Insider Ownership and Firm Performance: Comparative Analysis based on Emerging Economy of Malaysia and Bangladesh

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Abstract

This study explores the correlation between insider ownership and firm performance, specifically examining senior management and non-executive director ownership, assessed through Return on Assets (ROA). Utilizing data from publicly listed firms in Malaysia and Bangladesh spanning 2010 to 2019, the research employs Generalized Method of Moments (GMM) regression using both linear and cubic models. The central aim is to evaluate the impact of insider ownership on firm performance. Findings indicate a predominantly positive association between insider ownership and firm performance, with a more pronounced effect observed in the Malaysian economy compared to Bangladesh. This disparity underscores the diversified influence of insider ownership on firm performance in the distinctive economic contexts of these emerging economies. These results contribute to the literature on ownership structure and firm performance, providing valuable insights for practitioners, policymakers, and academics. The comparative analysis between Malaysia and Bangladesh offers nuanced perspectives, forming a basis for further research and strategic decision-making in corporate governance.

Keywords: Insider Ownership, Corporate Governance, Firm Performance, Publicly Enlisted Firms, Emerging Economy.

Introduction

The main objective of this study is to examine the correlation between insider ownership and firm success in the context of a rising economy. The topic of ownership structure and its role in addressing agency concerns and improving business performance has been a subject of considerable scholarly debate within the field of corporate finance. The existing body of research, exemplified by the seminal work of Berle and Means (1932), has established a significant correlation between director ownership and the overall performance of companies. The issue of corporate governance, sometimes referred to as agency theory (Jensen and Meckling, 1976), arises when a divergence exists between the interests of shareholders and those of senior management. Convergence occurs when a restricted cohort

of shareholders possesses a substantial part of shares or gains managerial responsibilities within the entity.

Although the study is scarce regarding the variations in the behavior of diverse stakeholder identities, a significant corpus of empirical literature has extensively examined the correlation between ownership concentration and firm performance. This relationship has been the subject of extensive scholarly investigation over an extended period. As the level of ownership held by management teams increases, there is a greater likelihood of alignment between managers' aims and those of external shareholders. Consequently, this alignment enhances the likelihood of addressing disagreements that may arise between managers and owners. Hence, the inclusion of stock ownership within management ranks is employed as a mechanism to mitigate agency conflicts and bolster the general effectiveness of the organization (Jensen and Meckling, 1976; Agrawal and Knoeber, 1996; Chen et al., 2003). Nevertheless, the existing study posits that the relationship between managerial ownership and business success may not always yield positive outcomes.

Insider ownership pertains to the number of shares and the proportion of preferred equity that is held by individuals with privileged access to internal information within a company. In their seminal work, Fama and Fama Jensen (1983) provide an illustrative account of how managers who possess a sufficient number of shares to exert control over board members can potentially exploit corporate resources for their gain. This exploitation may manifest in several forms, including the granting of excessive compensation to themselves, engaging in preferential transactions with their affiliated businesses, or undertaking initiatives with unfavorable net present values. According to Stulz (1988), the ownership of significant blocks of shares enables managers to establish themselves securely in their positions.

The relationship between insider ownership and corporate performance has produced varied outcomes in both developed and developing countries. While most previous studies have primarily concentrated on developed economies, there has been a noticeable dearth of studies conducted on emerging economies, namely those in Southeast Asia. Moreover, there has been a significant scarcity of comparative research conducted on the emerging economies of Malaysia and Bangladesh in recent years.

The Malaysian government has established a conducive investment climate by implementing a low-interest rate regime. In the year 2019, the prevailing interest rate stood at 4.8%, which marked a decrease from the about 6% rate observed in 2010. In the year 2019, Bangladesh experienced an interest rate of 6%, which marked an increase from approximately 5.25% observed in 2010. The Code of Corporate Governance in Malaysia (MCCG) promotes the practice of non-executive directors, particularly insiders, increasing their shares to uphold transparency and accountability. The Bangladesh Securities Exchange Commission (BSEC) has issued a corporate governance notice, stipulating that a minimum of 30 percent director shareholding is now mandatory. The rise of equity and investment markets in recent years can be attributed to favorable geopolitical developments and macroeconomic conditions. The stock market in Malaysia has exhibited remarkable performance in comparison to other regions in Southeast Asia. This can be attributed to the growing confidence among investors and the notable enhancements in firm earnings. Moreover, Bangladesh has been designated as an "emerging Asian tiger" (Alom, 2018) due to its impressive GDP growth rate for the fiscal year 2017-18, which ranked among the highest globally (Centre for Research and Information (CRI), 2018). This noteworthy achievement has motivated us to include Bangladesh as a region of interest. In both countries, the prevalence of family-owned firms is a notable phenomenon.

However, it is noteworthy that in Bangladesh, the majority of enterprises are family-owned, which therefore influences the decision-making processes related to corporate governance.

To sustain and improve this favorable performance, it is crucial to analyze corporate governance within the context of this evolving business environment. The objective of this study is to present empirical findings regarding the influence of insider ownership on corporate performance within the context of Malaysia's and Bangladesh's growing economies. The results of this study will provide significant knowledge to investors and regulatory bodies in developing nations, elucidating this crucial matter.

The topic of insider ownership has been extensively studied, and research indicates that when directors increase their stock ownership, their interests become more congruent with those of diverse stakeholders. This alignment of interests has the potential to facilitate the settlement of conflicts that may arise between CEOs and stakeholders. Nevertheless, certain research suggests that the combination of ownership and governance can result in unfavorable effects on economic success. Managers who possess a significant number of shares, enabling them to exert control over the top management team, can appropriate company wealth by various means, including but not limited to generous remuneration packages, preferential agreements with affiliated entities, or investments that yield negative net present value.

Examining corporate governance in the emerging economies of Malaysia and Bangladesh is imperative for comprehending how diverse categories of insider shareholdings influence business outcomes. As businesses undergo continuous transformations, the imperative to investigate the consequences of insider ownership on firm performance intensifies, holding significance for practitioners and policymakers. Since, most of the studies focused on these two insider groups are classic, there has been a temporal research gap for having precise study. The current research addresses this gap by analyzing the most recent data available until the onset of the pandemic, spanning the timeframe from 2010 to 2019. This study aims to provide a concentrated examination of various insider groups, aiming to discern their specific impacts on firm performance.

The applicability of research conducted in established markets to developing countries can be limited by disparities in financial, political, and social characteristics. Hence, it is imperative to conduct further investigation on the correlation between insider ownership and organizational success inside emerging markets. The primary objective of this study is to furnish precise empirical data about insider ownership and its influence on firm performance in the expanding economies of Malaysia and Bangladesh. By doing so, this research endeavors to offer significant insights to financial specialists and regulators operating in rising economies. The comparative analysis between Malaysia and Bangladesh contributes a nuanced perspective, facilitating the development of region-specific strategies and recommendations within the intricate realm of corporate governance. This study adds to existing literature by uncovering both linear and non-linear relationships within two different insider groups and their influence on the accounting-based performance of firms. The insights derived from the comparison between Malaysia and Bangladesh offer valuable guidance for investors, corporate leaders, and government officials, aiding them in making informed decisions. Investors stand to benefit by discerning which companies may exhibit favorable performance based on insider ownership, while government leaders can leverage this knowledge to formulate policies that foster sound business practices. Ultimately, the practical applications of this study position it as a valuable instrument for enhancing decision-making outcomes in the broader business landscape.

In general, the study emphasizes the intricate interplay between ownership, control, and governance inside corporations, with a specific focus on the growing markets of both nations. The impact of insider ownership on firm performance, specifically return on assets (ROA), has been examined through the consideration of both managerial and non-executive director ownership.

Literature Review

As pioneers in the field, Jensen and Meckling (1976) undertook an exploration of a contemporary topic, providing empirical evidence regarding the distribution of stocks between executives and owners and its impact on firm performance. The categorization of company stockholders into distinct groups—inside stockholders, actively involved in company management with selective voting rights, and outside stockholders without voting rights—revealed that the quantity of shares owned by insiders directly influences the firm's value. The study observed an increase in the company's value corresponding to a higher percentage of ownership held by insiders.

In the context of corporate governance, a noteworthy challenge arises from a misalignment of passion between the Board of Directors and the CEO. The executive leadership encourages management to undertake wealth-augmentation initiatives without adequately considering project risks. However, before initiating theoretical endeavors, the government assesses project threats and the probability of default (Tahir and Sabir, 2014; Abiola et al., 2014; Hsu and Wen, 2015; Ali et al., 2016; Abobakr, 2017; Zhu and Chen, 2018).

In environments characterized by weak legal frameworks and political instability, companies place value on ownership concentration, as noted by Waheed & Malik (2019) which reflects the Southeast Asian economy . Sarkar and Sarkar (2000) demonstrated the role of insider shareholders in assessing a company's worth within the context of India's emerging and developing economy, analyzing 1567 manufacturing Indian companies between 1995 and 1996. Linear regression results indicated a direct trend between insider shares and firm output. In contrast, Ang et al. (2000) revealed an inverse proportion between managerial ownership and business performance based on 1708 U.S.-based small firms.

The consensus among experts is that having stock in a company encourages a manager to increase the value of those holdings, anticipating a non-linear relationship between insider ownership and business success (Abdurrouf, M. A., 2011). Stulz (1988) explained that the likelihood of an acknowledged hostile takeover providing a certain premium decreases as ownership by insiders increases, with a complete elimination of takeover risk at 50% insider control.

Beiner et al. (2006) analyzed a dataset comprising 109 Swiss firms operational in 2002, aiming to examine the correlation between ownership concentration and firm value. The results of ordinary least squares (OLS) and three-stage least squares (3SLS) regression analyses indicated a subtle relationship between the shareholdings of officers and directors and the value of the firm.

Cheung and Wei (2006) delved into the same topic, investigating the connection between insider ownership and business performance by analyzing data from 1430 U.S.-based companies between 1991 and 2000. The study's regression findings supported earlier research, indicating no significant connection between insider holdings and firm success.

While Berle and Means (1932) initially discovered a favorable connection between personal focus and performance, subsequent research, including Demsetz and Lehn (1985) and Demsetz (1983), challenged the existence of this relationship.

Agency theory asserts that the establishment of ownership is an essential element in ensuring effective processes under the governance of corporations (Siala et al., 2009). According to Jensen and Meckling (1976), the presence of ownership held by administrators serves as a means of signaling to align the interests of investors with those of the manager.

The findings of Khan et al. (2011) and Shleifer and Vishny (1988) suggest that a significant level of managerial ownership can potentially result in management entrenchment. According to Wahla et al. (2012) and Morck et al. (1998), significant influence with ownership held by management might operate as a process impacting the synchronization of managers' and owners' benefits and ultimately affecting firm market equity.

On the contrary, the resource dependence theory favors collaboration with external resources, as they provide businesses access to a variety of sources and expertise, striving to optimize shareholder rights and the interests of all involved groups. Recognizing the executive board as a crucial section for the governance of the company, understanding how the qualities and structure of the system affect firm leadership is crucial (Deschênes et al., 2014). The economic profitability of an organization at any fixed period is measured by its firm performance. This is crucial as it assists in clearly communicating a company's true value to investors and analysts (Ceja et al., 2010). Corporate governance is concerned with how all parties involved in the firm act to protect their interests in the company (Haddad et al., 2011). The performance serves as a metric for a company's proficiency in attaining its objectives, arising from the interplay between the company's efficiency and effectiveness (Kanakriyah, 2021)

The advisory and supervision functions of the executive team are considered to be of utmost importance (Adams & Ferriera, 2007). The primary purpose of the advisory job is to provide the Chief Executive Officer (CEO) with the opportunity to access crucial data and resources, as well as opinions from experts (Fama & Jensen, 1983). Granting managers company shares induces them to exhibit shareholder-like behavior within this framework, as per the "incentive argument." In an extreme scenario, a company with sole proprietorship results in a total synchronization of the owner's and owner's motivations (Jensen and Meckling, 1976). Bull (1989) discovered that businesses that have undergone a management buy-out typically perform better due to this "entrepreneur impact." The advantages of controlling privately, as stated by Barclay and Holderness (1991), are one of the primary drivers behind the creation of block holders globally. This study provides evidence that ownership concentrations impact the fiscal policies of firms, specifically their debt and dividend policies. Office expenses occur in various forms, with monitoring costs being one such category. Observing costs are incurred by the head when monitoring the specialist's activities, such as drafting and enforcing agreements (Abdur Rouf, M. A., 2011). The observations of Al Farooque et al. (2020), identified no statistically significant correlation between firm performance and ownership structure. According to Tirole (2001), the creator of the framework for corporate governance must consider all partners, including grantors, employees, suppliers, and customers, as they are all impacted by the company's actions. This aligns with Shleifer and Vishny's (1997) explanation of governance developing a company's welfare, which is not only beneficial for the owners but for all involved parties. The governance levels of a company can play a supportive role for small enterprises in emerging markets, aiding in the differentiation between firms, as suggested by Shahid et al. (2020). Eckbo's (2006) point of view, contends a firm's corporate governance structure is described as a deposition of prerequisites for both internal and external capital markets, such as the presence of an authorized system for insiders to have the correct value for minority stakeholders.

The agency theory as a corporate governance theory will be used in this study to build the theoretical foundation. The agency model is a widely recognized concept in scholarly discourse on governance and financial issues, as evidenced by the works of Daily, Dalton, and Rajagopalan (2003) and Wasserman (2006). The issue of the separation between owners and managers inside businesses gives rise to several challenges, extensively examined in the field of office theory. This study delves into the interaction between both variables, exploring two variables—dependent and impartial. Ownership dependence (Managerial ownership and director ownership) is reflected in the performance of the company. The creation of hypotheses is a critical aspect of conducting a study aiming to combine several components that may impact business performance. The present study evaluates the following hypotheses:

H1: Senior Management Ownership impacts firm performance positively.
H2: Non-Executive Director Ownership impacts firm performance positively.

Methodology
Sampling and Data collection
The Malaysian Stock Exchange and Dhaka Stock Exchange have been used as data sources in this research. From each data source of both countries, 35 Malaysian and 35 Bangladeshi firms have been considered for this comparative research. The firms are taken from various industries including both financial and non-financial industries. The researcher has entered the data obtained from the annual reports of the companies into the Eviews application as relevant data.

Research Design
The present study employs a panel dataset design to conduct quantitative research, with a particular focus on the statistical analysis of numerical data. The utilization of a quantitative approach presents a distinct research difficulty, necessitating the precise delineation of independent and dependent variables, hence facilitating the elucidation of data derived from yearly reports. The objective is to assess the relationships between these factors. The selection of fundamental research is based on the objective of establishing cause-and-effect linkages, considering the potential impact of distinct independent variables on the outcomes of dependent variables. This type of study is particularly relevant in the context of an expanding economy. One specific area of investigation under causal research is the relationship between corporate success and insider ownership accessibility.

Data Analysis
Data analysis is a method of creating and organizing data to achieve the purpose of the study. Additionally, data analysis outlines how information will be processed, categorized, and associated, gives a systematic technique to identify trends in the data gathered. Thus, Eviews software was used to evaluate the collected data in the investigation. ROA a popular performance measurement, has been used to judge the firm's success. Data analysis uses descriptive, reliability, and regression. Pearson correlation measures relationship magnitude for continuous numerical variables. Repeating samples and conditions ensures tool reliability. Mathematics regression analysis examines relationships between variables, especially a dependent variable, and several independent factors. Models and evaluations vary for many variables. Pearson's correlation, used to evaluate relationships, measures r, the reciprocal link between two continuous numerical variables.

Dependent Variable

Firm performance is the dependent variable here. The study uses ROA to evaluate firm performance. Hsu and Wang (2014) and Sakawa and Watanabe (2020) found that Return on Assets (ROA) often uses accounting-based metrics to evaluate a company. Dividing the company's net income by its total assets to determine ROA.

Independent Variable

The main independent variable in this study is insider ownership. Two insider shareholding kinds are usually considered when examining insider ownership. Managerial and director ownership are being evaluated.

The amount of shares owned by the CEO, managing director, and other senior management is divided by the company's total share issue to determine managerial ownership. Dividing the number of non-executive directors' shares by the company's total shares to calculate director ownership.

Control Variable

To establish methodological rigor and facilitate meaningful comparisons, this study has used two control variables that are grounded on prior scholarly research (Daryaei & Fattahi, 2020). The initial control variable pertains to the organizational size, which is quantified by calculating the logarithm of the total assets in Million Malaysian Ringgit (MYR) for Malaysian firms and in Bangladeshi Taka (BDT) for Malaysian firms. The research suggests that companies with a larger size and a concentrated ownership structure may demonstrate enhanced efficiency in decision-making and business development, which might potentially result in favorable effects on the overall value of the organization. The second control variable pertains to leverage, which is determined by dividing the entire debts of the organization by its total assets. The leverage ratio is a metric that quantifies the efficiency with which a corporation employs its assets to fulfill its financial obligations within a designated period. A higher level of leverage indicates a lack of adequate resources to meet debt obligations, hence increasing the riskiness of the company's financial position and potentially leading to detrimental consequences on its business operations. Consequently, this is anticipated to have a negative influence on the overall performance of the organization.

Table 1
Operational Definitions

VARIABLE	DEFINITION	SOURCE
ROA	**Dependent Variable** Net Income/Total Asset	Annual Report
DIRECTOR OWNERSHIP	**Independent Variable** Percentage of shareholding by non-executive directors	Annual Report
MANAGERIAL OWNERSHIP	**Independent Variable** Percentage of shareholding by Senior Management	Annual Report
SIZE	**Control Variable** Logarithm of the book valueof Firm Asset	Same as Above
LEVERAGE	**Control Variable** Total Debt/Total Asset	Same as Above

Research Model
Prior studies have examined the relationship between ownership and organizational value using both linear and non-linear frameworks (Beiner et al., 2006; Chenung and Wei, 2006). The utilization of the cubic model has been employed to evaluate the non-linear association between ownership structure and business value.
This polynomial model has been discovered and used by Short and Keasy in 1999 to measure firm performance.

Performance = a +b_1 O w n +b_2 O w n ^{2}+b_3 O w n ^{3} + γ Control Variables
In the existing framework, the performance variable is considered as the dependent variable, while the term "Own" is utilized to denote insider shareholdings. The variable "Own^2" represents the square of securities held by insiders, whereas the variable "Own^3" represents the cubic value of stocks held by insiders.
Following previous scholarly investigations (Chenung & Wei, 2006), the coefficients for Own and Own^3 consistently exhibit positive values, but the coefficient for Own^2 consistently demonstrates negative values, demonstrating a persistent pattern in their correlation.
To fulfill the objectives of the present study, the following equations have been derived that incorporate both linear and cubic terms. The intention behind formulating these equations is to get insights into the relationship between insider ownership and the performance of businesses. The study incorporates firm size and leverage as control variables to examine their potential impact on the association between insider ownership and firm performance.

Cubic equation for managerial ownership

$$ROA = \beta_0 + \beta_1 MNGOWN + \beta_2 MNGOWN^2 + \beta_3 MNGOWN^3 + \beta_4 SIZE + \beta_5 LEV + \varepsilon \dots (1)$$

Linear equation for managerial ownership

$$ROA = \beta_0 + \beta_1 MNGOWN + \beta_2 SIZE + \beta_3 LEV + \varepsilon \dots (2)$$

Cubic equation for director ownership

$$ROA = \beta_0 + \beta_1 DIROWN + \beta_2 DIROWN^2 + \beta_3 DIROWN^3 + \beta_4 SIZE + \beta_5 LEV + \varepsilon \dots (3)$$

Linear equation for director ownership

$$ROA = \beta_0 + \beta_1 DIROWN + \beta_2 SIZE + \beta_3 LEV + \varepsilon \dots (4)$$

Where,

β_0 = Intercept

MNGOWN= Stock percentage held by senior managers of the firm.

DIROWN= Stock percentage held by non-executive directors of the firm

$MNGOWN^2$ = Square of stock percentage held by senior managers of the firm

$DIROWN^2$ = Square of stock percentage held by non-executive directors of the firm.

$MNGOWN^3$ = Cube of stock percentage held by senior managers of the firm

$DIROWN^3$ = Cube of stock percentage held by executive directors of the firm

SIZE= Log of firm's total assets.

LEV= Leverage of the firm

ε = Error Term/Residual

Result and Findings

Descriptive Analysis

The descriptive statistics for Bangladeshi firms are shown in Table 2. Performance measuring ROA has a mean of 3.55(median 3.19) with a standard deviation of 2.14. For insider ownerships director ownership has a minimum of 0 percent shareholding and a maximum of 35.41 percent of shareholding. For another insider ownership which is managerial ownership the minimum shareholding percentage by managers is 0 and the maximum is 14.92 for the Bangladeshi firms of the study sample. The mean of firm size here is 9.15 (median 9.55) with a standard deviation of 2.78 and for leverage, the mean is .17 (median 1.35) with a standard deviation of 1.35.

Table 2

Summary Statistics (Bangladeshi Firms)

	N	MEAN	MEDIAN	STDV	MIN	MAX
ROA	35	3.55	3.19	2.14	.35	11.35
MNGOWN	35	4.20	3.18	4.31	0	14.92
DIROWN	35	5.09	3	6.49	0	35.41
SIZE	35	9.15	9.55	2.78	2.89	14.89
LEV	35	2.22	1.35	1.81	.17	8.3

The descriptive statistics for Malaysian firms are shown in Table 3. Performance measuring ROA has a mean of 7.93(median 7.3) with a standard deviation of 4.93. For the insider ownerships director ownership has a minimum of 0.01 percent shareholding and a maximum of 26.89 percent of shareholding. For another insider ownership which is managerial

ownership the minimum shareholding percentage by managers is 0.004 and the maximum is 41.98 for the Malaysian firms of the study sample. The mean of firm size here is 15.62 (median 15.26) with a standard deviation of 3.86 and for leverage, the mean is 1.18 (median 1.09) with a standard deviation of .55.

Table 3
Summary Statistics (Malaysian Firms)

	N	MEAN	MEDIAN	STDV	MIN	MAX
ROA	35	7.93	7.3	4.93	.18	21.6
MNGOWN	35	7.86	1.8	10.46	.004	41.98
DIROWN	35	3.85	.78	6.21	.001	26.89
SIZE	35	15.62	15.26	3.86	8.22	23.25
LEV	35	1.18	1.09	.55	.33	3.33

Pair-Wise Correlation
Table 4 shows the pair-wise correlation matrix between the variables for firms in Bangladesh. Both insider ownership variables managerial and director ownership has negative correlation with ROA. In this study, all regressions are separately performed for the independent variables managerial ownership and director ownership so that multicollinearity doesn't get to be an issue here.

Table 4
Pair-Wise Correlation (Bangladeshi Firms)

VARIABLES	ROA	MNGOWN	DIROWN	SIZE	LEV
ROA	1	-.26	-.18	.24	-.01
MNGOWN	-.26	1	-.27	-.04	.37
DIROWN	-0.18	-.27	1	-.21	.27
SIZE	.24	-.04	-.21	1	-.21
LEV	-.01	.37	.27	-.21	1

Table 5 shows the pair-wise correlation matrix between the variables for firms in Malaysia. Both insider ownership variables managerial and director ownership have positive correlation with ROA which shows showing opposite direction of firms in Bangladesh.

The research also finds that the correlation between the control variables size and leverage is low which suggests that the estimations doesn't have multicollinearity problem for both countries.

Table 5
Pair-Wise Correlation (Malaysian Firms)

VARIABLES	ROA	MNGOWN	DIROWN	SIZE	LEV
ROA	1	.17	.07	-.15	.04
MNGOWN	.17	1	.84	-.20	.02
DIROWN	.07	.17	1	-.40	.11
SIZE	-.15	-.20	-.40	1	-.02
LEV	.04	.02	.11	-.02	1

Regression Findings
GMM and Robustness

The Generalized Methods of Moments (GMM) approach has gained significant popularity in the field of data analysis since its inception in 1982. This area of study has gained significant popularity in the realm of finance and economics research. The approach was initially developed by Karl Pearson in 1894, and subsequently, Lars Peter Hansen formalized the equation in 1982.

The Gaussian Mixture Model (GMM) is employed to establish assumptions about the specific moments of random variables, hence enhancing its robustness and efficiency. This methodology consolidates all the available data about a specific time circumstance and subsequently generates an estimation. The analysis using GMM exhibits the advantage of having a relatively lesser number of standard errors. This approach addresses the issue of endogeneity by internally analyzing the data, specifically by subtracting the past value of the variable from the current value in a statistical procedure, hence using the generalized method of moments (GMM). According to Roodman (2009, p. 86), The Generalized Method of Moments (GMM) is employed to address the issue of endogeneity in the first-moment problem. Additionally, GMM is utilized to tackle the second-moment problem of heteroscedasticity with an uncertain form, resulting in reliable and valid outcomes.

Table 6
REGRESSION ANALYSIS (Bangladesh for Senior Management Ownership)

	TWO STEP GMM (Linear)	TWO-STEP GMM(Cubic)
ROA	.35 (.00)	.35(.01)
MNGOWN	.12(.05)**	-.80(.72)**
MNGOWN2		.21(.15)*
MNGOWN3		-.01(.00)*
SIZE	.44(.00)*	.46(.02)*
LEVERAGE	.16(.01)*	.09(.04)*
ARELLANO SERIAL CORRELATION (AR2)	.05	.00
WALD-CHI SQUARE	.00	.00
SARGAN TEST	.30	.24

Notes: ***, **, and * denote significant at 1%, 5%, and 10%, respectively. Standard errors are reported in parenthesis.

In the context of Bangladeshi firms, this study employs both linear and cubic equations to assess coefficients. The GMM results indicate a positive relationship between managerial ownership and Return on Assets (ROA) in the linear model, while a negative association is observed in the cubic model. In the cubic model, the square and cubic values of managerial ownership exhibit both positive and negative directions, respectively. Control variables, size, and leverage demonstrate a positive correlation. In the linear model, the coefficient for managerial ownership is significant at the 5% level, and the coefficients for control variables are significant at the 10% level. However, employing the cubic model for Bangladeshi firms, the original value of the managerial ownership coefficient is non-significant at the 5% level. Additionally, the coefficients for the squared and cubic forms of managerial ownership are non-significant at the 10% level. Control variables remain significant at the 10% level. For

another independent variable, director ownership, both linear and cubic models using GMM show a negative and significant coefficient at the 5% level. In the cubic model, the coefficient for the squared form of director ownership is positive and significant at the 10% level, whereas the cubic form is negative and non-significant at the 10% level. Size and leverage for both models display a positive direction and significance at the 10% level. The regression analysis passes the Sargan test, confirming the absence of over-identifying restrictions, and passes the Arellano Serial Correlation test for both models. The analysis further passes the Wald-Chi Square test, affirming the validity of the variables used.

Table 7
REGRESSION ANALYSIS (Bangladesh for Non-Executive Director Ownership)

	TWO STEP GMM (Linear)	TWO-STEP GMM(Cubic)
ROA	.33 (.00)	.28(.01)
DIROWN	-.16(.02)**	-.73(.18)**
DIROWN2		.03(.01)*
DIROWN3		-.00(.00)*
SIZE	.35(.00)*	.32(.04)*
LEVERAGE	.30(.02)*	.38(.02)*
ARELLANO SERIAL CORRELATION (AR2)	.03	.00
WALD-CHI SQUARE	.00	.00
SARGAN TEST	.37	.41

Notes: ***, **, and * denote significant at 1%, 5%, and 10%, respectively. Standard errors are reported in parenthesis.

Within the Malaysian corporate context, this investigation utilizes both linear and cubic equations to evaluate coefficients. The results obtained through the Generalized Method of Moments (GMM) reveal a positive association between managerial ownership and Return on Assets (ROA) in both the linear and cubic models. In the cubic model, the directional impact of the square and cubic values of managerial ownership is negative and positive, respectively. Positive correlations are observed between control variables—size and leverage. In the linear model, the managerial ownership coefficient is statistically significant at the 5% level, while control variables' coefficients achieve significance at the 10% level. When employing the cubic model for Malaysian firms, the original value of the managerial ownership coefficient is statistically non-significant at the 5% level. Additionally, the coefficients for the squared and cubic forms of managerial ownership are non-significant at the 10% level. Control variables maintain significance at the 10% level. Concerning another independent variable, director ownership, both linear and cubic models utilizing GMM exhibit a positive and significant coefficient at the 5% level. In the cubic model, the coefficients for the squared and cubic forms of director ownership are positive and significant at the 10% level. Size and leverage for both models exhibit a positive direction and significance at the 10% level. The regression analysis successfully passes the Sargan test, confirming the absence of over-identifying restrictions, and passes the Arellano Serial Correlation test for both models. Furthermore, the analysis successfully passes the Wald-Chi Square test, attesting to the validity of the variables used.

Table 8
REGRESSION ANALYSIS (Malaysia for Senior Management Ownership)

	TWO STEP GMM (Linear)	TWO-STEP GMM (CUBIC)
ROA	.41 (.00)	.43(.14)
MNGOWN	.66(.07)**	1.88(.42)**
MNGOWN2		-.11(.12)*
MNGOWN3		.00(.00)*
SIZE	.49(.04)*	.70(.94)*
LEVERAGE	2.46(.28)*	3.02(.47)*
ARELLANO SERIAL CORRELATION (AR2)	.05	.41
WALD-CHI SQUARE	.01	.01
SARGAN TEST	.61	.14

Notes: ***, **, and * denote significant at 1%, 5%, and 10%, respectively. Standard errors are reported in parenthesis.

Table 9
REGRESSION ANALYSIS (Malaysia for Non-Executive Ownership)

	TWO STEP GMM (Linear)	TWO-STEP GMM (CUBIC)
ROA	.47 (.00)	.41(.01)
DIROWN	.42(.06)**	3.96(.21)**
DIROWN2		-.38(.03)*
DIROWN3		.00(.00)*
SIZE	.22(.02)*	.90(.02)*
LEVERAGE	5.17(.22)*	.77(.32)*
ARELLANO SERIAL CORRELATION (AR2)	.24	.36
WALD-CHI SQUARE	.01	.01
SARGAN TEST	.47	.72

Notes: ***, **, and * denote significant at 1%, 5%, and 10%, respectively. Standard errors are reported in parenthesis.

Conclusion
The present study investigates the nexus between insider ownership and firm performance in the emerging economies of Bangladesh and Malaysia. In the context of Bangladeshi firms, the initial hypothesis, tested through a linear model, suggests a positive relationship between senior management ownership and firm performance, resulting in the acceptance of the hypothesis. However, when employing the cubic model, the analysis reveals a negative association between the original value of managerial ownership and Return on Assets (ROA), leading to the rejection of the hypothesis. The scrutiny of the second hypothesis, focusing on Bangladeshi firms, employs a linear model and indicates a negative correlation between non-executive director ownership and firm performance, leading to the rejection of the hypothesis. Similarly, the cubic model unveils an inverse relationship between the original

value of director ownership and ROA, resulting in the rejection of the hypothesis. Turning to Malaysian firms, the first hypothesis posits a positive association between senior management ownership and firm performance, a relationship substantiated through the acceptance of the hypothesis when using linear model and rejection using cubic model. Additionally, for the second hypothesis, non-executive director ownership is found to be positively related to firm performance when employing the linear model. Similarly, applying the cubic model reveals a positive association between non-executive director ownership and ROA, leading to the acceptance of the hypothesis. The summary of hypothesis testing states that the first hypothesis is partially accepted for the Bangladeshi Economy and fully accepted for the Malaysian Economy. Additionally, the second hypothesis is rejected for the Bangladeshi Economy and accepted for the Malaysian Economy.

Using the GMM estimation, the key findings are:

- For Bangladesh's Economy, Senior Management Ownership and Firm performance are positive and significant at a 5% significance level with the linear Model.
- For Bangladesh's Economy, Senior Management Ownership and Firm performance are negative and non-significant at a 5% significance level with the cubic Model.
- For Bangladesh's Economy, Non-Executive Director Ownership and Firm performance are negative and significant at a 5% significance level with the linear Model.
- For Bangladesh's Economy, Non-Executive Director Ownership and Firm performance are negative and significant at a 5% significance level with the cubic Model.
- For the Bangladesh's Economy, both control variables size and leverage are positive and significant at a 10% significance level using both models and both independent variables.
- For the Malaysian Economy, Senior Management Ownership and Firm performance are positive and significant at a 5% significance level with the linear Model.
- For the Malaysian Economy, Senior Management Ownership and Firm performance are negative and non-significant at a 5% significance level with the cubic Model.
- For the Malaysian Economy, Non-Executive Director Ownership and Firm performance are positive and significant at a 5% significance level with a linear Model.
- For the Malaysian Economy, Non-Executive Director Ownership and Firm performance are positive and significant at a 5% significance level with the cubic Model.
- For the Malaysian Economy, both control variables size and leverage are positive. The variables are significant at a 10% significance level for non-executive director ownership using both models.
- However, the control variables are significant for senior management ownership using the linear model and non-significant at a 10% significance level using the cubic model.

The results of this investigation reveal that when employing a linear model, the coefficient for the relationship between senior management ownership and firm performance is 0.12 for Bangladeshi firms and 0.66 for Malaysian firms. In contrast, the application of a cubic model yields coefficients of 0.80 for Bangladeshi firms and 1.88 for Malaysian firms. The higher coefficients for Malaysian firms indicate a more robust association between senior management ownership and firm performance compared to Bangladeshi firms. Similarly, in the context of non-executive director ownership and firm performance, the coefficients derived from the linear model are 0.16 for Bangladeshi firms and 0.42 for Malaysian firms.

When employing the cubic model, the coefficients are 0.73 for Bangladeshi firms and 3.96 for Malaysian firms. These elevated coefficients suggest a stronger relationship between non-executive director ownership and firm performance in Malaysian firms compared to Bangladeshi firms. In the context of Bangladesh, policymakers are advised to promote increased ownership among senior management, given their active participation in daily decision-making processes. Additionally, there is a recommendation to carefully review and adjust policies related to non-executive director ownership, considering their indirect involvement in the firm's decision-making activities. Considering Malaysia, policymakers are urged to actively promote higher ownership among senior management, emphasizing its positive impact. Furthermore, there is a need for the reinforcement of policies aimed at encouraging non-executive director ownership. These measures collectively contribute to fostering effective corporate governance structures in both countries.

The outcomes of this study imply that insider ownership may exert a more substantial influence on firm performance in the Malaysian economy compared to the Bangladeshi economy. This observation underscores the significance of considering contextual variations in the impact of insider ownership on firm performance across different economies.

Implications and Limitations

The investigation was conducted within the economic contexts of Malaysia and Bangladesh, examining the influence of insider ownership on firm performance in these respective countries while considering potential cross-country effects. This research constitutes an augmentation to the existing body of literature, which predominantly assumes a positive correlation between insider shareholding and firm performance. Utilizing regression analyses, the study examined senior management ownership and non-executive director ownership through distinct equations, delineating the varied impacts of different insider ownership categories. The outcomes offer guidance for policymakers to inform more precise decision-making.

Furthermore, the study encompasses both the financial and non-financial sectors, revealing a consistent trend of the impact of insider ownership on company performance. Employing the Generalized Method of Moments (GMM), the study's findings are robust, given the distribution of ownership percentages from smaller to larger magnitudes.

Despite these implications, the study acknowledges limitations, notably about data disclosure and accuracy. Some entities provided quarterly data, necessitating conversion to yearly data, potentially introducing variability. Additionally, there is a potential limitation in the generalizability of results due to the absence of industry-specific effects in the current analysis which creates scope of industry-specific comparative research between these two countries. The study's study period until 2019, occurring just before the COVID-19 pandemic, provides an opportunity for subsequent research to explore post-pandemic impacts on insider ownership changes and firm performance.

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