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# The Role of Confucius Institutes and One Belt, One Road Initiatives on the Values of Cross-Border M&A: Empirical Evidence from China

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Abstract: This study examines how national cultural policies such as Confucius Institutes and One Belt, One Road initiatives (BRI) affect the post-acquisition returns of Chinese cross-border mergers and acquisitions based on data from a sample of 192 transactions covering 2011 to 2015. We find that the cultural export of Chinese Confucius Institutes and the BRI exert a significantly positive impact on long-term acquirer returns, while cultural/institutional distance exerts a negative impact. Further evidence shows that Confucius Institutes and BRI mitigate the negative effect of cultural distance between merging firms. These results offer the first evidence that national cultural translation has substantial impacts on the long-run acquirer financial performance of cross-border mergers that decrease cultural institutional heterogeneity between countries.

Keywords: Confucius Institutes; cultural distance; institutional distance; One Belt One Road initiative

#### 1. Introduction

China's economy has been globalizing since it entered the World Trade Organization in 2001. Guided by the opening strategy of "go global" pursued by the Chinese government, Chinese companies' cross-border mergers and acquisitions (CBM&A) entered a period of rapid growth. The financial crisis in 2008 severely impacted economic development and financial systems in both Europe and the United States. Recognizing this precious opportunity, Chinese companies have begun to actively look for investment and acquisition opportunities in overseas markets.

After the 2008 financial crisis, the number and size of Chinese enterprises' CBM&A increased rapidly. A report released by McKinsey in 2017 shows that Chinese entrepreneurs have completed more than 650 overseas M&A transactions in the past decade [1]. According to the DealGlobe Hurun China Cross-border M&A Report, only 88 cross-border transactions were announced by Chinese companies in 2007, with a value of USD 23.02 billion. In 2016, China had 438 overseas M&A investment transactions, an increase of more than 20% over the 363 transactions completed in 2015. Cumulative transactions totaled USD 215.794 billion, a significant increase of 147.75% over the 2015 total. In 2017, the scale of CBM&A declined, but the number of transactions is expected to maintain a steady growth trend.

Although a great leap forward in the overseas M&A of Chinese-funded enterprises has been made, their profitability is not satisfactory. The McKinsey report shows that the CBM&A performance of Chinese companies has not been ideal over the past decade. Approximately 60% of the transactions (i.e., nearly 300 transactions), totaling about 300 billion US dollars, did not create real value for the Chinese buyers. Meanwhile, the 2017 Chinese Enterprises Overseas Sustainable Development Report also indicates that among the overseas investment of 506 Chinese companies in the questionnaire

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survey, although 56% of them are profitable and 13% of them achieved good profitability, 18% of them remain the same, and 26% are experiencing a temporary loss. Hence, given that the CBM&A of most Chinese companies are unsuccessful, it is important to examine the economic benefits and determinants of CBM&A performance. National institutions and culture are important factors in the success or failure of CBM&A [2–4], and the One Belt, One Road initiatives (BRI) is gaining increasing worldwide attention. Thus, it is very important to examine the factors that influence the success or failure of CBM&A from the perspective of institutions and culture.

China's economic growth over the past few decades has been largely driven by exports and investment, both of which have been fostered by the rapid development of manufacturing. Labor and production costs continue to rise, however, and these two economic drivers are gradually losing power [5]. From 2011 to 2013, China's Gross Domestic Product (GDP) growth continued to decline, and the nation's economic development showed an L-shaped growth trend, which appears to have reached a bottleneck. Therefore, it has become a task for the Chinese government to overcome the development bottleneck and solve its development dilemma [6]. Against this backdrop, in 2013, while visiting countries in Central and Southeast Asia, Chinese President Xi Jinping proposed the "Economic Belt of the Silk Road" and the "21st Century Maritime Silk Road" strategies, which were eventually combined into the BRI, with China serving as its hub [7].

As the BRI enters a new stage of substantive construction, it impacts the sustainable development of China and other countries along the route. Zhang and Zhang [8] showed that the BRI policy helped the isolated economies such as Afghanistan and DPRK to be more integrated with other economies. On the other hand, Benintendi et al. [9] found that China's BRI policy's slow and complex globalization process led the country to the world's first coal production and second oil consumption in 2014, and China's carbon emissions in 2015 were 1.8 that of the United States. Additionally, Chinese CBM&As are significantly increasing in BRI areas. Before 2013, BRI-related countries were not the main destination for Chinese Outward Foreign Direct Investment (OFDI), accounting for an average of only 10.8% of total Chinese OFDI flow. After 2013, BRI-related countries became a hot destination for investment in construction projects [10]. The Statistical Bulletin of China's OFDI states that China's outward foreign direct investment stock in BRI-related countries was \$92.46 billion and accounted for 10.5% of China's OFDI flow in 2014. In 2018, the amount of China's OFDI reached a record high of \$17.89 billion and accounted for 12.5% of all newly signed foreign construction projects.

Data provided by the DealGlobe Hurun China Cross-border M&A Report show that CBM&As have not only entered the United States, Europe, and other developed countries but have also flowed to developing economies. Given this diversity of investment objects, Chinese companies pursuing overseas M&A not only face the challenges of institutional differences such as between legal norms and judicial systems but are also subject to the influence of cultural factors. The cultural problem is particularly prominent for BRI, as this project covers Central Asia, Southeast Asia, the Middle East, Europe, and East Africa, involving diverse cultures [3]. Due to a large number of countries along the route, China also faces political and security risks in advancing the construction of the BRI [11].

At the micro-level, differences in culture and institutions will lead to difficulties in cross-cultural management in companies' transnational operations, and will also affect the acceptance of target companies, which can hinder the smooth implementation of the go-global strategy. The Confucius Institutes project, an important global strategy of the Chinese government, has become an important engine for promoting Chinese OFDI by providing training in Chinese culture and language and by sharing information [12]. To deepen the go-global strategy, the BRI, which differs from the traditional regional cooperation system, can help remove the technical and implementation obstacles in international trade issues and reduce transaction costs [13]. It has received a positive response from countries and regions along the route and has created the conditions required for Chinese enterprises to truly go global. Therefore, through empirical research on Chinese listed companies that implemented CBM&A from 2010 to 2015, this study examines the performance of Chinese companies' CBM&A and analyzes their impact on corporate performance from both institutional and cultural perspectives.

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This study highlights the role of Confucius Institutes and the BRI in offsetting the costs and problems induced by the institutional/cultural distance between home and host countries concerning CBM&A, thus contributing to cross-cultural research in the international investment context. The results of this study provide new insights into the impact of cultural and institutional factors on CBM&A and offer decision-making guidance on the implementation of the go-global strategy.

This study provides some of the first large-scale evidence that national cultural convergence policies have substantial impacts on CBM&A performance. Specifically, we find the following. First, we find that greater cultural and institutional distance between merging firms exerts a negative impact on long-term acquirer returns, which suggests that cultural and institutional differences could make post-merger coordination more difficult and the realization of synergies less likely. By contrast, national cultural convergence policies such as the cultural export of Chinese Confucius Institutes and BRI have a significant and positive influence on the value creation of acquirers over the long term. We conduct a more thorough exploration of the proposed relationship by considering the moderating effect of Confucius Institutes and BRI on the negative effect of cultural and institutional distance. Multiple regression models using the joint variables show that cultural convergence policies mitigate the negative effects of merger outcomes due to cultural differences. Confucius Institutes and BRI can overcome potential cultural barriers to CBM&A by improving international friendship and cooperation and reducing communication costs. Moreover, the optimal complementary effect of BRI is reflected mainly in the institutional distance, whereas the interaction between cultural distance and BRI is not significant. We conclude that the BRI remains focused on intergovernmental cooperation and exchange and lacks non-governmental cultural exchange and communication. In subsequent robustness analyses, we show that our results are robust to alternative definitions of cultural distance.

This study provides three important contributions to the literature. First, it extends the literature on the effects of cultural and institutional distance on acquirer returns. Most studies on the effect of institutional factors on CBM&A outcomes have focused on the institutional and cultural distance between the home and target countries from a static perspective. Few studies have analyzed the determinants of CBM&A from the dynamic perspective of institutional and cultural differences, and even fewer have analyzed the complementary effects of Confucius Institutes or the BRI in terms of institutional and cultural distance. Our results demonstrate that Confucius Institutes can reduce the negative effects on China's CBM&A due to cultural and institutional distance. We also find that the BRI can provide extra protection against the risk of institutional distance and create an institutional environment conducive to Chinese CBM&A.

Second, this study enriches the research on the cultural exports of Confucius Institutes. Most studies have focused on the effect of Confucius Institutes at the national macro level, such as on higher education, tourism, and FDI. The impact of Confucius Institutes on the performance of CBM&As has not received extensive attention. As a vehicle for language promotion, cultural exchange, and diplomacy, Confucius Institutes are examined in this study to investigate their influence on CBM&A value creation. Thus, this study supplements the cross-border acquisition literature by exploring China's cultural exports.

Third, the existing studies on the BRI focus on discussing the economic, trade, and investment benefits from the perspective of countries and regions, while its impact of the BRI on enterprises has rarely been examined [14]. This study enriches our knowledge of how BRI affects Chinese CBM&A by combining cultural and institutional factors and identifying the complementary effects of BRI and institutional distance. We provide effective policy recommendations on how to promote regional investment cooperation along the BRI route as well as regional economic integration and sustainable development.

The rest of this study is organized as follows. Section 2 reviews the relevant literature. Section 3 develops the study's hypotheses. Section 4 discusses the study's data and methodology. Section 5 presents the results and discusses the factors influencing acquirer returns. The final section provides a summary of the conclusion and discusses the implications of the study.

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## 2. Conceptual Background

#### 2.1. Cultural Distance and CBM&A

Generally, national culture has a significant relationship with its organizational cultures. Iorgulescu and Marcu [15] showed that organizational culture is an essential element of national culture. The values, symbols, and histories of a country become the starting point for creating the culture of its local organization. Nazarian et al. [16] Investigated the relationship between Iran's national culture and organizational culture. This paper showed that in the case of medium-sized organizations, the national culture and the hierarchical culture of the organizations have a significant relationship, and in the case of large organizations, the market culture and the national culture have a significant relationship.

Culture is a broad concept, but most scholars argue that culture reflects the values of a group that serves as the criteria by which members judge things and behaviors. The cultural differences between the two countries will affect the overall behavior of merging companies or organizations, as they create a corporate culture formed by two different national environments [17]. Amid the progress of economic globalization, the number of CBM&A has continued to rise, and the impact of cultural distance on them has received much attention from scholars at home and abroad. However, the findings are not consistent. Bauer and Matzler [18] argued that cultural differences between countries may have synergistic effects and may help generate economies of scale after the M&A. Morosini et al. [19] found a positive correlation between cultural distance and CBM&A performance. They revealed that cultural diversity promotes innovation, provided learning opportunities, and promoted new approaches to problem-solving, and thus increased the likelihood of successful acquisition performance.

By contrast, Lee et al. [20], revealing that Chinese companies focus on developed countries for M&A, found that the difference in organizational cultures between enterprises in developed countries after M&A produced a negative impact due to the great cultural differences between countries. Boateng et al. [21] conducted an event study on a sample of 209 Chinese companies that conducted CBM&A from 1998 to 2012, finding that cultural distance had a negative impact on the post-merger results of M&A companies in the short term. Ahern et al. [22] examined data on 52 countries covering 1991 to 2008 and concluded that great cultural distances between merging companies lead to poor acquisition performance, as differences in cultural values between the two national groups of employees led to more difficulty in teamwork and coordination, thereby increasing integration costs.

# 2.2. Institutional Distance and CBM&A

Institutions impose the rules of the game in a society or, more formally, the humanly devised constraints that shape human interaction [23]. Scott defines institutions as the cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior [24]. Regardless of how they are defined, institutions serve to reduce uncertainty in transactions by establishing a stable structure, thus securing the benefits and reliability of economic activities.

Chinese companies' CBM&A are concentrated in developed regions such as Europe and the United States. China's economic and legal institutions differ from those of other countries, especially developed countries. For example, it is common for governments to hold shares in Chinese companies. Du and Zhang [25] showed that institutional distance had a positive impact on corporate M&A. They argued that developed countries have relatively advanced institutions and that Chinese companies can acquire more high-quality technology and financial resources by implementing M&A in such countries. Liu and Lu [26] examined the long-term financial results of Chinese companies conducting CBM&A from 2007 to 2012 and concluded that institutional difference had a positive impact on the long-term performance of CBM&A. They suggested that a greater institutional difference increases the likelihood of learning and acquiring value from M&A. Moreover, the use of acquisitions can increase opportunities in overseas markets and enhance the acquirer's confidence in overseas market expansion.

Contrariwise, Aybar and Ficici [27] examined data on 58 CBM&A from emerging countries and concluded that institutional distance had a negative impact on value creation in CBM&A. A longer

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distance between institutional levels can generate extra costs and longer negotiation time for the company. Li et al. [28] analyzed 311 CBM&A transactions from 1992 to 2012 via the event study method and found that longer institutional distance between two countries increases the potential risks of M&A and the difficulty of integration, resulting in a negative impact on the performance of CBM&A.

## 2.3. Confucius Institutes and CBM&A

The Confucius Institute Headquarters (Hanban) set up Confucius Institutes to promote Chinese languages and cultures in a global context, enhance the relationships between China and other countries, and facilitate the study of Chinese learners around the world. By December 2018, 548 Confucius Institutes and 1193 Confucius Classrooms had been established in 154 countries (or regions) [29]. The Confucius Institute promotes the recognition of Chinese culture and reduces the transaction costs caused by cultural differences through the dissemination of and training in Chinese languages and culture in the host countries [12]. In addition, the Confucius Institute holds various business activities in the host countries to strengthen China's long-term cooperative relationship with them by, for example, sharing trade information, building exchange platforms, and reducing problems such as information asymmetry caused by cultural differences. As an institution that spreads Chinese culture around the world, the Confucius Institute has promoted economic and trade cooperation while performing its main cultural mission [30].

Liu and Lu [26] show that the greater the number of Confucius Institutes established in the country where the target firm is located, the more frequently Chinese companies make overseas M&A in that country. Lien et al. [12] show that China has significantly promoted OFDI in developing countries through the establishment of Confucius Institutes. Lien argues that Confucius Institutes have enhanced the understanding of Chinese languages and culture in host countries, strengthened trust in transactions, and reduced the transaction costs of trading activities, thus promoting the development of China's foreign trade and OFDI. Ouyang and Li [31] find that the Confucius Institute is not only conducive to increasing the possibility of completing CBM&A, but also helps shorten the time required for the CBM&A process. They argue that the positive effect of Confucius Institutes on the chance of successful CBM&A will increase. According to Xu and Wang [32], Confucius Institutes have reduced the negative impact of cultural differences between China and foreign countries through its cultural exchanges and dissemination and has also significantly promoted Chinese companies' OFDI in host countries.

## 2.4. BRI and CBM&A

During Chinese President Xi Jinping's visit to Kazakhstan and Indonesia in October 2013, he outlined China's ambitious plans for the so-called "Silk Road Economic Belt" and "Maritime Silk Road of the 21st Century" respectively, which are contemporary versions of the centuries-old Silk Road trade routes. On land, the Silk Road Economic Belt would mainly target Central Asia and Europe, while the Maritime Silk Road would mainly target Southeast, South, and North Asia. These two initiatives were eventually combined into BRI, with China as its hub [7].

The purpose of the BRI is to promote regional economic development through the creation of win–win cooperation and joint prosperity. It intends to increase understanding and trust and to strengthen communication and friendship among countries in the region [33].

This initiative is seen to facilitate a new wave of globalization—in contrast to China's previous participation in the international division of labor system—by introducing capital, advanced technology, and management experience from developed countries and using China's labor cost advantage. The BRI places greater emphasis on a more comprehensive, coordinated, and high-level "going out", which will further promote the going out of Chinese equipment, services, currency, technology, and culture by increasing foreign investment [34]. The BRI is not only conducive to China's expansion of domestic demand and the fostering of new economic growth points but will also promote the coordinated economic development of countries along the BRI route.

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China's direct investment in countries along the BRI has experienced rapid growth over the past decade. According to the Ministry of Commerce, China's direct investment in countries along the route was \$200 million in 2003, accounting for 7.1% of the total in that period; in 2017, Chinese enterprises' direct investment in countries along the route reached \$14.36 billion, accounting for 12% of the total investment in that period. Regardless of the change in the total amount or the proportion, the countries along the BRI have gradually become among the most important for the foreign investment activities of Chinese enterprises [35].

The BRI, as a newly proposed global economic stimulus plan, has attracted widespread attention from scholars [36]. Dang et al. [37] study the performance of Chinese companies' CBM&A in ASEAN countries along the BRI route from 2005 to 2016 and find that the BRI has a positive impact on the performance of CBM&A in China and that private enterprises outperform state-owned enterprises. Li [38] uses data on China's overseas M&A from 2001 to 2017 and constructs a logit model to study the influence of enterprise ownership on the success rate of overseas M&A amid the background of BRI. The results show that strict safety review and discrimination against state-owned capital in host countries have caused the success rate of Chinese state-owned enterprises' overseas M&A to be significantly lower than that of private enterprises. However, host countries' discriminative effect on the overseas M&A of state-owned enterprises has eased as the BRI has progressed; ownership advantages, investment transfer, and state-owned enterprise reform are the main factors contributing to this shift. Xiao et al. [39] argue that the launch of the BRI has promoted the sustainable development of the economy, society, environment, infrastructure, and mechanism. As a result, all countries have shown an overall improvement in their sustainable development. Due to the short period from the launch of the BRI, its positive effect on sustainable development was not significant at the time of publishing.

## 3. Hypothesis Development

## 3.1. Cultural Distance and CBM&A Performance

Hofstede defines culture as the collective programming of the mind that distinguishes the members of one group or category of people from others [40]. Based on the six dimensions proposed by Hofstede's cultural dimensions theory, this study uses the formulas derived from Kogut and Singh [41] to calculate cultural distance. A larger value indicates a greater distance between the M&A company and the target firm. Ahern et al. [22] argue that synergies from international M&A require coordination between the employees of the two companies. Significant cultural differences between the countries of the two companies may cause mistrust, misunderstanding, and inconsistent goals. This makes coordination and integration after the merger more expensive, which makes achieving synergy more difficult. Ellis et al. [42] suggest that cultural differences hinder communication between firms in multinational M&A, increase management and information transmission costs, and are not conducive to firms' innovation output.

A culture is formed gradually through the long-term interactions of social life. After a CBM&A, the original cultures will not disappear immediately, and there will be an extended period during which the two cultures will affect corporate values. During this extended period, the employees of the target company will also be affected. Therefore, introducing a new culture in M&A requires a relatively slow, long-term process [43]. We, therefore, propose the following:

**Hypothesis 1:** Cultural distance exerts a negative impact on the long-term acquirer returns of Chinese CBM&A.

# 3.2. Institutional Distance and CBM&A Performance

Institutional distance refers to the institutional environmental dissimilarity between two countries in regulatory, cognitive, and normative terms [44]. We use the World Governance Indicators (WGIs) of the World Bank to measure the institutional distance between the target country and China, and we

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employ the formula derived from Kogut and Singh [41] to calculate cultural differences. A higher value indicates a greater institutional distance between the target country of overseas M&A and China.

In their complex international environment, companies are inevitably affected by the target country's institutional factors in CBM&A. Pan [45] argues that a large institutional distance between the two countries will force the acquirer to pay additional costs to understand and familiarize themselves with the institutional environment of the target country, which will increase the costs of communication and negotiation. Elango et al. [46] suggest that institutional distance brings external uncertainties and challenges to M&A companies and requires M&A companies to understand and overcome institutional differences in target countries. Understanding institutional differences and making adjustments will increase the risks and costs of acquirer transactions [47]. In light of the above, we propose the following:

**Hypothesis 2:** Institutional distance exerts a negative impact on the long-term acquirer returns of Chinese CBM&A.

#### 3.3. Confucius Institutes and CBM&A Performance

Through an empirical analysis of 1695 Chinese companies' CBM&A transactions from 2006 to 2017, Ouyang and Li [31] conclude that the Confucius Institute can effectively improve the success rate of CBM&A. In their view, Confucius Institutes established in target countries have played a positive role in accelerating the globalization of Chinese firms, especially those that lack experience in CBM&A. Liu et al. [48] find that the cultural exporting performed by the Confucius Institute has facilitated China's overseas M&A. Generally speaking, the more complete the Confucius Institute system in a target country, the more frequently Chinese companies will conduct overseas M&As there.

We suggest that the Confucius Institute can reduce the negative impact of cultural differences on CBM&A in the following way. First, the Confucius Institute provides language and vocational skills training, which enables employees on both sides of the M&A to communicate via the same language, and reduces the costs of information due to language barriers. Second, it provides information services and policy consultations for both the Chinese companies and acquired companies to reduce information asymmetry. Third, it enhances the acceptance of Chinese culture and reduces the external environmental resistance to Chinese companies' overseas investments [49].

Xu and Wang [32] find that the establishment of Confucius Institutes is conducive to promoting friendly and cooperative relations between China and other countries and makes up for the negative impacts of the difference in institutional environments. It also provides additional protection for Chinese companies' overseas investments and reduces institutional risks. The BRI is covered by multiple countries spread across the continents of Asia, Africa, and Europe, with different culture and institutional development. Xu et al. [50] investigated the Confucius institute's effects on China's OFDI via cultural distance and institutional quality and concluded that the substitution effect exists between Confucius institutes and cultural distance/institutional quality. When the cultural distance is small, Confucius institutes have a significant positive impact on China's OFDI but this effect will decrease when increasing the level of cultural distance. Besides, when the institutional quality in the host country is low, Confucius institution has a significant positive impact on China's OFDI but this effect will decrease when increasing the level of institutional quality. In target countries with poor institutional quality, Confucius institutions will provide prominent protection to China's OFDI. In target countries with more sounding institutional quality, formal legal arrangements might have provided sufficient protection for China's OFDI, decreasing the effectiveness of substitution protection from the home country. Ouyang and Li [31] concluded that the substitution effect between Confucius institutes and cultural distance, Confucius institutes can mitigate the negative effects of cultural distance in Chinese CBM&A's completion probability. We, therefore, propose the following:

**Hypothesis 3:** The establishment of Confucius Institutes exerts a positive impact on the long-term acquirer returns of Chinese CBM&A.

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**Hypothesis 3a:** Confucius Institutes mitigate the negative effects of cultural distance in Chinese CBM&A.

**Hypothesis 3b:** Confucius Institutes mitigate the negative effects of institutional distance in Chinese CBM&A.

# 3.4. BRI and CBM&A Performance

The impact of the cultural and institutional differences between the two countries in corporate cross-border investment is not static but differs according to the political relations and bilateral investment agreements between China and the target country [51]. The BRI is conducive to expanding exchanges and cooperation between governments along the route and provides financial and policy support to Chinese companies implementing CBM&A in BRI countries. By the end of January 2020, China had signed intergovernmental cooperation agreements on the BRI with 138 countries and 30 international organizations [52]. A large number of projects for connecting various sub-regions are already being considered, including high-speed railroads, oil and gas pipelines, and telecom and electricity links. Chinese institutions, such as the Silk Road Fund, the China Development Bank (CDB), and many Chinese companies, will probably make a large investment, alongside funding provided by international organizations such as the Asian Infrastructure Investment Bank (AIIB) and the BRICS New Development Bank, and even the World Bank and the Asian Development Bank (ADB) [33].

The BRI also promotes the improvement of investment rules between China and partner countries, overcomes investment risks caused by institutional differences, and creates an institutional environment beneficial to corporate foreign investment. Furthermore, in addition to the institutional environment, the social customs, religious beliefs, and other cultural elements of BRI countries are also essential factors in the success of CBM&A. Gu and Qiu [53] conclude that the BRI not only spreads Chinese civilization but also deepens the level of cultural integration between China and countries along the route, helping to reduce the risks and uncertainties of firm OFDI. Through an empirical study of 609 Chinese companies' overseas investments from 2005 to 2016, Shen and Jin [54] conclude that the BRI plays optimizing and complementary roles in cultural and institutional differences. They suggest that BRI has broadened the financing channels for corporate CBM&A, reduced transaction costs and market uncertainty, improved information transparency for investors, and addressed the specific investment needs of target countries. We thus argue that BRI greatly reduces the risk of enterprises' foreign investment and significantly improves investment effectiveness. We, therefore, propose the following:

**Hypothesis 4:** *BRI exerts a positive impact on the long-term acquirer returns of Chinese CBM&A.* 

**Hypothesis 4a:** *BRI mitigates the negative effects of cultural distance in Chinese CBM&A.* 

**Hypothesis 4b:** *BRI mitigates the negative effects of institutional distance in Chinese CBM&A.* 

#### 4. Data and Research Methodology

#### 4.1. Data Sources and Sample Selection

Most of the study's M&A data are extracted from the WIND M&A database, which provides information on acquirer names and targets, financial ratios, transaction dates, deal value, and other information.

Our sample process begins by including Chinese listed firms that carried out and completed CBM&A transactions from January 2011 to December 2015. These dates were chosen because China's economy had a basic environment to maintain steady and relatively fast growth in 2011 [55], and the year 2011 was the first year of China's 12th Five-Year Plan. For inclusion in the final sample, the selected CBM&A are required to meet the following criteria:

1. Acquirers are listed on the Shanghai or Shenzhen Stock Exchanges;

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2. Only the acquisition with the highest transaction value is assessed for firms that conducted more than one CBM&A during one year;

- 3. The M&A do not include British Virgin Islands or Cayman Islands acquisitions;
- 4. The M&A involve non-financial acquirers and targets. Financial firms have different financial reporting systems and regulations, which could bias the results;
- The deal value and accounting information of the acquirer must be available on the WIND database.
   After data matching, the final sample comprises 192 Chinese firms.

#### 4.2. Sample Description

# 4.2.1. Dependent Variable

In order to reflect the CBM&A performance more comprehensively, this study takes the "Enterprise Performance Evaluation Standard Value" promulgated by the State-owned Assets Supervision and Administration Commission in 2017 as a reference, combined with the actual situation of Chinese enterprises. From the four aspects of Solvency, development, management, and profitability, 12 indicators were chosen that reflect the management ability of enterprise assets, as single financial indicators cannot eliminate the manipulation of profits by acquirer [56,57]. The selected indicators are shown in Table 1.

Capability Indicator	Symbol			Variable	Calculation Methods			
Solvency	(1)	CR	(1)	Current ratio	(1)	Current assets/Current liabilities		
	(2)	QR	(2)	Quick ratio	(2)	(Current assets—Inventory)/ Current liabilities		
	(3)	DtAR	(3)	Debt to asset ratio	(3)	Debt/Total assets		
Development	(1)	TAGR	(1)	Total asset growth ratio		(Total assets at the end of the current period—Total assets at the end of the previous period)/Total assets at the end of the previous period		
	(2)	NAGR	(2)	Net asset growth ratio	(2)	(Net assets at the end of the current period—Net assets at the end of the previous period)/Net assets at the end of the previous period		
	(3)	EPSGR	(3)	EPS growth ratio	(3)	(EPS at the end of the current period—EPS at the end of the previous period) /EPS at the end of the previous period		
Management	(1)	ART	(1)	Account receivable turnover	(1)	Net sales/Average accounts receivable		
	(2)	CAT	(2)	Current receivable turnover	(2)	Net sales/Average current assets		
	(3)	TAT	(3)	Total asset turnover	(3)	Net sales/Average total assets		
Profitability	(1)	ROA	(1)	Return on assets	(1)	Net income/Average total assets		
	(2)	ROE	(2)	Return on net assets	(2)	Net income/Average shareholder's equity		

**Table 1.** Mergers and Acquisitions (M&A) Performance Evaluation Index.

# 4.2.2. Independent Variables

(3) OM

Cultural distance (CD): Our measure is based on Hofstede's culture dimensions [40], namely, power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, indulgence.

(3) Operating earnings/Revenue

(3) Operating margin

Consistent with prior studies, measured each target country through a Euclidean version of the Kogut and Singh [41] index. We compute the cultural distance as follows:

$$CD_{j} = \sum_{i=1}^{6} \left\{ \frac{\left(I_{ij} - I_{ic}\right)^{2}}{V_{i}} \right\} / 6$$

where  $CD_j$  is the cultural distance between country j and china,  $I_{ij}$  is country j's score on the i<sup>th</sup> cultural dimension,  $I_{ic}$  is the score of china on this dimension, and  $V_i$  is the variance of the score of the dimension.

Institutional distance (DIS): The institutional differences between China and the target countries are measured using the six World Governance Indicators (WGIs) published by the World Bank; Corruption Control, Government Effectiveness, Political Stability& Absence of Violence/Terrorism, Regulatory Quality, Rule of Law, and Voice & Accountability.

This is formally expressed as Kogut and Singh [41] index:

$$DIS_{j} = \sum_{i=1}^{6} \left\{ \frac{I_{ij} - I_{ic}}{V_{i}} \right\} / 6$$

where  $DIS_j$  is the institutional distance between China and the target country j,  $I_{ij}$  is country j's score on the ith dimension,  $I_{ic}$  is the score for China on the ith dimension, and  $V_i$  is the variance in the ith dimension. The dimensions are defined using the six WGI indicators.

Confucius Institute (CI): We use the number of Confucius institute established in the target country, which comes from the annual report of Hanban. Considering the possible endogeneity, the number of Confucius institutes with one year lag ( $CI_{it} - 1$ ) was used to estimate the model [12,32].

The Belt and Road Initiative (OBOR): Dummy variable that evaluates whether the cross-border M&A in the belt and road countries outperformed those outside the belt and road (1 was assigned if the M&A took place in BRI countries and 0 otherwise) [48].

#### 4.2.3. Control Variables

M&A performance is influenced by several factors. we introduce a set of control variables into our model to rule out alternative explanations. Based on the relevant past literature, we use a dummy variable for each industry and year of the transaction [21,58].

Transaction amount (LNV): The natural logarithm of the amount of the transaction (current RMB¥ in a given year) [59].

Labor costs (LRW): To represent the cost of human capital in the target economy, real GDP per capita in US dollars (the CPI index was used to deflate the nominal values) is used as a proxy for real wages, and the labor cost is calculated as the natural logarithm of the target country real wages [44].

Openness (LOPEN): The more open a country is in international trade, the more attractive it is likely to be as a destination for M&A; therefore, the openness is the ratio of the sum of imports and exports to nominal GDP (current US\$ in a given year) [48].

Technology level (LTECH): To measure the level of technology in the target country, the ratio of the target country's high-technology exports to nominal GDP (current US\$ in a given year) was used [48].

Infrastructure facilities (LINFRA): This is taken as a proxy of the natural logarithm of fixed telephone subscriptions per 100 people [48,60].

Natural Resource Endowment (NRR): The sum of fuel exports (% of merchandise exports) and ore and metal exports (% of merchandise exports) was taken as being representative of the natural resource abundance in the target country [48].

Related-party transaction (RPT): Dummy variables for the related-party transaction (1 for the related-party transaction, and 0 otherwise) [59].

State ownership (STA): Dummy variables for the state ownership (1 for state-owned enterprises, and 0 otherwise) [21].

AGE: Firm age from firms' establishment to cross-border M&As (years) [61]. Table 2 summarizes the definitions of all variables and sources of data used.

Table 2. Variable definitions and data sources.

Variable	Definition	Data Source	Reference
PROFIT2	The comprehensive ratio of CBM&A performance after two years	WIND Database	Shen and Jin [54] and Lin et al. [56]
CD	The composite index calculated with the Kogut and Singh formula of the cultural distance between China and the target country	Official website of Hofstede	Kogut and Singh [41]
CD4	The composite index calculated with the Morosini and Singh formula across Hofstede's four cultural dimensions as robustness checks	Official website of Hofstede	Morosini et al. [19]
DIS	The composite index calculated with the Kogut and Singh formula of the institutional distance between China and the target country	World Bank	Kogut and Singh [41]
CI	Number of Confucius Institutes established in target country i at year t-1	Official website of Hanban	Lien et al. [12] and Xu and Wang [32]
OBOR	A dummy variable equal to 1 if the M&A took place in a BRI country and 0 otherwise	Official website of BRI	Liu et al. [48]
LNV	Log of the amount of the transaction in Chinese yuan	World Bank	Du et al. [59]
LRW	Labor cost calculated as the log of the target country's real wages	World Bank	Liu et al. [48]
LOPEN	Openness calculated as the ratio of the sum of imports and exports to nominal GDP	World Bank	Liu et al. [48]
LTECH	Technology level calculated as the ratio of the target country's high-technology exports to nominal GDP	World Bank	Liu et al. [48]
LINFRA	Infrastructure facilities calculated as the log of fixed telephone subscriptions per 100 people	World Bank	Liu et al. [48] and Kamal et al. [60]
NRR	Natural resource endowment calculated as the % of ore, mineral, and fuel exports in total merchandised export	World Bank	Liu et al. [48]
RPT	A dummy variable equal to 1 for a related-party transaction	WIND Database	Du et al. [59]
STA	A dummy variable equal to 1 for state-owned enterprises and 0 otherwise	WIND Database	Boateng et al. [21]
AGE	Firm age, from firm establishment to CBM&A (years)	WIND Database	Wu and Xie [61]

## 4.2.4. Comprehensive Evaluation Model

In order to conduct a comprehensive and objective assessment of the performances of the listed firms before and after M&A, we constructed a comprehensive evaluation model by using the principal component analysis (PCA) method. The first step is positive management in factor analysis, which converts moderate indicators into positive indicators [62,63]. In the financial indicators in this paper, there are two different directions of indicators (included 9 positive indicators and 3 moderate indicators). In order to eliminate the data problems caused by the direction of indicators, to ensure the objective fairness of the main component extraction in factor analysis, it is necessary to make 3 moderate indicators forward treatment. Of the 12 financial indicators, the current ratio, the quick ratio, and the asset-liability ratio are moderate indicators, forward processing formula is:

$$Y_{ij} = \frac{1}{1 + \left(X_{ij} - N_j\right)}$$

where  $Y_{ij}$  is firm i's value after forwarding processing on the jth financial indicator,  $X_{ij}$  is firm i's original value on the jth indicator,  $N_j$  is the moderate value of the jth indicator, the moderate value generally takes the average of the jth indicator.

The second step is to establish a comprehensive score model for M&A performance:

$$Y_{mn} = \alpha_{n1}CR_m + \alpha_{n2}QR_m + \alpha_{n3}DtAR_m + \alpha_{n4}TAGR_m + \alpha_{n5}NAGR_m + \alpha_{n6}EPSGR_m + \alpha_{n7}ART_m + \alpha_{n8}CAT_m + \alpha_{n9}TAT_m + \alpha_{n10}ROA_m + \alpha_{n11}ROE_m$$
(1)  
+\alpha\_{n12}OM\_m

where  $Y_{mn}$  represents the score of the mth common factor in the nth sample company, and  $\alpha$  represents the score coefficient of the mth common factor on the corresponding index variable.

Finally, the following comprehensive evaluation function was constructed according to the factor score and the variance contribution ratio of the factor:

$$F_m^2 = \beta_{m1} Y_{m1} + \beta_{m2} Y_{m2} + \dots + \beta_{mn} Y_{mn}$$
 (2)

where  $F_m^2$  represents the comprehensive score of the mth sample company's performance in the second year after M&A, and  $\beta_{mn}$  represents the variance contribution rate of the nth common factor of the mth sample company.

# 4.2.5. Multivariate Regression Model

To explain the factors affecting the long-term acquirers' returns of Chinese CBM&A, we use the following regression model:

$$PROFOT2_{it} = \beta_0 + \beta_1 CD_{it} + \beta_2 DIS_{it} + \beta_3 CI_{it} + \beta_4 OBOR_{it} + \beta_5 Controls_{it} + y_t + Ind_{it} + \epsilon_{it}$$
(3)

$$PROFIT2_{it} = \beta_0 + \beta_1 CD_{it} + \beta_2 DIS_{it} + \beta_3 CI_{it} + \beta_4 OBOR_{it} + \beta_5 CD_{it} \cdot CI_{it} + \beta_6 DIS_{it}$$

$$\cdot CI_{it} + \beta_7 Controls_{it} + y_t + Ind_{it} + \epsilon_{it}$$

$$(4)$$

$$PROFIT2_{it} = \beta_0 + \beta_1 CD_{it} + \beta_2 DIS_{it} + \beta_3 CI_{it} + \beta_4 OBOR_{it} + \beta_5 CD_{it} \cdot OBOR_{it} + \beta_6 DIS_{it} \cdot OBOR_{it} + \beta_7 Controls_{it} + y_t + Ind_{it} + \epsilon_{it}$$
(5)

## 5. Results and Discussion

#### 5.1. Calculation of the Comprehensive Score

The spherical Bartlett test and the KMO test were performed on the financial indicator variables of the sampled firms. The results showed that the KMO value was greater than 0.5 in the two years after M&A, and the Bartlett companion probability was 0.000, indicating that the overall sample was suitable for factor analysis.

Second, we extracted the factor according to the principle that the total variance contribution rate exceeds 70%. Through factor analysis of 12 financial indicators in the second year after the M&A, we extracted five common factors of Y1, Y2, Y3, Y4, and Y5. Since the comprehensive evaluation function was a linear combination of the factors (Y1–Y5), the weight number of each factor in the regression equation was determined by the variance contribution rate of this particular factor, which eliminated the arbitrariness of subjective weighting. Thus, we obtained a comprehensive evaluation function in the second year after the M&A according to the principal factor:

$$Y_m^2 = (26.51\%Y_{m1} + 18.21\%Y_{m2} + 14.90\%Y_{m3} + 10.12\%Y_{m4} + 8.53\%Y_{m5}) / 78.27\%$$
 (6)

Using the above comprehensive score models, the comprehensive scores of sample firms are calculated to evaluate the performance in the second year after M&A. The influence factors of M&A performance are then analyzed.

#### 5.2. Correlation Analysis and Descriptive Statistics

Table 3 provides the correlation coefficients among the variables and the corresponding descriptive statistics. The results indicated relatively low correlations among most of the variables, with the maximum correlation being 0.7899 between labor cost and infrastructure facilities. The Variance Inflation Factor (VIF) value of each variable was far below the threshold value of 10 [64], indicating that collinearity between variables was not serious. Multicollinearity did not present a problem in our study.

	PROFIT2	CD	DIS	CI	LNV	OBOR	LRW	LOPEN	LTECH	LINFRA	NRR	RPT	STA	AGE
PROFIT2	1.000													
CD	-0.420	1.000												
DIS	-0.379	0.163	1.000											
CI	0.335	-0.110	-0.413	1.000										
LNV	0.410	-0.170	-0.008	0.051	1.000									
OBOR	0.405	-0.713	-0.283	0.281	0.0449	1.000								
LRW	-0.087	0.201	0.502	0.074	0.0027	-0.202	1.000							
LOPEN	-0.048	-0.558	0.249	-0.285	-0.0003	0.351	0.072	1.000						
LTECH	-0.022	-0.379	0.289	0.089	0.0217	0.220	0.305	0.742	1.000					
LINFRA	0.007	-0.009	0.243	0.160	-0.0467	0.063	0.790	0.043	0.205	1.000				
NRR	-0.153	0.267	0.545	-0.404	0.0179	-0.389	0.028	0.134	0.087	0.181	1.000			
RPT	0.010	-0.090	-0.052	0.039	-0.0915	0.138	-0.017	0.106	0.150	0.084	0.109	1.000		
STA	0.205	-0.254	0.038	0.038	0.3091	0.077	0.005	0.112	0.097	0.026	0.083	0.058	1.000	
AGE	0.211	-0.085	-0.150	0.082	0.2578	0.099	-0.077	0.005	0.002	0.103	0.118	0.156	0.144	1.000
Average	0.021	3.714	2.874	36.969	9.466	0.440	5.978	0.596	20.201	3.615	17.491	0.068	0.223	14.912
Std.Dev.	0.245	1.803	1.654	32.954	1.675	0.498	0.663	0.521	10.637	0.540	17.325	0.252	0.417	4.910

**Table 3.** Correlations and descriptive statistics.

#### 5.3. Multivariate Regression Results and Discussion

We performed multivariate regressions of PROFIT2 on the explanatory and control variables to test our main hypotheses. Table 4 summarizes the regression results of the factors influencing long-term CBM&A returns. Column (1) confirms that cultural distance and institutional distance have negative and significant effects on the long-term value creation of the acquirer, so we cannot reject Hypothesis 1 or Hypothesis 2. These findings appear to support studies that view large cultural distance as a source of risk that negatively affects value creation [21,27,28,65,66]. Column (1) shows that the establishment of Confucius Institutes positively affects the long-term performance of CBM&A for Chinese enterprises, providing support for Hypothesis 3. These results are in line with the findings of Liu and Lu [26] and Xu. et al. [50], suggesting that the long-term returns of acquiring firms tend to increase due to the cultural export activities of Confucius Institutes. We also found that the BRI had a significantly positive effect on CBM&A, suggesting that BRI opens up vast new frontiers for overseas investment from China and promotes the performance of CBM&A, which supports Hypothesis 4.

Moreover, Columns (2) and (3) verify the joint effect between the Confucius Institutes, BRI, and cultural/institutional distance. The results of Column (2) identify the transmission mechanism of Confucius Institutes' impact on CBM&A through cultural distance and institutional distance. However, the interaction between Confucius Institutes and cultural distance appears to have a significant and positive impact on long-term returns. This suggests a substitution effect between cultural distance and Confucius Institutes wherein the influence of these institutes on CBM&A performance is exerted by reducing the negative effects of cultural distance. The regression analysis shows that the estimate for the interaction between institutional distance and Confucius Institutes is positive and significant at the 1% level. It is argued that the establishment of Confucius Institutes promotes friendly cooperative relations between China and other countries, makes up for the negative impact of the target country's institutional distance, and provides additional security protection for CBM&A. The intensive activities of Confucius Institutes help those in host counties to understand Chinese languages better and appreciate Chinese culture. This can reduce hostility toward Chinese multinational entities and create a friendlier business environment. Thus, we expect that Confucius Institutes reduce the transaction costs and information asymmetry arising from liabilities of foreignness and psychic distance [50].

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For example, before initiating CBM&A, companies could use the Confucius Institute as third-party platforms to gain an in-depth understanding of the target company's corporate culture and institutional environment, and then formulate an effective risk plan accordingly.

Table 4. Multiple regression results.

	(1)	(2)	(3)
CD	-0.034 ***	-0.023 **	-0.033 ***
	(-3.498)	(-2.351)	(-3.494)
DIS	-0.059 ***	-0.042 ***	-0.062 ***
	(-6.263)	(-4.293)	(-6.906)
CI	0.001 **	0.002 ***	0.0008 **
	(2.486)	(3.897)	(2.160)
LNV	0.040 ***	0.039 ***	0.039 ***
	(6.235)	(6.470)	(6.518)
OBOR	0.068 **	0.088 ***	0.116 ***
	(2.175)	(2.957)	(3.446)
CI*CD		0.0007 ***	
		(2.814)	
CI*DIS		0.001 ***	
		(3.772)	
OBOR*CD			0.015
			(0.843)
OBOR*DIS			0.079 ***
			(5.794)
LRW	0.085	0.065 *	0.082 **
	(2.545)	(1.848)	(2.621)
LOPEN	-0.382	-0.020	-0.059
	(-0.971)	(-1.462)	(-1.583)
LTECH	-0.001	-0.002	-0.003
	(-0.693)	(-1.462)	(-1.646)
LINFRA	0.004	0.045	0.012
	(0.108)	(1.193)	(0.360)
NRR	0.003 ***	0.004 ***	0.004 ***
	(3.136)	(4.537)	(4.570)
RPT	0.016	0.031	0.030
	(0.421)	(0.883)	(0.886)
STA	-0.004	0.013	0.030
	(-0.134)	(0.518)	(1.184)
AGE	0.004 *	0.004 *	0.004 **
	(1.949)	(1.822)	(2.010)
Constant	-1.022	-1.281	-1.216
	(-6.557)	(-8.043)	(-8.274)
Year dummy	Y	Y	Y
Industry dummy	Y	Y	Y
Observations	192	192	192
Adj. R-squared	0.764	0.788	0.798
F value	20.89	22.51	23.88

Note: (1) LINFRA: Infrastructure facilities; (2) t-statistics in parentheses; \*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.1.

Column (3) in Table 4 shows that the BRI positively moderates the relationship between institutional distance and long-term value creation. The coefficient of the cross term was 0.0789 and was significant at the 1% level, providing support for Hypothesis 4b. Regarding the interaction between cultural distance and the BRI, the coefficient was positive but not statistically significant. This indicated that the BRI has a significant optimization and complementary effect on institutional distance, which can effectively alleviate CBM&A failure caused by institutional differences. However, this effect is not reflected in the cultural distance, perhaps because the BRI remains focused on intergovernmental cooperation and exchanges, rather than on cultural exchange and communication. Another possible explanation is that institutional quality can be greatly improved through the efforts of one or both governments, thereby reducing the distance with other countries relatively quickly [67]. China has signed various cooperation agreements with BRI-related countries, which provides policy protection for CBM&A. However, culture is developed over the long term. The BRI began in 2013 and is in the early stage of implementation. Moreover, most of the areas along the BRI are not economically developed, and their level of cultural infrastructure construction is not high, which affects cultural development and communication and limits the initiative's cultural influence. As stated before, cultural/institutional

distance presents important impediments for the value creation of China's CBM&A. The Chinese government should thus continue to strengthen the depth and breadth of exchanges and cooperation with BRI-related countries to provide long-term policy support and system guarantees for Chinese enterprises' international investments in BRI countries. Furthermore, the Ministry of Culture could also use Confucius Institutes as a channel through which to cultivate a group of cultural emissaries with international communication ability and social influence who could frequently communicate with BRI-related countries in academic exchanges and cultural research.

#### 5.4. Robustness Check

To check the robustness of our regression models, we employed additional specifications to rule out alternative explanations. We used the Morosini et al. [19] formula to calculate the cultural distance between China and the target country across Hofstede's four cultural dimensions which were used as proxies for cultural distance.

$$CD_j = \sqrt{\sum_{i=1}^4 (I_{ij} - I_{ic})^2}$$

where  $CD_j$  is the cultural distance between country j and china,  $I_{ij}$  is country j's score on the i<sup>th</sup> cultural dimension, and  $I_{ic}$  is the score of china on the i<sup>th</sup> dimension.

In Column (1), the coefficient of cultural distance is -0.032 and is significant at the 1% level, indicating that cultural distance exerts a negative and significant impact on long-term returns. However, Columns (2) and (3) show significant and negative impacts, as in Column (1). The results reported in Table 5 are similar to those shown in Table 4.

	(1)	(2)	(3)
CD4	-0.032 ***	-0.027 **	-0.023 **
-0.023 **	(-3.542)	(-2.468)	(-2.595)
DIS	-0.042 ***	-0.033 ***	-0.051 ***
	(-4.422)	(-3.356)	(-5.568)
CI	0.001 **	0.001 ***	0.001 ***
	(2.361)	(3.076)	(2.833)
OBOR	0.074 ***	0.083 ***	0.113 ***
	(2.797)	(3.134)	(3.918)
CI*CD4		$3.22 \times 10^{-5}$	
		(0.112)	
CI*DIS		0.0008 ***	
		(2.751)	
OBOR*CD4			-0.030
			(-1.621)
OBOR*DIS			0.086 ***
			(5.495)
Constant	-0.919 ***	-1.167 ***	-1.134 ***
	(-6.604)	(-8.433)	(-8.707)
Control variables	Y	Y	Y
Year dummy	Y	Y	Y
Industry dummy	Y	Y	Y
Observations	192	192	192
Adj. R-squared	0.762	0.769	0.791
F	21.43	20.86	23.64

Table 5. Robustness checks.

Note: (1) LINFRA: Infrastructure facilities; (2) t-statistics in parentheses; \*\*\* p < 0.01, \*\* p < 0.05.

To further verify the robustness of regression results in Table 6, this paper used the FGLS (feasible generalized least square) method to re-regress the empirical model.

In Table 6, the results show that the magnitude, sign, and significance of the coefficients of the major variables are approximately or substantially the same.

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	(1)	(2)	(3)
CD	-0.027 ***	-0.016 **	-0.026 **
	(-3.134)	(-1.971)	(-3.135)
DIS	-0.058 ***	-0.038 ***	-0.059 ***
	(-6.675)	(-4.097)	(-7.143)
CI	0.001 ***	0.002 ***	0.0009 **
	(2.653)	(4.328)	(2.436)
OBOR	0.074 **	0.085 ***	0.112 ***
	(2.797)	(3.134)	(3.618)
CI*CD		0.0008 ***	
		(3.607)	
CI*DIS		0.001 ***	
		(3.809)	
OBOR*CD			0.016
			(1.007)
OBOR*DIS			0.077 ***
			(6.129)
Constant	-1.386 ***	-1.292 ***	-1.424 ***
	(-5.664)	(-5.000)	(-6.070)
Control variables	Y	Y	Y
Year dummy	Y	Y	Y
Industry dummy	Y	Y	Y
Observations	192	192	192
Wald chi2	766.93	882.22	930.15
Prob > chi2	0.0000	0.0000	0.0000
Log likelihood	152.6613	163.5613	167.7511

Table 6. FGLS (Feasible Generalized Least Square) Regression Results.

Note: (1) LINFRA: Infrastructure facilities; (2) t-statistics in parentheses; \*\*\* p < 0.01, \*\* p < 0.05.

#### 6. Conclusions

This study investigates the role of national cultural policies such as Confucius Institutes and BRI on the values of cross-border merger activity using a sample of 192 acquisitions conducted from 2011 to 2015 by Chinese listed firms. The results indicate the following.

We find that institutional distance and cultural distance exert a significantly negative impact on post-acquisition returns. This indicates that, before engaging in a merger, Chinese enterprises need to fully understand the institutional environment of the target country and the cultural differences between the two countries. Furthermore, entrepreneurs should think about how these factors affect the risks to CBM&A performance.

We also find that the cultural export activities of Confucius Institutes have a positive effect on post-acquisition returns. A multivariable regression with joint variables shows that the interaction between cultural distance and institutional distance and Confucius Institutes have significant and positive impacts on firm value, confirming that the cultural output of Confucius Institutes can reduce the negative impact of cultural distance and institutional distance on CBM&A performance. Confucius Institutes can also provide protection in the target country and reduce potential institutional risk and enhance cultural exchanges, allowing them to promote Chinese CBM&A.

The BRI is a national strategy for promoting international economic integration implemented via a state capitalist model under an authoritarian regime [25]. Our study finds that the interaction between BRI and institutional distance has a significant and positive impact on post-acquisition returns. Regarding the interaction between cultural distance and BRI, the coefficient is positive but not statistically significant, indicating that BRI focuses on intergovernmental cooperation and exchanges; thus, non-governmental cultural exchanges and communication need to be strengthened.

From these results, some rational recommendations can be given. First, our results show that BRI can effectively improve the performance of CBM&A. The Chinese government should thus continue to strengthen the depth and breadth of exchanges and cooperation with BRI-related countries to provide long-term policy support and system guarantees for Chinese enterprises' international investments in BRI countries. Chinese enterprises, especially large traditional enterprises with development bottlenecks, should implement the go-global strategy, not only to improve domestic demand levels,

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thus improving the company's investment and business environment, but also to help them integrate foreign resources.

Second, the results also show that the BRI positively moderates the relationship between institutional distance and long-term value creation, whereas the coefficient of interaction between BRI and cultural distance is positive but not statistically significant. This may be because cultures are extremely slow-changing objects, the BRI began in 2013 and is in the early stage of implementation. The Chinese government should therefore actively explore the communication mode of international friendship cities, expand the fields of exchange, and engage in more forms of interaction so as to deepen mutual understanding and friendship between nations. The Ministry of Culture could also use Confucius Institutes as a channel through which to cultivate a group of cultural emissaries with international communication ability and social influence who could frequently communicate with BRI-related countries in academic exchanges and cultural research, which could help promote the effectiveness of overseas investments. In terms of project investment and construction, Chinese enterprises should strive to bring long-term benefits to local people in order to ensure that the BRI will take root among them and to enhance their trust in and openness to the project.

Third, entrepreneurs should focus on the cultural and institutional aspects of CBM&A, rather than focusing only on capital. Before initiating CBM&A, companies should strengthen exchanges of personnel, and use third-party platforms such as the Confucius Institute to gain an in-depth understanding of the target company's corporate culture and institutional environment, and then formulate an effective risk plan accordingly. During the CBM&A, enterprises should send employees who are familiar with the system and culture of the target company to communicate with each other in order to reduce the failures and losses caused by institutional and cultural distance and accelerate the integration of the firms' cultures, managements, and businesses.

This study also has several limitations that could drive future research. First, we use national-level data to investigate how Confucius Institutes and the BRI in host countries affect the performance of Chinese M&A from a macro perspective, ignoring the effects of firm-level characteristics (e.g., ownership, industry). Future studies could divide enterprises into sub-samples according to firm characteristics and conduct a comparative analysis of CBM&A in BRI-related countries. Second, many giant Chinese companies, such as Alibaba, Tencent, and JD.com, have acquired foreign technologies and assets, but these were not studied in detail [68]. Future research could include these Chinese enterprises' CBM&A in the analysis to produce more convincing results. Third, we use the methods developed by Kogut and Singh [41], which is widely used by scholars, to measure the cultural distance and institutional distance. This approach used the variance of the scores along the dimension to weight the squared deviation, but ignores the role of covariances between the cultural dimensions. Besides, Shenkar [69,70] suggested that the Kogut and Singh [41] index can be supplemented by Long Term Orientation especially where East-Asian countries are involved. Further research could improve the measurement methods of cultural distance and institutional distance.

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