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Market Performance of acquiring firms in Cross-border M&A
Evidence from the BRICS countries

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ABSTRACT

This paper studies the stock market performance of acquiring firms from the BRICS countries around the announcement of cross-border M&A focusing on the different factors that might affect the Cumulative Abnormal Returns (CARs) of the acquiring firm. The factors that we focus on are the industry relatedness between the acquiror and the target, the geographical and cultural distance between the two firms and the political environment and governance of the target firm's country. To investigate the main research question, a sample of 625 cross-border acquisitions by firms based in the BRICS countries is collected from the ThomsonOne and Datastream database for the period 2000 to 2022. Using the method of event study, we analyze the market reaction of the announcement of the cross-border acquisition on the stock performance of the acquiring firm using a 3-day, 5-day and 11-day event window. Then, we conduct a robust regression analysis to further investigate the impact of Industry Relatedness, Geographical Distance, Cultural Distance and Political Environment on the CARs of the acquiring firm.

In conclusion, we observe that each BRICS country studied has a different market reaction on the different factors discussed. Specifically, the political environment and governance of the target firm's country shows no significant effect on the CARs of acquiring firms and the target firm's industry has a negative significant effect only on the Indian subsample. On the other hand, geographical distance shows a positive market reaction in the sample of Indian firms and negative market reactions in the sample of Russian and Chinese firms. Lastly, the cultural distance between the target and acquiring firms is observed to have a positive market response to Russian, Indian and South African cross-border acquisitions. This indicates that generalizations about the market performance of firms from the emerging market population cannot be made.

Keywords: Cross-border mergers & acquisitions, Stock market reaction, BRICS countries, Industry Relatedness, Geographical Distance, Cultural Distance, Political Environment

JEL codes: G14, G34

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CHAPTER 1 Introduction

Cross-border mergers and acquisitions (M&A) carried out by emerging market firms (EMFs) have been trending strongly upward, with a total of 1 billion dollars in deal values in the 1990s, reaching almost 30 billion dollars in the last few years ([Zephyr, 2023](#)). Since cross-border M&A activities contribute to a high degree to the outbound foreign direct investment (OFDI) of countries, there is evidence indicating that the governments of emerging economies support and encourage enterprises to invest abroad. Over the past two decades, China, one of the largest emerging economies, has contributed around 40% to the total value of cross-border M&A deals executed by EMFs ([Zephyr, 2023](#)). Such development by Chinese companies has been documented since the Chinese government adopted the “Go out policy” in 1999. The main goals of this program were to motivate companies to invest abroad in order to achieve market expansion, product diversification, and brand recognition. However, 70 to 90 percent of M&A transactions fail ([Christensen, 2021](#)). Failures are caused by mispriced acquisition deals, ineffective integration of operations into the acquirer’s business model, and cultural and political differences. These may result in value destruction for the acquiring firm, leading to poor financial performance. Research on the impact of cross-border M&A on acquiring firms’ performance has been extensively studied in developed nations but is limited and inconsistent for emerging economies.

As emerging markets have developed policies about expanding OFDI, the existing literature about cross-border M&As by EMFs is still under-studied. Many scholars argued that determinants such as host government effectiveness in terms of the quality of public and civil services as well as autonomy from political influence ([Deng & Yang, 2015](#)) increase the likelihood of cross-border M&As by EMFs. Furthermore, geographical distance and bilateral trade between two countries also increase the probability of EMFs engaging in cross-border M&As ([Erel et al., 2012](#)). It is clear that acquiring firms and their stakeholders when going forward with an acquisition are expecting positive returns from their overseas investments, assuming rational decisions are made. Most literature measures the performance of M&A deals using the stock market returns around the day of the announcement or Buy-and-hold abnormal returns (BHARs) over a longer time period after the acquisition. Some scholars have argued that cross-border M&As by Chinese firms had a significantly positive stock market shock which implied that investors perceived the deals as an advantageous opportunity for the acquiring firm ([Tao et al., 2017](#); [Lin et al., 2020](#)). For Indian companies engaging in cross-border M&A deals, similar results have also been discovered ([Singla et al., 2012](#); [Jain et al., 2021](#)). However, [Aybar and Fici \(2009\)](#) examined 58 emerging market multinationals for the period 1991-2004 and concluded that cross-border M&As actually destroy value for half of the sampled companies.

Conflicting results are found in the literature regarding how cross-border M&A affects the financial performance of acquiring EMFs. The majority of recent research only examines Chinese and Indian

buyers, neglecting institutional differences and the other emerging economies, leading to broad generalizations about cross-border M&A by EMFs. This is due to acquiring companies of only one country being included in the sample to represent the population of emerging economies. The countries known as the BRICS—Brazil, Russia, India, China and South Africa—are the five biggest emerging market economies, and this thesis examines this topic by replicating the approach studied by [Tao et al. \(2017\)](#) but employing a sample of acquiring corporations based on these nations. The BRICS nations make up the largest concentration of EMFs on each continent and contributed 76% and 60% of OFDI ([“World Investment Report 2022,” 2022](#)) and GDP ([IMF Data, 2022](#)) in emerging economies in 2020, respectively. By excluding any country-specific features that might not be relevant to the entire population, this data selection process gives a more accurate depiction of emerging economies. Additionally, employing a sample of the BRICS nations enables the analysis of the political, social, and economic dynamics of these economies and gives more representative results for the population of EMFs. Therefore, the research question of this thesis is stated as:

“How do cross-border M&A deals affect the financial performance of the acquiring emerging market firms based in the BRICS countries?”

The research question will be empirically investigated using a representative sample of about 625 cross-border M&A deals which were announced and completed during the period 2000-2022. Specifically, this research will focus on the short-term performance of the acquiring firms using two methods, the event study approach and the robust regression approach. To evaluate the short-term effect, an event study is conducted which includes data on acquiring firms that are publicly listed, based in the BRICS countries, and that obtain at least 50% ownership of the target firm. Furthermore, three-day, five-day, and eleven-day event windows are utilized to calculate the cumulative abnormal returns (CARs) of the acquiring company's stock prices. This approach is commonly used by academics ([Aybar & Ficici, 2009](#); [Boateng et al., 2008](#) and others) and indicates the market's favourable or negative responses to the announcement. The predicting variables will be factors that have been shown to influence the performance of acquiring firms, such as the industry relatedness between the acquirer and the target and geographical distance between the acquiring and target firms' countries measured by [Mayer and Zignago \(2011\)](#). Another factor that substantially impacts performance is cultural distance ([Ahern et al., 2015](#)), represented by a self-constructed index that captures three dimensions of cultural distance, namely linguistic differences ([Mayer & Zignago, 2011](#)), religious differences ([Pew Research Center, 2015](#)), and historical ties ([Mayer & Zignago, 2011](#)). The third independent variable is the political risk associated with the target firm's country measured by the World Governance Indicators (WGI) which aggregates six dimensions of governance and political stability measures ([Kaufmann et al., 2010](#)). Lastly, the control variables used in the regression are the deal value of the acquisition, the ownership stake of the acquirer, the firm status of the target and an indicator of financial crisis.

The remainder of this paper is structured as follows. Section 2 discusses previous research on cross-border M&A and the development of hypotheses. Section 3 gives information about the data sample and the variables of interest. Section 4 discusses the methodology used in this paper to empirically test the research question. Section 5 presents the results of the empirical research and robustness check and lastly, Section 6 gives a conclusion and a discussion for future research on the topic.

CHAPTER 2 Theoretical Framework

2.1 Cross-border M&A

A big part of the academic literature on acquisitions and merger activity focuses on domestic deals conducted by public firms in the United States (US) or other developed countries ([Raghavendra et al., 2022](#)). However, most of the M&A deals worldwide involve non-US firms, from which a lot of them are private. As globalization has taken over, cross-border M&A have been one of the popular ways for firms to seek growth and new opportunities overseas. In order to understand the dynamics and determinants of cross-border M&A, it is necessary to define some concepts. Firstly, the definitions “mergers”, “acquisitions” or “takeovers” are very often used interchangeably. However, there is a clear distinction; “acquisitions” or “takeovers” imply an ownership of more than 50% by the acquiring firm and on the other hand, “mergers” are deals where two firms create a new legal entity under one corporation ([Piesse et al., 2012](#)). Therefore, “Cross-border M&A” are acquisitions or merger deals conducted by two firms which are located in two different countries.

The choice of a firm to acquire a foreign target firm has many strategic implications; most of these deals have resource- and competitive advantage-seeking strategies ([Gubbi et al., 2010](#); [Nicholson & Salaber, 2013](#)). For example, cross-border M&A can facilitate in easier access to natural resources, intelligent technology, human talent and entry to new markets. These strategies can increase the acquiring firm’s operational efficiency, market position in the industry and diversification. However, cross-border M&A are complicated deals with high probabilities of failure. [Hollmann et al. \(2011\)](#) studied one of the biggest failed M&A deals in history, a case of corporate culture clashing; the merge of Daimler-Benz and Chrysler in 1998. This deal was an idea of equally merging two transatlantic car manufacturers; Daimler-Benz based in Germany and Chrysler based in the US, to create a “powerhouse” that would dominate the car industry worldwide. The two companies could have a successful integration, yet the management of both parties was not willing to cooperate and compromise their cultural differences and as a result, the merger of \$37 billion dollars fell apart. Thus, it can be seen that cross-border acquisitions have their big upside potential, though with its risks.

2.1.1 Potential Benefits and Challenges from Cross-border M&A

Cross-border M&A is a type of acquisition where the acquiring firm makes an investment abroad, contributing to its country’s OFDI. Many firms engage in merger deals primarily because managers of the acquiring firm anticipate value creation from the M&A deal i.e., the value of the combined firm is higher than the value of the two separate firms ([Erel et al., 2012](#)). Value creation can occur for multiple reasons, such as for economies of scale and scope, vertical integration, monopoly gains, expertise and diversification ([Berk and DeMarzo, 2020](#)). Along with efficiency and operational gains, acquiring firms

can attain entry into new markets and customer base as well as brand recognition overseas ([Harper James Solicitors, 2022](#)). A survey by [Deloitte \(2017\)](#) on cross-border M&A deals identified the top three strategic drivers for acquiring firms to enter a deal with a firm overseas. These are portfolio diversification drivers as a result of saturation in the existing market and industry; favourable regulatory and tax law environment since target countries with instable political environment and high repatriation costs for earnings overseas make it less attractive and uncertain for the acquirer; and lastly, cost synergies such as economies of scale and scope as well as proprietary technology and intellectual property which enhance efficiency and decrease costs are important drivers for cross-border M&A deals ([Deloitte, 2017](#)). However, research by [McKinsey & Company \(2015\)](#) on cross-border acquisitions by EMFs found different results; the most common motive in international acquisitions are the strategic resources of target firms such as know-how, brand and technology and natural resources such as raw materials and energy.

Nevertheless, there are some concerning downsides in cross-border M&A deals that acquiring firms should take into account. One of the obstacles a firm can face is limits in inward FDI imposed by foreign governments which can be very challenging to firms to enter these markets and acquire firms. China's Negative List for Market Access is an example of restrictions on investments to both foreign and domestic investors on certain industries imposed by the Chinese government. Since China's 2022 updated Negative List more industries opened up for private investments and restrictions on M&A of listed companies were lifted, though industry-specific regulations may still apply ([China Briefing, 2022](#)). Furthermore, acquiring firms should not neglect any cultural differences they have with the target firm in terms of their corporate culture and organization model. Many known examples in history have shown cross-border acquisitions having issues integrating the culture of two firms, such as Daimler-Benz and Chrysler ([Hollmann et al., 2011](#)). Firms that are integrating in two different geographical locations, can not only have cultural barriers such as language differences and differences in values and ethics, but also difficulties in communication (e.g., time-zone differences, remote interaction, internet access). All these challenges can hinder the completion of an acquisition and prevent firms from achieving their strategic goals.

2.1.2 Determinants of Cross-border M&A

Academic literature makes distinct conclusions on what the determinants of cross-border M&A are in terms of successfully completing acquisition deals. In this section, the following determinants are discussed in depth; resource and market availability, regulatory and political environment; geographic distance; and cultural differences.

Resource and Market Availability

Firms that engage in international acquisitions are targeting firms that own resources and intellectual properties to benefit from the merger. [Deng and Yang \(2015\)](#) conducted a comparative investigation on the antecedents of cross-border M&A by employing the Resource-Dependence Theory (RDT). They suggest that higher resource and market availability in host countries increases the intensity of cross-border acquisitions by EMFs in the sample period 2000-2012. In addition, [Deng and Yang \(2015\)](#) identified differences on the determinants of cross-border M&A in target firms based in developed and developing countries. EMFs show a stronger interest on the intellectual property rather than natural resources of target firms in developed countries. Opposite results are found for targets in developing countries where only natural resources have a significant effect on the number of cross-border acquisitions. These results show that EMFs distinguish the advantages and opportunities that host countries possess and target firms according to their strategic objectives.

Regulatory and Political Environment

Furthermore, regulatory complexities and political instability in the target countries can also disincentives firms to invest overseas ([Deng and Yang, 2015](#)). Based on the Easy of Doing Business Index, acquiring firms based in Europe and High-Income OECD countries may find target firms from Asia-Pacific (APAC) and Latin America & Caribbean to have business-unfriendly regulatory environments compared to their home country ([The World Bank, 2020](#)). Likewise, the political environment of the target country is an important determinant for cross-border M&A deals. Host countries with instable political environment create uncertainty and insecurity for foreign firms and difficulties in carrying out business transactions. Moreover, high government intervention in business activities and the lack of freedom might act as a disincentive for cross-border acquisitions. Therefore, firms carefully evaluate the regulatory and political environment in the host country to better leverage the acquisition deals and achieve their expansion goals ([Deng and Yang, 2015](#)).

Geographic and Cultural Differences

It is clear that many boundaries associated with cross-border acquisitions influence the decision of firms to invest overseas, such as geographical, linguistic and in general cultural differences. Due to geographical distance many acquisitions never reach the completion stage ([Chakrabarti & Mitchell, 2016](#)). This is may be due to difficulties in exchanging information and due diligence between the two parties. As a result, it can worsen the communication between acquirer and target which is essential to identify optimal targets and achieve a successful acquisition. Research done by [Erel et al. \(2012\)](#) revealed a trend of cross-border M&A deals conducted by firms located in nearby countries; for example, more than 60% of the deals by acquiring firms in New Zealand were of Australian target firms in the period

1990-2007. Additionally, [Chakrabarti & Mitchell \(2016\)](#) have two interesting findings on the effect of geographical distance; prior acquisition experience moderates the negative effect of geographical distance on the likelihood of a merger; and industry-related acquisitions that have a smaller geographical distance have a higher likelihood of completion. These results, however, contradict with the findings of [Labbas et al. \(2018\)](#) that an increase in geographical distance increases the probability of completed cross-border M&A deals and that distant firms engaging in industry-related deals have a higher likelihood of completion. The aforementioned findings can be supported with the argument that foreign distant markets are very attractive especially for technology-based deals, where high technological capabilities are concentrated in a few leading markets such as the USA, Japan, and Europe ([Labbas et al., 2018](#)). Thus, it is shown that geographical distance is an important determinant of the completion of cross-border M&A.

Along with geographical barriers, cross-border M&A deals are also determined by cultural differences. Cultural differences can be represented as differences in beliefs, behaviours, language, religion, and corporate culture and organizational structure between two parties. Cross-border M&A is in fact more likely when two firms share a common culture and the same values. Thus, a bigger cultural distance would lead to a smaller number of completed cross-border M&A deals ([Labbas et al., 2018](#)). On the contrary, [Erel et al. \(2012\)](#) examined the effect of cultural differences through language and religious factors on the number of cross-border acquisition deals in the period 1990-2007 and found no significant effects. Therefore, acquiring firms are more likely to invest time and effort in due diligence and acquire target firms that are more culturally similar in terms of values, beliefs, work ethics, corporate cultural, and managerial decision making.

2.2 Emerging Market Firms

Cross-border acquisitions have seen an increase the last few decades, primarily by emerging markets firms which use these acquisitions as strategies to internationalize ([Tao et al., 2017](#)). Furthermore, emerging market governments are implementing policies to increase OFDI and incentivize investors to expand their businesses overseas. In order to understand how cross-border acquisitions by emerging market firms are different and how these deals are unique, it is important to define the concept of “Emerging economies”. There is no official definition of “Emerging markets”, however economists and researchers from the [International Monetary Fund \(2021\)](#) classified 20 emerging economies based on five criteria; their nominal GDP, population, GDP per capita, share of world trade and share of world external debt. These emerging economies include Argentina, Brazil, Chile, China, Colombia, Egypt, Hungary, India, Indonesia, Iran, Malaysia, Mexico, the Philippines, Poland, Russia, Saudi Arabia, South Africa, Thailand, Turkey, and the United Arab Emirates. The main characteristics of these markets are the rapid growth of their economy due to high production levels, the lower or middle-level GDP per capita, their transition to an open economy, and the overall instability and volatility of these markets ([Corporate](#)

[Finance Institute, 2023](#)). The abovementioned characteristics are the reason why investors are attracted to invest in these countries; risky with high volatility markets mean higher returns ([Barry et al., 1998](#)). Most of the emerging markets are typical to experience many sweeping reforms in certain time periods that affect their financial, economic and institutional stability creating risk and substantial losses for investors.

As it had been seen, many emerging market firms are engaging in international transaction to grow their businesses and seek new opportunities abroad. Many times, these transactions are serving a purpose regarding risk diversification; in case of a domestic economic crisis, an EMF can focus and put effort on increasing its activities on international markets ([Cavusgil et al., 2012](#)). This way EMFs can shift their resources to the most profitable and more international involvement to overcome any crisis constraints. Other reasons for internationalization by EMFs are market-seeking, resource-seeking and efficiency-seeking motives, which have been addressed in general in section 2.1.2 for all cross-border acquisitions.

2.3 Theoretical Perspective and Hypotheses Development

Considering that the number of cross-border M&A deals by EMFs has risen since the early 2000s, it is expected that these deals are profitable and value-enhancing for the acquiring firms. Therefore, in this paper the market performance of the acquiring EMFs is studied when engaging in cross-border acquisitions. Furthermore, we consider different country- and firm-level characteristics of the target firm and host country that are potentially influencing the financial performance of the acquiring firm, such as industry relatedness, bilateral trade distance, cultural distance and political and governance environment. Existing research on the effect of cross-border M&A on stock market performance is summarized in [Appendix A](#), which will be analyzed in depth further.

2.3.1 Market Performance

Announcements of cross-border M&A are company statements of the intention to acquire another company overseas. These statements can release strong signal and the market can react positively or negatively according to investors' beliefs on the announcement. Very often negative reactions by the market are represented by downward movements in the stock price and positive reactions are represented by upward movements. In general, market reaction to company's news or other announcements are momentary and ephemeral. Early studies on the international acquisitions by US firms used the event study method to analyze the effect of the market reaction on the announcement of the acquisition. This method has been used in most studies related to announcements of acquisitions as it captures investors' perception of the deals. Research done on cross-border M&A by US firms shows consistent results of positive returns for the acquiring firm ([Doukas & Travlos, 1988](#); [Morck & Yeung, 1992](#)). since the rapid growth of cross-border acquisitions in emerging markets in the 2000s, academic research focused on the

international acquisitions by EMFs and specifically by Chinese and Indian firms. These developing economies started to open up to trade and implemented policies such as the Chinese “Go out policy” in 1999 to promote internationalization and increase OFDI. However, research on cross-border acquisitions by EMFs is inconsistent and inconclusive, as most of the papers examine only one emerging country and generalize for the population of emerging markets. For instance, [Boateng et al. \(2008\)](#) analyzed 27 cross-border deals by Chinese firms in the sample period 2000-2004 and concluded that on average acquiring firms get positive abnormal returns of 1.32% and 4.42% on 1-day and 51-day event windows around the announcement, respectively. Positive abnormal returns for Chinese firms have also been found by other researchers in different sample periods ([Ning et al., 2014](#); [Du and Boateng, 2015](#); [Tao et al., 2017](#); [Lin et al., 2020](#); [Zhang et al., 2020](#); [Jain et al., 2021](#)). Similarly, Indian acquiring firms also gain positive abnormal returns around the announcement of cross-border acquisitions, as studied by [Gubbi et al. \(2010\)](#). On the contrary, [Aybar and Ficici \(2009\)](#) examined 13 different emerging markets for the period 1991-2004 and derived opposite results; on average the acquiring firm produced negative abnormal returns for different event windows. Nevertheless, EMFs engage in cross-border M&A as they expect value creation from the acquisition in the short and the long run. Therefore, the following hypothesis is proposed:

Hypothesis 1. The announcement of cross-border M&A deals by EMFs results in a positive market reaction for the acquiring firm in the short term.

2.3.2 Industry Relatedness

Industry relatedness is an important factor firms take into account when deciding on an acquisition and refers to the degree of similarity and complementarity of the operational activities of two companies ([Ellwanger & Boschma, 2015](#)). Acquisitions that have high level of industry relatedness are expected to realize higher synergies and efficiency gains in terms of operations. For example, horizontal mergers can benefit from economies of scale, by combining business activities and operating on efficient levels of production using all available resources. Furthermore, related firms can leverage their shared technologies and knowledge as well as networks and access to markets to gain market share and increase their competitive advantage. The selection of a target firm does not happen randomly as it can be seen by the increasing likelihood of a merger when the firms are related ([Ellwanger & Boschma, 2015](#)). An explanation for this could be the fact that it is easier and more transparent for the acquiring firm to conduct due diligence and determine the acquisition value of a merger since it is familiar with the dynamics of the market the target firm is operating and understands the operations of the business at a substantial level. On the contrary, industry-unrelated acquisitions have higher costs and lower synergy benefits when facing with cultural and business model integration challenges. Therefore, the following hypothesis is proposed:

Hypothesis 2. *Cross-border M&A deals conducted by firms within the same industry result in positive market performance for the acquiring EMFs.*

2.3.3 Bilateral Trade Distance

A crucial consideration for firms engaging in international acquisitions is the bilateral trade distance between the two countries involved. Bilateral trade distance defines the geographical, cultural, economic and regulatory disparities between two countries that exchange goods and services to promote trade and investment. Generally, countries that take part in international trade enjoy the benefits of expansion and access to new markets, improvements in competitive advantage and immense economic growth. Bilateral trade agreements are a strategy for countries to facilitate safe trade easier and faster with standardized regulation. Therefore, in the context of international investments and acquisitions, regional trade agreements and specifically service agreements have a positive effect on cross-border M&A activity ([Di Giovanni, 2005](#)). Smaller bilateral trade distance between two countries promotes easier geographical and regulatory access for firms to foreign markets and better coordination and integration of business activities ([Erel et al., 2012](#)). Since bilateral trade distance has a multifaceted nature, it is important to discuss the influence of geographical and cultural distance on the cross-border M&A in depth.

Geographical Distance

Many challenges and uncertainties arise from cross-border acquisitions between firms located in different countries or continents. Geographical distance has a notable impact on the completion likelihood of international acquisitions ([Chakrabarti & Mitchell, 2016](#)). Greater geographical distance between the acquiring firm and target firm implies logistics complications, higher transportation costs but mainly communication issues and delays in decisions-making processes. These consequences may then affect the profitability of the acquiring firm and its market performance. Therefore, smaller geographical distance has a positive effect on the likelihood of a cross-border M&A ([Rossi & Volpin, 2004](#)) and acquiring firms in close geographical proximity with the target firm prefer full-ownership acquisitions ([Ragozzino, 2009](#)). However, academic literature on emerging economies shows that geographical distance plays no significant role for EMFs in acquiring targets in other countries ([Deng & Yang, 2015](#)). This can be justified with the premise that EMFs are mainly involved in asset-seeking acquisitions, therefore more geographically distance target firms are more appealing to their interests. Nevertheless, geographical distance can lead to higher costs than benefits for acquiring EMFs, therefore the following hypothesis is proposed:

Hypothesis 3a. *Cross-border M&A deals between firms with smaller geographical distance result in positive market reactions for the acquiring EMFs.*

Cultural Distance

Cultural difference plays a significant role in the market performance of firms, especially in cross-border M&A where possible conflicts can complicate the coordination of the completion and the post-merger stage. Defining cultural differences, many elements need to be taken into account; that is, language differences, religious differences, values and beliefs, and business practices. Big disparities in a lot of these elements can create many challenges for the two firms involved in the acquisition, such as difficulties in understanding and adapting local customs and traditions. Moreover, it can also impact the smooth integration of the two businesses and the decisions-making processes, potentially leading to inefficiencies, loss of synergies and conflicts. Therefore, failure to handle the differences between the two parties can result in negative financial performance and negative market reactions ([Aybar & Ficici, 2009](#); [Ahern et al., 2015](#)). On the contrary, some research supports that differences in culture may facilitate innovation and new ways to approach problem-solving ([Page, 2007](#)) which would potentially lead to an increase in the likelihood of cross-border acquisitions. [Chakrabarti et al. \(2009\)](#) studied the cultural differences on cross-border M&A using an event study and concluded that acquiring firms from 34 different nations on average perform better in the long run if the target and acquirer have a bigger cultural distance. Furthermore, [Ye et al. \(2023\)](#) examined cultural friction between acquiring firm and target in the cross-border M&A setting and found that the market performance of the acquiring firm follows a “U-shaped” pattern; this suggests that the performance declines as cultural friction increases up until a certain point and then performance follows an upward trend. Based on existing literature and the effect of cultural distance in cross-border acquisitions, the following hypothesis is proposed:

Hypothesis 3b. *Cross-border M&A deals between firms with similar cultural backgrounds have a positive effect on the financial performance of acquiring EMFs.*

2.3.4 Political Environment and Governance

Political stability and governance effectiveness are fundamental characteristics of a well-institutionally established country. Acquiring firms searching for target firms to purchase and achieve their strategic goals, seek a favourable and stable investment environment to expand overseas. Countries such as Venezuela, Brazil and Syria have high political instability and high levels of corruption, resulting in a negative market sentiment. For instance, during the first week of office of the Brazilian president Luiz Inacio Lula da Silva in January 2023, former president Jair Bolsonaro’s supporters broke into government facilities in the nation's capital Brasilia. Foreign investors withdrew from Brazil's stock market as a result

of the country's rising political unrest, the market's scepticism of Brazil's institutional and political stability, and the instability of the Brazilian Real ([Andrade, 2023](#)). In the case of acquiring firms, political stability, transparency and government effectiveness in host country are crucial for the successful completion of a cross-border M&A deal and the long-term profitability of the acquiring firm. A favourable investment and institutional environment instil confidence in acquiring firms, provides predictability and reduces uncertainty. Academic research shows that bigger institutional differences between the acquiring and target firm in terms of economic policies, government efficiency, trade barriers, free flow of investment capital, proprietary rights and legal and regulatory framework generate positive abnormal returns for the acquiring firm ([Gubbi et al., 2010](#); [Du & Boateng, 2015](#)). In more recent study, [Tao et al. \(2017\)](#) the political risk and the governance quality of the host country using the six governance indicators of the World Governance Index (WGI). Results showed that Chinese acquiring firms who acquired firms from countries with high political stability and governance quality generated significant positive abnormal returns in the sample period 2000-2012. Conditional on the findings of the literature and examples from the real world, the following hypothesis is proposed:

Hypothesis 4. A target country with high political stability and good governance quality has a positive effect on the financial performance of acquiring EMFs.

CHAPTER 3 Data

3.1 Data Source Description

In this study, the data on cross-border M&A deals for the period 2000 to 2022 is obtained from Eikon, an interface that contains databases from ThomsonONE and Datastream. ThomsonONE includes over one million M&A deals by approximately 300,000 US-target firms and 700,000 non-US targets since the 1970s. Datastream contains global financial and macroeconomic time-series data on equity, stock market indices, currencies, company fundamentals and key economic indicators for 175 countries and 60 markets. From the abovementioned databases, M&A deal-related data is extracted such as announcement date, deal value, type of acquisition, name of acquiring and target firm, the countries the firms are based on and financial information about the acquiring and target firm.

3.2 Sample Description

The sample period starts from 2000 as many emerging economies started to promote foreign investments via changes in investment policies during the late 1990s. For instance, in 1997 the Brazilian Trade and Investment Promotion Agency (ApexBrasil) was founded which aims to help attract foreign direct investment and support national companies to invest abroad ([ApexBrasil, n.d.](#)). Another example is the implementation of the “Go out Policy” in 1999 by the Chinese government to promote FDI, achieve product diversification and brand recognition, and expand their financial channels. However, throughout the past 20 years, foreign investment strategies have continued to be implemented. In 2013, China initiated the Belt and Road Initiative (BRI), a strategy that seeks to connect Asia, Africa and Europe with an extensive land and sea network to improve integration between regions and increase trade and promote economic growth. As a result, the sample period of 2000 to 2022 will capture the favourable investment climate that encourages EMFs to pursue acquisition-based investments abroad.

The limited research that has been done on the impact of cross-border M&A on the financial performance of acquiring EMFs has led to generalizations. The majority of the research on cross-border acquisitions by EMFs has only looked at Chinese and Indian acquirors ([Gubbi et al., 2010](#); [Ning et al., 2014](#)). This is because only companies from one country were included in the sample selection. For example, Chinese companies might not be the most realistic depiction of emerging markets, according to [Deng and Yang's \(2015\)](#) analysis. This is due to the divergent preferences Chinese investors have for the effectiveness of the host government in comparison to those of other emerging markets. Thus, it is important to be cautious when extrapolating Chinese cross-border M&A agreements to other EMFs. This study focuses on a broader sample of acquiring firms from the known BRICS countries, that is Brazil, Russia, India, China and South Africa. These five countries are the largest emerging market economies making up the highest concentration of EMFs on each continent and contributed 76% and 60% of OFDI (“[World](#)

[Investment Report 2022," 2022](#)) and GDP ([IMF, 2022](#)) in emerging economies in 2020, respectively. By excluding any country-specific features that might not be relevant to the entire population, this data selection process gives a more accurate depiction of emerging economies. Additionally, employing a sample of the BRICS nations enables the analysis of the political, social, and economic dynamics of these economies and gives more representative results for the population of EMFs.

3.3 Sample Criteria and Sample Size

The cross-border M&A deals by acquiring firms from the BRICS countries should meet the following criteria: (i) only mergers or acquisition deals are included; (ii) the announcement date lies between the period 1st of January 2000 to 31st of December 2022; (iii) the acquiring firm's nation is one of the BRICS countries; (iv) the deals are fully completed; (v) the acquiring firms are listed companies; (vi) the deal value is at least 50 million USD, to consider only contributive cross-border acquisitions; and (vii) the acquiring firm gets an ownership of at least 50%, calculated as the number of common shares acquired in the transaction plus any shares previously owned by the acquiror, divided by the total number of shares outstanding. Controlling for these criteria we have a sample of 822 cross-border M&A deals. From the ThomsonOne database. The final sample ended up with a 625 cross-border M&A deals, after excluding deals by acquiring firms with missing stock market information from Datastream.

3.4 Variable Description

In this section, the variables of interest will be defined and described in detail. Based on the Hypothesis Development in section 2.3, our dependent variable is *Market Performance*, our independent variables are *Industry Relatedness*, *Geographical Distance*, *Cultural Distance* and *Political Environment* and finally, the control variables are *Deal Value*, *Ownership Stake*, *Target Status* and *Financial Crisis* indicator. [Appendix B1](#) summarizes the variables used in this study and gives detailed information on the type of variable and the method of measure.

3.4.1 Dependent Variable

To conduct our analysis, the dependent variable used to measure *Market Performance* is the Abnormal Returns (ARs) on the stock price of the acquiring firm. ARs will be measured using the event study method around the date of the announcement. An event study is one of the methods that can isolate the event effect and market reaction and capture the abnormal returns created upon the announcement of the cross-border M&A. Specifically, the ARs are calculated based upon an estimation window of available stock price data no later than 1 year before the announcement to establish the expected average returns of the acquiring firm's stock. Then, using as a benchmark the MSCI Emerging Market Index, we calculate

the ARs of the stock using the CAPM asset pricing model. The ARs are calculated as follows:

$$AR_{it} = R_{it} - (a + \beta_i R_{mkt})$$

where AR_{it} is the abnormal returns, R_{it} is the actual daily return of the stock for firm i on day t , and R_{mkt} is the daily return of the MSCI Emerging Market Index, an index of 24 emerging market countries in which the BRICS countries account more than 50% of the index ([MSCI, 2023](#)).

In Hypothesis 1, we evaluate the short-term performance of the acquiring firm due to the announcement of the acquisition. Assuming that markets are at least of a semi-strong form of efficiency, the efficient market theory states that the market prices already incorporate all publicly available information, including the event studied. However, information can be incorporated into the market prices immediately, with a delay or preceding of an event day. This is because financial markets are forward-looking, therefore any anticipations or information leakages are also incorporated into the price. As a result, many researchers use event windows around the event date (announcement date) to capture the full effect of the market reaction. In this study, three-day, five-day, and eleven-day event windows are chosen around the cross-border M&A announcement in order to calculate the CARs of the acquiring company's stock price ([Aybar & Ficici, 2009](#); [Tao et al., 2017](#)). The CARs are calculated as follows:

$$CAR_t = \sum_{t=1}^n AR_t$$

where CAR_t is the cumulative abnormal return for the period $t = \text{day } 1$ until $t = \text{day } n$ in the event window.

3.4.2 Independent Variables

Industry Relatedness

To test for Hypothesis 2, the independent variable *Industry Relatedness* is measured using the Standard Industrial Classification (SIC) system. The SIC system is used to provide a standardized framework to categorize companies into industries, where the 4-digit SIC codes are given for each company. The first 2 digits identify the Major industry the company is part of, the 3rd digit identifies the Primary industry of a company, and the 4th digit shows the Specific industry of the company. In this analysis, *Industry Relatedness* will be measured as a categorical variable which *Industry Relatedness* = 3 if the acquiring and target companies are in the same Primary industry (3-digits are the same), *Industry Relatedness* = 2 if the acquiring and target companies are in the same Major industry (2- digits are the same) and *Industry Relatedness* = 1 if the acquiring and target companies are not related.

Geographical Distance

Testing for Hypothesis 3a, the independent variable *Geographical Distance* is measured using [Mayer & Zignago \(2011\)](#) database from the study about Bilateral trade distance. The variable is calculated by the great circle formula which uses the latitudes and longitudes of the official capital city of each country to measure the geographical distance between two countries. *Geographical Distance* is measured as shown below:

$$\begin{aligned} \text{Geographical Distance} &= \text{Earth's radius} \\ &* \cos^{-1}[\cos(\text{Latitude}_a) * \cos(\text{Latitude}_b) \\ &* \cos(\text{Longitude}_a - \text{Longitude}_b) + \sin(\text{Latitude}_a) * \sin(\text{Latitude}_b)] \end{aligned}$$

where Latitude_a is the latitude of country's *a* official capital city, Latitude_b is the latitude of country's *b* official capital city, Longitude_a is the longitude of country's *a* official capital city, and Longitude_b is the longitude of country's *b* official capital city.

Cultural Distance

To test for Hypothesis 3b, we are using the independent variable *Cultural Distance*, a self-constructed index using 3 dimensions of cultural distance, i.e., linguistic differences, religious differences and historical ties. Each of these variables is a dummy variable where *Linguistic Differences* = 1 if the two countries have different official languages and 0 otherwise, *Religious Differences* = 1 if the two countries have different official religions and 0 otherwise, and *Historical Ties* = 1 if the two countries **do not** have a colonial relationship and 0 otherwise. The variables *Linguistic Differences* and *Historical Ties* are extracted from the dataset by [Mayer & Zignago \(2011\)](#) and the variable *Religious Differences* is extracted from the database by [Pew Research Center \(2015\)](#). Then, the index *Cultural Distance* is calculated as follows:

$$\text{Cultural Distance} = \text{Linguistic Differences} + \text{Religious Differences} + \text{Historical Ties}$$

where *Cultural Distance* becomes a categorical variable with *Cultural Distance* = 3 if the two countries have a high degree of cultural distance, *Cultural Distance* = 2 if the two countries have a moderate degree of cultural distance, *Cultural Distance* = 1 if the two countries have a low degree of cultural distance, and *Cultural Distance* = 0 if the two countries are culturally the same.

Political Environment and Governance

Hypothesis 4 is tested using the independent variable *Political Environment* which is measured using the World Governance Indicator (WGI). This index aggregates six dimension of governance and political stability, such as voice and accountability, regulatory quality, political stability and absence of violence, rule of law, government effectiveness and control of corruption ([Kaufmann et al., 2010](#)). Each dimension

has a range from -2.5 to +2.5, thus the aggregate index has a range from -15 to +15. The index represents high quality of political environment and governance of a country with higher index values.

3.4.3 Control Variables

In order to reduce confounding effects, increase the precision of results and address any potential omitted variable bias, we are including control variables in the regression analysis. One of the control variables used in this analysis is *Deal Value* of the acquisition, which has shown to have a significant effect in previous literature ([Ahern et al., 2020](#)). Furthermore, the control variable *Ownership Stake* measured as the percentage of total shares of the target owned by the acquiring firm after the acquisition, can be viewed as a factor that can influence the market performance of the acquiring firm. If a company acquires a high percentage of a target, it is then exposed to the target company's risk profile to a higher degree. In this study we also control for the effect of the target firm's status through the variable *Target Status*, that is if the target firm is public, private, a subsidiary, a government-owned business or a joint venture ([Aybar & Ficici, 2009](#)). Lastly, we add a control for the effect of a financial crisis during the year of the announcement in the following way; *Financial crisis* is a dummy variable indicating 1 if the year of the announcement was a financial crisis year and 0 otherwise. Particularly, a financial crisis year is defined in this context as the year in which a stock market crash or bubble occurred. In the sample period we identify the following years as financial crisis years; 2000 the Dot-Com bubble, 2007 - 2008 the financial crisis due to failures of large financial institutions in the US, 2015 the Chinese stock market crash, and 2020 – 2021 the recession due to COVID-19 lockdowns. The choice of the *Financial Crisis* control variable stems from the fact that existing literature focused on the period between 2000 and 2007, in-between the Dot Com bubble and the financial crisis in 2007-2008 ([Boateng et al., 2008](#); [Aybar & Ficici, 2009](#); [Gubbi et al., 2010](#); [Singla et al., 2012](#)). Therefore, by controlling for the abovementioned factors we expect to see an effect on the CARs of the acquiring firms around the date of the announcement.

3.5 Data Sample Analysis

The final data sample of this study contains 625 cross-border M&A deals completed by EMFs based on the BRICS during the period 2000-2022. Figure 1 illustrates the total number of deals and the total deal value per year conducted by EMFs in the sample. The number of cross-border acquisitions followed an increasing trend from 2000 to 2007, with a sharp increase in the number of deals and total deal value in 2006. This could be due to multiple reasons such as the increasing trend in globalization and outward FDI from emerging markets and the favourable investment environment. However, the financial crisis of 2007-2008 created a downturn in acquisitions and investments abroad for the following few years, reaching a 10-year low of \$6.6 billion in deal values in 2013. Many fluctuations have occurred during the

sample period with the COVID-19 lockdowns in 2020-2021 reducing the number of deals conducted by EMFS to lowest levels; 11 deals in 2020, 23 in 2021, and 16 in 2022.

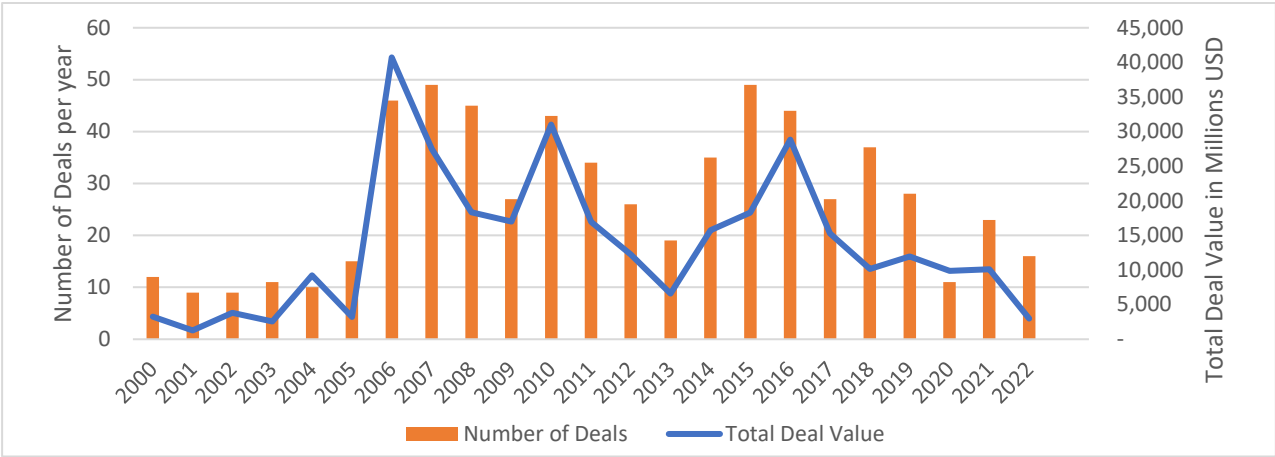


Figure 1 Number of Deals and Total Deal Value in the period 2000-2022 by acquiring firms from the BRICS

Analyzing each one of the BRICS countries separately, there are some differences to be taken into account when drawing conclusions in this study. [Table 1](#) presents an analysis on the cross-border deals per BRICS country during the period 2000-2022. China had the highest number of cross-border acquisitions of 238 in the examined period with an average deal value of 484.22 million USD and an average equity ownership stake of 90%. This can be justified from the attempts by the Chinese government to promote outward FDI in the late 1990s and beginning of 2000s and their continued involvement in foreign investments and international exposure during the last 20 years (e.g., the Belt and Road Initiative in 2013). On the other hand, Brazil had only 62 cross-border deals, the lowest from the BRICS countries, however; with the highest average deal value of 858.83 million USD and the lowest equity ownership stake of 88%. This shows that Brazilian acquiring firms are willing to pay more for acquiring foreign companies possibly due to higher target size, higher target profitability or higher potential synergies.

Table 1 Analysis of cross-border M&A deals per BRICS country during the period 2000-2022

Acquiring firm's nation	Number of cross-border acquisitions	Average Deal Value (USD million)	Average Equity Ownership Stake (%)
Brazil	62	858.83	88%
Russia	73	706.92	88%
India	141	336.60	93%
China	238	484.22	90%
South Africa	111	445.68	90%
Total	625	507.24	90%

3.6 Descriptive Statistics

[Table 2](#) reports the descriptive statistics of the variables presented in this study for the period 2000-2022 before any modifications or transformations have been done. The results show that the average CARs on the announcement of cross-border M&A for the EMFs is on average 0.01% for all event windows. It is important to mention that the CARs for the 11-day event window have only 620 observations due to the acquiring firm not being public for the whole 11-day event window around the announcement; thus, these cross-border deals have been dropped. Regarding the deal characteristics, on average cross-border acquisitions have a deal value of 507 million USD and an average ownership stake of 90%. Moreover, the average cross-border M&A by EMFs is an acquisition of a similar-industry business, which is located approximately 7.4 thousand km from the acquiring firm's country and has an almost similar cultural background as the acquiring firm. The target firm is on average a private or a subsidiary company based on a country with a fairly average political environment and governance score of 5.66. An important note for the variable *Political Environment* is that it has only 584 observations. This is due to the WGI data being unavailable for the years 2000, 2001 and 2022, and for the country British Virgin Islands. Lastly, we observe the probability of the cross-border deals examined taking place during a financial crisis year is 30%, which indicates that most of the cross-border deals will not show a financial crisis effect.

Table 2 Descriptive Statistics (Before Modifications)

Variables	Obs	Mean	Std Dev	Median	Min	Max
CAR3day	625	0.01	0.07	0.001	-0.25	0.70
CAR5day	625	0.009	0.09	0.002	-0.32	0.66
CAR11day	620	0.008	0.13	0.000	-0.78	1.44
Ind Relatedness	625	1.96	0.88	2	1	3
Geo Distance	625	7,413.27	3,896.53	7,831.14	256.25	19,297.47
Cultural Distance	625	0.57	0.68	0	1	2
Political Environment	584	5.66	4.74	7.54	-9.47	11.18
Deal Value	625	507.24	1,134.08	187.85	50	17,153.35
Ownership Status	625	0.90	0.17	1	0.5	1
Target status	625	2.39	0.85	3	1	5
Financial Crisis	625	0.30	0.46	0	0	1

3.7 Normality Check

After testing for normality of the variables using histograms and scatterplots, the variables *Deal Value*, showed a non-normal right-skewed distribution, presented in the left figure in [Appendix B2](#). To fix for the skewness, a zero-skewness log transformation has been applied (Engle-Warnick & Laszlo, 2017) as such:

$$New_variable_A = \ln (variable_A - k)$$

where k is chosen so that the skewness of the new variable is zero. Therefore, *Deal Value* is now transformed to $Ln_DealValue = \ln (Deal\ Value - 47.65)$ with $k = 47.65$. The method of zero-skewness log transformation was the most appropriate transformation for the variable as other frequently used methods such as a log transformation were still generating a skewed non-normal distribution. [Appendix B3](#) presents the descriptive statistics of the variables after modifications and transformations have been applied.

3.8 Multicollinearity Check

An important test to conduct before testing for the hypotheses is a multicollinearity check; a statistical phenomenon where the independent variables are highly correlated with each other. This phenomenon causes many issues such as unstable coefficient estimates, reduced statistical power and difficulty interpreting individual effects of variables. Multicollinearity exists when two independent variables have a correlation close to $-/+ 1$. [Table 3](#) presents the correlation matrix of the variables of interest after modifications/transformations. The correlation matrix displays the pairwise correlations between independent variables where positive values indicate a positive correlation and negative values indicate negative correlation and values closer to zero indicate weaker or zero correlation. The threshold used to identify highly correlated independent variables is between 0.7 and 0.9. In [Table 3](#), the independent variables of interest are in rows (4) to (11). We observe no multicollinearity between the independent variables of this study, which suggested no issues in interpreting coefficient estimates.

Table 3 Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) CAR3day	1.00										
(2) CAR5day	0.86	1.00									
(3) CAR11day	0.56	0.75	1.00								
(4) Ind Relatedness	-0.01	-0.05	-0.07	1.00							
(5) Geo Distance	-0.08	-0.07	-0.06	0.002	1.00						
(6) Cultural Distance	0.01	-0.03	-0.02	-0.002	0.02	1.00					
(7) Political Environment	0.05	-0.01	-0.05	-0.16	0.22	0.09	1.00				
(8) Ln_DealValue	-0.12	-0.08	-0.03	0.02	-0.04	-0.02	-0.04	1.00			
(9) Ownership Percent	-0.04	-0.02	0.01	-0.04	0.11	0.06	0.14	0.01	1.00		
(10) Target status	-0.06	-0.05	-0.03	-0.10	-0.06	0.01	-0.05	-0.06	0.01	1.00	
(11) Financial crisis	0.01	-0.02	-0.05	-0.05	0.05	0.01	0.05	-0.03	0.07	-0.08	1.00

CHAPTER 4 Methodology

The research question will be empirically tested using the representative sample of 625 cross-border M&A deals through two statistical methods; a t-test and the ordinary least squares (OLS) regression method.

Hypothesis 1 will be empirically tested using a t-test to determine the significance of the CARs of the acquiring companies around the announcement date. If the CARs observed around the announcement are significantly different from zero, then we can conclude that the CARs have a significant impact on the market performance of the acquiring firm. The test statistic of this method is as follows:

$$t_{CAR} = \frac{CAR}{s_{CAR}/\sqrt{n}}$$

where S_{CAR} is the standard deviation of the CARs and n the number of days in the event window.

The method of OLS regression will be tested for each of the BRICS countries separately to differentiate the country-specific effects of each independent variable on the CARs of the acquiring firm. Precisely, Hypothesis 2 of the effect of *Industry Relatedness* of the cross-border acquisition on the CARs will be tested as follows:

$$Market\ Performance_i = a + \beta_i Industry\ Relatedness_i + Control\ Variables + \epsilon_i$$

Hypothesis 3a of the effect of *Geographical Distance* of the acquiring and target firm on the CARs of the acquiring firm will be studied in the following manner:

$$Market\ Performance_i = a + \beta_i Geographical\ Distance_i + Control\ Variables + \epsilon_i$$

Hypothesis 3b of the effect of the *Cultural Distance* between the acquiring and target firm on the CARs will be examined with the regression below:

$$Market\ Performance_i = a + \beta_i Cultural\ Distance_i + Control\ Variables + \epsilon_i$$

Hypothesis 4 of the effect of the *Political Environment* of the target firm on the CARs will be tested as follows:

$$Market\ Performance_i = a + \beta_i Political\ Environment_i + Control\ Variables + \epsilon_i$$

By analyzing each BRICS country separately, we end up with a small sample size for each hypothesis. This might cause the coefficient estimates to be incorrect. Therefore, a robust regression, that is a form of weighted and reweighted OLS regression, will also be used to examine if any potential big outliers or

influential data points distort the coefficient estimates. The robust regression first performs a screening using Cook's Distance, calculated as follows:

$$D_i = \frac{\sum_{j=0}^n (Y_j - Y_{j(i)})^2}{(p + 1)\sigma^2}$$

where Y_j is the j th fitted response value, $Y_{j(i)}$ is the j th fitted response value, where the fit does not include observation i , p is the number of regression coefficients and σ is the Mean Square Error based on all observations. Observations with Cook's Distance > 1 are outliers and are therefore dropped. Then the robust regression performs Huber iterations and biweight iterations to assign weights to each observation based on their influence.

CHAPTER 5 Results & Discussion

5.1 Statistical Results

In this section, statistical results and interpretations will be discussed regarding the hypotheses developed in the previous sections.

5.1.1 t-test Results

Statistical results about the market reaction on the announcement of the cross-border M&A by EMFs are presented in [Table 4](#). Hypothesis 1 was tested over 3 different event windows, namely 3-day, 5-day and 11-day event windows for the 5 countries consisting the BRICS nations. The results show different market reaction for acquiring firms of the 5 researched countries. Specifically, the results for the Brazilian acquiring firms show non-significant negative CARs of approximately -0.01% over all event windows. Similar, negative and insignificant results are also found for South African firms with an average of -0.001% CARs over all event windows. Russian acquiring firms showed significant negative abnormal returns of -0.028% only for the 11-day event window at the 5% significance level. However, Chinese and Indian acquiring firms have opposite findings; positive and significant market reactions over at least the 3-day and 5-day event windows at the 5% significance level. Precisely, Chinese acquiring firms have an average of 0.024% of CARs and Indian acquiring firms have lower CARs of 0.012%.

Table 4 Cumulative Abnormal Returns (CARs) of BRICS acquiring firms for 2000-2022

CARs	Obs	Mean	Std Error	Positive: Negative	t statistic	p-value	Decision
<i>Panel A: Brazilian acquiring firms</i>							
(-1, +1)	62	-0.012	0.009	22:40	-1.28	0.21	Do not reject H0
(-2, +2)	62	-0.014	0.009	24:38	-1.57	0.12	Do not reject H0
(-5, +5)	62	-0.004	0.012	27:35	-0.30	0.77	Do not reject H0
<i>Panel B: Russian acquiring firms</i>							
(-1, +1)	73	-0.004	0.007	33:40	-0.52	0.60	Do not reject H0
(-2, +2)	73	-0.009	0.008	32:41	-1.12	0.27	Do not reject H0
(-5, +5)	70	-0.028	0.012	24:46	-2.37**	0.02	Reject H0 at 5%
<i>Panel C: Indian acquiring firms</i>							
(-1, +1)	141	0.012	0.005	78:63	2.50	0.014**	Reject H0 at 5%
(-2, +2)	141	0.014	0.006	75:66	2.19	0.03**	Reject H0 at 5%
(-5, +5)	141	0.010	0.009	72:69	1.04	0.30	Do not reject H0
<i>Panel D: Chinese acquiring firms</i>							
(-1, +1)	238	0.024	0.006	137:101	4.28	0.000***	Reject H0 at 1%
(-2, +2)	238	0.023	0.007	135:103	3.29	0.001***	Reject H0 at 1%
(-5, +5)	236	0.024	0.011	128:108	2.13	0.03**	Reject H0 at 5%
<i>Panel E: South African acquiring firms</i>							
(-1, +1)	111	-0.001	0.005	55:56	-0.25	0.81	Do not reject H0
(-2, +2)	111	-0.001	0.006	56:55	-0.12	0.90	Do not reject H0
(-5, +5)	111	-0.001	0.008	59:52	-0.14	0.89	Do not reject H0

Note. *p < 0.1, **p < 0.05, ***p < 0.01

5.1.2 Regression Results

Brazilian acquiring firms

To analyze the market performance of Brazilian acquiring firms, we ran two types of regressions, namely the OLS regression and the robust regression. [Table 5](#) presents the robust regression results of acquiring firms from Brazil. From the 3-day and 5-day event window 2 observations have been dropped as outliers and 3 observations for the 11-day event window. The results show that all independent variables have no significant results at any event window. However, the control variable *Ownership Stake* has at 10% significance level a negative effect of -0.097 on the CARs at the 11-day event window. This can be interpreted as an increase in the percentage of equity owned by the acquiring firm decreases CARs by -9.7%. Results from the OLS regression for the Brazilian acquiring companies can be found in [Appendix C1](#). The OLS regression coefficients have slight differences with the robust regression results, indicating that the observations dropped have some influence on the estimates.

Table 5 Robust Regression Results of Brazilian acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel A: Brazilian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.001 (0.009)	0.006 (0.01)	0.005 (0.01)
Geographical Distance	-0.003 (0.007)	-0.006 (0.008)	-0.007 (0.01)
Cultural Distance	-0.012 (0.01)	-0.003 (0.02)	-0.03 (0.02)
Political Environment	0.001 (0.002)	0.001 (0.002)	0.002 (0.003)
<i>Control Variables</i>			
Ln_DealValue	-0.004 (0.005)	-0.004 (0.005)	-0.005 (0.006)
Ownership stake	-0.004 (0.04)	0.050 (0.04)	0.097* (0.05)
Target status	0.001 (0.009)	0.001 (0.01)	-0.003 (0.01)
Financial crisis	0.006 (0.01)	0.006 (0.02)	0.009 (0.02)
Constant	0.013 (0.06)	-0.039 (0.07)	-0.05 (0.08)
N	59	59	59
R ²	0.03	0.06	0.12

Note. Standard errors in parentheses. *p < 0.1, **p < 0.05, ***p < 0.01

Russian acquiring firms

[Table 6](#) demonstrates the robust regression results for Russian acquiring firms with 3 dropped observations for the 3-day event window and 1 observation dropped for the 5-day and 11-day event window. *Geographic Distance* has significant negative effect at 10% significance level of -0.019 at the 11-day event windows. This indicates that the market reacts negatively on average of -1.9% to cross-border acquisitions of target firms that are located at a bigger geographical distance from the acquiring firm. Furthermore, *Cultural Distance* shows significant results of 0.014 and 0.025 at the 5% and 10% significance level, for the 3-day and 11-day event windows, respectively. From these results, it can be concluded that Russian acquiring firms gain positive CARs upon the announcement of a cross-border acquisition with a target company with a different cultural background. In [Appendix C2](#), the OLS regression results are presented which indicate that the robust regression accounts for the outliers in the sample.

Table 6 Robust Regression Results of Russian acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel B: Russian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	0.004 (0.005)	-0.008 (0.008)	0.001 (0.01)
Geographical Distance	-0.003 (0.004)	-0.009 (0.006)	-0.019* (0.009)
Cultural Distance	0.014** (0.06)	0.009 (0.01)	0.025* (0.01)
Political Environment	0.001 (0.001)	0.000 (0.001)	-0.000 (0.002)
<i>Control Variables</i>			
Ln_DealValue	-0.000 (0.003)	-0.001 (0.004)	-0.001 (0.007)
Ownership stake	-0.03 (0.02)	-0.03 (0.04)	-0.071 (0.05)
Target status	0.002 (0.004)	-0.005 (0.007)	-0.01 (0.01)
Financial crisis	-0.005 (0.008)	-0.01 (0.01)	-0.03 (0.02)
Constant	0.01 (0.03)	0.05 (0.05)	0.09 (0.07)
N	69	69	66
R ²	0.17	0.08	0.20

Note. Standard errors in parentheses. *p < 0.1, **p < 0.05, ***p < 0.01

Indian acquiring firms

[Table 7](#) presents the robust regression results of cross-border acquisitions by Indian firms during the period 2000-2022 with 2 observations dropped. *Cultural Distance* has a significant effect on the CARs of the acquiring firm at the 5% significance level, with positive effects of 0.022 and 0.027 at the 3-day and 5-day event windows respectively, and a positive effect of 0.064 at 1% significance level at the 11-day event window. This indicates that Indian acquiring firms acquiring a target company that is more culturally different from acquiring firms will generate positive CARs on average. Furthermore, positive results can be seen for the independent variable *Geographical Distance* with a positive effect of 0.012 on the 5-day event window at the 5% significance level. This indicates that acquiring firms gain on average 1.2% when the target firms are based in countries further away from the acquiring firm's headquarters. Additionally, some control variables are observed to have significant effect on the CARs of Indian acquiring firms such as the *Deal Value* at the 5-day and 11-day event window, *Ownership Stake* at the 11-day event window, *Target Status* at the 3-day event window and *Financial Crisis* at the 11-day event window. In [Appendix C3](#) the results of the OLS regression are presented which show different results from the robust regression, indicating that influential observations are present.

Table 7 Robust regression results of Indian acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel C: Indian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.008 (0.006)	-0.012* (0.007)	-0.010 (0.009)
Geographical Distance	-0.003 (0.004)	-0.005 (0.004)	0.012** (0.006)
Cultural Distance	0.022** (0.01)	0.027** (0.01)	0.064*** (0.02)
Political Environment	-0.000 (0.001)	-0.000 (0.002)	-0.003 (0.002)
<i>Control Variables</i>			
Ln_DealValue	-0.001 (0.003)	-0.006* (0.003)	-0.011** (0.005)
Ownership stake	0.011 (0.03)	0.059 (0.04)	0.14** (0.05)
Target status	-0.013** (0.006)	-0.010 (0.007)	-0.000 (0.01)
Financial crisis	-0.003 (0.009)	-0.003 (0.01)	-0.027* (0.02)
Constant	0.024 (0.04)	-0.006 (0.05)	-0.16 (0.07)
N	132	132	132
R ²	0.09	0.12	0.18

Note. Standard errors in parentheses. *p < 0.1, **p < 0.05, ***p < 0.01

Chinese acquiring firms

Robust regression results for the Chinese acquiring firms are shown in [Table 8](#). The only significant independent variable is *Geographical Distance* with negative effects of -0.006, -0.008 and 0.008 at the 5%, 1% and 10% significance level at the 3-day, 5-day and 11-day event windows, respectively. These results depict that acquisitions of targets located at a larger distance from the acquiring firm will produce negative CARs for the Chinese acquirors. Furthermore, the results indicate significant effect of the control variable *Ownership Stake* for the 5-day event window at the 10% significance level. [Appendix C4](#) presents the OLS regression results for Chinese firms. Despite that the robust regression dropped 9 observations, there are small differences between the OLS and the robust regression results such as the control variable *Ownership stake* having a significant coefficient under the robust regression.

Table 8 Robust regression results of Chinese acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel D: Chinese acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.001 (0.005)	-0.007 (0.006)	-0.000 (0.008)
Geographical Distance	-0.006** (0.003)	-0.008*** (0.003)	-0.008* (0.005)
Cultural Distance	-0.004 (0.008)	-0.004 (0.01)	-0.003 (0.01)
Political Environment	-0.000 (0.001)	-0.002 (0.001)	0.000 (0.002)
<i>Control Variables</i>			
Ln_DealValue	-0.003 (0.003)	-0.003 (0.003)	0.002 (0.004)
Ownership stake	-0.032 (0.03)	-0.051* (0.03)	-0.042 (0.04)
Target status	-0.003 (0.005)	-0.006 (0.006)	0.002 (0.009)
Financial crisis	0.000 (0.009)	-0.01 (0.01)	-0.014 (0.02)
Constant	0.084 (0.03)	0.14 (0.04)	0.066 (0.05)
N	231	231	229
R ²	0.03	0.07	0.01

Note. Standard errors in parentheses. *p < 0.1, **p < 0.05, ***p < 0.01

South African acquiring firms

[Table 9](#) presents the robust regression results of cross-border acquisition by South African firms in the period 2000-2022. *Cultural Distance* is the sole significant effect on CARs for South African acquiring firms. Specifically, at the 10% significance level a positive effect of 0.018 on the 3-day event window suggests that cross-border acquisition of target firms with a larger cultural difference from South African firms will generate positive abnormal returns by the stock market. Furthermore, the control variable *Financial Crisis* has a significant negative effect on the CARs of South African acquiring firms at the 3-day event window at the 10% significance level. Comparing the robust regression results with the OLS regression results in [Appendix C5](#), we conclude that there are very small differences between the two methods as only 1 observation is dropped only for the 3-day event window. Therefore, both regression results give good average estimates of the coefficient of the models.

Table 9 Robust regression results of South African acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel E: South African acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	0.009 (0.005)	0.007 (0.008)	0.005 (0.01)
Geographical Distance	0.001 (0.006)	0.003 (0.008)	-0.009 (0.01)
Cultural Distance	0.018* (0.009)	0.013 (0.01)	0.004 (0.02)
Political Environment	-0.001 (0.001)	-0.002 (0.002)	-0.001 (0.006)
<i>Control Variables</i>			
Ln_DealValue	0.002 (0.003)	-0.001 (0.004)	-0.002 (0.006)
Ownership stake	-0.000 (0.03)	0.006 (0.04)	0.034 (0.05)
Target status	-0.001 (0.004)	0.003 (0.007)	0.006 (0.009)
Financial crisis	-0.02* (0.01)	-0.025 (0.02)	-0.014 (0.02)
Constant	-0.023 (0.03)	-0.012 (0.05)	-0.001 (0.07)
N	93	93	93
R ²	0.13	0.08	0.06

Note. Standard errors in parentheses. *p < 0.1, **p < 0.05, ***p < 0.01

4.2 Hypotheses Discussion

From the findings of the statistical results in section 4.1, this section will conclude on the discussion regarding the hypotheses and mention some concluding remarks.

Hypothesis 1

Results of Hypothesis 1 confirm that each one of the BRICS nations have a different market reaction to cross-border M&A announcements, with Chinese and Indian firms having a positive market reaction and Brazilian, Russian and South African firms having a negative market reaction. Therefore, Hypothesis 1 is rejected for the sample population of acquiring firms from Brazil, Russia and South Africa. On the other hand, the results for Chinese and Indian acquiring firms are in line with Hypothesis 1 as most literature shows ([Boateng et al., 2008](#); [Gubbi et al., 2010](#); [Ning et al., 2014](#); [Du and Boateng, 2015](#); [Tao et al., 2017](#); [Lin et al., 2020](#); [Zhang et al., 2020](#); [Jain et al., 2021](#)). Consequently, EMFs should be investigated and studied separately per emerging country since merging results of all emerging countries can create incorrect and inaccurate findings.

Hypothesis 2

Hypothesis 2 states that if the acquiror and target firm are related by industry, the cross-border acquisition will result in a positive market reaction. Based on the findings of the statistical results the hypothesis is rejected for Brazilian, Russian, Chinese and South African acquiring companies as they have shown insignificant results. On the other hand, Indian acquiring firms had negative significant results of *Industry Relatedness* on CARs at the 5-day event window, rejecting the hypothesis. This shows that in the sample studied, cross-border acquisition by EMFs have shown to have no effect on the type of acquisition in terms of industry. On the contrary, the literature has shown non-concluding findings on the effect of *Industry Relatedness* on CARs. [Zhang et al. \(2020\)](#) concluded that cross-border acquisitions by Chinese firms with a higher level of industry relatedness with the target have positive abnormal returns and on the other hand, [Aybar & Ficici \(2009\)](#) showed negative abnormal returns for acquiring firms of 13 emerging markets.

Hypothesis 3a

Hypothesis 3a states that the bigger the geographical distance between the acquiror and target firm in a cross-border acquisition, the more negative the market reaction. The regressions have showed different results for each BRICS country. Particularly, Brazilian and South African firms showed non-significant results, Russian and Chinese firms showed negative significant results and Indian firms showed positive significant results. In this hypothesis, we observe again different market reaction to the different emerging market, confirming that each country has different expectations and perceptions of cross-border acquisitions. Therefore, hypothesis 3a is accepted only for the sub-samples of Russian and Chinese cross-border acquisitions.

Hypothesis 3b

Next, hypothesis 3b, which states that cross-border acquisitions between firms with similar cultural background (smaller cultural distance) have a positive effect on CARs, is rejected for all acquiring firms. Specifically, firms from Russia, India and South Africa showed positive and significant results which indicates that the market perceives acquisitions of target firms with different religion, different official language and no historical ties as positive news and thus increasing CARs. Literature from [Aybar & Ficici \(2009\)](#) and [Ahern et al. \(2015\)](#) found opposite results; negative effect of cultural distance on CARs in cross-border acquisitions by EMFs examining samples of 13 and 35 emerging countries, respectively. Furthermore, we observe cultural distance to have no impact on the CARs of Brazilian and Chinese cross-border acquisitions which is line with the findings of other academics ([Nicholson and Salaber, 2013](#); [Du and Boateng, 2015](#); [Jain et al., 2021](#)).

Hypothesis 4

Lastly, hypothesis 4 states that target countries with high political stability and good governance have a positive effect on the market performance of the acquiror. Based on the regression results, all cross-border acquisitions from the BRICS countries have shown non-significant effect of *Political Environment* on the CARs. Our results contradict with the rest of the literature that political stability or institutional distance between the acquiror and target have a positive effect on the market performance of the acquiror ([Gubbi et al., 2010](#); [Du and Boateng, 2015](#); [Tao et al., 2017](#)). Therefore, hypothesis 4 in our analysis is rejected for the sample period studied.

4.3 Robustness check

In order to enhance the validity and credibility of the results of this research, a robustness check is completed on the proxy of *Cultural Distance*. The results in section 4.1 are based on a proxy for *Cultural Distance* which has been calculated using three measures of cultural background; religion, language and historical ties. However, most of the literature on cross-country cultural differences use the Hofstede's index of cultural dimensions ([Aybar & Ficici, 2009](#); [Nicholson and Salaber, 2013](#)). This index uses six dimensions of national cultural such as the Power distance index (PDI), Individualism vs. collectivism (IDV) index, Uncertainty avoidance index (UAI), Masculinity vs. femininity (MAS) index, Long-term orientation vs. short-term orientation (LTO) index and Indulgence vs. restraint (IND) index (Hofstede, 2001).

Appendix C6 to C9 present the robust regression results for each BRICS country using the Hofstede's index of cultural dimension as a proxy for *Cultural Distance*. Important to note is that the data for the Hofstede's index is limited to only a few countries, thus in our results countries without a value for the Hofstede's index are dropped. This also includes South Africa which is one of the main BRICS countries

in our analysis and therefore, the regression results for South African acquiring firms had been dropped. Due to the lack of data availability on the Hofstede's index, the reliability of our results is thus being reduced.

[Appendix C6](#) presents the regression results for Brazilian acquiring firms and it can be observed that none of the independent variables has significant effects. Analyzing the results for Russian acquiring firms (see [Appendix C7](#)), *Geographical Distance* has negative significant effects at the 1% significance level for the 11-day event window which is in line with findings in our main analysis in [Table 6](#). However, the variable *Cultural Distance* has negative significant effects at the 5% significance level for the 5-day event window. This shows that the Hofstede's index gives contrasting results for Russian acquiring firms in the period studied. In [Appendix C8](#), the regression results for Indian acquiring firms show non-significant effects for any variable of interest except from the control variables *Deal Value* and *Ownership stake* at the 11-day event window and *Target status* at the 3-day event window. Compared to the main results in [Table 7](#), using the Hofstede's index as a proxy for *Cultural Distance* the model loses significant effects of the variables *Industry Relatedness*, *Geographical Distance* and *Cultural Distance*. Finally, the regression results for Chinese acquiring firms presented in [Appendix C9](#) show that using a different proxy for *Cultural Distance* only *Geographical Distance* has a negative significant effect in the model which is in line with the findings in [Table 8](#).

Comparing the findings from the robustness check and the regression results in section 4.1, it can be concluded that the proxy of *Cultural Distance* using the three dimensions of religion, language and historical ties is a better measure in this sample and the main results are robust and valid.

CHAPTER 5 Conclusion

Since the early 2000s, emerging markets have seen an upward trend regarding the volume of cross-border M&A deals conducted. Many scholars have investigated these acquiring firms since that period and have determined which factors influence the decisions of firms to acquire target overseas ([Erel et al., 2012](#); [Deng and Yang, 2015](#); [Labbas et al., 2018](#)). This investigation has been turned also towards to market performance of these acquiring firms and towards which factors influence the gains or losses generated during the announcement period of the acquisitions. However, most of the literature has only examined cross-border M&A by Indian and Chinese firms ([Gubbi et al., 2010](#); [Ning et al., 2014](#)). In order to expand the research of cross-border acquisitions by EMFs, this study investigates a broader sample of emerging countries called the BRICS, representing Brazil, Russia, India, China and South Africa. This sample of countries is considered the largest concentration of EMFs on each continent and contribute to high percentages of OFDI and GDP of the emerging countries population. Therefore, the main research question studied in this research is “How do cross-border M&A deals affect the financial performance of the acquiring emerging market firms based in the BRICS countries”.

In this study, we investigate the market performance of acquiring firms that engage in cross-border M&A during the period 2000 to 2022. Our sample contains 625 acquisitions by EMFs based in the BRICS countries. The sample’s preliminary analysis shows that the highest number of acquisitions during the period is by Chinese acquiring firms. This is possibly due to the increasing number of foreign policies and initiatives by the government of China to increase OFDI and improve their competitive position in the global market over the last two decades. Furthermore, our sample’s unique aspect is the different patterns the cross-border M&A follow throughout the sample period. These patterns are associated with the economic, financial, political and worldwide events, such as the OFDI policy implementations by emerging countries during the later 1990s and early 2000s, the 2008 financial crisis and the COVID-19 pandemic during the period 2020-2021. Thereupon, our sample of cross-border acquisitions differs from the prevailing studies in the literature. In order to analyze the market performance of acquiring firms in our sample, an event study is conducted. Specifically, we look at the CARs around the date of the announcement of the acquisitions in the 3-day, 5-day and 11-day event windows. Then, we carry out a robust regression analysis for the subsamples of each BRICS country to evaluate the effects of *Industry Relatedness*, *Geographical Distance*, *Cultural Distance* and *Political Environment* on the market performance of the acquiring firms. This method facilitates in separating any country-specific characteristics that have an impact on the market reaction of the cross-border acquisitions.

Our findings confirm that acquiring firms from each of the emerging countries studied have different market responses on the characteristics of the cross-border acquisitions. Particularly, we observe that the target firm’s industry does not have any significant effect on the abnormal returns of the acquiring firm

except from Indian acquiring firms that have a negative effect on the relatedness of the target's industry. Geographical distance between the target and acquiror also plays a significant role in the market performance of the acquirors with a positive market reaction in the sample of Indian firms and negative market reactions in the sample of Russian and Chinese firms. Regarding the cultural differences between the target and acquiring firms we observe Russian, Indian and South African cross-border acquisitions to gain abnormal returns from a bigger cultural distance from the target. Lastly, the political environment and governance of the target firm's country showed no effect on the CARS of acquiring firms of any BRICS country studied. These results illustrate that cross-border acquisitions from EMFs should be studied separately in order to make concluding remarks on the market performance of acquiring firms.

Nevertheless, most of the literature studies cross-border acquisitions only by Indian and Chinese firms and makes generalizations for the whole emerging market population. Our findings confirm that the generalizations made in the literature might create incorrect conclusions about the rest of the emerging countries that have different market responses from Chinese or Indian firms. For instance, Indian firms react in the opposite directions regarding the industry relatedness of the target and Chinese firms react in the opposite directions in terms of the cultural distance between the target and acquiror from the rest of the BRICS countries.

Important to note for this study are a number of limitations, which are an excellent justification for conducting further research. Firstly, looking at the explanatory power of the statistical models we observe that robust regressions have an R^2 which is between 1% and 20% depending on the acquiring country and the event window studied. This indicates a relatively small explanatory power of the models, suggesting that omitted variables bias might be present. Secondly, the study lacks of generalizability to explain cross-border acquisitions in the emerging market population. In this study, we try to understand the emerging market population through the BRICS countries, however we anticipate that the differences observed between the emerging countries is a reason we cannot generalize our conclusions.

For further research, we suggested to study a number of different aspects in this research. Firstly, a broader sample of emerging countries can be studied for which similarities and differences between them can be identified in order to make generalized conclusions for the population. Secondly, a better proxy for *Cultural Distance* can be identified or created which can best explain the different aspects of cultural differences between countries. Thirdly, it would be interesting to study the period before the early 2000s to understand the impact of globalization and OFDI policy implementations in emerging markets in cross-border M&A. Finally, we suggest to research other factors that might influence the CARs of acquiring firms in emerging markets to be included in the statistical models to increase the explanatory power.

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APPENDIX A Literature Review

Table A1 A summary of existing literature on market performance effects of cross-border M&A

Acquiring firm's Market	Author(s), (Year)	Sample period	Sample details	Methodology	Findings
<i>Panel A Financial Performance of acquiring firm</i>					
China	Boateng et al. (2008)	2000-2004	27 cross-border deals	Event study (CARs)	Positive abnormal returns of 1.32%, for the (0, +1) event window and an average of 4.4274% for the (-20, +20) event window
13 emerging nations	Aybar & Ficici (2009)	1991-2004	433 cross-border deals	Event study (SCARs)	Negative abnormal returns of -0.09% and -0.12% for the (-1, +1) and (-1,0) event windows for the acquiring firm, respectively
India	Gubbi et al. (2010)	2000-2007	425 cross-border deals	Event study (CARs)	Positive abnormal returns of 2.58% over an 11-day event window
India	Singla et al. (2012)	2005-2008	15 cross-border deals	Long-term: regression analysis with ratios/ Short-term: Event study (CAARs)	Long-term financial performance and short-term stock performance show statistically insignificant results for the acquiring firm.
China	Ning et al. (2014)	1991-2010	355 cross-border deals	Event study (CARs)	Positive and statistically significant results from 0.61% to 1.05% over the 2- and 3-day event windows.
China	Du and Boateng (2015)	1998-2011	468 cross-border deals	Event study (SCARs)	Positive statistically significant abnormal returns of 0.48% to 1.52% over different event windows
China	Tao et al. (2017)	2000-2012	165 completed cross-border deals	Event study (CARs)	Positive abnormal returns of 0.84%, 0.89% and 1.22% for the (-1,0), (0, +1) and (-1, +1) event windows for the acquiring firm, respectively.
China and Hong Kong	Lin et al. (2020)	2010-2015	435 cross-border deals	Event study (CARs)	Positive abnormal returns of the range 1.46% to 1.68% for the (-1,0), (0, +1), (-1, +1) and (-2, +2) event windows for Chinese firms and insignificant results for Hong Kong
China	Zhang et al. (2020)	2000-2015	447 cross-border deals	Event study (CARs)	Positive abnormal returns of 0.01% for the acquiring firm
China and India	Jain et al. (2021)	2001-2017	533 Indian and 125 Chinese cross-border deals	Event study (CAARs)	Positive significant abnormal returns of 0.71% and 0.23% on the day of the announcement for Indian and Chinese firms respectively
<i>Panel B Industry Relatedness</i>					
13 emerging nations	Aybar & Ficici (2009)	1991-2004	433 cross-border deals	Event study (SCARs)	Negative abnormal returns of -0.55% for the (-2, +1) event window for the acquiring firm when purchasing a target from the same industry

China	Zhang et al. (2020)	2000-2015	447 cross-border deals	Event study (CARs)	Positive and significant abnormal returns of 0.034% when the acquirer and target have a higher level of industry relatedness
<i>Panel C Cultural Distance</i>					
13 emerging nations	Aybar & Ficici (2009)	1991-2004	433 cross-border deals	Event study (SCARs)/Culture measured through a proxy and Hofstede's index	Greater cultural distance leads to negative significant results for most event windows studied
34 nations (incl. Hong Kong, South Africa and other)	Chakrabarti et al. (2009)	1991-2000	405 cross-border deals	Event study/Buy-and-Hold abnormal returns (BHARs) and CARs	Acquisitions perform better in the long run if the target and acquirer have a bigger cultural distance. The positive effect of cultural distance is not captured in the short run/announcement period returns.
China and India	Nicholson and Salaber (2013)	2000-2010	310 Indian deals and 79 Chinese deals	Event study (CARs)/Hodstede's index	Cultural distance does not have significant effects for Chinese acquiring firms and do not benefit from countries with similar culture. Smaller cultural distance earns higher returns for Indian acquiring firms
35 nations (incl. the BRICS)	Ahern et al. (2015)	1985-2008	2,824 cross-border deals	Event study (CARs)/Culture measured through the World Value Survey (WVS)	Greater the cultural distance between two countries, the lower the abnormal returns for the acquirer and the target
China	Du and Boateng (2015)	1998-2011	468 cross-border deals	Event study (SCARs)	Positive but not statistically significant effect of cultural distance on abnormal returns
China and India	Jain et al. (2021)	2001-2017	533 Indian deals and 125 Chinese deals	Event study (CAARs)	Indian acquiring firms show negative significant effects of cultural distance on stock returns. China, however, shows positive insignificant results
<i>Panel D Political Environment & Governance</i>					
India	Gubbi et al. (2010)	2000-2007	425 cross-border deals	Event study (CARs)	Positive and significant results of institutional distance to abnormal stock returns
China	Du and Boateng (2015)	1998-2011	468 cross-border deals	Event study (SCARs)	Positive and significant effect of institutional distance to abnormal stock returns of the acquiring firm
China	Tao et al. (2017)	2000-2012	165 completed cross-border deals	Event study/Stock Market Reaction (CARs)	Positive and significant results for acquiring firms who purchase firms with a high level of political stability and governance quality

APPENDIX B Data Sample and Variables

Table B1 Variable Description

Variable Name	Function	Type	Description
CAR3day	Dependent	Continuous	CAR of the 3-day event window around cross-border M&A announcement
CAR5day	Dependent	Continuous	CAR of the 5-day event window around cross-border M&A announcement
CAR11day	Dependent	Continuous	CAR of the 11-day event window around cross-border M&A announcement
Industry Relatedness	Independent	Categorical	= 3 Same Primary SIC code = 2 Same Major SIC code = 1 Not Related
Geographical Distance	Independent	Continuous	Geographical distance between official capital cities of two countries measured by the great circle formula
Cultural Distance	Independent	Categorical	= 3 High Degree of Cultural Distance = 2 Moderate Degree of Cultural Distance = 1 Low Degree of Cultural Distance = 0 No Degree of Cultural Distance
Political Environment	Independent	Continuous	WGI ranging from -15 to +15
Deal Value	Control	Continuous	Deal Value of the cross-border M&A
Ownership Stake	Control	Continuous	Final ownership stake above 50%
Target status	Control	Categorical	= 1 Public firm = 2 Private firm = 3 Subsidiary firm = 4 Government-owned firm = 5 Joint venture
Financial Crisis	Control	Dummy	= 1 Financial Crisis during the announcement year = 0 No Financial Crisis during the announcement year

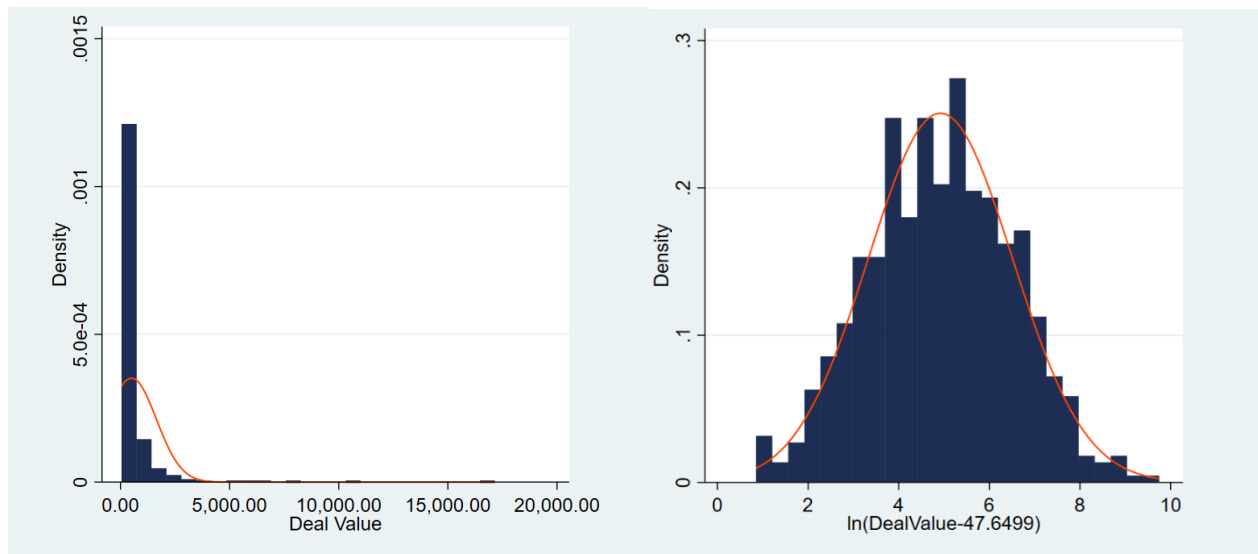


Figure B2 Histograms of *Deal Value* before and after zero-skewness log transformation

Table B3 Descriptive Statistics (After Modifications)

Variables	Obs	Mean	Std Dev	Median	Min	Max
CAR3day	625	0.01	0.06	0.001	-0.15	0.27
CAR5day	625	0.01	0.08	0.002	-0.19	0.33
CAR11day	620	0.01	0.11	0.000	-0.30	0.40
Ind Relatedness	625	1.96	0.88	2	1	3
Geo Distance	625	7,413.27	3,896.53	7,831.14	256.25	19,297.47
Cultural Distance	625	1.51	0.66	1	1	3
Political Environment	584	5.66	4.74	7.54	-9.47	11.18
Ln_Deal Value	625	4.92	1.59	4.94	0.85	9.75
Ownership Stake	625	90.24	16.85	100	50	100
Target status	625	2.39	0.85	3	1	5
Financial Crisis	625	0.30	0.46	0	0	1

APPENDIX C Statistical Results

Table C1 OLS regression results of Brazilian acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel A: Brazilian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.014 (0.01)	-0.005 (0.01)	-0.01 (0.02)
Geographical Distance	-0.006 (0.01)	-0.009 (0.01)	-0.013 (0.015)
Cultural Distance	-0.002 (0.02)	-0.022 (0.02)	-0.025 (0.03)
Political Environment	0.002 (0.003)	0.002 (0.003)	0.002 (0.004)
<i>Control Variables</i>			
Ln_DealValue	-0.007 (0.007)	-0.007 (0.007)	-0.004 (0.009)
Ownership stake	-0.106* (0.06)	-0.051 (0.06)	-0.015 (0.075)
Target status	0.002 (0.01)	0.001 (0.01)	0.002 (0.018)
Financial crisis	0.009 (0.02)	0.005 (0.02)	0.03 (0.03)
Constant	0.15 (0.09)	0.101 (0.09)	0.07 (0.12)
N	59	59	59
R-squared	0.09	0.07	0.05

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C2 OLS regression results of Russian acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel B: Russian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	0.008 (0.008)	0.003 (0.01)	0.004 (0.01)
Geographical Distance	-0.01 (0.007)	-0.017** (0.008)	-0.000** (0.01)
Cultural Distance	0.011 (0.01)	0.005 (0.01)	0.007 (0.02)
Political Environment	0.000 (0.001)	-0.000 (0.001)	-0.000 (0.002)
<i>Control Variables</i>			
Ln_DealValue	-0.006 (0.005)	-0.004 (0.006)	-0.002 (0.008)
Ownership stake	-0.12*** (0.04)	-0.10** (0.04)	-0.13** (0.06)
Target status	-0.005 (0.007)	-0.012 (0.01)	-0.02* (0.01)
Financial crisis	0.021 (0.02)	0.012 (0.02)	-0.009 (0.03)
Constant	0.13 (0.05)	0.14 (0.06)	0.19 (0.08)
N	69	69	66
R-squared	0.21	0.18	0.19

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C3 OLS regression results of Indian acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel C: Indian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.003 (0.006)	-0.008 (0.008)	-0.010 (0.01)
Geographical Distance	-0.002 (0.004)	-0.001 (0.005)	0.009 (0.006)
Cultural Distance	0.029*** (0.01)	0.031** (0.01)	0.062*** (0.02)
Political Environment	0.001 (0.001)	0.001 (0.002)	-0.002 (0.002)
<i>Control Variables</i>			
Ln_DealValue	-0.001 (0.003)	-0.004 (0.004)	-0.006 (0.005)
Ownership stake	0.014 (0.04)	0.061 (0.04)	0.18*** (0.06)
Target status	-0.011* (0.007)	-0.010 (0.008)	-0.003 (0.01)
Financial crisis	-0.007 (0.01)	-0.002 (0.01)	-0.021 (0.02)
Constant	-0.005 (0.05)	-0.035 (0.05)	-0.21 (0.07)
N	132	132	132
R-squared	0.09	0.08	0.16

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C4 OLS regression results of Chinese acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel D: Chinese acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.000 (0.007)	-0.008 (0.008)	-0.021 (0.01)
Geographical Distance	-0.007** (0.004)	-0.009** (0.005)	-0.014** (0.006)
Cultural Distance	-0.016 (0.01)	-0.029 (0.01)	-0.029 (0.02)
Political Environment	-0.000 (0.002)	-0.003 (0.002)	-0.007 (0.006)
<i>Control Variables</i>			
Ln_DealValue	-0.004 (0.004)	-0.000 (0.04)	0.006 (0.006)
Ownership stake	0.009 (0.03)	-0.006 (0.04)	0.010 (0.06)
Target status	-0.010 (0.007)	-0.009 (0.009)	-0.009 (0.01)
Financial crisis	-0.016 (0.01)	-0.015 (0.02)	-0.035 (0.03)
Constant	0.097 (0.04)	0.13 (0.06)	0.15 (0.08)
N	231	231	229
R-squared	0.04	0.05	0.07

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C5 OLS regression results of South African acquiring firms for the period 2000-2022

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel E: South African acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	0.010 (0.006)	0.006 (0.008)	0.002 (0.01)
Geographical Distance	0.001 (0.007)	-0.009 (0.009)	-0.014 (0.01)
Cultural Distance	0.023* (0.01)	0.015 (0.01)	0.008 (0.02)
Political Environment	-0.002 (0.002)	-0.002 (0.002)	-0.001 (0.006)
<i>Control Variables</i>			
Ln_DealValue	-0.000 (0.004)	-0.001 (0.005)	-0.002 (0.006)
Ownership stake	0.032 (0.03)	0.03 (0.04)	0.036 (0.04)
Target status	-0.000 (0.006)	0.003 (0.008)	0.002 (0.009)
Financial crisis	-0.004 (0.01)	-0.013 (0.02)	-0.005 (0.02)
Constant	-0.049 (0.04)	-0.013 (0.05)	0.021 (0.06)
N	93	93	93
R-squared	0.10	0.07	0.07

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C6 Robustness check on Cultural Distance of Brazilian acquiring firms

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel A: Brazilian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.003 (0.008)	0.004 (0.01)	0.008 (0.01)
Geographical Distance	-0.004 (0.007)	-0.006 (0.008)	-0.005 (0.01)
Cultural Distance	0.001 (0.003)	-0.000 (0.002)	-0.000 (0.00)
Political Environment	0.001 (0.002)	0.001 (0.002)	0.000 (0.003)
<i>Control Variables</i>			
Ln_DealValue	-0.005 (0.004)	-0.003 (0.005)	-0.000 (0.006)
Ownership stake	-0.011 (0.03)	0.047 (0.04)	0.082 (0.05)
Target status	-0.003 (0.008)	0.001 (0.01)	0.001 (0.01)
Financial crisis	-0.001 (0.01)	0.002 (0.02)	0.006 (0.02)
Constant	0.047 (0.05)	-0.338 (0.06)	-0.08 (0.08)
N	56	56	56

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C7 Robustness check on Cultural Distance of Russian acquiring firms

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel B: Russian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.007 (0.007)	-0.011 (0.009)	-0.007 (0.02)
Geographical Distance	-0.003 (0.005)	-0.007 (0.007)	-0.000** (0.01)
Cultural Distance	-0.000 (0.000)	-0.001** (0.000)	-0.000 (0.000)
Political Environment	0.001* (0.001)	0.001 (0.001)	0.003 (0.002)
<i>Control Variables</i>			
Ln_DealValue	-0.001 (0.004)	-0.001 (0.005)	-0.005 (0.01)
Ownership stake	-0.01 (0.03)	0.029 (0.03)	0.006 (0.07)
Target status	-0.004 (0.005)	-0.008 (0.006)	-0.012 (0.01)
Financial crisis	-0.001 (0.01)	-0.006 (0.02)	-0.028 (0.03)
Constant	0.044 (0.03)	0.045 (0.04)	0.11 (0.09)
N	37	37	37

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C8 Robustness check on Cultural Distance of Indian acquiring firms

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel C: Indian acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.007 (0.006)	-0.01 (0.007)	-0.005 (0.01)
Geographical Distance	-0.004 (0.004)	-0.006 (0.004)	0.007 (0.006)
Cultural Distance	0.000 (0.000)	-0.000 (0.002)	-0.000 (0.00)
Political Environment	0.001 (0.001)	0.001 (0.002)	-0.003 (0.003)
<i>Control Variables</i>			
Ln_DealValue	-0.000 (0.003)	-0.006 (0.004)	-0.011** (0.005)
Ownership stake	-0.018 (0.04)	0.035 (0.04)	0.127** (0.06)
Target status	-0.013** (0.006)	-0.009 (0.008)	0.007 (0.01)
Financial crisis	-0.008 (0.01)	-0.003 (0.01)	-0.026 (0.02)
Constant	0.084 (0.04)	0.048 (0.05)	-0.069 (0.07)
N	120	120	120

Note. *p < 0.1, **p < 0.05, ***p < 0.01

Table C9 Robustness check on Cultural Distance of Chinese acquiring firms

Variables	CARs (-1, +1)	CARs (-2, +2)	CARs (-5, +5)
<i>Panel D: Chinese acquiring firms</i>			
<i>Independent Variables</i>			
Industry Relatedness	-0.001 (0.005)	-0.005 (0.006)	0.003 (0.008)
Geographical Distance	-0.006** (0.003)	-0.008** (0.003)	-0.007 (0.004)
Cultural Distance	0.000 (0.00)	0.000 (0.00)	0.000 (0.00)
Political Environment	-0.000 (0.001)	-0.002 (0.001)	-0.000 (0.002)
<i>Control Variables</i>			
Ln_DealValue	-0.002 (0.003)	-0.003 (0.003)	-0.001 (0.004)
Ownership stake	-0.037 (0.03)	-0.061** (0.03)	-0.050 (0.04)
Target status	-0.003 (0.005)	-0.006 (0.006)	-0.001 (0.009)
Financial crisis	-0.00 (0.01)	-0.010 (0.01)	-0.016 (0.02)
Constant	0.088 (0.03)	-0.040 (0.04)	-0.081 (0.05)
N	213	213	212

Note. *p < 0.1, **p < 0.05, ***p < 0.01