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Article

Institutional Ownership and Firm Performance: Evidence from an Emerging Economy

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Abstract: Using the Ordinary Least Square (OLS) estimation technique based on a sample of 180 listed firms from 2008 to 2018, this study investigates the impact of institutional ownership on firm performance in the Bangladeshi setting. Consistent with the “active monitoring” view, the results indicate that both domestic and foreign institutional investors have a positive effect on firm performance measured by Tobin’s Q and Return on Asset (ROA). In addition, this study explores whether the other corporate governance attributes—board size and board independence—operate as mediators between institutional ownership and firm performance. Our findings indicate that both board size and board independence have a significant positive impact on the relationship between institutional ownership and firm performance.

Keywords: institutional ownership; domestic ownership; foreign ownership; Tobin’s Q; ROA; board ownership; board independence

JEL Classification: G01; G32; G33; G34; G38



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1. Introduction

Institutions around the globe have become progressively more important in shaping business. Mergers and acquisitions in the integrated business world of today have brought about a drastic shift in the corporate ownership structure of firms, a shift that is more inclined towards the concentration of institutional and foreign ownership. It is believed that institutional shareholders are efficient implementers of company information for effective investment (Bartov et al. 2000; Douma et al. 2006; El-Gazzar 1998; Ferreira and Matos 2008). Prior studies have indicated that institutional ownership impacts abnormal stock returns and, hence, firm performance (Ali et al. 2004). Extant literature has investigated the impact of institutional ownership on firm performance in various contexts, which puts forward three differing views: “active monitoring”, “passive monitoring”, and “exploitation”. Pressure-resistant institutions independently acquit and actively engage in monitoring firm managers, while pressure-sensitive investors carry themselves as passive monitors, have a business relationship with the investee firm, or exploit the rights of the minority shareholders for their own gain. These differing investors are deemed to have vastly different impacts on the firm’s performance (Brickley et al. 1988).

Prior studies have shown mixed and inconclusive evidence on the relationship between institutional ownership and firm performance. Some studies demonstrated a positive relationship between institutional ownership and firm performance (Elyasiani and Jia 2010; Omran et al. 2008; Yan and Zhang 2009; Yeh 2019) and the same positive correlation was noted between foreign ownership and firm performance (Bentivogli and Mirenda 2017; Kao et al. 2018), hence, confirming the “active monitoring” view. On the contrary, a negative (Muttakin et al. 2012) or no association (Demsetz and Villalonga 2001) between institutional ownership and firm performance has also been concluded in some past studies, leading towards a more “passive monitoring” view of investors. In the context of Bangladesh,

Mollah et al. (2012) concluded there was no impact of board ownership on firm performance; however, other corporate governance mechanisms like institutional shareholdings, board salary, dividend, etc., might boost firm performance. Rashid (2020) showed the relationship between institutional ownership and Tobin's Q was not statistically significant; however, he found a significant positive association between institutional ownership and accounting-based firm performance.

This study draws attention to an emerging market owing to the considerable differences in economic systems, tax systems, corporate ownership structures, and corporate governance that are noticed between East Asia and the United States (Claessens and Fan 2002; Hasan et al. 2020; Peng et al. 2008). The economic growth rate of SAARC countries has been commendable, and along with their ample natural and human resources, these markets show great potential. In addition, the linkage between corporate ownership structure, corporate governance, and firm performance in emerging markets have been of interest in past literature as well (Bose et al. 2017; Lou et al. 2020; Mukhopadhyay and Chakraborty 2017). We focus our study on Bangladesh for numerous reasons. First, in the last decade, due to sustained economic expansion and financial development in South Asia, Bangladesh has been declared an "emerging Asian tiger" (Alom 2018). The GDP growth rate was 7.86% in the fiscal year 2017–2018, one of the highest in the world (Centre for Research and Information (CRI) 2018), motivating us to select Bangladesh as a region of interest. Second, the majority of the firms in Bangladesh are primarily family-owned, which results in highly concentrated ownership that plays an important role in shaping corporate decisions. Third, the Bangladeshi economy has seen a shift from the conventional family-owned business structure and has witnessed a rise in institutional shareholdings. In 2020, the percentage of institutional shareholding of total Dhaka Stock Exchange market capitalization rose to 15.6%. We expect this restructuring of ownership composition to strengthen corporate monitoring, which might elevate firm performance. Fourth, the Securities and Exchange Commission Bangladesh in 2006 announced the Corporate Governance Notification (CGN), which required listed firms to have independent directors in the Anglo-American style on their boards, at a ratio of 1:10 (Rashid 2020). It will be interesting to see the role of institutional ownership in shaping firm performance, given this reform. Finally, Bangladeshi firms are afflicted by a lack of regulatory control, corporate accountability, and transparency. Another concern is market irregularities and malpractices, such as the unavailability of information to investors, insider control, and collaboration to manipulate stock prices in the market. Considering these issues, this study aims to test whether institutional shareholders are effective implementers of monitoring mechanisms within the investee firms in the context of Bangladesh.

Using the OLS estimation technique, this paper aims to demonstrate whether the presence of institutional investors within the listed companies in Bangladesh favorably influences firm performance. We obtained data from 180 listed companies on the Dhaka Stock Exchange over the period of 2008–2018. Our measures of institutional ownership comprise domestic and foreign ownership. Firm performance was measured by Tobin's Q and Return on Asset (ROA), which are widely used proxies for measuring firm performance. Our results support the "active monitoring" view, where Bangladeshi institutional investors are actively involved in monitoring and facilitating firms toward performance enhancement. We further analyze whether corporate governance attributes like board size and board independence are channels through which the relationship between institutional ownership and firm performance is mediated. The results are indicative that when they are included in the model along with institutional ownership, board size, and board independence, they show a significantly positive impact on Bangladeshi firm performance.

Our paper contributes to the existing literature owing to the plausible different impact institutional ownership might have on emerging markets, such as Bangladesh, given the different economic profile, weak implementation of the legal framework, and poor corporate governance compared to their developed counterparts. The closest to our study is the paper by Rashid (2020), which concluded that foreign and director ownership has a significant positive impact on a firm's performance considering both accounting and market-based

performance, whereas institutional ownership positively impacts only accounting-based performance. However, this study was conducted for three years with a limited sample size, which might not lead to comprehensive results. This study includes a dataset obtained over a longer period of time (2008–2018), which eliminates estimation bias and assists in generalizing the outcomes to a much wider context. The relationship between institutional ownership and firm performance is a fundamental area of interest; hence, this study will aid managers, current and potential investors, and regulators in making key decisions and contributing to the value enhancement of firms. Since emerging financial markets possess similar market traits, our findings will enable not only Bangladeshi policymakers, but other emerging economies to set up an effective structure for corporate governance and make better and well-informed policy decisions.

The rest of the paper is organized as follows: Section 2 discusses relevant literature, and Section 3 describes the research methodology. Section 4 presents the empirical results, followed by Section 5, which displays channel analysis for the relationship between institutional ownership and firm performance. Section 6 concludes the paper and provides policy recommendations.

2. Literature Review and Hypothesis Development

2.1. Theoretical Evidence

The separation of ownership and control leads to agency problems and moral risks if managers put short-term profits ahead of long-term profits by using the company's resources for their own personal gain (Hart and Quinn 1993). The corporate ownership structure acts as a crucial governing mechanism that pressurizes the managers to strive for company success. Shleifer and Vishny (1986) contend that, among several executive equity ownership mechanisms, institutional shareholding is deemed to be an ideal form by which to rigorously monitor the managers.

The existing literature on the effects of institutional ownership on corporate governance mechanisms has brought forward a few differing views: (i) Active Monitoring, (ii) Passive Monitoring, and (iii) Exploitation. According to the “active monitoring” view, institutional investors have the power to exert pressure on company managers to improve the company's corporate governance mechanisms in order to reduce information asymmetry and increase firm operational transparency (Lin and Fu 2017; Shleifer and Vishny 1986). With the aid of sophisticated managerial expertise, high-quality resources, and specialized skills, institutional investors can supervise managers, aiding them in improving the quality of managerial decisions to ensure increased corporate value (Elyasiani and Jia 2010; Firth et al. 2016). Through the large proportion of shareholding (and voting rights) of the institutional investors, the monitoring role also enables them to indicate any dissatisfaction with the concerned company's management (McCahery et al. 2016) which ensures that the firm's performance is never compromised.

On the other hand, the “passive monitoring” view states that institutional investors have no intention of monitoring the day-to-day management of the investee firm, as they might solely be interested in myopic financial goals or adjusting portfolio requirements (David and Kochhar 1996; Elyasiani and Jia 2010). The “passive monitoring” view suggests that institutional investors sometimes invest in a company based on some insider information advantages and might not have any intention of long-term investment or improvement of the company's corporate governance and firm performance (Elyasiani and Jia 2010). In this instance, institutional investors act as “traders”, buying and selling shares within a short span of time. Thus, such institutional investors will have no significant impact on the investee firms' performance. Alternatively, the “exploitation” view states that institutional investors might conspire with the investee firm's managers to exploit the shareholder's wealth and obtain additional benefits from the company (Elyasiani and Jia 2010). According to the exploitation view, institutional investors ignore resolving organizational fraud or misappropriation of company wealth if they themselves also benefit from such misconduct (Cornett et al. 2007).

The distinguished monitoring role of institutional investors is further enhanced when the institutional shareholders come from a thriving foreign economy. Foreign institutional shareholders can minimize agency problems and enhance the firm's performance with the aid of their superior monitoring skills, global expertise, and multinational portfolios. Foreign institutional investors are able to offset the costs of board ownership through their substantial shareholdings, and they are able to oversee managerial behavior even though company boards within emerging economies are typically controlled by family-concentrated boards. Corporate governance, management expertise, and strict monitoring are all domains where firms might benefit from the presence of foreign institutional investors (Huang and Zhu 2015). Due to their internationally diversified portfolios, independence from local management, absence of conflicts of interest, and professional monitoring abilities; foreign institutional investors play a stronger role than domestic institutional investors in internal corporate governance, and hence, improve the firm's value as well as operating performance (Lou et al. 2020).

2.2. Empirical Evidence

Although it is evident that institutional shareholding can possibly impact firm performance, studies, however, have shown inconclusive results. For instance, employing a large data set consisting of Chinese listed firms between 2004 and 2014, Lin and Fu (2017) documented the positive impact institutional investors posit on Chinese firm performance, supporting the "active monitoring" view. Using data from an emerging economy like India, Kansil and Singh (2018) opined that there is a significant positive relationship between institutional shareholding and firm performance. Institutional shareholders motivate companies to undertake good governance practices, and they have the duty to protect the interests of the principals of the company, which then translates into enhanced corporate performance (Connelly et al. 2010; Cornett et al. 2007; Hussain Tahir 2015; Tornyeva and Wereko 2012). Institutional shareholders also act as monitors, who tend to put a check on the expropriating behaviors of the self-serving owners of the firm and improve overall firm performance (Mokhtari and Makerani 2013; Su et al. 2013). The positive impact of the presence of institutional investors on firm performance is imminent, supporting the benefits the investee firm derives from the monitoring role of the institutional investors (Fitri and Surjandari 2022; Hai et al. 2018; Herdjiono and Sari 2017; Lin and Fu 2017; Lou et al. 2020).

Previous studies have suggested that foreign institutional shareholding is a source of good governance practices and improved firm performance (Bai et al. 2004; Douma et al. 2006). Companies with a high level of foreign institutional ownership are expected to experience higher growth and improved performance with the supply of external funding and foreign managerial expertise (Ferreira and Matos 2008). Because companies in developing countries have highly concentrated ownership, Santiago-Castro and Baek (2004) argue that foreign institutional investors are crucial, as their active monitoring role will mitigate insider exploitation. Studying 18 emerging economies, Lins (2003) suggested that domestic institutional shareholders of emerging markets have limited resources and encounter political constraints that obstruct them from effectively performing their monitoring role. However, foreign institutional shareholders can operate without any unjust political or governmental intervention. Thus, in an emerging economy, foreign shareholders are able to effectively perform the monitoring role, positively impacting firm performance. Similar results were documented by Khanna and Palepu (2000), who contended that for an emerging economy like India, firm performance is positively associated with foreign institutional ownership and negatively associated with domestic institutional ownership.

Contrary to the above findings that favor the presence of institutional shareholders within the firm, several researchers have put forward the adverse effect institutional investors have on firm performance (Musallam et al. 2018; Tsouknidis 2019). For instance, Musallam et al. (2018), using a dataset from the Indonesian Stock Exchange, and Tsouknidis (2019), using a dataset of U.S.-listed shipping companies, showed a significant negative

correlation between institutional ownership and corporate performance, suggesting that institutional investors are unable to effectively monitor the managers, adversely affecting firm performance. Such institutional investors are more inclined towards earning short-term benefits by aligning interests with incompetent managers rather than monitoring those managers for further improvement of the company's performance (Pound 1988). This supports the "Exploitation" view. Using data from India from the early 1990s, Khanna and Palepu (2000) contended that domestic institutional investors have detrimental effects on firm performance for companies within emerging economies, as domestic investors in an emerging economy may not have the business knowledge and expertise equivalent to their international counterparts. In terms of foreign institutional shareholders, Thanatawee (2014) showed that firms with higher foreign institutional shareholders tend to have lower corporate value.

Similar to several other East Asian economies, the corporate control framework of the majority of Bangladeshi firms is insider-oriented, or significant stakes in the company are family-owned. Insiders or family owners, therefore, can easily manipulate corporate valuation and may not act as appropriate corporate monitors. Due to such highly concentrated ownership within a non-efficient market, external governing mechanisms like the presence of institutional shareholders can positively impact firm performance. Rashid (2020) showed the relationship between institutional ownership and Tobin's Q is not statistically significant, but found a significant positive association between institutional ownership and ROA. Such ambiguous results give us the motivation to develop the following hypothesis to further delve into the analysis of the relationship between institutional ownership and firm performance:

Hypothesis 1 (H1). *Institutional ownership (domestic/foreign) positively impacts firm performance.*

3. Methodology

3.1. Sample Construction and Data Sources

We developed our sample size by extracting information from several sources. For the investigation of the proposed hypothesis, data was obtained from all the listed companies on the Dhaka Stock Exchange, from 2008 to 2018. The ownership structure of the sample data was manually collected from annual reports of publicly listed companies in Bangladesh. Excluding financial firms, our final sample included 180 firms. Financial variables for the study were all obtained from the DataStream Database.

3.2. Dependent Variable: Firm Performance

We employed two proxies in order to measure firm performance: Tobin's Q and Return on Asset (ROA) (Daryaei and Fattahi 2020; Hamza et al. 2020; Hsu and Wang 2014; Sakawa and Watanabel 2020). Tobin's Q is the market-based firm performance measured by adding the fair market value of common stocks with the book value of total liabilities and dividing it by total assets. ROA is an accounting-based measure of how well a company is doing. It is measured by dividing the company's net income by its total assets.

3.3. Independent Variable: Domestic Institutional Ownership and Foreign Institutional Ownership

Institutional ownership was our key independent variable. Institutional shareholding was categorized into domestic and foreign ownership. Domestic ownership (INST_DOM) included shares held by domestic institutions like insurance companies, banks, mutual funds, and pension funds, plus special accounts. Foreign institutional ownership (INST_FRGN) was calculated as the percentage of ownership held by foreign investors.

3.4. Control Variables

To ensure consistency and comparability with previous papers, Daryaei and Fattahi (2020); Drobetz et al. (2021) controlled for several variables that may potentially influence firm performance. The first control variable we apply is the firm size (Size) which is

measured as the natural logarithm of total assets in millions of US \$. It is expected that larger firms with higher bureaucracies may become inefficient at business development and the decision-making process. Such an incompetent business operation will adversely impact corporate value. Second, we control for liquidity (Liquidity). We expect that firms with higher liquidity will have better firm performance, as higher liquidity implies firms' solid ability to raise cash when needed, which can consequently be an underlying reason for higher firm performance. Our third control variable, leverage (Leverage), is calculated as the ratio of total debts to total assets. Leverage illustrates how a firm funds its assets and the firm's overall ability to meet its monetary obligations in due time. A higher leveraged firm denotes the firm's inadequate capital structure, making such firms riskier. Riskier firms tend to have an overall detrimental business operation, which is likely to adversely impact firm performance. Next, we control for asset growth (Asset growth) which shows the percentage change of company assets within a given period of time. Asset growth reflects the management efficiency of asset capitalization, and thus, is expected to positively impact firm performance. The fifth control variable is stock price volatility (Price volatility) which is measured by the average stock price fluctuations over a given period of time. Higher stock price volatility translates to higher risk for firms, which may also adversely influence firm performance. Lastly, we also employ property, plant, and equipment net (PPENT) as a control variable. All variables are defined in Table 1.

Table 1. Definitions of variables.

Variable	Definition	Source
Dependent Variable		
Tobin's Q	(Fair Market value + Total Liabilities)/Total Asset	Datastream
ROA	Net income before extraordinary items and discontinued operations divided by total assets multiplied by 100	Datastream
Independent Variable		
Domestic Institutional Ownership	Percentage of shareholding by domestic institutional investors	Annual report
Foreign Institutional Ownership	Percentage of Shareholding by foreign investors and Corporations	Same as above
Control Variable		
Size	The natural logarithm of the book value of a firm's asset	Datastream
Liquidity	Cash divided by total assets	Same as above
Leverage	The ratio of a firm's total debt to the book value of its assets	Same as above
Asset Growth	Percentage growth in assets	Same as above
Price Volatility	Measured as standard deviation of share price	Same as above
PPENT	Property, plant and equipment divided by total assets	Same as above

3.5. Estimation Model

To investigate the relationship between institutional ownership (domestic and foreign) and firm performance (Tobin's Q and ROA), we specify the following OLS regression model:

$$\begin{aligned}
 \text{Performance}_{i,t} = & \alpha_0 + \beta_1 \text{INST}_{i,t} + \beta_2 \text{Size}_{i,t} + \beta_3 \text{Liquidity}_{i,t} + \beta_4 \text{Leverage}_{i,t} \\
 & + \beta_5 \text{Asset Growth}_{i,t} + \beta_6 \text{Price Volatility}_{i,t} + \beta_7 \text{PPENT}_{i,t} + \text{Year}_t \\
 & + \varepsilon_{i,t}
 \end{aligned} \tag{1}$$

where $\text{Performance}_{i,t}$ is measured by Tobin's Q and ROA, INST represents institutional ownership as domestic institutional ownership (INST_DOM) and foreign institutional ownership (INST_FRGN). Size denotes the firm size, measured as the logarithm of total assets; liquidity is measured as cash divided by total assets; leverage is measured as total debt divided by total assets; Asset growth is measured by percentage growth in total assets; price volatility is measured as the standard deviation of share price; and PPENT is measured as property, plant, and equipment divided by total assets, which are used to control for the effects of firm-level characteristics.

4. Empirical Results

4.1. Summary Statistics and Correlation Matrix

The descriptive statistics for our sample are presented in Table 2. Two performance proxies, Tobin's Q and ROA, have mean (median) values of 1.59 (0.92) and 8.3 (6.69). INST_DOM has a mean (median) of 0.19 (0.17) and a standard deviation of 0.15. INST_FRGN has a mean (median) of 0.10 (0.02) and a standard deviation of 0.19. INST_DOM varies between 0% and 73%, whereas INST_FRGN varies between 0% and 90%. The mean (median) of firm size (Size) is 16.69 (16.59). The mean (median) of firm leverage (Leverage) is 0.92 (0.10), with a standard deviation of 4.15. Moreover, asset growth has a mean (median) value of 18.85 (13.10) with a standard deviation of 25.78, while the mean (median) of stock price volatility (Price volatility) is 0.13 (0.12).

Table 2. Summary statistics.

	N	Mean	Std. Dev.	Median	Min	Max
Tobin's Q	819	1.59	2.55	0.92	0.05	19.84
ROA	819	8.30	7.12	6.69	−7.48	34.48
INST_DOM	819	0.19	0.15	0.17	0.00	0.73
INST_FRGN	819	0.10	0.19	0.02	0.00	0.90
Size	819	16.69	1.75	16.59	12.59	19.78
Liquidity	819	0.07	0.09	0.03	0.00	0.61
Leverage	819	0.92	4.15	0.10	0.00	36.47
Asset Growth	819	18.85	25.78	13.10	−15.95	167.76
Price Volatility	819	0.13	0.07	0.12	0.01	0.33
PPENT	819	0.30	0.27	0.27	0.00	0.91

Table 2 presents summary statistics of Tobin's Q and ROA, institutional ownership proxies and other control variables used in this study. All variables are defined in Table 1 and winsorized at the 1% and 99% levels.

The pair-wise correlation matrix is shown in Table 3. The correlation between Tobin's Q and the ROA spread is 0.35, which is positive, as predicted. The stronger association implies that the majority of businesses with a high Tobin's Q also have a high ROA spread, implying that Tobin's Q and ROA spread are complementary proxies for company performance. Both domestic and foreign ownership has a positive correlation with Tobin's Q as well as ROA. All regression estimations are separately performed for institutional and foreign ownership to avoid multicollinearity. We also note that the correlation among the control variables is low, suggesting that multicollinearity is not a problem in the estimation. Additionally, we compute and examine each independent variable's variance inflation factor (VIFs). In all cases, the VIFs are below 2 (not reported here), which is far below the critical value of 10, suggesting multicollinearity is not an issue in the model.

Table 3. Pair-wise correlations.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Tobin's Q	1.00										
ROA	0.35 *	1.00									
INST_DOM	0.12 *	0.06	0.04	1.00							
INST_FRGN	0.40 *	0.36 *	0.29 *	−0.12 *	1.00						
Size	−0.55 *	−0.36 *	−0.17 *	0.08	−0.34 *	1.00					
Liquidity	0.00	0.03	0.21 *	−0.01	−0.06	0.13 *	1.00				
Leverage	0.60 *	0.16 *	0.14 *	−0.04	0.07	−0.38 *	0.03	1.00			
Asset Growth	−0.07	0.21 *	0.22 *	−0.02	−0.05	−0.13 *	0.09 *	0.31 *	1.00		
Price Volatility	−0.25 *	−0.46 *	−0.30 *	−0.09	−0.31 *	0.34 *	−0.23 *	−0.09	0.03	1.00	
PPENT	0.29 *	0.15 *	−0.04	−0.13 *	−0.03	−0.57 *	−0.33 *	0.23 *	0.07 *	−0.31 *	1.00

Table 3 presents the pair-wise correlations matrix for all variables used in this study. * denotes statistical significance of coefficient estimates at the 5% level. All variables are defined in Table 1.

4.2. Baseline Regression Results

Using OLS regression, we estimate Equation (1) to examine the influence of institutional ownership on market and accounting performance, as measured by Tobin's Q and ROA, respectively. The baseline regression results are presented in Table 4. In columns 1 and 3, we show the unincorporated impact of institutional ownership on firm performance without controlling for any firm-specific characteristics. Our first key variable of interest, INST_DOM, shows a positive relationship with Tobin's Q as well as ROA, both having a 5% significance level. In columns 2 and 4, we re-ran the regression results after controlling for the firm-specific characteristics. Our findings continue to exhibit a positive association between INST_DOM and both firm performance measures, with a 1% significance level. The coefficient of 3.241 indicates that an increase of one within-firm standard deviation (0.15) in institutional ownership is associated with a 0.49 increase in Tobin's Q, which is equivalent to 30.1% of the average Tobin's Q score and nearly 19.21% of the standard deviation of Tobin's Q. ROA's coefficient of 7.014 indicates that an increase of one within-firm standard deviation (0.15) in institutional ownership is associated with a 1.05 increase in ROA, which is equivalent to 12.67% of the average ROA score and nearly 14.74% of the standard deviation of ROA. Therefore, these findings are economically significant. Based on our findings, we can state that the monitoring role of the institutional owners significantly improves firm performance.

The result is consistent with the "active monitoring" and similar to the findings reported by [Elyasiani and Jia \(2010\)](#); [Omran et al. \(2008\)](#); [Yan and Zhang \(2009\)](#); [Yeh \(2019\)](#). For instance, [Yeh \(2019\)](#) used the OLS regression model on the Taiwanese dataset from the period of 2011–2015 to contend the positive effect of institutional ownership on both ROA and Tobin's Q. We document similar results in the context of Bangladesh, using the same regression technique. However, our results contrast with [Tsouknidis \(2019\)](#), who reported a negative relation between institutional ownership and firm performance in the context of the USA. The presence of institutional shareholders mitigates the value-reducing activities of opportunistic managers, as the institutional shareholders rigorously monitor entrenched managers. Hence, under rigorous monitoring by the institutional owners, managers are forced to act in the best interest of the shareholders and make decisions that are most beneficial for the firm. Our results are in line with the outcomes of [Sakawa and Watanabel \(2020\)](#), who, using a Japanese dataset, also showed that the monitoring role of institutional investors significantly improves firm performance. In summary, our results show that Bangladeshi institutional investors have become more involved in monitoring and aiding enterprises in improving their performance.

Turning to the control variables, we observe several significant relationships. The coefficient of firm size (Size) with both measures of performance is negative and significant at a 1% level, indicating that an increase in firm size decreases a firm's market performance (Tobin's Q), as well as accounting performance (ROA). The economic significance of firm size is significantly higher compared to the economic significance of other control variables. For example, an increase of one within-firm standard deviation in the firm size decreases Tobin's Q by 1.51, which is nearly 59.21% of the standard deviation and 94.96% of the mean of Tobin's Q. Likewise, an increase of one within-firm standard deviation (1.75) in firm size is associated with a 3.36 decrease in ROA, which is equivalent to 40.52% of the average ROA score and nearly 47.20% of the standard deviation of ROA. Thus, having more layers, more bureaucracy, and a more inflexible structure, the large firm can impair the board's capacity to make strategic decisions, resulting in a negative influence on the firm's performance ([Gong et al. 2013](#)). Leverage, another control variable, has a negative effect on Tobin's Q and is statistically significant at the 5% level. Leverage continues to exhibit a negative association with ROA. However, the coefficient is statistically insignificant. Therefore, firms with a high leverage ratio in their capital structure see their performance being negatively impacted ([Anderson and Reeb 2003](#); [Elyasiani and Jia 2010](#)). Thus, financial managers should cautiously proceed while using financial leverage, which can impact the firm's value. We also find that stock price volatility (price volatility) has a negative, significant effect on

both Tobin's Q and ROA at the 1% level, implying that both Tobin's Q and ROA fall as stock market volatility increases. Moreover, the correlation between board independence and firm performance (Tobin's Q and ROA) has great economic significance. For instance, an increase of one within-firm standard deviation in the stock price volatility (price volatility) decreases Tobin's Q by 0.959, which is nearly 60.31% of the mean of Tobin's Q, and an increase of one within-firm standard deviation in the stock price volatility decreases ROA by 2.54, which is nearly 30.64% of the mean of ROA.

Table 4. Impact of Domestic Institutional Ownership and Firm Performance.

	(1)	(2)	(3)	(4)
	Tobin's Q	Tobin's Q	ROA	ROA
INST_DOM	1.777 ** (2.133)	3.241 *** (2.638)	2.504 ** (2.079)	7.014 ** (2.519)
Size		−0.865 *** (−5.851)		−1.922 *** (−4.008)
Liquidity		0.493 (0.349)		3.669 (0.689)
Leverage		−0.426 ** (−2.089)		−0.124 (−0.674)
Asset Growth		−0.000 (−0.383)		0.001 (0.658)
Price Volatility		−13.700 *** (−4.293)		−36.329 *** (−3.272)
PPENT		−0.280 (−0.550)		−0.999 (−0.521)
Constant	1.907 *** (9.514)	18.064 *** (7.500)	7.462 *** (13.631)	44.000 *** (5.635)
Observations	819	819	819	819
R-squared	0.014	0.450	0.003	0.219
Industry effects	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes

Table 4 displays results of Equation (1) using OLS estimation technique. The dependent variable is INST_DOM. Columns 1 and 3 show results without the control variables. Columns 2 and 4 include the control variables. T-statistics are in parentheses. Definitions of all variables are provided in Table 1. Superscripts *** and ** denote statistical significance at 1% and 5% level, respectively.

In Table 5, we examine the impact of foreign institutional ownership on firm performance. Columns 1 and 3 show the results without the application of the firm-level control variables. Our second key variable of interest, INST_FRGN, shows a significant positive association with both firm performance measures across all regression results at a minimum 5% significance level. After controlling for the firm-specific characteristics, we show that an increase of one within-firm standard deviation in the percentage of foreign ownership increases Tobin's Q by 0.55, which is 34.59% of the mean of Tobin's Q and nearly 21.56% of the standard deviation of Tobin's Q, indicating that an increase in INST_FRGN substantially increases Tobin's Q score of Bangladeshi firms. Additionally, at a 5% level of significance, INST_FRGN exhibits a positive correlation with ROA. An increase of one within-firm standard deviation in the percentage of foreign ownership increases ROA by 1.22, which is 14.68% of the mean of ROA and nearly 17.13% of the standard deviation of ROA, indicating that an increase in INST_FRGN substantially increases the ROA score. Similar to the findings of Ferreira and Matos (2008), Lin and Fu (2017), and (Bena et al. 2017) we also document a positive correlation between foreign ownership and firm performance. Through active monitoring, management skills, and financial resources, foreign institutional investors strengthen the firm's corporate governance mechanisms and, as a result,

improve corporate performance. In a study based on an emerging market like Taiwan, [Hsu and Wang \(2014\)](#) showed that the positive association between institutional ownership and firm performance is more pronounced for foreign institutions, as foreign institutions can be more resourceful and have better executive skillsets. Our findings, therefore, suggest that in the context of Bangladesh, foreign institutional ownership tends to improve firm performance. The results are consistent with [Imam and Malik \(2007\)](#), who used a dataset from the Dhaka Stock Exchange to conclude that foreign institutional shareholders tend to improve the performance of Bangladeshi firms.

Table 5. Impact of Foreign Ownership on Firm Performance. results of Equation (1) using OLS estimation technique.

	(1)	(2)	(3)	(4)
	Tobin's Q	Tobin's Q	ROA	ROA
INST_FRGN	3.588 *** (7.643)	2.885 *** (4.536)	11.164 *** (6.306)	6.413 ** (2.536)
Size		−0.672 *** (−3.853)		−2.689 *** (−3.912)
Liquidity		0.546 (0.353)		−6.429 (−1.034)
Leverage		−0.422 *** (−3.077)		−1.456 ** (−2.597)
Asset Growth		0.000 (0.014)		0.001 (0.707)
Price Volatility		−12.085 *** (−3.734)		−47.659 *** (−3.637)
PPENT		0.094 (0.171)		−2.052 (−0.919)
Constant	1.014 *** (8.846)	13.808 *** (4.559)	6.968 *** (14.490)	59.441 *** (4.970)
Observations	819	819	819	819
R-squared	0.163	0.564	0.127	0.446
Industry effects	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes

Table 5 presents the dependent variable INST_FRGN. Columns 1 and 3 show results without the control variables. Columns 2 and 4 include the control variables. T-statistics are in parentheses. Definitions of all variables are provided in Table 1. Superscripts *** and ** denote statistical significance at 1% and 5% level, respectively.

5. The Effect of Corporate Governance Mechanisms

In this section, we aim to examine whether corporate governance characteristics, such as the size of the board and the proportion of independent directors within the board, may influence the overall effectiveness of a company's ownership structure and its mechanisms. In the next section, we employ two corporate governance attributes—board size and board independence—to examine whether they have any mediating effect on the relationship between institutional ownership and firm performance.

5.1. Mediating Impact of Board Size on the Relationship between Institutional Ownership and Firm Performance

The larger number of directors allows the board to gather diverse intellect and skills and utilize such expertise to improve strategic decision-making ([Gómez et al. 2017](#)). In other words, the effectiveness of the board increases with an increased number of directors within the board. As a result, studies show that a larger board is associated with improved firm performance ([Hamza et al. 2020](#); [Sanda et al. 2010](#)). Based on the discussion, we expect

that board size will mediate the relationship between institutional ownership and firm performance in a positive direction.

The regression results are reported in Table 6. The results demonstrated in columns 1, and 2 show that board size has a positive effect on the relationship between institutional ownership and Tobin's Q at the 5% level of significance and on the relationship between institutional ownership and ROA at the 10% level of significance. Furthermore, in columns 3 and 4 of Table 6, board size has a favorable influence on the linkage between foreign institutional ownership and Tobin's Q at the 1% level of significance and on the relationship between foreign institutional ownership and ROA at the 10% level of significance. A larger board tends to provide greater and more heterogeneous expertise to develop superior business development strategies and contribute to optimum decision-making processes. In addition to that, the larger the board size, the more monitoring is assumed, assisting the board of directors in making solid corporate decisions (Pearce and Zahra 1992) by leveraging a range of diverse expertise from their diverse backgrounds (Kao et al. 2018) and thereby boosting the firm's performance (Choi and Wong 2007). So, our results suggest that board size plays an important role in solidifying the corporate governance mechanisms of Bangladeshi companies.

Table 6. Mediating impact of Board size on the relationship between institutional ownership and firm performance.

	(1)	(2)	(3)	(4)
	Tobin's Q	ROA	Tobin's Q	ROA
INST_DOM	11.901 ** (2.501)	3.093 ** (2.187)		
INST_DOM xBoard Size	1.051 ** (2.011)	0.997 * (1.841)		
INST_FRGN			3.053 ** (2.358)	6.887 (0.804)
INST_FRGN xBoard Size			0.969 *** (2.847)	2.498 * (1.915)
Board Size	0.017 ** (2.286)	0.791 *** (3.472)	0.068 ** (2.292)	0.829 *** (4.166)
Size	−1.098 *** (−6.428)	−2.536 *** (−4.635)	−0.657 *** (−3.831)	−3.224 *** (−5.063)
Liquidity	−0.345 (−0.229)	−3.300 (−0.613)	1.014 (0.656)	−6.749 (−1.162)
Leverage	−0.401 * (−1.915)	−0.169 (−0.940)	−0.632 *** (−4.432)	−2.092 *** (−3.825)
Asset Growth	−0.009 (−0.923)	0.064 * (1.841)	−0.007 (−0.822)	0.031 (1.037)
Price Volatility	−13.758 *** (−4.174)	−41.357 *** (−3.867)	−11.749 *** (−3.759)	−52.221 *** (−4.438)
PPENT	−0.738 (−1.335)	−2.316 (−1.221)	0.073 (0.123)	−3.451 (−1.557)
Constant	22.021 *** (7.733)	47.283 *** (5.154)	12.920 *** (4.453)	60.979 *** (5.670)
Observations	819	819	819	819
R-squared	0.493	0.325	0.631	0.589
Industry effects	Yes	Yes	Yes	Yes
Year effects	Yes	Yes	Yes	Yes

Table 6 shows results for analyzing the mediating impact of board size on the relationship between institutional ownership and firm performance. T-statistics are in parentheses. Definitions of all variables are provided in Table 1. Superscripts ***, **, * denote statistical significance at 1%, 5%, and 10% level, respectively.

5.2. Mediating Impact of Independent Directors on the Relationship between Institutional Ownership and Firm Performance

The agency theory argues that the advisory and monitoring roles are more prominently performed by independent directors as they do not take part in the day-to-day operation of the business. Thus, board independence acts as an internal control method, and an independent director's decisions are more strategic and objective toward achieving the shareholder's interest (Brickley and Zimmerman 2010). In 2006, the Securities and Exchange Commission of Bangladesh created the Corporate Governance Notification, under which it was made mandatory for listed Bangladeshi firms to have at least one independent director on a board with fewer than ten members. Such a convergence of Bangladeshi corporate governance mechanisms with those of the Anglo-Saxon makes it rational to examine the influence of board independence on the relationship between institutional ownership and firm performance. Independent directors possess the capability to govern and challenge management decisions in order to protect the company's reputation and continue to improve firm performance. Zhu et al. (2016) show evidence that the effective monitoring role of independent directors is associated with higher firm valuation. In line with this discussion, we expect that, in the context of Bangladesh, the presence of independent directors within the board will have a positive reinforcement of the relationship between institutional ownership and firm performance.

The results are reported in Table 7. In columns 1 and 2, we show that board independence has a favorable influence on the link between institutional ownership and Tobin's Q and ROA, at a significance level of 5% and 1%, respectively. Furthermore, through columns 3 and 4 of Table 7, we demonstrate that board independence has a significant positive influence on the association between foreign ownership and Tobin's Q at the 5% level of significance and on the relationship between foreign institutional ownership and ROA at the 1% level of significance. Independent board members with extensive experience and competence, as well as enhanced monitoring capabilities and expanded networks (Fama and Jensen 1983), strengthen the relationship between ownership structure and business performance. Our results provide evidence that, in addition to the vigorous monitoring by the institutional shareholders, the monitoring role of the independent directors acts as a catalyst for the positive relationship between institutional ownership and firm performance.

Table 7. Mediating impact of Board Independence on the relationship between institutional ownership and firm performance.

	(1) Tobin's Q	(2) ROA	(3) Tobin's Q	(4) ROA
INST_DOM	2.857 ** (2.605)	19.075 * (1.825)		
INST_DOM x IND	1.820 ** (2.117)	1.502 ** (2.597)		
INST_FRGN			0.528 ** (2.314)	1.229 ** (2.442)
INST_FRGN xIND			1.369 ** (2.076)	6.392 *** (2.828)
Board Independence	2.545 ** (2.924)	19.395 * (1.973)	1.660 * (1.764)	22.622 ** (2.587)
Size	−0.962 *** (−5.036)	−2.191 *** (−4.004)	−0.629 *** (−3.323)	−2.611 *** (−3.596)
Liquidity	1.476 (0.911)	4.922 (0.864)	0.691 (0.389)	−4.488 (−0.647)

Table 7. Cont.

	(1)	(2)	(3)	(4)
	Tobin's Q	ROA	Tobin's Q	ROA
Leverage	−0.481 ** (−2.144)	−0.230 (−1.223)	−0.338 ** (−2.260)	−1.162 * (−1.955)
Asset Growth	−0.004 (−0.339)	0.088 ** (2.403)	−0.006 (−0.636)	0.013 (0.364)
Price Volatility	−11.792 *** (−3.245)	−31.258 *** (−2.703)	−11.491 *** (−3.439)	−43.330 *** (−3.276)
PPENT	−0.405 (−0.702)	0.979 (0.477)	0.034 (0.056)	−0.283 (−0.118)
Constant	18.843 *** (5.897)	42.228 *** (4.620)	13.572 *** (4.252)	61.945 *** (5.033)
Observations	819	819	819	819
R-squared	0.464	0.296	0.581	0.491

Table 7 shows results for analyzing the mediating impact of board independence on the relationship between institutional ownership and firm performance. T-statistics are in parentheses. Definitions of all variables are provided in Table 1. Superscripts ***, **, * denote statistical significance at 1%, 5%, and 10% level, respectively.

6. Conclusions

This paper investigates the impact of institutional ownership (domestic and foreign) on firm performance in the context of an emerging economy—Bangladesh—over the period of 2008–2018, using Tobin's Q and Return on Asset (ROA) proxies of firm performance measures. Our paper extends the existing empirical literature by exploring the role of both institutional and foreign shareholders on firm performance in the context of Bangladesh, using a dataset covering 180 non-financial firms from DSE. Research in the context of an emerging nation, such as Bangladesh, is scarce. Hence, this paper adds a view to the already vast existing literature, the data of which are mainly focused on developed nations.

After controlling for firm-specific characteristics (such as firm size, liquidity, leverage, asset growth, price volatility, and property, plant, and equipment net), we provide evidence that Bangladeshi institutional shareholders are facilitating firms towards boosting their performance. The result is coherent with the “active monitoring” view, which implies that institutional shareholders, with strong supervision of the managers, can in turn help managers make sound strategic decisions regarding the firm. This will mechanically lead to a reduction in information asymmetry and an intensification of the transparency with which the firm operates to ensure increased corporate value. This monitoring authority of institutional owners with specialized skills will align firm-specific decisions in favor of shareholders that are most beneficial for the firm. Following that, we also demonstrate a positive association between increased foreign institutional shareholding and firm performance. In an emerging economy, foreign institutional shareholders supply skilled management expertise and high-end resource endowment, and most importantly, they act as superior corporate monitors, which further enhance firm performance. Additionally, we explore two other corporate governance characteristics—board size and board independence—to determine whether they mediate the relationship between institutional ownership and firm performance. Our results indicate that board size has a significantly positive impact on firm performance in Bangladeshi companies. Next, we explored the impact of board independence on the relationship between institutional ownership and firm performance. Our results suggest that not only robust monitoring by the institutional shareholders, but also the strong monitoring role played by the independent directors are the foundations for the positive relationship between institutional ownership and firm performance. Independent board members, with their extensive experience and competency, coupled with their monitoring capabilities and a large network base, do reinforce the positive relationship between ownership structure and business performance.

Our study has several important implications for shareholders, firms, and regulators. Through the threat of exit due to incompetency, institutional shareholders can discipline the management, as well as mitigate the plausible lack of financing by increasing liquidity, which may ameliorate firm performance. As is evident in this paper, institutional (both domestic and foreign) shareholders, through their rigorous monitoring role, can trigger strong corporate governance, which will in turn increase firm performance in an emerging economy like Bangladesh. In Bangladesh, insider ownership currently comprises 30% of the overall ownership structure within Bangladeshi firms. Such a founder-family-controlled board lacks independence, and thus, inadequately represents minority shareholders and institutional investors. Based on the findings of our study, it is recommended that the government and standard setters must restructure the ownership setting and prioritize increasing institutional shareholdings within Bangladeshi firms for improved governance and performance. Consequently, regulators might want to look into the corporate ownership structure of firms in Bangladesh to aid in striking a balance in ownership structure. This is because institutional and foreign shareholders tend to be high-risk takers looking for a high-risk-return payoff. This high-risk-taking tendency might lead to indulgence in risky investments, which might have adverse implications for firm value. Hence, our study appeals to finding an equilibrium between internal regulatory mechanisms and ownership structure. Consequently, this research also contributes to the vast field of ownership structure in academic literature from an emerging market perspective.

We acknowledge that our regression results may have some limitations. We employed the OLS regression technique, for which the obtained results could be biased due to endogeneity issues. Future research could concurrently investigate the relationship between institutional ownership and firm performance on the one hand, and the cost of debt on the other. This will help get a better idea of the risk-return trade-off, and hence, aid managers in making informed decisions. In addition to that, instead of looking into the impact of institutional ownership on financial performance, studies can also delve into the possible impacts of institutional ownership on non-financial performances. Some studies carried out in the context of the USA included the effect of institutional ownership on carbon emission (Safiullah et al. 2022), firm transparency and information production (Boone and White 2015), sustainability reporting (Nulla 2015), and CSR activities (Kim et al. 2019). It would be noteworthy to see how these results might differ in the context of an emerging economy like Bangladesh.

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