Master Thesis in International Business

The effect of geographic internationalization scope on firm performance of EMNEs: the moderating role of board diversity

An empirical analysis of firms from emerging BRICS+ countries

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Abstract

This thesis examines the impact of geographic internationalization scope on firm performance of EMNEs in BRICS+ countries, and the moderating role of board gender diversity and board nationality diversity. Data were collected from the LSEG and Orbis databases and were analyzed using multiple regression analysis. Results show that greater geographic internationalization scope contributes significantly to improved firm performance of EMNEs. While gender diversity within the board had no significant moderating influence, this could be due to the underrepresentation of women on boards in the sample. However, board nationality diversity was found to have a positive significant moderating role, suggesting that nationality diversity on the board of directors can enhance the benefits of geographic internationalization. The findings highlight the importance of a strategic approach to internationalization and diversity within the board of directors. Future research should seek a larger sample and more data from the BRICS+ and other emerging countries to confirm the generalizability of the results and examine possible inter-country differences.

Keywords

Emerging markets, Emerging Multinational Enterprises, BRICS, BRICS+, geographic internationalization scope, board diversity, board gender diversity, board nationality diversity, firm performance.

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1. Introduction

1.1 Background

The process of internationalization has been greatly accelerated by the rapid advancements in communication and infrastructure technologies, fostering a more interconnected global community (Adedoyin et al., 2020). In the past decades, a lot of research has focused on the internationalization of Multinational Enterprises (MNEs) from developed countries. However, more recently, MNEs from emerging countries, so called emerging multinational enterprises (EMNEs), are trying to catch up with MNEs from developed countries (Moghaddam et al., 2014). EMNEs are assuming increasingly prominent positions in the world economy (Verbeke & Kano, 2015).

The study of how firms' internationalization influences their performance has garnered significant academic attention. This area of research is principally divided into three key dimensions (Vermeulen & Barkema, 2002). The first dimension, internationalization pace, examines the speed at which companies extend their operations overseas. The second dimension, internationalization rhythm, explores whether businesses expand in a consistent or variable pattern. The final dimension, internationalization scope, investigates the extent of a firm's expansion in terms of the number of countries (geographic scope) and/or the variety of markets (product scope) it reaches internationally (Vermeulen & Barkema, 2002). Considerable scholarly attention has been devoted to exploring this phenomenon within MNEs originating from developing nations. For instance, Koster et al. (2010) conducted a study which investigated the internationalization strategies of Starbucks and the impact of these three foundational pillars.

Brazil, Russia, India, China, and South Africa, known as the BRICS countries, form a group that occupies a remarkable position in today's world, both economically and geographically, within a relatively short period of time (Nayyar, 2016). In 2020, the BRICS countries together accounted for more than 40 percent of the global population and 24 percent of global GDP (Lal, 2023). In January 2024, Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates were admitted, with the so-called BRICS+ now accounting for 37.3 percent of global GDP (Jütten & Falkenberg, 2024). In addition, firms from BRICS+ countries are expanding rapidly and in large numbers abroad (Andreff, 2016). The growth of the BRICS+ countries and the expanding businesses from these countries, highlight the importance of researching these economies.

1.2 Problem statement

Previous studies examining the relationship between the extent of geographic internationalization and firm performance have shown that companies with significant geographic internationalization, generally tend to obtain better levels of performance (Albu, 2021; Schwens et al., 2018). This is attributed to their ability to leverage competitive advantages resulting from their global network of subsidiaries, thereby generating economies of scale (Schwens et al., 2018). Diversification reduces operational risks by allowing companies to operate in different areas, thus reducing the risk of one sector failing (Albu, 2021). Nevertheless, this drive toward internationalization is not free of complexity, especially in the context of board characteristics. These include characteristics such as age, gender, and nationality (Baker et al., 2020). These studies mainly concern companies from developed countries, such as in Campbell and Mínguez-Vera's (2007) study on the influence of board age and gender on firm performance in Spain. Bernile et al. (2018) examined samples in the United States and found that firms with board members of diverse genders and ethnicities improve company performance.

However, these studies focused on MNEs from developed countries, and with the increasing influence of emerging countries in recent years, according to international business (IB) research, there has been relatively little research focusing on EMNEs (Amighini et al., 2015). Scholars like Khanna and Palepu (2000) discovered that EMNEs exhibited behavior that traditional IB theories could not account for. This led numerous scholars questioning the applicability of traditional IB theories for EMNEs (Amighini et al., 2015; Liang et al., 2021). Shepherd and Suddaby (2016) state that traditional IB theories cannot be applied to EMNEs because of their limited grasp of theoretical frameworks and their incorporation into the development of management theories. Scholars suggest that focusing on emerging economies in international business research is essential to enhance and broaden the scope of existing theories, thereby deepening our understanding of international business (Amighini et al., 2015; Khanna & Palepu, 2000; Liang et al., 2021).

While EMNEs from BRICS+ countries may internationalize without the traditionally expected competitive advantages, they may still face consequences of different board characteristics. This highlights the need to review theories of board characteristics in the context of emerging markets and their unique challenges and opportunities. Despite academics' claims that board

characteristics can affect the impact of geographic internationalization scope on firm performance (Bernile et al., 2018; Campbell & Mínguez-Vera, 2007), little empirical research has been conducted on firms from emerging countries.

1.3 Objective

This master thesis' objective is to investigate the relationship between geographic internationalization and firm performance in MNEs in emerging markets, while moderated by board characteristics, with a focus on firms from BRICS+ countries. This research intends to fill an important gap in the existing literature by empirically examining how the scope of geographic internationalization impacts firm performance, particularly in the context of emerging economies, where the trajectory of outward foreign direct investment and internationalization is unique due to subsequent institutional economic reforms.

1.4 Research question

This master thesis aims to explore the impact of geographic internationalization scope on EMNE's firm performance. Furthermore, it will investigate whether different board characteristics serve as moderating variables in the relationship between geographic internationalization scope and firm performance. The central research question to be addressed is:

> *"How does the geographic internationalization scope influence the performance of MNEs from emerging countries, and in what way do board characteristics act as moderators in this relationship?"*

To ensure a rigorous comparison, firm age, firm size, and industry will be accounted for as control variables (Handoyo et al., 2023; Moss et al., 2013; Yadav et al., 2021). The relation between geographic internationalization scope and firm performance, as well as the moderating and control variables, will be quantified through the application of multiple regression analysis.

1.5 Relevance

This thesis highlights an essential gap in traditional theories of international business, particularly in the context of EMNEs. It focuses on uncovering the motives behind the internationalization of these EMNEs and explores its impact on their firm performance. By

incorporating board characteristics as moderating variables, this research provides valuable empirical insights that illuminate the relationship between the geographic internationalization scope and firm performance of MNEs in emerging markets. Although there has been research on the direct impact of board characteristics on firm performance, the moderating effect of board gender diversity and board nationality diversity has been understudied. This thesis represents a response to academic demands for more empirically based data regarding these interactions, adding new perspectives to the current field of research.

On a practical level, this thesis is valuable to managers of EMNEs. It provides guidelines for effectively structuring EMNEs' internationalization activities. The insights of this study helps managers of EMNEs identify optimal circumstances for expansion aimed at maximizing competitive advantages. In addition, this thesis highlights the importance of considering board characteristics when choosing an internationalization strategy that can increase firm performance. These insights are crucial for EMNEs in making strategic decisions about their international growth plans, a key element in globalizing business.

1.6 Outline

This master thesis consists of six chapters. The next chapter reviews existing literature on the concepts in this study. Chapter three discusses the research method used, how the data are obtained and how the variables have been operationalized. Chapter four analyzes the data and presents the results. Chapter five discusses the results, focusing on the main relationship, as well as the impact of the moderating variables and the control variables. In chapter six a conclusion is drawn. This chapter also identifies the implications and limitations of this study and offers suggestions for future research.

2. Literature review

This chapter provides background on emerging markets, EMNEs, geographic internationalization scope, and board characteristics by reviewing recent literature. It focuses on the internationalization scope of MNEs from emerging markets and how board characteristics affect the relationship between internationalization scope and performance. The hypotheses to be tested are included and illustrated in a conceptual model.

2.1 Emerging markets

The description of emerging markets or economies was first described by economists at the International Financial Corporation (IFC), in 1981. After this initial description, references to emerging markets have become unavoidable in the media, foreign policy and trade, and annual reports of multinational enterprises (Khanna & Palepu, 2010).

One of those economists, Ashoka Mody, wrote a paper where four claims were made regarding the characterization of emerging markets (Mody, 2004). First, there is market volatility, which entails unstable politics and volatile exchange rates in markets. Second, emerging markets have high growth potential and attract a lot of foreign investments because of the significant return on investment. The third characteristic refers to significant economic growth, stimulated by government policies that promote industrialization and economic growth. Finally, these markets tend to have low middle income per capita, which encourages foreign investment and economic growth (Mody, 2004).

However, there are criticisms of Mody's characterization, and definitions differ considerably because emerging markets vary greatly and often do not meet all characteristics (Khanna & Palepu, 2010). Countries like Brazil, Russia, India, China, and South Africa are considered emerging markets due to their fast economic growth, but do not meet all of Mody's criteria. Countries like Colombia and the Philippines are also labeled emerging markets but differ significantly in terms of poverty and growth. Another definition states that emerging markets tend towards market orientation and are building a solid economic base, becoming essential global economic players (Bruton et al., 2007).

The BRICS+ countries have quickly gained a remarkable global position economically and geographically (Nayyar, 2016). According to Lal (2023), they represented over 40 percent of

the world's population and 24 percent of global GDP in 2020. Cheng et al. (2007) suggest that the BRICS countries could become the world's leading economic entity by mid-century. Andreff (2016) notes a significant increase in business expansions from BRICS countries abroad. With the addition of Egypt, Ethiopia, Iran, Saudi Arabia, and the UAE in January 2024, BRICS+ now accounts for 37.3 percent of global GDP (Jütten & Falkenberg, 2024). The BRICS+ countries match most of Mody's (2004) characteristics, and their growth highlights the importance of research on these emerging economies.

2.2 Emerging Multinational Enterprises

Multinational enterprises (MNEs) are companies that control the production of goods or services in at least one country outside their home country (Dunning, 1981). Emerging multinational enterprises (EMNEs) from markets like the BRICS+ countries are increasing their influence in global trade and industry (Jütten & Falkenberg, 2024). These EMNEs operate efficiently within their home countries' institutional and infrastructural constraints, providing a unique competitive advantage (Ramamurti, 2012). Carney et al. (2016) note that EMNEs differ significantly from developed market counterparts in their internationalization approaches and competitive strategies.

As highlighted by Ramamurti (2012), these firms often possess unique ownership advantages, such as a deep knowledge of emerging market needs and the ability to operate cost-effectively. EMNEs often follow a rapid and sometimes aggressive route of international expansion, which differs from the traditional gradual internationalization of many multinationals from developed markets (Luo & Tung, 2007). An interesting observation here is that these firms often expand into both developed and other emerging markets, creating new types of competitive dynamics (Carney et al., 2016). The phenomenon of EMNEs poses new challenges to traditional international business theories.

The growing presence of EMNEs on the global stage brings a new dimension to international business that not only enriches our understanding of globalization, but also contributes to the ongoing development of theories about multinational enterprises (Carney et al., 2016). These theories illustrate how firms from fast-growing economies have been able to become global players and provide valuable insights into the dynamics of global markets and competitive strategies (Luo & Tung, 2007).

2.3 Process of internationalization

In recent decades, international business management literature has increasingly focused on the process of internationalization of firms (Johanson & Vahlne, 1990), reflecting the trend of expanding operations abroad. Originating in behavioral theory (Cyert & March, 1963), internationalization involves engaging in activities on an international level, including foreign subsidiaries, joint ventures, licensing agreements, international advertising, and trade shows (Johanson & Vahlne, 1990).

Geographic expansion is recognized as crucial for growth, allowing companies to reach a larger customer base and increase sales (Barringer & Greening, 1998). Different geographic areas bring varying market conditions, making existing knowledge possibly insufficient for new markets (Lu & Beamish, 2001). However, international expansion enables firms to acquire new knowledge and capabilities (Barkema & Vermeulen, 1998). Despite potential gains, empirical research shows mixed results on the impact of internationalization on profitability, suggesting that benefits are not guaranteed and depend on several factors.

Vermeulen and Barkema (2002) examined the relationship between firms' internationalization process and profitability, focusing on three key aspects: pace, rhythm, and scope. They argue that the manner of international expansion significantly impacts success. Pace refers to the speed of entering new foreign markets. A high pace may lead to insufficient integration of new ventures, negatively impacting profitability (Vermeulen & Barkema, 2002). Rhythm involves the regularity of establishing foreign subsidiaries. Firms with a constant, rhythmic pace benefit more from foreign expansion than those with an irregular approach (Vermeulen & Barkema, 2002).

The last key aspect of internationalization is scope (Vermeulen & Barkema, 2002). Vermeulen and Barkema (2002) distinguish scope between geographic scope and product scope. Geographic scope refers to the number of countries in which a company has subsidiaries and product scope addresses the number of products a company offers (Vermeulen & Barkema, 2002). Expansion into multiple countries and into different product markets is complicated and could lead to inefficiencies (Vermeulen & Barkema, 2002). According to Vermeulen and Barkema (2002) this is because each country has unique cultural and institutional

characteristics, and the company must adapt to new customers, suppliers, competitors, and government contacts. This puts considerable strain on an organization's absorptive capacity.

Research on the effects of geographic internationalization on performance yielded inconsistent outcomes (Eckert & Trautnitz, 2010). Foreign investment is more complex and riskier than domestic investment (Lee & Caves, 1998). Goerzen and Beamish (2003) argue that internationalization increases costs due to added complexity. A broader scope may also increase organizational complexity, potentially outweighing the benefits (Verbeke & Ciravegna, 2018). Some scholars claim that geographic internationalization negatively affects firm performance (Collins, 1990; Kumar, 1984; Lall & Siddharthan, 1982), while others show positive effects. High geographic diversification can spread operational risks (Gande et al., 2009) and reduce risks of economic downturns and demand (Kim et al., 1993). According to Schwens et al. (2018) it also allows firms to leverage their competitive advantage in more markets, achieving lower costs through economies of scale. Overall, research suggests that the relationship between internationalization and firm performance is complex, with both risks and opportunities.

2.4 Process of internationalization in emerging markets

Emerging markets offer a different context for firms seeking internationalization compared to developed countries (Fey et al., 2016). These markets are often characterized by political and economic volatility, less developed institutional frameworks, and rapid economic shifts (Hoskisson et al., 2000). This context requires an adapted approach to internationalization, as firms navigate an unpredictable yet opportunistic landscape (Fey et al., 2016). Hashai (2011) states that higher geographic internationalization increases the liability of foreignness, resulting in extra costs and negatively impacting performance. According to Hashai (2011), EMNEs lack competitive advantages to overcome this liability. However, emerging market firms have different drivers and strategies for internationalization than firms in developed economies (Cuervo-Cazurra & Genç, 2008).

As highlighted by Cuervo-Cazurra and Genç (2008), these firms pursue internationalization not only to enter new markets, but also to acquire strategic assets such as technology and brand names, with the aim of strengthening their competitive position both locally and globally. This contrasts with the traditional approach of firms from developed countries, which typically internationalize after establishing a strong position in the domestic market (Luo and Tung,

2007). Companies from emerging markets tend to skip stages in the internationalization process compared to their counterparts from developed countries. According to Luo and Tung (2007), this 'accelerated internationalization' is partly attributed to the need to overcome domestic obstacles and exploit new opportunities in less competitive foreign markets.

EMNEs may deviate from traditional stage models of internationalization like the Uppsala Model (Johanson & Vahlne, 1977). They often emphasize learning and innovation, employing strategies of 'linkage, leverage, and learning' to collaborate with global partners and access essential resources (Mathews, 2006). This approach helps overcome emerging market challenges and liability of foreignness, ensuring global competitiveness. The discussed studies highlight the importance of geographic scope in internationalization for EMNEs, suggesting that geographic expansion can improve firm performance. These insights support the assumption that geographic scope affects the success of companies in emerging markets. Thus, the following hypothesis is proposed:

> *H1: 'Geographic internationalization scope has a positive impact on firm performance for MNEs in emerging markets.'*

2.5 Board characteristics

Studies on board diversity focus primarily on gender diversity, with comparatively less attention to age and nationality (Baker et al., 2020; Abdullah & Ismail, 2013). As these three aspects often recur in research on board characteristics, this study will also focus on these aspects.

2.5.1 Board age diversity

In recent years, several studies have examined the effect of board age on firm performance (Gardiner, 2022). Gardiner (2022) reviewed 54 empirical papers on board member age diversity and its influence on performance. While some studies found positive or negative relationships, most did not consider age diversity a significant forecaster of firm performance. Khidmat et al. (2020) found no significant effect of board member age diversity on Chinese companies' performance. Similarly, Akpan and Amran (2014) found no effect in Nigerian firms. Given the lack of convincing evidence, board member age diversity is not included as a focus point.

2.5.2 Board gender diversity

Gender diversity on boards refers to the representation of various genders on an organization's board of directors. Interest in gender diversity has increased in recent years. Studies by Campbell & Mínguez-Vera (2007) and Bernile et al. (2018) show that gender diversity can positively affect firm performance and board decision-making in countries like Spain and the U.S. Promoting gender diversity brings a broader spectrum of perspectives and experiences (Nielsen & Huse, 2010), leading to improved decision-making and a comprehensive approach to management (Bernile et al., 2018). Nielsen and Huse (2010) found that diverse boards are more effective in identifying risks and opportunities and representing a wider range of stakeholders' interests.

Adams and Ferreira (2009) showed that female directors significantly influence both board inputs and firm outcomes. However, in Germany, researchers found that gender diversity can initially negatively affect firm performance (Joecks et al., 2012). This negative effect reverses after reaching a 'critical mass' of about 30% women on the board, leading to higher performance than male-only boards, indicating a U-shaped relationship (Joecks et al., 2012). Brahma et al. (2020) found a similar pattern in UK companies, where having three or more women on the board positively affected firm performance more than having two or fewer.

In contrast, Marquez-Cardenas et al. (2022) found that gender diversity on boards did not affect firm performance in Latin America, attributing this to the underrepresentation of women. Singhania et al. (2022) conversely concluded that board gender diversity did positively impact firm performance in India. Additionally, Yilmaz et al. (2022) found that board gender diversity positively affects corporate governance performance.

Current literature indicates that several studies on gender diversity on boards have been conducted, particularly in developed countries and on the direct impact on firm performance. Studies generally show that gender diversity on boards has a positive effect on firm performance. In a study from Li and Chen (2018) on non-financial firms in China, it was demonstrated that board gender diversity has a positive impact on firm performance. In addition, in a study from Kilic and Kuzey (2016), they found that companies in Turkey are predominantly managed by men and that the presence of female directors shows a positive correlation with the financial performance of these companies. In contrast, there is limited

evidence that gender diversity on boards does not have a significant impact on firm performance in developing countries in Latin America (Marquez-Cardenas et al., 2022).

According to a study by Wang et al. (2022), Chinese listed companies with more female directors are less likely to be involved in international entrepreneurship, but the quality of decisions made by these boards is better. While firms with more female directors may show a lower intensity of internationalization, the quality of their international business decisions improves (Wang et al., 2022), suggesting a more thoughtful and strategic approach.

However, to the researcher's best knowledge, no research has yet examined the moderating effect of board gender diversity on the relationship between internationalization scope and firm performance in emerging economies. The direct positive impact of gender diversity on the board of directors on business outcomes, as well as the positive effect on the quality of international business decisions, indicates a potentially positive moderating role of gender diversity on the board of directors on the relationship between geographic internationalization scope and firm performance. This leads to the following hypothesis:

> *H2: 'Board gender diversity positively moderates the impact of geographic internationalization scope on firm performance of MNEs in emerging markets.'*

2.5.3 Board nationality diversity

Board cultural diversity refers to board members with different norms and values (Dodd & Zheng, 2022) and is often measured by the national origin of board members (Dodd et al., 2022; Harjoto et al., 2019). Board nationality diversity refers to the variety of citizenship among board members (Odero & Egessa, 2023). Although board cultural diversity is a broader concept than just board nationality diversity, different nationalities can also entail different cultures (Hofstede, 1980). Firms that have boards that are diverse in terms of nationality, could possibly enjoy the benefit of a broader understanding of diverse business environments that contrast with those of local contexts (Jhunjhunwala & Mishra, 2012). Research by Estélyi and Nisar (2016) confirms the positive impact of board nationality diversity on international market activities.

According to Adams et al. (2010), external board members of different nationalities can strengthen the advisory capacity of the entire board by having experience and knowledge of foreign market operations and access to foreign networks. Companies can also derive value

from the advisory services of foreign board members (Naveen et al., 2013). Research has shown that nationality diversity impacts not only a firm's international market operations (Estélyi & Nisar, 2016), but also financial performance (Rose et al, 2013; Ujunwa, 2012). Additionally, Belcredi and Ferrarini (2013) found that companies with multinational board members achieved better returns. However, Dodd and Zheng (2022) highlight that the value of board nationality diversity can vary depending on countries and evolve over time.

Although significant progress has been made in research on board nationality diversity, the moderating role of multinationality in boards remains underutilized in emerging economies. According to Estélyi and Nisar (2016), companies with board members with different nationalities that successfully penetrate the markets of other countries, are more likely to create value. This could imply that board nationality diversity has a positive moderating effect on the relationship between geographic internationalization scope and firm performance. In order to further explore this topic, the following hypothesis is formulated:

> *H3: 'Board nationality diversity positively moderates the impact of geographic internationalization scope on firm performance of MNEs in emerging markets.'*

2.6 Conceptual model

The conceptual model as shown in figure 1, represents the three hypotheses as formulated in this study. Also the expected effects are shown in the model.

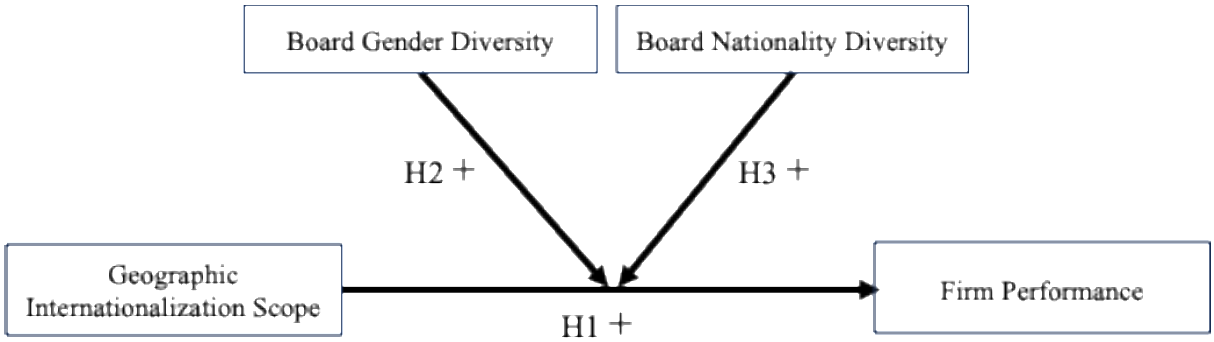

Figure 1 - Conceptual Model

3. Methodology

In this chapter, the epistemological approach and the research method will be discussed, as well as the data collection, sample description, data operationalization, and data analysis. Lastly, the validity and reliability of this research and the research ethics will be covered.

3.1 Epistemological approach

The epistemological approach of this research is grounded in positivism. According to Aliyu et al. (2014), positivism views truth as an independent, objective phenomenon. This paradigm holds that truth and reality are separate from human perceptions (Aliyu et al., 2014). This thesis maintains that truth is free from the researcher's subjective interpretations, implying that the researcher and subject are separate and independent. Kaya (2013) states that reality is objectively examined by the researcher, maintaining a distance from the studied object. The positivist approach emphasizes objectivity, requiring the researcher to avoid personal biases.

3.2 Research method

The goal of this master thesis is to determine how the scope of geographic internationalization affects EMNE's firm performance, and whether this relationship is influenced by board gender and nationality diversity. The research includes one independent, one dependent, and two moderating variables. According to Creswell (2009), a quantitative research method is appropriate, as it allows for statements about the relationship between variables (Field, 2013).

This thesis expands on two areas of previous research: the impact of geographic internationalization scope on the firm performance of MNEs in developed countries, and the influence of board characteristics on this relationship. In theory, board characteristics should influence the relationship between geographic internationalization scope and firm performance. This thesis will investigate whether this is true when tested against data from EMNEs. The research in this thesis is deductive research. Deductive research involves moving from the general toward the specific (Vennix, 2019). This is the situation in this research, because formulated hypotheses will be tested against data from EMNEs.

3.3 Data collection

To answer the research question, the right data is essential. This research includes four variables: geographic internationalization scope (independent), firm performance (dependent),

and board gender and nationality diversity (moderating). Since no dataset with all required data existed, a new dataset was created using Orbis and LSEG. Orbis provides financial and business information, while LSEG offers environmental, social, and governance (ESG) data (LSEG, 2023). Data on geographic scope were collected from Orbis. Data on firm performance and board characteristics were obtained from LSEG. Control data on firm size, age, and industry were also collected from LSEG. The datasets were merged using firms' ISIN codes. The year 2021 is chosen, as it has the most data available on board nationality diversity.

Research findings from a multi-country perspective are often more generalizable than those from single-country studies (Franke & Richey, 2010). Therefore, the choice is made to include firms from the BRICS+ countries in this study, rather than focusing on only one country. As indicated, Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates were admitted to the BRICS in January 2024. This broader scope enhances the applicability of research findings in different contexts and increases the validity of drawn conclusions of the study (Field, 2013).

3.4 Sample description

For this analysis, data was filtered to include only relevant companies. First, companies were filtered by location, selecting only those from BRICS+ countries. Second, data was filtered for companies with available information on size, age, and industry for control variables. Third, information on the number of countries where companies have subsidiaries was required to determine geographic internationalization scope. Fourth, firm performance data was necessary. Finally, data on board gender and nationality diversity was required. Firms with missing data for board gender or board nationality diversity were excluded from consideration in advance.

Country	Number of firms	Percentage (%)
China	82	40,4
India	24	11,8
Brazil	22	10,8
Russia	19	9,4
South-Africa	46	22,7
UAE	6	3
Saudi Arabia	4	2
Total BRICS+	**203**	**100**

Table 1 – Dataset distribution

As shown in Table 1, the dataset consists of 203 firms. The primary reason for this relatively low number is caused by the little available data on board nationality diversity within companies. When filtering the data, the first thing looked at, was the availability of the independent variable and the moderating variables. It was noticeable that data from certain BRICS+ countries were missing. For the countries Egypt, Ethiopia and Iran, there is no data available in the LSEG database at all. As mentioned earlier, data on board nationality diversity was scarce, which caused this variable to be looked at first. Then, for the companies with available data on board nationality diversity, the data of the other variables were also collected, including the control variables firm size, firm age and industry.

3.5 Data operationalization

3.5.1 Geographic internationalization scope

The geographic internationalization scope is typically measured based on the number of foreign subsidiaries (Vermeulen & Barkema, 2002). Vermeulen and Barkema (2002) use the term 'foreign affiliates' to refer to subsidiaries of the firm, which are considered to embody a tangible foreign presence, ranging from simple sales offices to fully operational production facilities. Researchers like Hashai (2011) and Mendoza et al. (2019) have also used this approach to measure geographic internationalization scope. The number of foreign subsidiaries is available through the Orbis database.

3.5.2 Firm performance

To measure firm performance, return on assets (RoA) will be used. Considerable empirical literature has used ROA to measure firm performance (Adams & Ferreira, 2009; Dodd & Zheng, 2022). ROA is calculated by dividing a firm's net income by its total assets. This approach is in line with the research definitions used by Le and Buck (2011) in their study. The required RoA data for this study can be found in de LSEG database.

3.5.3 Board gender diversity

Board gender diversity can be measured by the percentage of women on the board, which is calculated by dividing the number of women on the board by the total number of board members (Wang et al., 2024). Also, in the mentioned studies by Campbell & Mínguez-Vera (2007) and Bernile et al. (2018) the percentage of women on the board is used as a measure of board gender diversity. Data on board gender diversity is retrieved from the LSEG database (LSEG, 2023).

3.5.4 Board nationality diversity

As discussed before, board nationality diversity is often measured by the different nationalities of board members (Dodd et al., 2022; Harjoto et al., 2019). This information is available in the LSEG database (LSEG, 2023). As in studies from Harjoto et al. (2019), board nationality diversity is assessed as the ratio of different nationalities to the total number of board members. This results in values between 0 and 1 for board nationality diversity.

3.5.5 Control variables

This study carefully controls for age, size, and industry to avoid distortions in the analysis (Handoyo et al., 2023). Older and larger companies typically generate more revenue and perform better than smaller ones (Handoyo et al., 2023; Yadav et al., 2021). Data on establishment years and number of employees were collected from LSEG. Industry type is also considered, as earnings and performance perceptions vary by industry (Moss et al., 2013). Companies' industries are classified by the Standard Industrial Classification (SIC) available in LSEG.

3.6 Data analysis method

In this thesis, the relation between one independent variable and one dependent variable, and the effect of two moderating variables is studied. According to Field (2013) and Hair et al. (2019), multiple regression analysis is the most suitable method to test this relationship. Additionally, to assess the moderating effects, multiple regression analysis is the most appropriate method (Field, 2013; Hair et al., 2019). A hierarchical regression will be used to show how each group of variables affects the dependent variable (RoA) in separate models. First, we will look at the effect of the control variables, then the independent variable and finally the moderating variables.

Prior to conducting the analysis, an exploratory data analysis is conducted to identify missing data points and outliers that could cause bias. Following this, several assumptions are checked before performing a regression analysis. These assumptions include linearity, homoscedasticity, multicollinearity, independence of error terms, and normality of the error term (Field, 2013; Hair et al., 2019). This ensures internal validity (Field, 2013; Hair et al., 2019). To ensure external validity and generalizability, data from firms in all BRICS+ countries is used (Field, 2013).

Once the data meets all assumptions, it can be analyzed. Initially, the effects of the geographic scope of internationalization on performance will be examined, while also assessing the influence of control variables on the results. In the event of finding a significant difference, further investigation will be conducted into the extent to which board gender and nationality diversity moderate the relationship between the geographic scope of internationalization and firm performance. The results will be used to accept or reject the formulated hypotheses.

3.7 Reliability

Reliability in research refers to the extent to which the results of a study are consistent and stable with repeated measurements or application of the same research method under similar conditions (Field, 2013). It also refers to the accuracy and consistency of the measurements, instruments, procedures, and analytical techniques used to collect and analyze data (Field, 2013). A reliable study is able to produce reproducible and consistent results, which allows for credibility and generalizability of findings (Hair et al., 2019). Therefore, to ensure the reliability of the study, every decision regarding the data will be documented.

3.8 Research ethics

This thesis will conform to the APA ethical guidelines and adopts the Netherlands Code of Conduct for Scientific Practice (Radboud University, 2023). The data are from Orbis and LSEG, internationally recognized databases for reliable financial information (Orbis) and ESG information (LSEG). Strict adherence to ethical principles will be maintained during the data analysis to ensure that the integrity of the data is not compromised by falsification or any form of manipulation. In addition, unacceptable research practices as described in the APA Code of Ethics will be dispensed to the best of knowledge and ability. After collection and processing, the data will be stored on the Radboud University's network drive for a period of ten years according to the Research Data Management (RDM) guidelines.

4. Analysis

Chapter four first describes the data sample. The collected data is checked for missing values and outliers. Next, it is evaluated whether the data meets all the assumptions necessary before conducting a multiple regression analysis. Lastly, the results of the analysis are presented, and the hypotheses are accepted or rejected.

4.1 Data descriptives

As mentioned in chapter three, the dataset used in this thesis consists of 203 firms. However, this thesis examines MNEs in emerging markets, and not all firms are MNEs. In chapter two, MNEs were described as companies that carry out operational activities in at least one country other than its home country (Dunning, 1981). Therefore, it is important that all companies that have no subsidiaries abroad (Internationalization Scope = 0) are removed from the dataset. This means that 29 companies are removed from the dataset, which leaves 174 MNEs. The removed companies are listed in Appendix 1.

As mentioned before, the data is analyzed using multiple regression analysis, as that is the most suitable method (Field, 2013; Hair et al., 2019). Although there is relatively little data available, according to the recommendations of scholars like Khamis and Kepler (2010) and Tabachnick and Fidell (2013), the sample size of 174 is large enough. These scholars recommend the minimum sample size (n) for a multiple regression analysis should be $n \geq 50 + 8 \times m$, where m is the number of predicting variables (Khamis and Kepler, 2010; Tabachnick and Fidell, 2013). This implies that in this study, counting the control variables as independent variables, a sample size of $50 + 8 \times 6 = n \geq 98$ is needed. $174 > 98$, so the sample size is big enough.

Table 2 shows the distribution of the geographic internationalization scope. The table shows that nearly 60% of the companies in the dataset have subsidiaries in one to five countries. Despite 63.2% of the firms having subsidiaries in six countries or less, 24.1% of the MNEs in the dataset operate in more than 10 countries. On average, firms in the dataset operate in 8.41 countries. The median is 4, and the mode is 2, which shows that a considerable number of companies operate in relatively few countries, indicating a skewed distribution, with a few companies operating in many more countries pulling the average upwards.

INTERNATIONALIZATION SCOPE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	31	17.8	17.8	17.8
	2	32	18.4	18.4	36.2
	3	17	9.8	9.8	46.0
	4	12	6.9	6.9	52.9
	5	11	6.3	6.3	59.2
	6	7	4.0	4.0	63.2
	7	4	2.3	2.3	65.5
	8	7	4.0	4.0	69.5
	9	3	1.7	1.7	71.3
	10	3	1.7	1.7	73.0
	11	5	2.9	2.9	75.9
	12	3	1.7	1.7	77.6
	13	4	2.3	2.3	79.9
	14	4	2.3	2.3	82.2
	15	5	2.9	2.9	85.1
	16	1	.6	.6	85.6
	17	5	2.9	2.9	88.5
	18	3	1.7	1.7	90.2
	19	1	.6	.6	90.8
	20	3	1.7	1.7	92.5
	22	1	.6	.6	93.1
	23	1	.6	.6	93.7
	28	1	.6	.6	94.3
	32	1	.6	.6	94.8
	33	1	.6	.6	95.4
	36	1	.6	.6	96.0
	37	1	.6	.6	96.6
	39	2	1.1	1.1	97.7
	51	1	.6	.6	98.3
	60	1	.6	.6	98.9
	61	1	.6	.6	99.4
	63	1	.6	.6	100.0
Total		**174**	**100.0**	**100.0**	

Table 2 – Geographic internationalization scope distribution

4.2 Data examination

4.2.1 Checking for missing data

The necessary data was finally collected for 174 companies. However, despite pre-set filters, some data were missing for a number of companies. To ensure the reliability and validity of the study, it was decided to remove the firms with missing data for some variables. A list of the removed firms is included in Appendix 2. After deleting the observations with missing data, 170 observations remained.

4.2.2 Checking for outliers

In addition to checking for missing data, it is also important to check the data for outliers. Field (2013) describes an outlier as an observation that is substantially different from the majority of the data. When analyzing data, such outliers can cause problems (Field, 2013). Field (2013) states that the mean and the sum of squared errors can be affected, if the outliers are not removed. Hair et al. (2019) describe two types of outliers. The first type of outlier is a true outlier, where the observation deviates remarkably from the mean but is not incorrect (Hair et al., 2019). The second type of outlier is an outlier by error, where the observation deviates due to an measurement error (Hair et al., 2019).

When addressing outliers, it is essential to take their type into account. Variables in the dataset are converted into Z-scores, indicating how far a value deviates from the mean in standard deviations (Field, 2013; Hair et al., 2019). An observation is considered an outlier if its Z-score is more than +3 or less than -3 (Field, 2013). Assuming consistent measurement in the LSEG and Orbis databases, any detected outliers are true outliers. Companies with Z-scores above +5 or below -5 were considered exceptional and were therefore removed from the dataset. The three deleted outliers can be found in Appendix 3, leaving 167 observations.

4.3 Assumptions

Specific assumptions should be validated prior to performing a regression analysis. First, two fundamental assumptions regarding the distribution of variables are examined, which are considered a necessary step for any statistical test. In addition, five specific assumptions applicable to multiple linear regression analysis are evaluated.

4.3.1 Dispersion of the independent variables

Firstly, a general assumption involves checking that the predictor variables in the dataset are normally distributed (Field, 2013). These predictor variables include not only the independent variables, but also the moderating and controlling variables that are metrically scaled. According to Hair et al. (2019), the distribution of predictor variables can be statistically controlled through descriptive statistics, as well as by evaluating the values of skewness and kurtosis. A variable is considered normally distributed when the values of skewness and kurtosis are inside the range of -3 to +3 and do not exceed these limits (Hair et al., 2019).

The values of skewness and kurtosis of all variables are presented in Appendix 4. The values for board gender diversity and firm age are within the acceptable range (Hair et al., 2019). For geographic internationalization scope and board nationality diversity, the values for skewness are within the range, but the values for kurtosis fall outside the range. For firm size, the values for both skewness and kurtosis fall outside the accepted range. Deviating skewness and kurtosis values can cause bias in data analysis (Hair et al., 2019). To correct this, variables can be transformed to address distribution problems while maintaining relative differences between datapoints (Field, 2013). Logarithmic and square root transformations were performed to determine the best results.

A square root transformation was chosen for the variable geographic internationalization scope because the values for both skewness (from 2.855 to 1.410) and kurtosis (from 10.009 to 2.129) best represented the data. The logarithmic transformation was chosen for the variables board nationality diversity and firm size because this transformation provided the best results for these variables. For board nationality diversity, the skewness changed from 2.213 to .974 and the kurtosis changed from 4.956 to .160. For firm size, the skewness changed from 3.929 to -.043 and the kurtosis changed from 17.052 to -.177. The transformations are documented in Appendix 4.

4.3.2 Dispersion of the dependent variable

Similarly, the dependent variable must be normally distributed in order to correctly perform a multiple regression analysis (Field, 2013). For the variable firm performance, the value for skewness is within the accepted range of -3 to +3 (2.052), but the value for kurtosis falls outside this range (4.758). Consequently, a logarithmic and a square root transformation were performed, as found in Appendix 5. The square root transformation yielded the best results (skewness = .892; kurtosis = .836), therefore this transformation was chosen in the analysis.

4.3.3 Linearity

The first specific assumption is linearity, meaning the relationship between each independent variable and the dependent variable must be linear (Field, 2013). Additionally, the combined relationship between all independent variables and the dependent variable must be linear (Field, 2013). Linearity can be tested using partial residual plots for individual variables and a residual plot for the combined relationship. These plots, found in Appendix 6 and 7, indicate that the

linearity assumption is met. There are no clear indications of nonlinear relationships, confirming that a linear model is appropriate (Field, 2013).

4.3.4 Homoscedasticity

The next assumption involves the homoscedasticity of the data, meaning that the variance of the residuals remains constant across all values of the predicted variable(s) (Field, 2013). According to Field (2013), homoscedasticity is essential for ensuring the accuracy and reliability of the estimates in a regression model. To verify homoscedasticity, the residuals plot in Appendix 7 can be accessed. The data points are randomly distributed and show no pattern, indicating that the data meet the assumption of homoscedasticity (Field, 2013).

4.3.5 Multicollinearity

When conducting a multiple regression analysis, it is essential to check for multicollinearity (Field, 2013). This means that there should not be strong linear relationships between the independent variables (Hair et al., 2019). The Variance Inflation Factors (VIF) and tolerance values of the independent variables serve as indicators of multicollinearity (Field, 2013). The general guideline is that VIF values should not exceed ten and tolerance values should be at least 0.1 (Field, 2013). The VIF and tolerance values are presented in Appendix 8. All variables have VIF values below ten and tolerance values above 0.1, indicating the absence of multicollinearity.

4.3.6 Independence of error terms

The fourth assumption involves the independence of error terms, meaning the residuals of all observations are uncorrelated (Field, 2013). The Durbin-Watson test checks for this, with values between zero and four and an ideal around two (Hair et al., 2019). Values less than one or greater than three may indicate correlated residuals (Field, 2013). In this study, the Durbin-Watson test result of 1.923, shown in Appendix 8, indicates that the independence of error terms assumption is met.

4.3.7 Normality of the error term

The final assumption refers to the normality of the error term (Field, 2013). This normality can be assessed using a probability graph, also called a P-P plot (Hair et al., 2019). A normal distribution of residuals is present if the residuals are accurately located around the line in the

probability graph. The P-P plot for the data in this study is included in Appendix 9 and demonstrates a normal distribution of the residuals.

4.4 Multiple regression analysis

After meeting all assumptions, the multiple regression analysis can be performed to test the hypothesized relationships. The relationships are controlled by the control variables firm age, firm size and industry. First the relationship between geographic internationalization scope and firm performance is analyzed. Then it is analyzed how the relationship between geographic internationalization scope and firm outcomes is affected by the moderating. Before the moderating effects are created, the predictor variables (geographic internationalization scope, board gender diversity and board nationality diversity) are mean centered. According to Field (2013) and Hair et al. (2019), the predictor variables should be mean centered to better interpret them and avoid multicollinearity.

The multiple regression analysis was performed hierarchically using the enter method. This entails that the independent variables were added to the analysis incrementally through multiple models (Hair et al., 2019). The first model contains only the control variables. The second model examines the main effect by adding the independent variable, geographic internationalization scope. The third model adds the moderating variables, board gender diversity and board nationality diversity, to analyze the moderating effects.

All three models in the multiple regression analysis showed significance ($P < .001$), as shown by the ANOVA output in Appendix 11. The data in Table 3 summarize the output of the multiple regression analysis and provide an opportunity for deeper analysis of the results. The R-squared (R^2) indicates the amount of the variance of the dependent variable that can be explained by the predictor variables (Field, 2013). However, Hair et al. (2019) state that the adjusted R^2 is better to look at, as this value considers the number of predictor variables and better reflects how much variance is explained by the model. The value of the adjusted R^2 of the first model is .249, indicating that 24.9% of the variance is explained by the control variables. An adjusted R^2 value of .303 is shown for the second model, meaning that this model explains 30.3% of the variance. The last model showed a higher adjusted R^2 value of .360, explaining 36% of the variance. The value of F change is significant ($P = < .001$) for all models, which means that each model provides a significant improvement in explained variance (Field, 2013).

Model 1				
Predictor	B	SE	β	P
Year	-.001	.004	-.019	.783
Industry	-.082	.034	-.173	.017
log_Employees	.829	.129	.444	<.001
R^2	.262			
Adjusted R^2	.249			
Sig. F Change	<.001			
Model 2				
Predictor	B	SE	β	P
Year	.004	.004	.070	.331
Industry	-.096	.033	-.203	.004
log_Employees	.662	.132	.354	<.001
sqrt_Int_Scope	.235	.064	.270	<.001
R^2	.320			
Adjusted R^2	.303			
Sig. F Change	<.001			
Model 3				
Predictor	B	SE	β	P
Year	.001	.004	.023	.744
Industry	-.079	.032	-.166	.015
log_Employees	.689	.126	.369	<.001
sqrt_Int_Scope	.178	.063	.204	.005
Moderation_Gen_Div	.004	.005	.058	.360
Moderation_Nat_Div	.600	.152	.255	<.001
R^2	.383			
Adjusted R^2	.360			
Sig. F Change	<.001			
Durbin-Watson	1.964			

Table 3 – Multiple Regression Analysis Summary

Table 3 can be used to determine whether the formulated hypotheses can be accepted or rejected. The three hypotheses are shown in table 4. The effect of the control variables firm size (B = .829, P = <.001) and industry (B = -.082, P = .017) are significant. This means that a firm's performance varies per industry, and that firms with more employees show better firm performance. The control variable firm age showed no significance (B = -.001, P = <.783), and

thus does not explain any of the variance of firm performance. This indicates that firm performance does not depend on how long a firm has been in operation.

In addition, geographic internationalization scope has a significant positive impact on firm performance (B = .235, P = <.001). This implies that the more countries a company operates in, the better its firm performance becomes. When looking at the moderating variables, it can be found that board gender diversity does not have a significant moderating impact on firm performance (B = .004, P = .360). This shows that the relation between geographic internationalization scope on firm performance is not moderated by board gender diversity. However, the multiple regression analysis reveals that board nationality diversity does have a significant moderating impact on the effect of geographic internationalization scope on firm performance (B = .600, P = <.001). This indicates that the more different nationalities a board contains, the greater the impact of geographic internationalization scope on firm performance becomes.

Hypothesis		**β**	**Sig.**	**Result**
H1	Geographic internationalization scope has a **positive** impact on firm performance for MNEs in emerging markets.	.270	<.001	Accepted
H2	Board gender diversity **positively** moderates the impact of geographic internationalization scope on firm performance of MNEs in emerging markets.	.058	.360	Rejected
H3	Board nationality diversity **positively** moderates the impact of geographic internationalization scope on firm performance of MNEs in emerging markets.	.255	<.001	Accepted

Table 4 – Accepted & rejected hypotheses

5. Discussion

In this chapter, the results in this thesis are discussed and compared to previous theoretical findings. First, the results of the main relationship are discussed. Then, the effect of the moderating variables is examined. Finally, the control variables will be covered.

5.1 Geographic internationalization scope

In this thesis, the main relationship analyzed was the relationship between the geographic internationalization scope of EMNEs in the BRICS+ countries and their firm performance. The multiple regression analysis reflects a positive relationship between the geographic internationalization scope and firm performance of EMNEs from the BRICS+ countries. For each model that was conducted in the analysis, the results showed this positive effect to be significant. This indicates that as EMNEs expand their operations across multiple countries, their firm performance improves. Hypothesis 1 is therefore being accepted.

The positive relationship between geographic internationalization scope and firm performance, as found in this study, contrasts with several studies by Goerzen and Beamish (2003) as well as Lee and Caves (1998), that point to the increased costs, higher complexity and increase in risks of internationalization. Transaction cost theory suggests that the costs and risks of managing international operations often outweigh the benefits (Goerzen & Beamish, 2003). Vermeulen and Barkema (2002) also stress that expansion into multiple countries and product markets can lead to inefficiencies because of the need to adapt to different cultural and institutional environments. Nevertheless, these studies (Goerzen & Beamish, 2003; Vermeulen & Barkema, 2002) only focused on MNEs from developed countries like Japan and the Netherlands, which could explain the contrasting results.

Hashai (2011) argues that EMNEs lack the competitive advantages to overcome the liability of foreignness and succeed abroad. However, the positive relationship between geographic internationalization scope and firm performance, as shown in this thesis, can be supported by several studies. Cuervo-Cazurra and Genç (2008) state that EMNEs internationalize to acquire strategic assets like technology and brands, enhancing their competitiveness. Schwens et al. (2018) suggest that geographic expansion helps firms achieve a greater competitive advantage. Additionally, adapting and responding to varying market conditions is a benefit of geographic internationalization (Schwens et al., 2018; Vermeulen & Barkema, 2002).

Another possible explanation for the positive effect found in this thesis, is risk diversification as suggested by Kim et al. (1993). They argue that income from different countries can dampen the impact of economic downturns in a specific region, contributing to a more stable and resilient financial position (Kim et al., 1993). In addition, according to Barringer and Greening (1998), geographic expansion can help firms reach a larger customer base, which can eventually result in economies of scale, which could explain the positive effect on firm performance.

5.2 Board gender diversity

The regression analysis shows that board gender diversity has no significant moderating effect on the relationship between geographic internationalization scope and firm performance of EMNEs. This resulted in the rejection of hypothesis 2, which expected gender diversity on boards to have a significant positive moderating effect.

The regression analysis shows that board gender diversity does not significantly moderate the relationship between geographic internationalization scope and firm performance. These results are contradicting with those of Nielsen and Huse (2010) and Adams and Ferreira (2009), who found that gender diversity leads to better decision-making and corporate performance. Additionally, Brahma et al. (2020) and Singhania et al. (2022) show that board gender diversity positively impacts corporate performance, especially with a substantial presence of women. These studies suggest that gender diversity provides strategic advantages valuable in different contexts (Brahma et al., 2020; Singhania et al., 2022).

Brahma et al. (2020) conclude that gender diversity has a positive effect when there are three or more women on the board. With fewer women, the effects may vary and be less clear, possibly explaining the non-significant result in the regression analysis. Marquez-Cardenas et al. (2022) note that in Latin America, limited gender diversity within boards may contribute to the lack of a significant moderating influence. If women are underrepresented, their ability to influence strategic decisions is limited (Marquez-Cardenas et al., 2022). Joecks et al. (2012) found that a critical mass of about 30% women on the board significantly improves corporate performance. In this study, board gender diversity was below the 30% threshold in 76.6% of observations (see Appendix 12). This high percentage of low gender diversity could explain the lack of a significant effect, as indicated by Brahma et al. (2020) and Marquez-Cardenas et al. (2022).

The underrepresentation of women on boards of EMNEs is noteworthy and may suggest that managers of EMNEs do not pay enough attention to board gender diversity. Many developed countries have gender quotas, requiring a minimum number or percentage of women on boards (Kiefer, 2022). Unlike developed countries, few emerging countries have implemented any form of gender quotas (MSCI, 2023). This could explain the large number of companies in the dataset with less than 30% women on the board. In addition, the complexity of the interaction between board gender diversity and internationalization may also play a role. The impact of gender diversity on the relationship between geographic internationalization and firm performance could vary, depending on other factors such as the nature of international expansion, specific market characteristics and the firm's overall strategy.

5.3 Board nationality diversity

In contrast to board gender diversity, the results show that board nationality diversity does have a significant moderating effect on the relationship between geographic internationalization scope and firm performance of EMNEs. This indicates that the presence of a greater diversity of nationalities on boards, reinforces the positive impact of geographic internationalization on the firm performance of MNEs in emerging markets.

The positive moderating effect of board nationality diversity can be explained using previously done research. According to Jhunjhunwala and Mishra (2012), companies with nationality diverse boards can benefit from a broader understanding of different business environments. This can help in successfully navigating and penetrating international markets, which can enhance the positive impact of internationalization scope on firm performance (Estélyi & Nisar, 2016). In addition, Adams et al. (2010) and Naveen et al. (2013) argue that foreign board members can add value through their knowledge of foreign markets and access to international networks. This can improve strategic decision-making and help companies better capitalize on their international expansion.

The results of this study, refute the findings in the study by Ujunwa (2012), which showed that board nationality diversity has no significant impact on corporate financial performance in Nigeria. Also, the positive moderating effect of board nationality diversity contradicts the study by Harjoto et al. (2019). It was suggested that board nationality diversity can lead to

communication problems and conflicts within the board of directors, which can reduce the effectiveness of decision-making (Harjoto et al., 2019). According to Harjoto et al. (2019), national differences can cause misunderstandings and tensions that disrupt board cohesion and cooperation, which can lead to suboptimal decisions and performance.

It is important to recognize that the value of board nationality diversity may vary by country and evolve over time, as also indicated in Dodd and Zheng's (2022) research. It may be that the positive effects of board nationality diversity, may not be universal for all countries. However, in the context of the BRICS+ countries studied, the results demonstrate that diversity in nationalities within the board can be a powerful driver for improving firm performance through effective internationalization.

5.4 Control variables

In this study, the control variables firm age, firm size and industry were added. Firm age showed a non-significant effect. Firm age was expected to have a positive impact, as older firms generally exhibit better firm performance (Handoyo et al., 2023). However, the literature on the impact of firm age is not one-sided. In fact, according to Stock et al. (2002), firms are less likely to innovate as they age. Innovation is related to firm performance (Yilmaz et al., 2005), what would imply that older firms actually perform worse. It could be possible that these effects balance each other out, what would explain why no significant effect of firm age was observed in this study.

The control variable firm size showed a significant positive effect. This was in line with the expectation that larger firms would show better firm performance (Yadav et al., 2021). Although Yadav et al. (2021) measured firm size by total assets, net sales and market capitalization ratio, the results in this thesis show that the size of EMNEs in BRICS+ countries, measured by number of employees, is also positively correlated with improved firm performance. This highlights that firm size is an important determinant of firm performance, regardless of the used measurement method. It can therefore be argued that the size of MNEs in the BRICS+ countries, as measured by the number of employees, is positively correlated with improved firm performance. A significant effect was also found for the control variable industry, which was in line with findings of (Moss et al., 2013). However, the effect of industry was many times smaller than the effect of firm size.

6. Conclusion

In the final chapter of this thesis, an overview of the main findings is presented. Subsequently, the theoretical and practical implications of the results, as well as the limitations of the study will be discussed. The chapter ends with suggestions for future research.

6.1 Concluding

The purpose of this study was to examine whether geographic internationalization scope influences firm performance of EMNEs, and whether board gender and nationality diversity moderate this relationship. While there has been previous research on these concepts in developed countries, they remain understudied in emerging countries. Previous studies have mainly focused on the direct effect of gender diversity and cultural diversity on boards. The research question, as formulated in the first chapter of this thesis, is:

> *'How does the geographic internationalization scope influence the performance of MNEs from emerging countries, and in what way do board characteristics act as moderators in this relationship?'*

Data from the LSEG and Orbis databases for BRICS+ countries were collected and merged into a new dataset, then analyzed using multiple regression analysis. The analysis showed a positive significant effect between geographic internationalization scope and firm performance, implying that a larger internationalization scope improves EMNE performance, thus supporting hypothesis 1. However, no significant effect was found for board gender diversity, leading to the rejection of hypothesis 2. This could be due to the underrepresentation of women on boards in the sample.

However, a significant positive effect was found for board nationality diversity, enhancing the impact of geographic internationalization scope on firm performance, thus supporting hypothesis 3. Three control variables were included: company age, company size, and sector. Firm age showed no significant result, while firm size and sector both had significant effects, indicating that EMNE performance increases with company growth and that sector also affects performance.

6.2 Theoretical implications

The results of this thesis offer several important theoretical implications for understanding the relationship between geographic internationalization scope and firm performance of MNEs in emerging markets, along with the role of board diversity as a moderator.

The positive relationship between geographic internationalization scope and firm performance of EMNEs, as shown in this study, supports the theory that internationalization allows MNEs from emerging markets to acquire strategic assets like technology and brands, strengthening their competitive position (Cuervo-Cazurra & Genç, 2008). This result confirms Schwens et al. (2018), who argue that geographic expansion helps firms achieve greater competitive advantage through economies of scale and risk diversification. Studies by Goerzen and Beamish (2003) and Lee and Caves (1998), which point to increased costs and risks of internationalization, are refuted. EMNEs from BRICS+ countries share similarities with MNEs from developed countries, benefiting from strategic assets and economies of scale. Their larger, faster-growing home markets offer unique advantages that differentiate them from developed markets.

Although the results revealed no significant moderating effect of board gender diversity on the relationship between geographic internationalization scope and firm performance, previous studies highlight potential benefits. Nielsen and Huse (2010) and Adams and Ferreira (2009) showed that board gender diversity can lead to better decision-making and improved performance. Gender diversity is particularly effective with a substantial presence of women (Brahma et al., 2020; Singhania et al., 2022). The absence of a significant effect in this thesis may be due to many observations having less than the 30% critical mass of female board members (Joecks et al., 2012). This low percentage of female board members in many of the observations, suggests that EMNEs from BRICS+ countries do not put much thought into gender quotas on boards. This is typical for MNEs from emerging countries, while MNEs from developed countries pay a lot of attention to gender quotas (Kiefer, 2022).

The significant positive moderating role of board nationality diversity on the relationship between geographic internationalization scope and firm performance highlights its strategic advantages. This confirms findings of Jhunjhunwala and Mishra (2012), who suggest that multiple nationalities within boards help companies navigate international markets, enhancing the positive impact of internationalization. The results also support Adams et al. (2010) and

Naveen et al. (2013), who state that foreign board members add value through their knowledge of foreign markets and access to international networks. More diverse nationalities on boards positively affect EMNEs from BRICS+ countries as they expand abroad.

6.3 Managerial implications

In addition to theoretical implications, the results of this research also have several important implications for managers of MNEs in emerging markets. The findings that a larger geographic internationalization scope leads to improved firm performance offers insight for strategic choices. Managers are recommended to consider expanding their firms' international presence to gain competitive advantages and improve firm performance. This expansion can help companies acquire strategic assets, such as technology and brands, and strengthen their market position (Cuervo-Cazurra & Genç, 2008).

Although the results showed no significant moderating effect of board gender diversity on the relationship between geographic internationalization scope and firm performance, managers may as yet pay attention to gender diversity. Despite evidence of a positive moderating role of board gender diversity, it is still plausible that board gender diversity indirectly improves firm performance. Previous studies suggest that gender diversity can lead to better decision-making and improved performance, especially when there are 30% women on the board (Joecks et al., 2012). Despite many EMNEs not having gender quotas, managers should consider the importance of having (at least 30%) women on the board. The positive moderating role of board nationality diversity underscores the importance for managers to assemble a board with members of different nationalities, to better navigate international markets.

6.4 Limitations and future research

This study has several limitations that affect the interpretation of the results and therefore need to be addressed. For each limitation, it is suggested how it could be considered in future research.

6.4.1 Sample size

The first limitation concerns the sample size, which was 167 observations. Although this meets the guidelines of Khamis and Kepler (2010) and Tabachnick and Fidell (2013), it remains relatively small. Additionally, over 40% of the sample consisted of companies from China,

while other BRICS+ countries were underrepresented. Of the countries added to BRICS+ in January 2024, data is only available for Saudi Arabia and the United Arab Emirates, together comprising just 5% of the total sample.

This affects the generalizability of the results to other BRICS+ countries, requiring caution when applying these findings to the entire region. Beyond BRICS+, the results cannot be readily generalized to other emerging or developing countries. BRICS+ countries are unique due to their strong economic growth, geopolitical influence, and diverse economic structures and cultural backgrounds. They represent a significant portion of the world's population and output, playing a crucial role in the global economic and political arena (Lal, 2023). Their cooperation strengthens their ability to address shared challenges and provide an alternative voice in the international economic order (Cheng et al., 2007). Differences in institutional, economic, and cultural contexts may limit the applicability of the findings to other emerging countries.

To provide more detailed explanations regarding the effect of geographic internationalization scope on EMNE performance, more data from BRICS+ countries and a larger sample are needed. Including other emerging countries outside BRICS+ would help determine if the results remain consistent and generalizable. A larger sample with better representation may also allow for analysis of inter-country differences, examining if other emerging countries align with or differ from BRICS+ findings.

6.4.2 Measurement of board diversity

In addition, the study is based on a cross-sectional dataset, with data collected at one point in time. Only data from 2021 was used due to limited board diversity data for other years, making causal relationships harder to identify. The limited measurements for diversity, focusing only on the percentage of women for gender, and ratio of nationalities for nationality, is also a limitation. Diversity includes other dimensions like age, education, and professional background. Also board size is important, since the study could not assess if the board met the critical value of three women (Brahma et al., 2020). Not including these diversity forms may limit the analysis.

Future studies might use a longitudinal design to better understand causal relationships. Expanding the sample and including more dimensions of board diversity may provide a more complete picture.

6.4.3 Additional control variables

Another limitation concerns the control variables. Although firm size, firm age, and sector were included, other relevant variables were not. The multiple regression analysis showed that the control variables explained 24.9% of the variance. Market dynamics, competitive pressures, and economic conditions were not included, possibly leading to overestimation or underestimation of the effects of the independent variables. Including additional control variables in future research can improve accuracy. Addressing these limitations can contribute to a deeper understanding of the interactions between internationalization, board diversity, and firm performance.

Resources

Abdullah, S. N., & Ismail, K. N. I. K. (2013). Gender, ethnic and age diversity of the boards of large Malaysian firms and performance. *Jurnal Pengurusan*, 38, 27–40. https://doi.org/10.17576/pengurusan-2013-38-03

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, 94(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007

Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey. *Journal of Economic Literature*, 48(1), 58–107. http://www.jstor.org/stable/40651578

Adedoyin, F. F., Bekun, F. V., Driha, O. M., & Balsalobre-Lorente, D. (2020). The effects of air transportation, energy, ICT and FDI on economic growth in the industry 4.0 era: Evidence from the United States. *Technological Forecasting and Social Change*, 160, 120297. https://doi.org/10.1016/j.techfore.2020.120297

Akpan, E. O., & Amran, N. A. (2014). Board Characteristics and Company Performance: Evidence from Nigeria. *Journal of Finance and Accounting*, 2(3), 81. https://doi.org/10.11648/j.jfa.20140203.17

Albu, A. (2021). Organisation of Industry. *Nature*, 136, 237-239. https://doi.org/10.1038/136237a0.

Aliyu A., Bello, M. U., Kasim, R., & Martin, D. (2014). Positivist and Non-Positivist paradigm in social science research: conflicting paradigms or perfect partners? *Journal of Management and Sustainability*, 4(3). https://doi.org/10.5539/jms.v4n3p79

Amighini, A., Cozza, C., Giuliani, E., Rabellotti, R., & Scalera, V. G. (2015). Multinational enterprises from emerging economies: what theories suggest, what evidence shows. A literature review. *Economia e Politica Industriale*, 42(3), 343–370. https://doi.org/10.1007/s40812-015-0011-8

Andreff, W. (2016). Outward foreign direct investment from BRICs countries: Comparing the stratégies of Brazilian, Russian,Indian and Chinese multinational companies. *The European Journal of Comparative Economics*, 12 (2), 79–131. https://shs.hal.science/halshs-01342391/document

Baker, H. K., Pandey, N., Kumar, S., & Haldar, A. (2020). A bibliometric analysis of board diversity: Current status, development, and future research directions. *Journal of Business Research*, 108, 232–246. https://doi.org/10.1016/j.jbusres.2019.11.025

Barkema, H. G., & F. Vermeulen (1998). "International Expansion through Start-Up or Acquisition: A Learning Perspective," *Academy of Management Journal* 41, 7–26.

Barringer, B.R. & D.W. Greening (1998). Small business growth through geographic expansion: A comparative case study. *Journal of Business Venturing*, 13(6), 467–492.

Belcredi, M., & Ferrarini, G. (2013). Boards and shareholders in European listed companies. In *Cambridge University Press eBooks*. https://doi.org/10.1017/cbo9781139629126

Bernile, G., Bhagwat, V., & Yonker, S. E. (2018). Board diversity, firm risk, and corporate policies. *Journal of Financial Economics*, 127(3), 588–612. https://doi.org/10.1016/j.jfineco.2017.12.009

Brahma, S., Nwafor, C., & Boateng, A. (2020). Board gender diversity and firm performance: The UK evidence. *International Journal of Finance & Economics*, 26(4), 5704–5719. https://doi.org/10.1002/ijfe.2089

Bruton, G., Ahlstrom, D., & Obłój, K. (2007). Entrepreneurship in Emerging Economies: Where Are We Today and Where Should the Research Go in the Future. Entrepreneurship Theory and Practice, 32, 1 - 14. https://doi.org/10.1111/j.1540-6520.2007.00213.x.

Campbell, K., & Mínguez-Vera, A. (2007). Gender diversity in the boardroom and firm financial performance. *Journal of Business Ethics*, 83(3), 435–451. https://doi.org/10.1007/s10551-007-9630-y

Carney, M., Dieleman, M., & Taussig, M. (2016). How are institutional capabilities transferred across borders? *Journal of World Business*, 51(6), 882–894. https://doi.org/10.1016/j.jwb.2015.12.002

Cheng, H., Gutierrez, M., Mahajan, A., Shachmurove, Y., & Shahrokhi, M. (2007). A future global economy to be built by BRICs. *Global Finance Journal*, 18(2), 143–156. https://doi.org/10.1016/j.gfj.2006.04.003

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage Publications, Inc.

Cuervo-Cazurra, A., & Genç, M. E. (2008). Transforming disadvantages into advantages: developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39(6), 957–979. https://doi.org/10.1057/palgrave.jibs.8400390

Cyert, R.D. & March, J.G. (1963). *A Behavioral Theory ofthe Firm*. Prentice-Hall, Englewood Cliffs, NJ

Dodd, O., Frijns, B., & Garel, A. (2022). Cultural diversity among directors and corporate social responsibility. *International Review of Financial Analysis*, 83, 102337. https://doi.org/10.1016/j.irfa.2022.102337

Dodd, O., & Zheng, B. (2022). Does Board Cultural Diversity Contributed by Foreign Directors Improve Firm Performance? Evidence from Australia. *Journal of Risk and Financial Management,* 15(8), 332. https://doi.org/10.3390/jrfm15080332

Dunning, J. (1981). *International Production and Multinational Enterprises*. London: Allen and Unwin.

Eckert, S., & Trautnitz, G. (2010). A commentary on risk reduction by geographic diversification. *The Multinational Business Review*, 18(4), 95–113. https://doi.org/10.1108/1525383x201000021

Estélyi, K. S., & Nisar, T. M. (2016). Diverse boards: Why do firms get foreign nationals on their boards? *Journal of Corporate Finance*, 39, 174–192. https://doi.org/10.1016/j.jcorpfin.2016.02.006

Fey, C. F., Nayak, A. K. J. R., Wu, C., & Zhou, A. J. (2016). Internationalization strategies of emerging market multinationals. *Journal of Leadership & Organizational Studies*, 23(2), 128–143. https://doi.org/10.1177/1548051816633229

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE Publications.

Franke, G. R., & Richey, R. G. (2010). Improving generalizations from multi-country comparisons in international business research. *Journal of International Business Studies*, 41(8), 1275–1293. https://doi.org/10.1057/jibs.2010.21

Gande, A., Schenzler, C., & Senbet, L. W. (2009). Valuation effects of global diversification. *Journal of International Business Studies*, 40(9), 1515–1532. https://doi.org/10.1057/jibs.2009.59

Gardiner, E. (2022). What's age got to do with it? The effect of board member age diversity: a systematic review. *Management Review Quarterly*. https://doi.org/10.1007/s11301-022-00294-5

Goerzen, A., & Beamish, P. W. (2003). Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13), 1289–1306. https://doi.org/10.1002/smj.357

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th ed.). Cengage Learning.

Handoyo, S., Mulyani, S., Ghani, E. K., & Soedarsono, S. (2023). Firm characteristics, business environment, strategic orientation, and performance. *Administrative Sciences*, 13(3), 74. https://doi.org/10.3390/admsci13030074

Harjoto, M. A., Laksmana, I., & Yang, Y. (2019). Board nationality and educational background diversity and corporate social performance. *Corporate Governance*, 19(2), 217–239. https://doi.org/10.1108/cg-04-2018-0138

Hashai, N. (2011). Sequencing the expansion of geographic scope and foreign operations by "born global" firms. *Journal of International Business Studies*, 42(8), 995–1015. https://doi.org/10.1057/jibs.2011.31

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values.* Beverly Hills, CA: Sage Publications.

Hoskisson, R. E., Eden, L., Lau, C. P., & Wright, M. (2000). STRATEGY IN EMERGING ECONOMIES. *Academy of Management Journal*, 43(3), 249–267. https://doi.org/10.2307/1556394

Jhunjhunwala, S., & Mishra, R. K. (2012, November 8). *Board Diversity and Corporate Performance: The Indian Evidence.* The IUP Journal of Corporate Governance. 11.

Joecks, J., Pull, K., & Vetter, K. (2012). Gender diversity in the boardroom and firm performance: What exactly constitutes a "Critical mass?" *Journal of Business Ethics*, 118(1), 61–72. https://doi.org/10.1007/s10551-012-1553-6

Johanson, J., & Vahlne, J. (1977). The internationalization Process of the Firm—A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32. https://doi.org/10.1057/palgrave.jibs.8490676

Johanson, J., & Vahlne, J. E. (1990). *The mechanism of internationalisation*. International marketing review.

Jütten, M., & Falkenberg, D. (2024). Expansion of BRICS. *PE 760.368* [Report]. *European Parliamentary Research Service*. Retrieved March 18, 2024, from https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/760368/EPRS_BRI(2024)760368_EN.pdf

Kaya, Y. (2013). Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences. *European Journal Of Education*, 48(2), 311–325. https://doi.org/10.1111/ejed.12014

Khamis, H. J., & Kepler, M. (2010). Sample Size in Multiple Regression: 20 + 5k. Journal of Applied Statistical Science, 17, 505-517

Khanna, T., & Palepu, K. G. (2000). The future of business groups in emerging markets: long-run evidence from Chile. *Academy of Management Journal*, 43(3), 268–285. https://doi.org/10.2307/1556395

Khanna, T. & Palepu, K. G. (2010). The nature of institutional voids in emerging markets, in T. Khanna and K. G. Palepu (eds), Winning in Emerging Markets: A Road Map for Strategy and Execution: 13-26. Boston: Harvard Business Press.

Khidmat, W. B., Khan, M. Z., & Ullah, H. (2020). The Effect of Board Diversity on Firm Performance: Evidence from Chinese L isted Companies. *Indian Journal of Corporate Governance*, 13(1), 9–33. https://doi.org/10.1177/0974686220923793

Kiefer, R. (2022). Gender Quotas and Equity in Corporate Boardrooms: A Legal, Economic, and Social Analysis. *Bellarmine Law Society Review*, 12(1), 3–18. Retrieved from https://ejournals.bc.edu/index.php/blsr/article/view/14475

Kiliç, M., & Kuzey, C. (2016). The effect of board gender diversity on firm performance: evidence from Turkey. *Gender in Management*, 31(7), 434–455. https://doi.org/10.1108/gm-10-2015-0088

Kim, W. C., Hwang, P., & Burgers, W. (1993). Multinationals' diversification and the risk-return trade-off. *Strategic Management Journal*, 14(4), 275–286. https://doi.org/10.1002/smj.4250140404

Koster, M., Alkema, R, & Williams, C. (2010). *Resuming Internationalization at Starbucks*. Ivey Publishing.

Kumar M. S. (1984). *Growth, acquisition and investment: An analysis of the growth of industrial firms and their overseas activities*. Cambridge University Press.

Lal, B. (2023). The BRICS Countries: Trends of Demographic and Economic Development. *International Journal of Science and Research*, 12, 702-708.

Lall, S. and Siddharthan, N.S. (1982) The Monopolistic Advantages of Multinationals: Lessons from Foreign Investment in the U.S. *Economic Journal*, 92, 668-683. http://dx.doi.org/10.2307/2232556

Le T. V., & Buck T. (2011). State ownership and listed firm performance: A universally negative governance relationship? *Journal of Management and Governance*, 15(2), 227–248. https://doi.org/10.1007/s10997-009-9098-5

Lee, T., & Caves, R. E. (1998). Uncertain outcomes of foreign investment: determinants of the dispersion of profits after large acquisitions. *Journal of International Business Studies*, 29(3), 563–581. https://doi.org/10.1057/palgrave.jibs.8490007

Li, H., & Chen, P. (2018). Board gender diversity and firm performance: The moderating role of firm size. *Business Ethics*, *27*(4), 294–308. https://doi.org/10.1111/beer.12188

Liang, Y., Giroud, A., & Rygh, A. (2021). Emerging multinationals' strategic asset-seeking M&As: a systematic review. *International Journal of Emerging Markets*, 16(7), 1348–1372. https://doi.org/10.1108/ijoem-12-2019-1059

LSEG. (2023). Environmental, social and governance scores from LSEG. Retrieved March 6, 2024, from https://www.lseg.com/content/dam/data-analytics/en_us/documents/methodology/lseg-esg-scores-methodology.pdf

Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic management journal*, 22(6-7), 565-586.

Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4), 481–498. https://doi.org/10.1057/palgrave.jibs.8400275

Marquez-Cardenas, V., González-Ruiz, J. D., & Grisales, E. a. D. (2022). Board gender diversity and firm performance: evidence from Latin America. *Journal of Sustainable Finance & Investment*, 12(3), 785–808. https://doi.org/10.1080/20430795.2021.2017256

Mathews, J. A. (2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23, 5–27. https://doi.org/10.1007/s10490-006-6113-0

Mendoza, X., Espinosa, C., & Araya-Castillo, L. (2019). When geography matters: International diversification and firm performance of Spanish multinationals. BRQ Business Research Quarterly. https://doi.org/10.1016/j.brq.2018.10.006

Mody, A. (2004). *What Is an Emerging Market?* International Monetary Fund.

Moghaddam, K., Sethi, D., Weber, T., & Wu, J. (2014). The Smirk of Emerging Market Firms: A Modification of the Dunning's Typology of Internationalization Motivations. *Journal of International Management*, 20, 359-374. https://doi.org/10.1016/J.INTMAN.2014.01.002.

Moss, T. W., Payne, G. T., & Moore, C. B. (2013). Strategic consistency of exploration and exploitation in family businesses. *Family Business Review*, 27(1), 51–71. https://doi.org/10.1177/0894486513504434

MSCI. (2023). Women On Boards: Progress Report 2022. In MSCI.COM (pp. 2–30). Retrieved June 10 2024, from https://www.msci.com/documents/10199/36771346/Women_on_Boards_Progress_Report_2022.pdf

Naveen, L., Daniel, N. D., & McConnell, J. J. (2013). The Advisory Role of Multinational Directors in U.S. Firms. *Social Science Research Network*. https://doi.org/10.2139/ssrn.2023420

Nayyar, D. (2016). BRICS, developing countries and global governance. *Third World Quarterly*, 37(4), 575–591. https://doi.org/10.1080/01436597.2015.1116365

Nielsen, S., & Huse, M. (2010). The Contribution of Women on Boards of Directors: Going beyond the Surface. *Corporate Governance: An International Review*, 18(2), 136–148. https://doi.org/10.1111/j.1467-8683.2010.00784.x

Odero, J. A., & Egessa, R. (2023). Board Nationality and Educational Diversity and Organizational Performance: *A Systematic Review of Literature. International Journal of Business, Economics, and Social Development*, 4(4), 218–228. https://doi.org/10.46336/ijbesd.v4i4.522

Radboud University. (2023). *Nijmegen School of Management Master Thesis Handbook for Business Administration* [PDF]. Nijmegen School of Management.

Ramamurti, R. (2012). What is really different about emerging market multinationals? *Global Strategy Journal*, 2(1), 41–47. https://doi.org/10.1002/gsj.1025

Rose, C., Munch-Madsen, P., & Funch, M. (2013). Does Board Diversity Really Matter? Gender Does Not, but Citizenship Does. *International Journal of Business Science and Applied Management*, 8(1), 15-27. http://www.business-and-management.org/paper.php?id=96

Schwens, C., Zapkau, F., Bierwerth, M., Isidor, R., Knight, G., & Kabst, R. (2018). International Entrepreneurship: A Meta–Analysis on the Internationalization and Performance Relationship. *Entrepreneurship Theory and Practice*, 42, 734 - 768. https://doi.org/10.1177/1042258718795346.

Shepherd, D. A., & Suddaby, R. (2016). Theory building. *Journal of Management*, 43(1), 59–86. https://doi.org/10.1177/0149206316647102

Singhania, S., Singh, J., & Aggrawal, D. (2022). Board committees and financial performance: exploring the effects of gender diversity in the emerging economy of India. *International Journal of Emerging Markets*. https://doi.org/10.1108/ijoem-03-2022-0491

Stock, G. N., Greis, N. P., & Fischer, W. J. (2002). Firm size and dynamic technological innovation. *Technovation*, 22(9), 537–549. https://doi.org/10.1016/s01664972(01)00061-x

Tabachnick, B. G., & Fidell, L. S. (2013). Using Multivariate Statistics (6th ed.). Pearson.

Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. *Corporate Governance*, Vol. 12 No. 5, pp. 656-674. https://doi.org/10.1108/14720701211275587

Vennix, J. A. M. (2019). *Research Methodology*. Pearson.

Verbeke, A., & Ciravegna, L. (2018). International entrepreneurship research versus international business research: A false dichotomy? *Journal of International Business Studies*, 49(4), 387–394. https://doi.org/10.1057/s41267-018-0154-8

Verbeke, A., & Kano, L. (2015). The New Internalization Theory and Multinational Enterprises from Emerging Economies: A Business History Perspective. *Business History Review*, 89(3), 415–445. doi:10.1017/S0007680515000689

Vermeulen, F., & Barkema, H. (2002). Pace, rhythm and scope: Process dependence in building a profitable multinational corporation. *Open Economies Review*. https://doi.org/10.1002/SMJ.243.

Wang, K., Ma, J., Xue, C., & Zhang, J. (2024). Board Gender Diversity and Firm Performance: Recent Evidence from Japan. *Journal of Risk and Financial Management*, 17(1), 20. https://doi.org/10.3390/jrfm17010020

Yadav, I. S., Pahi, D., & Gangakhedkar, R. (2021). The nexus between firm size, growth and profitability: new panel data evidence from Asia–Pacific markets. *European Journal of Management and Business Economics*, 31(1), 115–140. https://doi.org/10.1108/ejmbe-03-2021-0077

Yilmaz, C., Alpkan, L., & Ergün, E. (2005). Cultural determinants of customer- and learningoriented value systems and their joint effects on firm performance. *Journal of Business Research*, 58(10), 1340–1352. https://doi.org/10.1016/j.jbusres.2004.06.002

Yilmaz, M. K., Hacioğlu, Ü., Tatoğlu, E., Aksoy, M., & Duran, S. (2022). Measuring the impact of board gender and cultural diversity on corporate governance and social performance: evidence from emerging markets. *Ekonomska Istrazivanja-economic Research*, 36(2). https://doi.org/10.1080/1331677x.2022.2106503

Appendix

Appendix 1: Deleted companies - Non MNEs

YEAR	COUNTRY	ISIN	CUL_DIV	GEN_DIV	ROA	EMPLOYEES	INT_SCOPE	IND_CODE	IND_NAME	BUSI_CODE	BUSI_NAME
1993	CN	CNE0000004	40	0	0,79	9201	0	51	Basic Materi	5110	Chemicals
1999	CN	US01609W1(	25	16,67	10,35	251462	0	57	Technology	5720	Software & IT Services
1944	ZA	GB00BRXH2(	27,27	36,36	8,43	30561	0	51	Basic Materi	5120	Mineral Resources
1944	ZA	ZAE0003026	14,29	28,57	11,35	6260	0	52	Industrials	5220	Industrial & Commercial Services
1985	BR	BRSANBCDA	41,67	25	2,12	48834	0	55	Financials	5510	Banking & Investment Services
2002	CN	CNE100003N	8,33	16,67	7,36	1019	0	57	Technology	5720	Software & IT Services
1995	CN	CNE1000002	16,67	0	1,84	288200	0	53	Consumer Cy	5310	Automobiles & Auto Parts
2004	CN	CNE1000002	11,11	16,67	1,13	351252	0	55	Financials	5510	Banking & Investment Services
1995	CN	CNE000000T	11,11	0	2,29	80321	0	52	Industrials	5240	Transportation
2004	CN	CNE1000008	10	10	5,12	13338	0	51	Basic Materi	5130	Applied Resources
1999	BR	BRTRPLACNF	33,33	0	11,5	1400	0	59	Utilities	5910	Utilities
2002	RU	US29355E20	8,33	33,33	-	-	0	51	Basic Materi	5120	Mineral Resources
1993	CN	CNE000000D	10	30	11,68	16283	0	51	Basic Materi	5120	Mineral Resources
-	RU	RU000A102S	10	10	-	-	0	55	Financials	5560	Holding Companies
1990	ZA	ZAE0001526	33,33	44,44	1,35	-	0	54	Consumer N	5430	Food & Drug Retailing
1999	CN	US64110W1(	16,67	16,67	11,61	32064	0	57	Technology	5720	Software & IT Services
2014	CN	US62914V10	16,67	16,67	14,42	15204	0	53	Consumer Cy	5310	Automobiles & Auto Parts
1999	CN	CNE1000007	8,33	8,33	4,14	417173	0	50	Energy	5010	Energy - Fossil Fuels
2018	CN	US88557W1(	11,11	0	20,74	2129	0	55	Financials	5510	Banking & Investment Services
1994	CN	CNE000000C	10	20	11	5258	0	57	Technology	5720	Software & IT Services
1998	BR	BRVIVTACNC	25	25	6,39	34000	0	57	Technology	5740	Telecommunications Services
2006	BR	BRTAEECDAI	16,67	0	16,81	701	0	59	Utilities	5910	Utilities
1999	IN	INE854D010	11,11	11,11	5,97	3261	0	54	Consumer N	5410	Food & Beverages
2007	RU	RU000A106Y	11,11	11,11	3,89	10000	0	57	Technology	5720	Software & IT Services
2002	CN	CNE1000000	13,33	13,33	3,78	82555	0	53	Consumer Cy	5310	Automobiles & Auto Parts
1992	CN	CNE0000002	9,09	27,27	9,59	5340	0	53	Consumer Cy	5310	Automobiles & Auto Parts
2007	CN	US98417P20	16,67	16,67	3,46	1701	0	60	Real Estate	6010	Real Estate
1997	CN	CNE0000015	20	20	3,99	2297	0	54	Consumer N	5410	Food & Beverages
2000	CN	CNE100000B	7,14	14,29	8,83	43876	0	51	Basic Materi	5120	Mineral Resources

Table 5 – Deleted companies (non MNEs)

Appendix 2: Deleted companies - Missing values

YEAR	COUNTRY	ISIN	CUL_DIV	GEN_DIV	ROA	EMPLOYEES	INT_SCOPE	IND_CODE	IND_NAME	BUSI_CODE	BUSI_NAME
1946	ZA	ZAE000067211	10	40	4,13	$$ER: 4540,NO	17	52	Industrials	5240	Transportation
1994	ZA	ZAE000042164	21,43	35,71	6,01	$$ER: 4540,NO	15	57	Technology	5740	Telecommunications Services
1980	AE	AER00101017	11,11	11,11	3,55	$$ER: 4540,NO	1	51	Basic Materials	5120	Mineral Resources
2005	RU	RU000A0JNGA5	33,33	11,11	6,34	$$ER: 4540,NO	1	59	Utilities	5910	Utilities

Table 6 – Deleted companies (missing values)

Appendix 3: Deleted companies – Outliers

Country	ISIN	Z_Size	Z_Age	Z_Industry	Z_Scope	Z_ROA	Z_Gen_Div	Z_Cul_Div
IN	INE467B01029	5.85571	.24236	.95526	2.66435	1.43121	.24458	-.48708
IN	INE860A01027	1.70358	.07524	.95526	5,17053	.46152	.45161	-.66862
CN	US68276W4006	-.31590	1.16148	3.16232	-.49157	-9.75226	.24458	-.48708

Table 7 – Deleted companies (outliers)

Appendix 4: Descriptive statistics predicting variables

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
INT_SCOPE	167	1	61	7.96	10.185	2.855	.188	10.009	.374
GEN_DIV	167	.00	63.64	19.5304	13.84717	.648	.188	.181	.374
NAT_DIV	167	5.00	88.89	18.9659	16.11769	2.213	.188	4.956	.374
YEAR	167	1895	2018	1987.97	24.857	-1.556	.188	1.765	.374
EMPLOYEES	167	283	357000	29865.40	57786.865	3.929	.188	17.052	.374
Valid N (listwise)	167								

Table 8 – Descriptive statistics predicting variables

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
INT_SCOPE	167	1	61	7.96	10.185	2.855	.188	10.009	.374
log_INT_SCOPE	167	.00	1.79	.6457	.46595	.312	.188	-.769	.374
sqrt_INT_SCOPE	167	1.00	7.81	2.4383	1.42296	1.410	.188	2.129	.374
Valid N (listwise)	167								

Table 9 – Transformation Geographic internationalization scope

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
NAT_DIV	167	5.00	88.89	18.9659	16.11769	2.213	.188	4.956	.374
log_NAT_DIV	167	.70	1.95	1.1747	.27565	.974	.188	.160	.374
sqrt_NAT_DIV	167	2.24	9.43	4.0857	1.51206	1.564	.188	1.906	.374
Valid N (listwise)	167								

Table 10 – Transformation Board Nationality Diversity

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
EMPLOYEES	167	283	357000	29865.40	57786865	3.929	.188	17.052	.374
log_EMPLOYEES	167	2.45	5.55	4.0008	.66541	-.043	.188	-.177	.374
sqrt_EMPLOYEES	167	16.82	597.49	133.1808	110.45966	2.050	.188	5.073	.374
Valid N (listwise)	167								

Table 11 – Transformation Firm Size

Appendix 5: Descriptive statistics dependent variable

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ROA	167	.19	48.79	9.3374	8.97764	2.052	.188	4.758	.374
Valid N (listwise)	167								

Table 12 – Descriptive statistics dependent variable

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
ROA	167	.19	48.79	9.3374	8.97764	2.052	.188	4.758	.374
log_ROA	167	-.72	1.69	.7854	.43410	-.551	.188	.575	.374
sqrt_ROA	167	.44	6.98	2.7689	1.29636	.892	.188	.836	.374
Valid N (listwise)	167								

Table 13 – Transformation ROA

Appendix 6: Partial Regression Plots

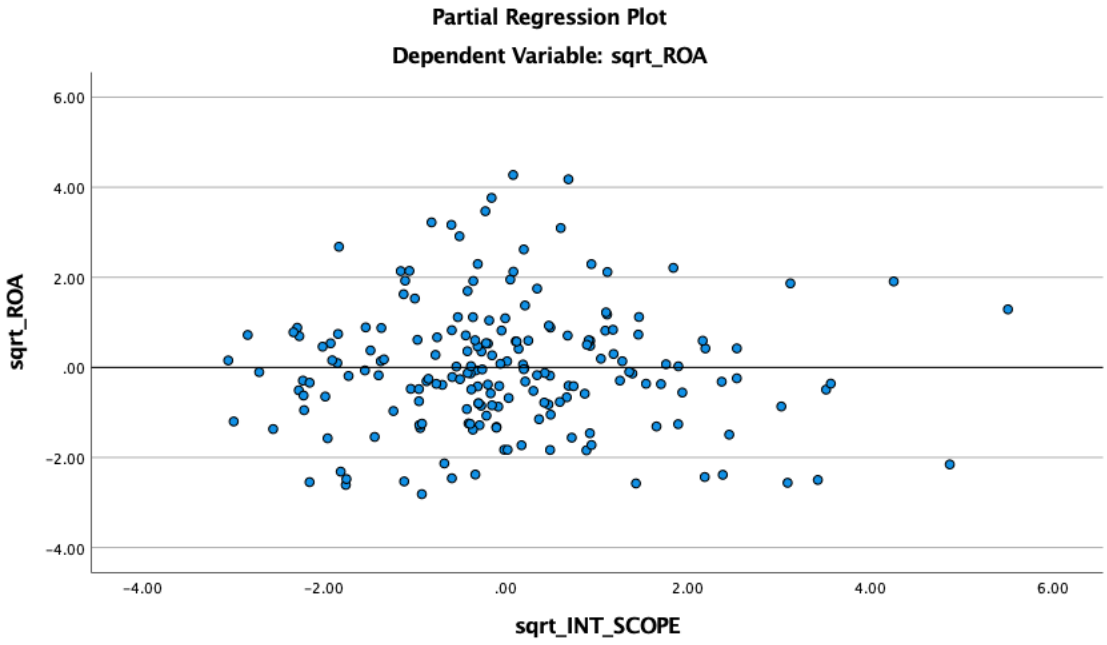

Figure 2 – Partial Regression Plot – Geographic internationalization scope

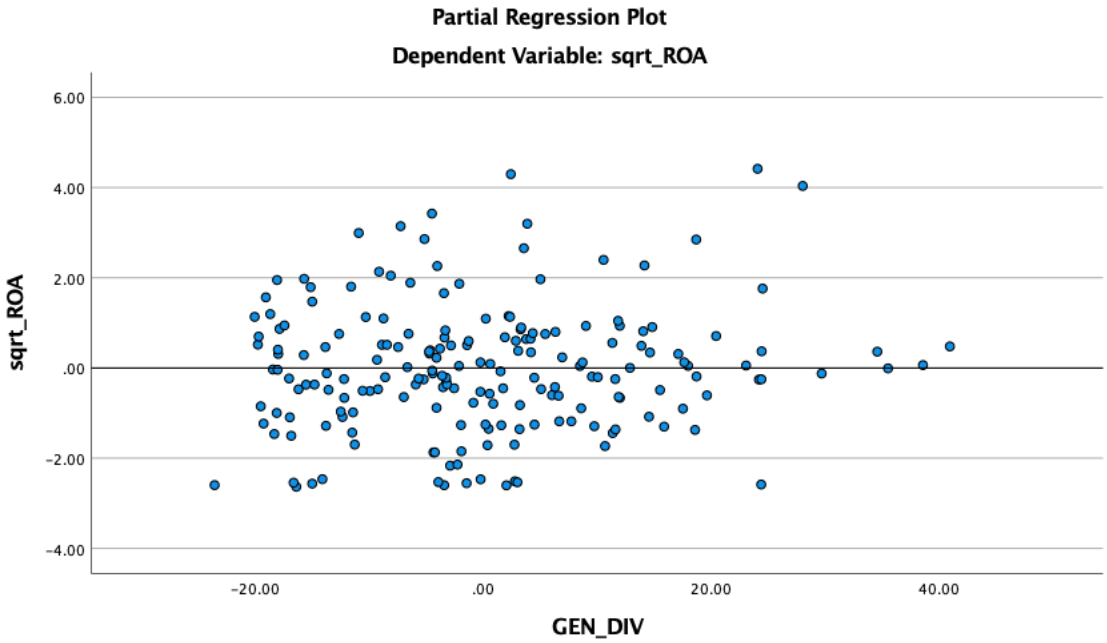

Figure 3 – Partial Regression Plot – Board gender diversity

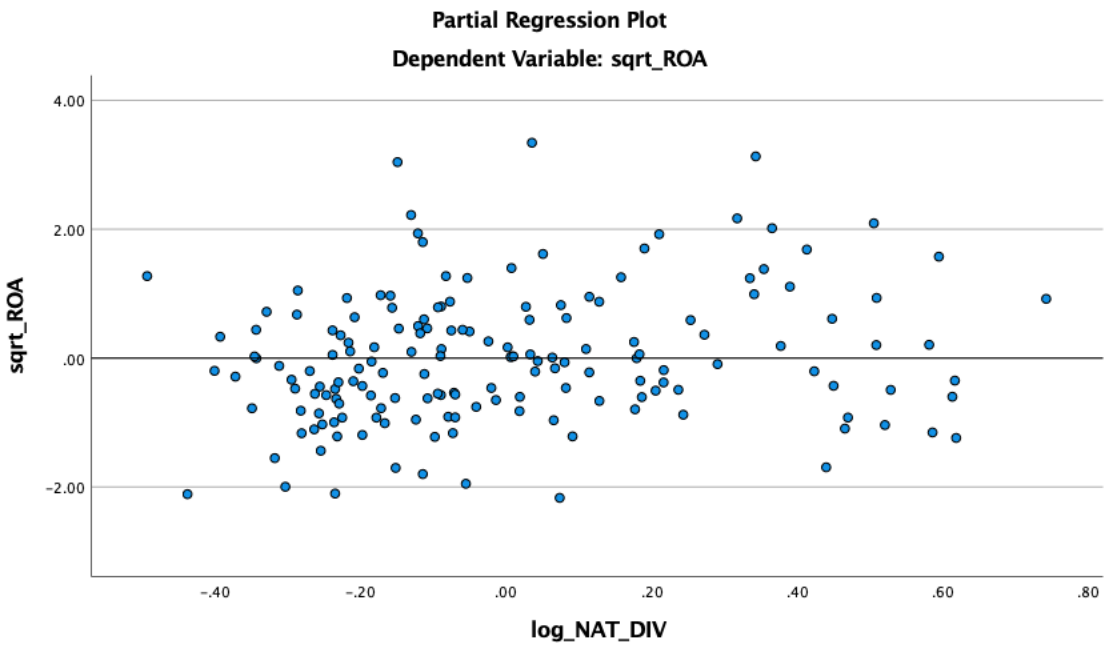

Figure 4 – Partial Regression Plot – Board nationality diversity

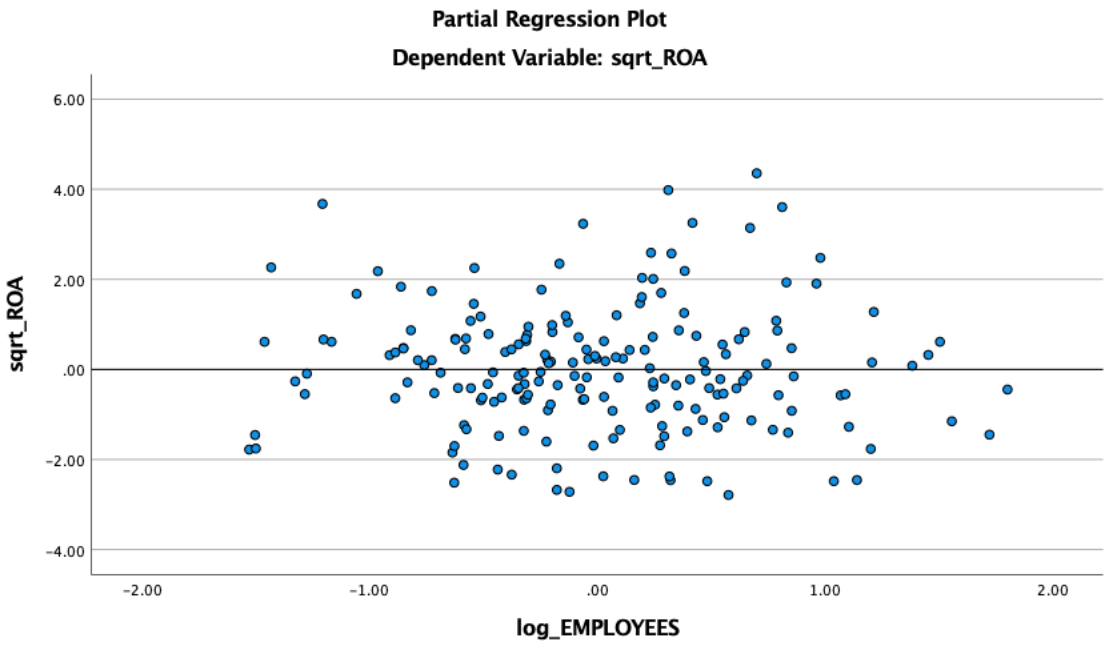

Figure 5 – Partial Regression Plot – Firm size

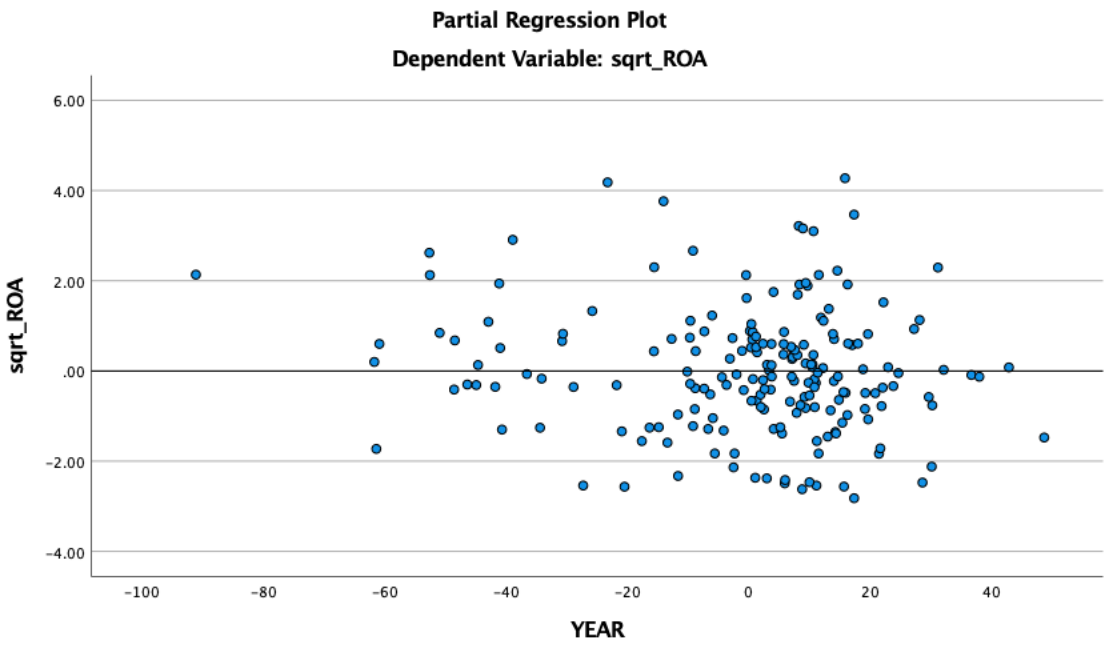

Figure 6 – Partial Regression Plot – Firm age

Appendix 7: Residual plot

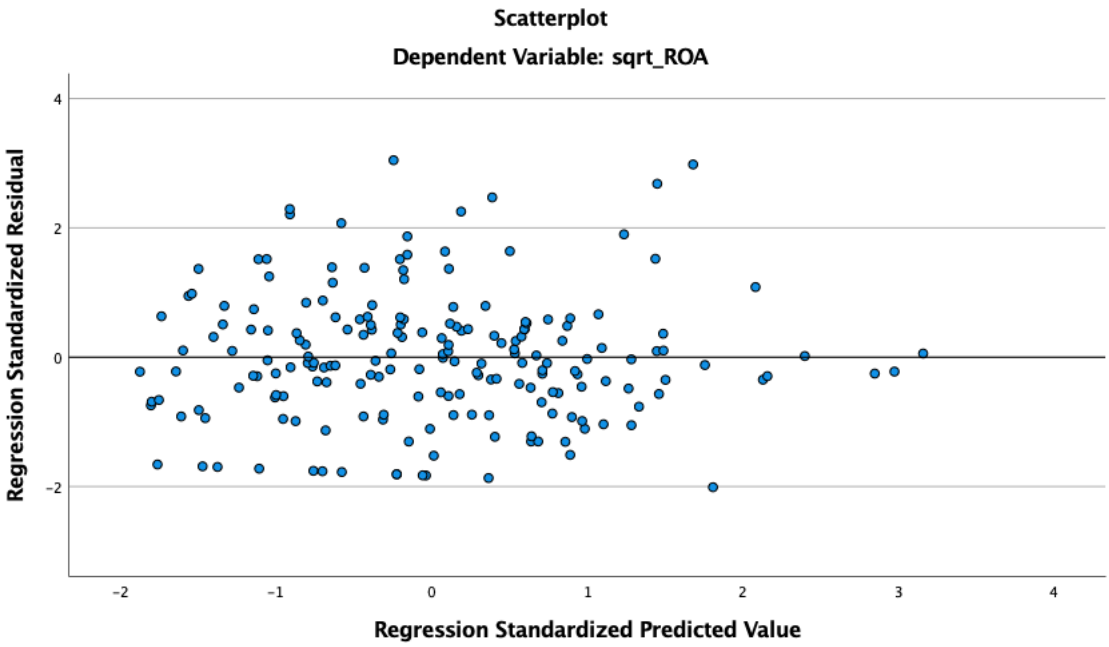

Figure 7 – Residual Plot

Appendix 8: Tolerance scores and VIF scores

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Correlations Zero-order	Correlations Partial	Correlations Part	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	5.983	6.741		.888	.376					
	YEAR	-.001	.004	-.019	-.276	.783	-.093	-.022	-.019	.915	1.093
	INDUSTRY	-.082	.034	-.173	-2.402	.017	-.271	-.185	-.162	.877	1.140
	log_EMPLOYEES	.829	.129	.444	6.453	<.001	.481	.451	.434	.956	1.046
2	(Constant)	-2.026	6.844		-.296	.768					
	YEAR	.004	.004	.070	.975	.331	-.093	.076	.063	.812	1.232
	INDUSTRY	-.096	.033	-.203	-2.918	.004	-.271	-.223	-.189	.865	1.156
	log_EMPLOYEES	.662	.132	.354	5.022	<.001	.481	.367	.325	.843	1.186
	sqrt_INT_SCOPE	.235	.064	.270	3.703	<.001	.374	.279	.240	.792	1.262
3	(Constant)	-1.668	7.025		-.237	.813					
	YEAR	.003	.004	.060	.815	.416	-.093	.064	.052	.766	1.305
	INDUSTRY	-.097	.033	-.204	-2.958	.004	-.271	-.228	-.189	.863	1.158
	log_EMPLOYEES	.637	.131	.341	4.867	<.001	.481	.359	.311	.834	1.199
	sqrt_INT_SCOPE	.207	.065	.237	3.208	.002	.374	.246	.205	.749	1.336
	GEN_DIV	.000	.006	.002	.036	.971	.030	.003	.002	.871	1.148
	log_NAT_DIV	.735	.299	.163	2.457	.015	.260	.191	.157	.930	1.075

a. Dependent Variable: sqrt_ROA

Table 14 – Tolerance and VIF scores

Appendix 9: Durbin-Watson Test

Model Summary[d]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.512[a]	.262	.249	1.07720	.262	19.310	3	163	<.001	
2	.566[b]	.320	.303	1.03750	.058	13.714	1	162	<.001	
3	.587[c]	.345	.320	1.02452	.025	3.066	2	160	.049	1.923

a. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY

b. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY, sqrt_INT_SCOPE

c. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY, sqrt_INT_SCOPE, log_NAT_DIV, GEN_DIV

d. Dependent Variable: sqrt_ROA

Table 15 – Durbin-Watson Test

Appendix 10: Normality of the error term

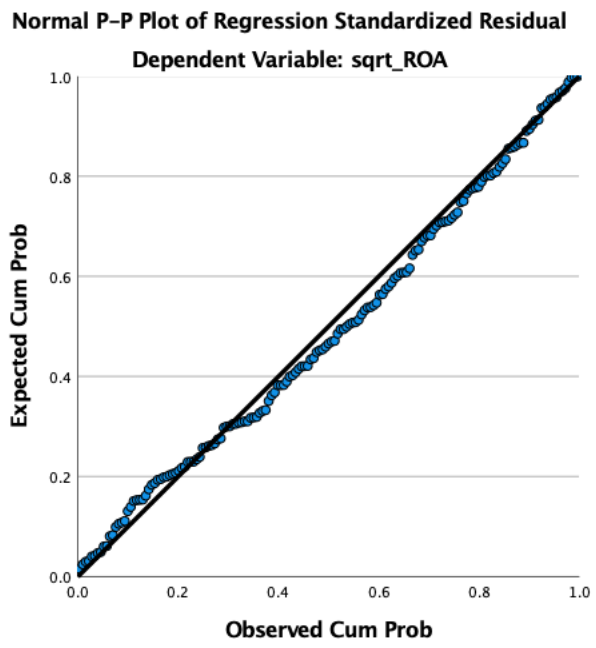

Figure 8 – P-P Plot of Regression Standard Residual

Appendix 11 – Results Multiple Regression Analysis

Descriptive Statistics

	Mean	Std. Deviation	N
sqrt_ROA	2.9309	1.24271	167
YEAR	1987.97	24.857	167
INDUSTRY	54.32	2.621	167
log_EMPLOYEES	4.0048	.66529	167
sqrt_INT_SCOPE	2.4383	1.42296	167
Moderation_GEN_DIV	4.1138	16.36492	167
Moderation_NAT_DIV	.0456	.52711	167

Table 16 – Descriptive Statistics - Multiple Regression Analysis

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	log_EMPLOYEES, YEAR, INDUSTRY[b]	.	Enter
2	sqrt_INT_SCOPE[b]	.	Enter
3	Moderation_GEN_DIV, Moderation_NAT_DIV[b]	.	Enter

a. Dependent Variable: sqrt_ROA

b. All requested variables entered.

Table 17 – Variable Entered - Multiple Regression Analysis

Model Summary[d]

					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.512[a]	.262	.249	1.07720	.262	19.310	3	163	<.001	
2	.566[b]	.320	.303	1.03750	.058	13.714	1	162	<.001	
3	.619[c]	.383	.360	.99400	.064	8.245	2	160	<.001	1.987

a. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY

b. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY, sqrt_INT_SCOPE

c. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY, sqrt_INT_SCOPE, Moderation_GEN_DIV, Moderation_NAT_DIV

d. Dependent Variable: sqrt_ROA

Table 18 – Model Summary - Multiple Regression Analysis

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67.221	3	22.407	19.310	<.001[b]
	Residual	189.139	163	1.160		
	Total	256.360	166			
2	Regression	81.982	4	20.496	19.041	<.001[c]
	Residual	174.378	162	1.076		
	Total	256.360	166			
3	Regression	98.276	6	16.379	16.578	<.001[d]
	Residual	158.085	160	.988		
	Total	256.360	166			

a. Dependent Variable: sqrt_ROA

b. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY

c. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY, sqrt_INT_SCOPE

d. Predictors: (Constant), log_EMPLOYEES, YEAR, INDUSTRY, sqrt_INT_SCOPE, Moderation_GEN_DIV, Moderation_NAT_DIV

Table 19 – ANOVA - Multiple Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	5.983	6.741		.888	.376					
	YEAR	-.001	.004	-.019	-.276	.783	-.093	-.022	-.019	.915	1.093
	INDUSTRY	-.082	.034	-.173	-2.402	.017	-.271	-.185	-.162	.877	1.140
	log_EMPLOYEES	.829	.129	.444	6.453	<.001	.481	.451	.434	.956	1.046
2	(Constant)	-2.026	6.844		-.296	.768					
	YEAR	.004	.004	.070	.975	.331	-.093	.076	.063	.812	1.232
	INDUSTRY	-.096	.033	-.203	-2.918	.004	-.271	-.223	-.189	.865	1.156
	log_EMPLOYEES	.662	.132	.354	5.022	<.001	.481	.367	.325	.843	1.186
	sqrt_INT_SCOPE	.235	.064	.270	3.703	<.001	.374	.279	.240	.792	1.262
3	(Constant)	1.663	6.729		.247	.805					
	YEAR	.001	.004	.023	.327	.744	-.093	.026	.020	.766	1.305
	INDUSTRY	-.079	.032	-.166	-2.463	.015	-.271	-.191	-.153	.849	1.178
	log_EMPLOYEES	.689	.126	.369	5.453	<.001	.481	.396	.339	.841	1.189
	sqrt_INT_SCOPE	.178	.063	.204	2.850	.005	.374	.220	.177	.752	1.329
	Moderation_GEN_DIV	.004	.005	.058	.917	.360	.094	.072	.057	.966	1.035
	Moderation_NAT_DIV	.600	.152	.255	3.955	<.001	.319	.298	.246	.929	1.076

a. Dependent Variable: sqrt_ROA

Table 20 – Coefficients - Multiple Regression Analysis

Appendix 12 – Distribution Board Gender Diversity

BOARD GENDER DIVERSITY					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	23	13.8	13.8	13.8
	6.67	2	1.2	1.2	15.0
	7.14	3	1.8	1.8	16.8
	7.69	3	1.8	1.8	18.6
	8.33	3	1.8	1.8	20.4
	9.09	6	3.6	3.6	24.0
	10.00	5	3.0	3.0	26.9
	11.11	12	7.2	7.2	34.1
	12.50	6	3.6	3.6	37.7
	13.33	1	.6	.6	38.3
	14.29	10	6.0	6.0	44.3
	15.38	1	.6	.6	44.9
	16.67	8	4.8	4.8	49.7
	18.18	5	3.0	3.0	52.7
	20.00	8	4.8	4.8	57.5
	21.43	2	1.2	1.2	58.7
	22.22	11	6.6	6.6	65.3
	23.08	3	1.8	1.8	67.1
	25.00	7	4.2	4.2	71.3
	26.67	2	1.2	1.2	72.5
	27.27	3	1.8	1.8	74.3
	28.57	3	1.8	1.8	76.0
	29.41	1	.6	.6	76.6
	30.00	4	2.4	2.4	79.0
	30.77	2	1.2	1.2	80.2
	31.25	1	.6	.6	80.8
	33.33	8	4.8	4.8	85.6
	35.00	1	.6	.6	86.2
	36.36	3	1.8	1.8	88.0
	37.50	4	2.4	2.4	90.4
	38.46	3	1.8	1.8	92.2
	41.67	1	.6	.6	92.8
	42.86	3	1.8	1.8	94.6
	44.44	1	.6	.6	95.2
	45.45	1	.6	.6	95.8
	46.15	1	.6	.6	96.4
	50.00	2	1.2	1.2	97.6
	53.85	1	.6	.6	98.2
	55.56	1	.6	.6	98.8
	60.00	1	.6	.6	99.4
	63.64	1	.6	.6	100.0
Total		**167**	**100.0**	**100.0**	

Table 21 – Distribution Board Gender Diversity