for an enterprise to make strategic decisions (Barney, 1991; Wach, 2020). All kinds of resources brought by enterprises through cross-border M&A have common characteristics. To realize the potential of these acquired resources, enterprises must be able to use such resources effectively and improve utilization efficiency. However, the diversity of resources requires enterprises to make different combinations when examining resources and improving innovative ideas, and this requires the main M&A enterprises to cultivate the two capabilities of development and exploration (i.e., ambidexterity capabilities of exploitation and exploration). The resources acquired by the acquirer's enterprise include similar and heterogeneous resources. Development and exploration capabilities reflect the different directions of the enterprise's use of resources and the company's development strategy and thus affect M&A performance (Benner & Tushman, 2003; Hilmersson & Johanson, 2020). Specifically, when the homogeneity of the resources owned by the enterprise is high, the enterprise's ability to exploit resources is strong; when the heterogeneity of the resources owned by the enterprise is high, the enterprise's ability to explore resources is strong (O'Reilly & Tushman, 2011; Venugopal *et al.*, 2020).

In cross-border M&A, due to the differences in the institutional environment between countries, differences exist in the resource utilization and management of the target enterprise by the merging enterprises. Generally, firms in countries with the same institutional environments have high homogeneity, and firms in countries with different institutional environments have high heterogeneity. When companies with high homogeneity implement cross-border M&As, the transaction costs between companies are relatively low, and the acquirer can easily apply its existing successful experience to the cross-border merger of the target company, thereby helping improve the efficiency and performance of M&A (Venugopal *et al.*, 2020). For example, in the cross-border M&A of technical resources, further in-

depth exploration and research can be performed along the original technical path, the ability of enterprises to create technical value can be improved in accordance with the needs of overseas customers, and the technical adaptability to the transnational environment can be strengthened (Irwin *et al.*, 2022). When companies with high heterogeneity carry out cross-border M&As, the resource heterogeneity and diversity of the acquired companies are difficult to digest and absorb, and the past successful experience of the acquirer is difficult to replicate and promote. At this time, enterprises can develop and create new market demands by exploring their capabilities to experiment and innovate and can gain new competitive advantages. On the basis of the analysis above, this study proposes the following hypotheses:

Hypothesis 1a: *A firm's capability to exploit resources is positively correlated with cross-border M&A performance.*

Hypothesis 1b: *A firm's capability to explore resources is positively correlated with cross-border M&A performance.*

Experience learning and cross-border M&A performance

The acquisition activities in cross-border M&As face great challenges because the acquirer may encounter unfamiliar languages, business practices, and national cultures (Johanson & Vahlne, 1977). For Chinese companies implementing cross-border M&A, how to overcome these challenges through experience learning is an important issue if they want to succeed overseas. Organizational learning from experience is an important part of organizational learning theory. Organizational learning theory posits that past operational experience can be internalized into theoretical knowledge, and organizations preserve this knowledge in the form of behavioral routines, which are then used to regulate their own behaviors. Constantly updating the normative role of behavioral conventions promotes the healthy development of enterprises (Anand *et al.*, 2016). On the basis of different learning objects, experience learning can be divided into prior self-experience learning and vicarious experience learning (Haleblian & Finkelstein, 1999). When many companies conduct international operations, they learn from their previous experience in entering the host country's market, learn from the host country's system and market experience (Uribe *et al.*, 2020), or conduct external learning by observing and imitating the behavior of other companies while trying their best to avoid risks and reduce costs, thereby improving their investment efficiency.

The experience learning curve shows that with previous M&A experience, enterprises can learn from previous M&As about how to carry out a new M&A activity, how to make M&A decisions, and how to implement post-merger integration management. The more experience a firm has in corporate M&A, the higher the success rate of corporate M&A is and the better the performance of the company is. A firm's previous M&A experience can create knowledge and exert a positive effect on M&A performance (Galavotti *et al.*, 2017). The reason is that when a company has accumulated extensive experience in M&A, it does not need to spend too much energy thinking about the implementation of a similar merger next time. Specifically, having an existing set of normative behaviors can help promote the implementation of enterprise M&As (Yoon *et al.*, 2020).

Knowledge transfer theory explains the relationship between organizational learning and M&A performance. Experiential learning is an important source of organizational learning. Organizations transfer resources and capabilities effectively through the process of experiential learning, which finally affects M&A performance (Ahammad *et al.*, 2016). Notably, the smooth transfer of resources and capabilities depends not only on M&A experience, but also on the learning and transformation capabilities of the organization with regard to its own experience. For cross-border M&A, which involves low-frequency and difficult corporate activities, the role of experience learning should be given increased attention. Experience learning emphasizes that in order to realize the transformation from accumulated enterprise experience to M&A performance, a learning mechanism needs to be established. A set of scientific and ideal organizational learning mechanisms can internalize the external M&A activity experience of enterprises into abstract M&A capabilities. The application of practice evolves directly into M&A efficiency and results (Lamotte *et al.*, 2021). With the advancement of the learning process and the increase in enterprise experience, the ability to manipulate experience and learn can be improved, and the difference between experiences can be identified, absorbed, and utilized correctly. At this time, experience learning can easily have a positive impact on the company's overseas M&A (Chen *et al.*, 2021). After some time and through continuous learning, trial and error, and feedback, the enterprise's judgment of the experience can become increasingly accurate, the initial negative learning effect can be reversed, and the performance of the enterprise can gradually increase. Enterprises' learning of M&A experience includes success and failure experiences. Success experience can strengthen the enterprise's understanding of its current strategic management knowledge and skills, flexibly adjust the enterprise's M&A strategy, and enhance the organization's confidence in engaging in similar strategic ac-

tivities, thereby improving the efficiency of enterprise M&A (Madsen & Desai, 2010). Learning from companies with experience in cross-border M&A can enhance enterprises' ability to adapt to the cross-border market, such as developing new products suitable for the local area and launching advertisements that cater to local consumers (Mehreen *et al.*, 2021). Experience in M&A also enables management to thoroughly understand the process of M&A. Meanwhile, learning from failure experience makes the enterprise examine the problem deeply and prompts managers to re-evaluate the current strategic decision, grasp the accuracy of the information and the management's own judgment ability, explore the feasibility of the existing model and practice, and jump out of the strategy for organization inertia and for acquiring new knowledge. Dikova and Sahib (2013) supported this view, and they suggested that companies with rich M&A experience are more able to overcome M&A difficulties and reduce M&A transaction costs and risks and demonstrate better performance after M&A compared with companies with minimal M&A experience (Wang *et al.*, 2020). On the basis of the analysis above, this study proposes the following hypotheses:

Hypothesis 2a: *Prior experience learning of firms has a positive effect on cross-border M&A performance.*

Hypothesis 2b: *Vicarious experience learning of firms has a positive effect on cross-border M&A performance.*

Mediating role of experience learning

When multinational companies conduct international business, they encounter an environment with fierce international market competition. To gain international market share, enterprises must conduct marketing research on the international market at the early stage as a guide. They need to make full use of the existing familiar domestic market space and explore the unknown and unfamiliar international market space in order to achieve innovative breakthroughs and enhance the company's global competitive advantage in the industry; this situation poses a huge challenge to the company's ability to implement strategies (Mohr & Batsakis, 2019), and it requires the acquirer to give full play to the ambidexterity capabilities of exploring and exploiting foreign resources. The ability of enterprises to explore resources is mainly reflected in the ability of enterprises to search, screen, identify, and absorb resources. Through the exploration of external resources, an enterprise increases the diversification of its resources and

enhances its popularity. The ability of enterprises to exploit resources is mainly reflected in the ability of enterprises to use resources reasonably and efficiently. The ability of enterprises to utilize resources increases the attention they give to existing resources, prompting them to find new directions for using resources and different solutions. A study by the Swedish home furnishing giant IKEA (Jonsson & Foss, 2011) showed that multinational companies establish corresponding organizational mechanisms by exploring and exploiting the resources of host countries, which can promote ongoing experience learning. The marketing efforts, pricing, fundamental values, and vision of the host country can promote the company's cross-border M&A performance.

Continuously learning M&A-related experience and knowledge and improving the company's M&A management capabilities and skills can reduce the risk of M&A operations, enable the company to obtain development opportunities that match its own internal resources, and help improve M&A performance (Bruneel *et al.*, 2010). When an enterprise conducts related M&A, the experience accumulated and learned in the home country can help the enterprise grow and develop in the host country. This situation reduces the time spent by the acquirer on adaptation and integration in the host country and accelerates the time for improving the benefits of corporate M&A. Kafouros and Forsans (2012) found that companies with rich empirical market knowledge can provide products or services that effectively meet the needs of the host country's market and can formulate highly effective marketing strategies, and non-empirical technical knowledge helps companies determine the direction of industrial technology development to rediscover, identify, and evaluate strategic technical resources. Li (2022) argued that the development of international business by an enterprise helps the executives become familiar with internationalization rules, the host country's market environment, strategic resources, and other variables, which can help enterprises "learn by doing," promote the accumulation of experience, and improve the performance of cross-border M&A.

The higher the heterogeneity of the executive team is, the more likely it is to combine its own experience, knowledge, or other resources to make higher-quality and more creative decisions, especially for major and complex strategic decisions, such as cross-border M&A (Seo *et al.*, 2020). The ability of the enterprise and the resources accumulated in the past determine the different advantages of the enterprise in the new environment of different host countries. Companies can diversify into new industries based on prior and vicarious learning experiences, and the vicarious experience learning of different businesses can expand the business field of the enter-

prise. On the basis of the analysis above, this study proposes the following hypotheses:

Hypothesis 3a: *Prior experience learning of firms plays a mediating role in the effect of resource exploration capability on cross-border M&A performance.*

Hypothesis 3b: *Vicarious experience learning of firms plays a mediating role in the effect of resource exploitation ability on cross-border M&A performance.*

Moderating effect of institutional distance

Institutional theory is one of the commonly used theories to study the international business activities of enterprises (Brouthers & Hennart, 2007). Institutional distance includes formal and informal institutional distance. Formal institutions are manifested in political rules, legal decisions, and economic issues (Peng, 2000), which refer to the differences in laws and regulations between the institutional environments of the home country and the host country (region). They determine the nature of private property rights, access to finance, development of skills and knowledge, and labor relations. Informal institutions refer to cultural contexts that describe the patterns of trust, cooperation, identity, and subordinate behavior. They include socially approved codes of conduct and codes of conduct that are rooted in culture and ideology. When enterprises carry out international business activities, the informal institutional environment is reflected in the influence of differences in culture and ideology between the home country and the host country on the choice of multinational investment models (Cuervo & Gen, 2011). The formal institutional environment risk is manifested by the situation where multinational enterprises face the influence of the unstable market mechanism and unstable political, economic, and judicial systems of the host country (Wang & Chung, 2020).

(1) Formal institutional distance

According to institutional theory, when the distance between formal institutions is large, the difference between the legal and regulatory environments between the home country and the host country also increases, and it becomes increasingly difficult for foreign investors to adapt to relevant local regulations, thereby increasing the transaction cost of enterprises operating overseas and leading to poor M&A performance (Kostova *et al.*,

2020). When companies from emerging economies enter the host country for M&A, the foreignness liability caused by unfamiliarity with the host country's environment, the lack of host country legitimacy, political and economic regulations, and cultural differences limit the company's access to various resources of the host country and result in limited communication with consumers, suppliers, and R&D institutions in the host country.

Given the lack of relevant foreign operation and management experience, the acquirer is likely to suffer losses due to the foreignness liability in the process of M&A, whereas the host country's enterprises do not incur additional production expenditures (Wu & Reuer, 2021). In regions and countries with weak institutions and weaker environmental protection, the negative impact of conducting transnational business activities is serious (Riaz *et al.*, 2022). In recent years, to obtain highly advanced technical resources, Chinese enterprises have conducted cross-border M&A in developed countries in Europe and the United States. The formal systems of these countries are far from China's formal system, and these countries have strict control, which may adversely affect the cross-border M&A performance of Chinese companies (Zhang & Yang, 2021). Even when a multinational company has experience in domestic M&A in the same industry, it is difficult to successfully copy and apply the original knowledge and relationships to foreign business activities when encountering new situations in the host country's institutional environment during cross-border M&A (He *et al.*, 2018). Therefore, on the basis of the analysis above, this study proposes the following hypotheses:

Hypothesis 4a: *Formal institutional distance has a negative moderating effect on firms' ambidexterity capability and cross-border M&A performance.*

(2) Informal institutional distance

The performance of cross-border M&A is affected not only by formal institutions, such as laws, but also by informal institutions, such as local cultural and social traditional backgrounds of the host country. Informal institutional distance refers to the differences in values, behavioral norms, and cultures of social groups, organizations, or government agencies (Gu *et al.*, 2019).

Informal institutional distance in this study refers to differences in cultural practices and cultural values between two countries. With regard to the influence of informal institutional distance on the performance of multinational enterprises, relevant studies have produced inconsistent research

conclusions. According to institutional theory, when the informal institutional distance increases, enterprises encounter increased difficulty in obtaining legitimacy and transfer organizational practices in the target market, and the hidden costs paid are high, making the overseas M&A performance poor. Park *et al.* (2018) conducted a study on foreign subsidiaries operating in South Korea and found that as the cultural distance between the home country of the foreign subsidiary and South Korea increases, the company benefits from the market opportunities generated by the cultural distance, thus making its subsidiaries achieve improved financial performance. For acquirers with extensive international experience, cross-border M&A can make company management aware of the pitfalls associated with cross-border acquisitions and adept at resolving acquisition-related conflicts, which allows acquirers to benefit from cultural differences and ultimately improves the acquisition performance (Dikova & Sahib, 2013). A recent study has showed that Chinese acquirers experience wealth growth ranging from 0.45% to 1.49% over a 10-year period and has found that cultural distance negatively affects acquirer value creation in the short and long terms (Boateng *et al.*, 2019), and this situation is highly prominent in the service industry and strategic emerging industries.

Although studies on the relationship between informal institutional distance and cross-border M&A performance have not achieved consistent conclusions, the present study considers that the existence of informal institutional distance does not help enterprises face difficult and complex problems, such as foreign institutions, cultures, and behavioral habits. According to Gallego *et al.* (2020), in countries with large informal institutional distances, especially religion and other cultural distances, the development of international business needs to adapt to the local moral and cultural environment. The acquirer's enterprise can obtain resources, such as technology and brand, from the host country through the acquisition; after in-depth understanding and absorption, it can gradually catch up and make up for it, and the acquirer's ability to exploit resources is continuously improved. Moreover, post-M&A affects consumers' recognition of technologically advanced corporate brands. Given that customers' perceptions of product brands are path-dependent, consumers' recognition of technologically advanced corporate brands is affected after M&A. Therefore, the ability of enterprises to exploit and explore resources can improve the performance of cross-border M&A. However, difficulties, such as language communication and unfamiliarity with the local market, limit the search, integration, and transfer of effective knowledge (Castellani *et al.*, 2013). Adapting to different rules, laws, and cultures further increases the operating costs of the acquirer's enterprise and exposes the M&A activities to an environment

of uncertainty and risk, which exerts a negative impact on M&A performance. The greater the distance is between informal institutions, the higher the degree of “liability of foreignness” is (Dikova *et al.*, 2019). Adapting to different cultural, political, and economic markets is a time-consuming and difficult task for enterprises, and it increases the organization and coordination costs of transnational operations. Therefore, on the basis of the analysis above, this study proposes the following hypotheses:

Hypothesis 4b: *Informal institutional distance has a negative moderating effect on the relationship between firms’ ambidexterity capability and cross-border M&A performance.*

In accordance with the analysis above, this study constructs a model demonstrating the relationship between the capability to explore/exploit resources, experience learning, institutional distance, and cross-border M&A performance, as shown in Figure 1.

Figure 1 shows the influence relationship among the variables. The symbols “+” and “-” indicate positive and negative relationships between variables, respectively. As can be seen in the figure, the capability to explore/exploit resources has a positive relationship with experience learning, and the same relationship is observed between experience learning and cross-border M&A performance. The capability to explore/exploit resources also has a direct positive impact on cross-border M&A, which is negatively moderated by institutional distance.

Methods

Data sources

This study selects the overseas M&A events of Chinese companies listed on the A-share market of the Shanghai and Shenzhen Stock Exchanges from 2010 to 2020. The data are all from China Stock Market and Accounting Research (CSMAR) and Wind databases. CSMAR and Wind are two of the best-known and most widely used databases in China, and the CV Source database is a professional database of Chinese M&A.

To eliminate the effect of outliers, all continuous variables are tailed at 1% and 99% quantiles. For inclusion in the final sample, the following restrictions are imposed on the acquiring firms. (1) Listed companies handled by ST or ST* are excluded. (2) Each successful transaction is initiated by a listed company in mainland China, and the target company for acquisi-

tion is a foreign-funded enterprise outside mainland China. (3) Companies registered in tax havens are excluded to ensure that M&As are motivated by internationalization strategies. (4) Listed companies in the financial and insurance industry are excluded. (5) For multiple M&As of an enterprise in the same year, only the one with the largest transaction size is reserved. (6) Companies with incomplete financial information or abnormal performance fluctuations within the three-year observation period are excluded. (7) In view of the influence mechanism of M&A experience learning in this study, the sample of acquirers with only one M&A during the observation period is excluded. To ensure accuracy, this study compares and verifies the selected cross-border M&A events against the company's annual report or foreign investment bulletin, and 173 valid samples are obtained in the end.

Variables

(1) Dependent variable

The dependent variable, cross-border M&A performance, in this study refers to the financial performance of the acquirers who carry out cross-border M&A. Many scholars have studied the internationalization of enterprises by using objective performance. Profit margins, including return on sales (ROS), return on equity (ROE), and return on assets (ROA), are used the most (Zhao *et al.*, 2019). ROA is the most widely adopted in literature on M&As (Zhang *et al.*, 2018) because it can reflect the impact of cross-border M&A on the profit rate of corporate shareholders. This study uses the difference in ROA (ΔROA) to measure M&A performance by calculating the change in return on total assets one year before the acquisition ($t - 1$) and one year after the acquisition ($t + 1$).

(2) Independent variables

In existing research on the measurement of organizational ambidexterity capability, the method of questionnaire survey is generally used to collect relevant data. However, cross-sectional data cannot reflect the dynamic changes in enterprise ambidexterity capability during the sample period. Hence, this study adopts panel data to measure the dual capability of enterprises.

The measurement of an enterprise's resource exploration capability (REC) is reflected by the heterogeneity of enterprise executive education. In the process of firm development, the senior management team is mainly

responsible for the formulation and implementation of the enterprise strategy and operation, which are key factors to enhance the ambidexterity capability. The thinking and behavior of senior management have a profound impact on the enterprise (Storch-De *et al.*, 2022). Therefore, the heterogeneity of the senior management team is conducive to the development of the ambidexterity capability of an enterprise. High heterogeneity of the executive team equates to a strong leadership ability to use resources effectively, manage the team effectively, and demonstrate high-level team tasks; then, the post-acquisition organizational performance can improve (Yue *et al.*, 2021). Hambrick and Mason (1984) pointed out that the educational heterogeneity of the executive team increases the diversity of cognitive bases and perspectives on problems, thus helping the executive team improve the systematic thinking ability to solve problems and improve the performance of cross-border M&A.

The specific measures of the heterogeneity of the executive education profession are as follows:

First, the codes of the major of executive education are established as 1 = science and engineering (including science, agriculture, engineering, and medicine), 2 = economics and management, 3 = literature and art (including literature, philosophy, and history), 4 = law, and 5 = others (including military science, pedagogy, and non-educational profession). Second, the measurement method proposed by Blau (1977) based on the Herfindahl index is adopted to evaluate the diversity level of the resource. The formula for calculating the index is

$$H = 1 - \sum P_i^2, \quad (1)$$

where P_i represents the proportion of a category, i is the number of categories, and H is a numerical value between 0 and 1; the larger the H value, the higher the degree of heterogeneity of the related resources. Theoretically, the value of H ranges from 0 to 0.80, with values above 0.25 indicating relatively high heterogeneity of the resource. In this model, a category index needs a value of at least 3 to be valid. Therefore, the higher the heterogeneity of the educational backgrounds of corporate executives, the stronger the ability of the company to explore resources.

The measurement of resource exploitation capability (RTC) is measured by the rate of change of the enterprise's supplier concentration. Suppliers are an important external knowledge source for enterprises. The higher the degree of exploitation of external knowledge sources by enterprises, the deeper the exploration of this knowledge source.

The specific algorithm for comparing the top five suppliers of the acquirer's cross-border M&A in the current year uses the difference between the concentration ratio of the top five suppliers of the acquirer's cross-border M&A and the top five suppliers of the acquirer in the year before the cross-border M&A. The greater the change in the supplier concentration of an enterprise, the stronger the ability of new products to meet customer needs after cross-border M&A and the stronger the ability of the enterprise to utilize resources.

(3) Mediating variable

In accordance with Levitt and March (1988) and Haleblian and Finkelstein (1999), this study uses the number of previous M&As to measure experience learning and divides experience into prior and vicarious experience, that is, it uses one dimension and empirical research combining two dimensions. After 2010 and before this M&A of the enterprise, all the times of overseas M&A of the enterprise itself are used to measure the previous experience (*PE*) learning, and the count does not include this merger and acquisition.

In this study, the object of the enterprise's vicarious experience (*VE*) learning is limited to the cross-border M&A transactions initiated by the acquirer's enterprise after 2010 and other enterprises in the same industry before the current acquisition. The two-digit SIC code is utilized to distinguish the industry type. Given that the transaction cases of other companies that are too old do not have an important reference value for companies, this study uses a five-year time window to solve the recency issue. Thus, the success experience or failure experience of other companies with the same two-digit SIC code as the acquirer's company in the past five years is the success or failure experience of other companies that the current company can learn later.

(4) Moderating variables

Formal institutional distance (FID) is measured using the Worldwide Governance Indicators (WGI) following Wang and Chung (2020) and Zhang & Yang (2021). The WGI project, released annually by the World Bank since 1996, measures the development of a country's institutions in six dimensions and covers most of the countries or regions in the world. The calculation of formal institutional distance adopts the algorithm of cultural distance proposed by Du and Boateng (2015), which is a Euclidean version of the Kogut and Singh (1988) index. The Euclidean distance ver-

sion relaxes the assumption that all institutional dimensions are equally important, thereby increasing the robustness of the measurement (Shenkar 2001).

$$FID_j = \sum_{k=1}^6 \left[\frac{(I_{kj} - I_{kc})^2}{V_k} \right] / 6, \quad (2)$$

where FID_j represents the formal institutional distance between the home country and host country j , I_{kj} denotes the score for host country j in dimension k of the WGI in year t , I_{kc} denotes the score for the home country, and V_k is the variance in dimension k of the WGI in year t .

Two frameworks can be employed for the measurement of informal institutional distance: the cultural frameworks of Hofstede and the GLOBE project. Given that the countries covered by the GLOBE index are limited, this study uses the Hofstede cultural framework to calculate cultural distance. This index has been widely used in academic research and was updated in 2015. The new version consists of six dimensions. The algorithm of cultural distance is similar to that of formal institutional distance, and the specific calculation formula is

$$IID_i = \sum_{i=1}^6 \left[\frac{(C_{ij} - C_{ic})^2}{V_i} \right] / 6, \quad (3)$$

where IID_i represents the informal institutional distance between the home country and host country j , C_{ij} denotes the score for host country j in dimension i of the WGI in year t , C_{ic} denotes the score for the home country, and V_i is the variance in dimension i of the WGI in year t .

(5) Control variables

In accordance with M&A literature, other factors that may affect the acquirer's M&A performance are included in the model as control variables.

Firm age (FA) can reduce the negative impact of the foreignness liability on the performance of M&A. In this study, firm age is adopted as the control variable, and the data are from the difference between the year of M&A and the year of establishment of the enterprise in the Wind database. Considering that the larger the number of M&A shares ($MA-S$) is, the more Chinese enterprises will intervene in the operation of M&A enterprises,

which is likely to influence the performance of Chinese enterprises after M&A, this study takes the number of M&A shares as a control variable. The equity data are from Wind, CSMAR, and relevant news reports. Moreover, the economic development of the host country has a great impact on firms' cross-border M&A performance. Some studies have suggested that conducting M&A in developed host countries can result in the acquisition of abundant complementary resources (Nicholson & Salaber, 2013) and that the operational risk in these countries is smaller than the risk in developing countries (Noordin *et al.*, 2015). A country's economic power represents its influence in the world economy, and countries with strong economic power tend to possess great power in international discourse; therefore, firms conducting international business often receive different treatments depending on the national power of their home countries. In this study, the logarithm of the per capita GDP (*p-GDP*) of the host country is adopted as a quantitative indicator to measure the level of economic development and as a control variable. The data are from the official website of the World Bank. The management methods and concepts are completely different due to different industries. When enterprises conduct M&A in different industries, they are unfamiliar with the industry in which the M&A enterprises are located, which may affect M&A performance. Therefore, this study takes the similarities and differences of M&A industries (*MA-I*) as the control variables.

In accordance with the research of Dunning and Lundan (2008), this work mainly distinguishes the following industrial attributes according to the investment motivation of enterprises: the attribute of the natural resource acquisition industry, such as mining and agriculture (value 1); the attribute of the market seeking industry, such as trade and construction (value 2); and the attribute of the strategic asset acquisition industry, such as manufacturing (value 3). The larger the M&A amount is in the total assets of the enterprise, the greater the impact on the business operation and financial situation of the enterprise is. Therefore, this present study adopts the ratio of the M&A(*R-MA*) amount to the total assets of the company as a control variable. The M&A amount is from Wind, CSMAR, and related news reports, and the total asset data of the company are from the annual reports of listed companies. Moreover, the effect of M&A performance on an enterprise differs depending on the size of the firm (*FS*). Therefore, the logarithm of the total number of enterprises is used as a control variable to measure the size of an enterprise.

Model setting

On the basis of the previous theoretical analysis and variable design, this study employs the difference between the ROA (ΔROA) before and after cross-border M&A performance as the dependent variable, the enterprise's REC and RTC as independent variables, and the firm's own previous and vicarious experience as a mediating variable. Formal institutional distance (FID) and informal institutional distance (IID) are used as moderator variables. In addition, firm age (FA), the level of economic development of the host country (p-GDP), the number of M&A shares (MA-S), the similarities and differences in the M&A industry (MA-I), the ratio of M&A to the total assets of the company (R-MA), and firm size (FS) are introduced into the model as control variables.

To test the proposed hypotheses, multivariate regression models are used in this study, and they are shown in the following formula:

$$\begin{aligned} \Delta ROA = & \alpha_0 + \beta_1 REC + \beta_2 RTC + \beta_3 (REC \times FID) + \\ & + \beta_4 (REC \times IID) + + \beta_5 (RTC \times FID) + \\ & + \beta_6 (RTC \times IID) + \sum_{i=1}^6 \gamma_i Controls + \varepsilon, \end{aligned} \tag{4}$$

where the intercept is denoted as α_0 and $\beta_0 - \beta_6$ refer to the estimated coefficients of each independent variable. The control variables are represented by Controls, which relates to FA, p-GDP, MA-S, MA-I, R-MA, and FS. The coefficients of the control variables are indexed by γ_i ($i = 2 \dots 6$). In addition, ε denotes a random error representing other factors affecting the dependent variable that are not included in the independent variables. Data processing and model estimation are performed using Stata12.0 statistical analysis software.

Results

Descriptive statistics

Table 1 shows the means, standard deviations, and correlations among all variables. Given that the industry to which the enterprise belongs is a classified variable and the similarities and differences of the M&A industry are virtual variables, this study excludes them from the descriptive statistics.

Table 1 indicates that the Chinese companies in the sample had only 0.558 domestic M&A learning experiences on the average before cross-

border M&A, and they have learned extensively from their peers' cross-border M&A experience, with an average of 13.116. In terms of enterprise dual capabilities, the average value of the enterprises' ability to utilize resources is negative, indicating that through cross-border M&A, Chinese firms have reduced their dependence on external suppliers and enhanced their ability to make full use of their own resources. The average age of enterprises is 16.495, which is nearly 17 years, and the maximum value even reaches 36 years; this result indicates that most enterprises selected in this study are relatively mature, which is in line with the life cycle characteristics of listed companies. The average value of ROA change in cross-border M&A performance is 0.152.

These data show that on the whole, after the Chinese enterprises implemented cross-border M&A, their overall performance increased. To exclude the potential adverse influence of this correlation, we calculate the variance inflation factor (VIF) scores for the variables. The calculation results show that the maximum VIF score of all variables in all regressions is 4.169. This value is far below the usually recommended threshold of 10, suggesting that multicollinearity has not affected our findings.

Correlation analysis

In this research, correlation analysis is performed to test whether the explanatory variables have collinearity, and the results are shown in Table 2. The correlation coefficient between the explanatory variables does not exceed 0.5, indicating that the explanatory variables involved in all models in this study do not have serious multicollinearity issues and do not affect the subsequent regression analysis.

In addition, the correlation coefficient between the differences in ROA of cross-border M&A and the ability of enterprises to exploit/explore is positive, which is in line with expectations. The signs of the correlation coefficients of most of the control variables and cross-border M&A performance in the table are also in line with the expectations of this study.

Regression analysis and hypothesis testing

To investigate the role of REC and RTC on cross-border M&A performance that is moderated by the influence of formal/informal institutional distance and by previous/vicarious experience, this study conducts a hierarchical regression analysis to examine all the hypotheses mentioned previously. Table 3 shows the estimated results of the multiple regression models.

Table 3 shows eight models. The first model (Model 1) is the control model, and Models 2, 3, 4, 5, 6, 7, and 8 show mediation and interaction effects as hypothesized earlier. Our results provide support for Hypotheses 1a, 1b, 2a, 2b, 3a, and 3b, as indicated in Table 3. Our detailed explanation is as follows.

A hierarchical moderated regression is conducted to test our research hypotheses. During the analysis process, the control variables are initially entered, and Model 1 is adopted as the basic regression model, including control variables and the dependent variable Δ ROA and excluding the hypothesized variables. The analytical results reveal that firm size, age, and ratio of M&A amount to total assets have significant negative effects on cross-border M&A performance.

Models 2 and 3 are regression models involving REC and RET/PE and VE on the dependent variable cross-border M&A performance, respectively, with the control variables. In Model 2, the regression coefficients of REC and RTC are 0.364 and 0.158, respectively, both of which are significant ($P < 0.05$). Therefore, a positive correlation exists between REC and cross-border M&A performance and between RTC and cross-border M&A performance. Hypotheses H1a and H1b are supported. Similarly, in Model 3, the regression coefficients of PE and VE are 0.119 and 0.065, respectively, both of which are significant ($P < 0.1$). Therefore, a positive correlation exists between PE and cross-border M&A performance and between VE and cross-border M&A performance. Hypotheses H2a and H2b are supported.

Hypotheses 3a and 3b theorizes that PE and VE mediate the relationships between the independent variables (REC, RTC) and the dependent variable (Δ ROA). To test these hypotheses, the study follows the procedures suggested by Baron and Kenny (1986) and estimates four models. In particular, to test Hypotheses 3a and 3b, Models 4 and 5 are developed; these models respectively involve REC and RET on the dependent variable PE and VE with control variables. REC and RET positively influence PE (coefficient_{REC} = 0.146, $P < 0.05$; coefficient_{RET} = 0.088, $P < 0.1$) in Model 4 and positively influence VE (coefficient_{REC} = 0.102, $P < 0.05$; coefficient_{RET} = 0.061, $P < 0.1$) in Model 5. Based on Model 2, Model 6 examines the mediation effect of REC, RTC, PE, and VE on the dependent variable cross-border M&A performance. In Model 6, the regression coefficients of the independent variables REC (coefficient_{REC} = 0.271, $P < 0.01$), RTC (coefficient_{REC} = 0.103, $P < 0.05$), PE (coefficient_{PE} = 0.134, $P < 0.05$), and VE (coefficient_{VE} = 0.053, $P < 0.1$) are all significant and positive. By comparison, in Model 2, the study finds that the coefficient value of REC decreases from 0.364 ($P < 0.01$) to 0.271 ($P < 0.05$), and the coefficient value of RTC

decreases from 0.158 ($P < 0.05$) to 0.103 ($P < 0.1$). At this time, the positive effects of PE and VE on cross-border M&A performance are still significant. Specifically, R^2 increases from 0.415 (in Model 2) to 0.441 (in Model 6), and a significant F-value increment (increases from 55.318 in Model 2 to 57.104 in Model 6) is obtained when PE and VE are included in the model. This result indicates that the explanatory power of Model 6 is increased. Thus, PE and VE partially mediate the relationship of REC and RTC with cross-border M&A performance, thereby supporting Hypotheses H3a and H3b.

Next, we sequentially examine the moderating effect of firms' prior and vicarious experience on cross-border M&A performance. Models 7 and 8 involve REC, RET, FID, IID, VE, REC*FID, REC*IID, RET*FID, and RET*IID on the dependent variable cross-border M&A performance with control variables. By considering the moderating effects and a potential equation multicollinearity problem (Uyanık & Güler, 2013), we take the centralization of REC and RTC and the two moderators (FID and IID) before sequentially multiplying them in Models 7 and 8.

The results of Model 7 reveal that the coefficients of REC and RTC are significant positive values (coefficient_{REC}=0.258, $P < 0.01$; coefficient_{RTC}=0.126, $P < 0.05$), whereas the coefficients of FID and IID are significant negative values (coefficient_{FID}=-0.261, $P < 0.01$; coefficient_{IID}=-0.149, $P < 0.05$). The coefficients of interactions between REC and RTC and FID are also negative and significant (coefficient=-0.174, $P < 0.05$; coefficient=-0.128, $P < 0.05$). Similarly, in Model 8, the coefficients of REC and RTC and their interaction with IID are both significant negative values (coefficient=-0.124, $P < 0.05$; coefficient=-0.079, $P < 0.1$). These results suggest that the positive effects of REC and RTC on cross-border M&A performance are weakened by a high level of institutional distance (FID and IID). Thus, FID and IID play a negative moderating role in the relationship between REC and cross-border M&A performance and between RTC and cross-border M&A performance, thereby supporting Hypotheses H4a and H4b.

With regard to the control variables, we find that the enterprises' ratio of M&A amount to total assets is constantly and negatively related to cross-border M&A performance and significant at the 5% level, at least in Models 1 to 3 and Models 6 to 8. Therefore, firms with a large ratio of M&A amount to total assets exhibit decreased cross-border M&A performance.

Robustness checks

To test the robustness of the research results, we adopt the following method and conduct a robustness test. The difference in return on total assets, which is a measure of cross-border M&A performance, as the dependent variable in this study is replaced by the difference in ROE ($\Delta\text{ROE} = \text{ROE}_{t+1} - \text{ROE}_{t-1}$). The findings reveal that the significance level and direction of the regression coefficients of the key variables remain constant. Then, the independent, mediating, and moderating variables are lagged for 1 year for analysis, and no significant difference is found between the signs of the regression coefficients of the main variables and those in the original regression model. All these analyses produce consistent results, thereby lending credence to our findings.

Discussion

Hypotheses H1a, H1b, H2a, H2b, H3a, H3b, H4a, and H4b are all empirically tested. Drawing upon organizational learning theory and the capability perspective, we develop and refine our understanding of the antecedents of cross-border M&A performance, with focus on the complex relationships involving the capability to exploit/explore resources for improving experiential learning and cross-border M&A performance. Specifically, our study provides three substantive contributions to the research on acquisition capabilities, each of which provides valuable implications for scholars and business policy makers in cross-border M&A who have selected M&A as a particular means of obtaining and sustaining a competitive advantage.

Our findings show that firms' REC and RTC resources have the same effects on cross-border M&A performance. That is, the combined effect of the ambidexterity capability of an enterprise is conducive to the improvement of cross-border M&A performance. On the one hand, a company's cross-border M&A performance is considerably improved by the ambidexterity capability in international business activities, thereby providing opportunities for obtaining abundant strategic resources, generating new information, and creating cross-border M&A results. With the integration of the global economy, the scarcity and uniqueness of resources are decreasing, the development of enterprises has broken through the situation that was severely restricted by resources in the past, and the establishment of the ambidexterity capability of enterprises has received increasing attention from enterprises. Relevant studies have also confirmed that the ambidexterity capability of enterprises contributes to the improvement of enterprise

performance and innovation activities (Luger *et al.*, 2019). On the other hand, firms' REC and RTC have a significant positive effect on the cross-border M&A performance of enterprises. The RTC resource extends existing technologies and skills, improves existing products, and ultimately improves the performance of existing products and services and the efficiency of sales channels. By making full use of existing resources and rational allocation, enterprises can innovatively employ existing information, technology, and other resources to improve their performance (Carnes *et al.*, 2019).

When enterprises carry out cross-border M&A activities, they make full use of existing resources to improve existing products or existing technologies and maintain current survival. The absorption of advanced technology by the acquirer's enterprise is affected by the acquirer's own technological foundation. The stronger the enterprise's ability is to exploit technological resources, the more in-depth the understanding and cognition of technological resources are and the easier it is to innovate by combining technologies and enhance the enterprise's innovation capability. Therefore, the RTC resource lays the foundation for the improvement of the technical level of the acquirer's enterprise. In addition, during M&A, the two companies discuss some strategic and detailed issues, especially for companies that mainly acquire technical resources. By using existing technologies and the market, they can concentrate their energy and time on effectively solving the technical acquisition problems they encounter, thereby helping improve business performance (Li, 2022).

Firms' capacity to explore resources cannot easily adapt to the complex changes in the external environment, which requires continuous search and discovery of new resources, new businesses, and new opportunities on the basis of utilizing resources (Osiyevskyy *et al.*, 2020). With regard to M&A of enterprises, the main purpose of the acquirer is to obtain and effectively use the advanced technological or market resources of the target enterprise and promote the improvement of the enterprise's innovation ability. Therefore, the utilization of acquired resources is only a part of the purpose of enterprise M&A. Moreover, through the utilization and integration of the target enterprise's technical resources, new development opportunities can be explored, and the overall competitiveness of the enterprise can be enhanced. For companies in emerging countries, such as China, when entering new markets, the most important thing to develop and improve is technological innovation capability (Scalera *et al.*, 2020). The ability of enterprises to explore resources is reflected in the professional management characteristics and diversified development thinking of senior executives.

They can fully explore and seize new markets and opportunities, and their performance after completing cross-border M&A can be improved.

On the other hand, the study examines the mediating role of experiential learning in the relationship between REC and cross-border M&A performance and between RTC and cross-border M&A performance. The results verify and further expand the view of Haleblian *et al.* (2006) and Basuil and Datta (2019), who reported that prior acquisition experience and recent acquisition performance are positively related to the likelihood of subsequent acquisition. On the basis of this argument, the study confirms the positive effects of prior and vicarious experience on the cross-border M&A performance of an enterprise and enriches existing studies and related theories. Moreover, the study finds that experience learning plays a mediating role in the impact of corporate ambidexterity capability on cross-border M&A performance, that is, the effect of a firm's ambidexterity capability on cross-border M&A performance is mediated by experience learning. When enterprises use REC resources to carry out M&A activities, they often start from learning from experience (Basuil & Datta, 2019). Past related M&A experience is an important source of internal learning. Enterprises can learn relevant M&A knowledge and skills from experience, which can effectively guide the company's follow-up M&A behavior. After a company has acquired experience in M&A, it can efficiently select the M&A objects that it needs and the strategic decision-making methods that can help improve the success rate of M&A and firm performance. Experience in M&A can help enhance the company's subsequent M&A performance. When an enterprise has no previous M&A experience to learn from, the role of resource exploration ability is reflected (Mohr & Batsakis, 2019). The ability to explore resources opens up new opportunities for enterprises. Enterprises have the opportunity to learn and conduct in-depth research on new technologies and new businesses so that they can acquire abundant new knowledge on cross-border M&A when facing new products and markets. Accumulated experience can enhance the core competitiveness of enterprises. In addition, whether learning from the successful experiences or failures of others, vicarious experience can enable enterprises to complete the acquisition of a target enterprise through imitation and innovation, which have a positive effect on M&A.

In addition, we find that FID and IID negatively moderate the relationship between REC and cross-border M&A performance and between RTC and cross-border M&A performance. When the distance between FID and IID is large, the institutional and operating costs of overseas M&A increase, and obtaining legitimacy becomes difficult. The improvement effect of cross-border M&A performance is weakened. This conclusion is con-

sistent with that of Van and Maseland (2016). FID inhibits M&A performance to a certain degree mainly due to the political resistance of the host government arising from ideological differences. In particular, the host country government intervenes in cross-border M&A of Chinese companies out of anti-monopoly considerations to reduce the impact on the development of related industries in the host country.

Conclusions

On the basis of the data of 173 listed companies from 2010 to 2020 in China, this study empirically analyzes the relationship between ambidexterity capability and cross-border M&A performance of enterprises and investigates the mediating role of experiential learning and the moderating role of institutional distance. The following conclusions are derived.

At first, enterprises' REC and RTC have positive effects on cross-border M&A performance. Enterprises need to give full play to the role of the two types of capabilities. For technology companies that carry out cross-border M&A, the combination of REC and RTC can reduce the risk of exploring various technological resource activities in the host country and enhance the value of using existing resources, which can help enterprises effectively digest and absorb the advanced technology of target enterprises, thus improving the competitiveness and cross-border M&A performance of enterprises.

Secondly, enterprises' REC and RTC play a partial mediating role in the impact of experience learning on cross-border M&A performance. Previous studies have mainly analyzed the direct relationship between the ambidexterity capability of enterprises and firm performance. This study finds that this relationship affects the performance of cross-border M&A by influencing the mediating variable of experience learning. It also suggests that other variables mediate the impact of the two corporate capabilities on cross-border M&A performance.

Thirdly, FID and IID play a negative moderating role in the relationship between REC and cross-border M&A performance and between RTC and cross-border M&A performance. That is, a large institutional distance weakens the influence of REC and RTC on cross-border M&A performance.

Our study has implications for managers involved in acquisitions. First, enterprises need to fully consider the characteristics of the enterprise's ambidexterity ability and adopt a matching M&A strategy to effectively leverage the advantages of the acquirer's enterprise when making

strategic decisions on cross-border M&A. Second, enterprises should selectively absorb the experience and knowledge on prior M&A through continuous exploration and learning. Furthermore, company executives should value the role of M&A experience in overcoming the liability of foreignness. For example, companies can consider hiring some professional managers with rich experience or building relationships with local partners in overseas M&A transactions to complete cross-border M&A transactions in order to reduce the negative effect of the liability of foreignness on overseas M&A performance. Third, enterprises in emerging economies can choose a host country with a small institutional distance from their home country to practice and accumulate experience when conducting cross-border M&A. Before entering a country with a large institutional distance to conduct cross-border M&A activities, the firm should choose a relatively mild means of entry and fully study the institutional norms of the host country; then, the firm can make detailed plans after acquiring an in-depth understanding. The acquirer company should objectively face up to the existing informal system, overcome the negative impact of self-reference standards, and establish cross-cultural awareness. In addition, the acquirer enterprise should strengthen cross-cultural communication and training. By fully understanding and learning the host country's culture, the acquirer enterprise can break down cultural barriers, reduce the adverse effects of cultural differences, and improve cross-border M&A performance.

In addition, the government can provide a favorable policy environment and institutional guarantee for Chinese enterprises to “go global” and to improve the effectiveness of overseas M&A. Moreover, the government should actively establish an information service platform for enterprises to invest in M&A. This platform can contain the information, such as laws and regulations, of the host country and its cultural beliefs in order to reduce the risks and costs caused by information asymmetry.

This study strongly complements extant literature on how enterprises' ambidextrous capability affects cross-border M&A performance and how the relationship is affected by institutional distance, and it provides suggestions for companies to develop REC and RTC for various strategies. However, similar to other studies, this study has certain limitations. By analyzing the experience learning and institutional distance of acquirer companies, this study initially clarifies the impact mechanism of ambidexterity capability on the M&A performance of Chinese companies.

According to the measurement method, cross-border M&A is a learning process, and using the difference in return on total assets to measure performance has some disadvantages because it cannot fully reflect the performance content after cross-border M&A. It can also involve some subjec-

tive indicators that are difficult to quantify, such as corporate social responsibility and the role it plays in the host country's economic development and social stability, which are the extension of the performance of cross-border M&A. In terms of the research content, when examining the impact of M&A experience learning on cross-border M&A performance, the types of experience, such as successful and failed experiences and M&A experiences of different industries, can still be improved.

However, the impact mechanism is highly complicated due to the numerous factors that affect the performance of cross-border M&A. Typical case studies may be carried out in combination with specific events of cross-border M&A in the future to further refine and improve the relevant impact mechanism, and new research findings may be obtained.

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Annex

Table 1. Descriptive statistics

Variable	Obs.	Max	Min	Mean	Sd.	VIF
<i>ΔROA</i>	273	0.507	-0.414	0.152	0.081	—
<i>REC</i>	273	0.911	0.168	0.527	0.221	2.561
<i>RTC</i>	273	0.953	-2.631	-0.047	0.552	1.903
<i>PE</i>	273	10	0	0.558	1.329	2.364
<i>VE</i>	273	92	0	13.116	14.903	4.169
<i>FID</i>	273	5.037	0.328	2.874	0.126	2.118
<i>IID</i>	273	5.942	0.419	3.246	1.835	3.065
<i>FA</i>	273	36	3	16.495	6.281	3.226
<i>MA-S</i>	273	100	10	72.543	39.106	1.827
<i>p-GDP</i>	273	12.011	5.528	12.146	0.905	2.235
<i>R-MA</i>	273	6.859	0	0.353	0.574	1.524
<i>FS</i>	273	16.131	3.475	9.206	1.882	2.018

Table 2. Correlation matrix

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. <i>AROA</i>	1												
2. <i>REC</i>	0.424***	1											
3. <i>RTC</i>	0.169*	-0.005	1										
4. <i>PE</i>	0.116*	0.258**	0.147*	1									
5. <i>VE</i>	0.075	0.116*	0.075	0.229**	1								
6. <i>FID</i>	-0.418**	-0.035	0.026	-0.108	-0.247**	1							
7. <i>IID</i>	-0.329**	-0.017	-0.038	-0.053	-0.029	0.406***	1						
8. <i>FA</i>	-0.009	-0.013	-0.032	0.261***	0.203**	-0.035	0.049	1					
9. <i>MA-S</i>	-0.035**	-0.006	0.003	0.015	0.141	0.006	0.012	0.019	1				
10. <i>p-GDP</i>	0.081	0.224**	0.315**	-0.003	-0.115	-0.009	-0.002	0.303**	0.264**	1			
11. <i>MA-I</i>	0.034	0.035	0.063	-0.027	0.039	0.014	0.005	0.023	0.016	-0.025	1		
12. <i>R-MA</i>	-0.857**	0.012	-0.01	0.028	-0.104	0.026	0.014	-0.117	0.021	-0.138	-0.009	1	
13. <i>FS</i>	0.042	0.008	-0.011	0.095	0.047	-0.003	-0.011	0.027	-0.023	0.325***	0.273**	0.018	1

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

Table 3. Multiple regression model parameter estimation results

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
<i>Constant</i>	0.048 ^{***}	0.062 ^{**}	0.053 ^{***}	0.027 ^{**}	0.021 ^{***}	0.071 ^{**}	0.055 ^{***}	0.048 ^{**}
<i>FA</i>	-0.012 [*]	-0.019 [*]	-0.016 [*]	-0.013 [*]	-0.013 [*]	-0.011 [*]	-0.017 [*]	-0.014 [*]
<i>MA-S</i>	-0.017	-0.021	-0.015	0.016	0.014	-0.023	-0.022	-0.024
<i>p-GDP</i>	0.014	0.016	0.021	0.003	0.003	0.021	0.015	0.011
<i>MA-I</i>	-0.021	-0.023	-0.018	0.007	0.005	-0.029	-0.024	-0.017
<i>R-MA</i>	-0.316 ^{***}	-0.337 ^{***}	-0.228 ^{***}	0.012	0.009	-0.122 ^{**}	-0.138 ^{***}	-0.135 ^{***}
<i>FS</i>	0.125 ^{**}	0.144 ^{**}	0.109 ^{**}	0.005	0.002	0.171 [*]	0.042 ^{**}	0.033 ^{**}
<i>REC</i>		0.364 ^{***}		0.146 ^{**}	0.102 ^{**}	0.271 ^{***}	0.258 ^{***}	0.211 ^{**}
<i>RTC</i>		0.158 ^{**}		0.088 [*]	0.061 [*]	0.103 ^{**}	0.126 ^{**}	0.122 ^{**}
<i>PE</i>			0.119 ^{**}			0.134 ^{**}		
<i>VE</i>			0.065 [*]			0.053 [*]		
<i>FID</i>							-0.261 ^{***}	-0.135 ^{**}
<i>IID</i>							-0.149 ^{**}	-0.104 [*]
<i>REC*FID</i>							-0.174 ^{**}	
<i>REC*IID</i>							-0.128 ^{**}	
<i>RET*FID</i>								-0.124 ^{**}
<i>RET*IID</i>								-0.079 [*]
<i>R²</i>	0.428	0.441	0.433	0.338	0.0325	0.476	0.485	0.481
<i>F</i>	52.624 ^{***}	55.318 ^{***}	54.057 ^{***}	49.052 ^{***}	47.731 ^{***}	57.104 ^{***}	58.226 ^{***}	57.664 ^{***}
<i>VIF</i>	1.273— 2.247	1.394— 2.176	1.315— 2.558	1.181— 1.735	1.336— 1.904	1.209— 2.736	1.442— 2.318	1.385— 2.106

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

Figure 1. Theoretical hypothesis model of this study

