CORPORATE GOVERNANCE, INSTITUTIONAL INVESTOR TYPE AND FIRM PERFORMANCE: EVIDENCE FROM AN EMERGING MARKET

Rama Sastry Vinjamury *

* School of Business Management, Narsee Monjee Institute of Management Studies (NMIMS), Bengaluru, India Contact details: Narsee Monjee Institute of Management Studies (NMIMS), Kalkere Post, Bannerghatta Road, Bengaluru, Karnataka 560083, India



How to cite this paper: Vinjamury, R. S. (2021). Corporate governance, institutional investor type and firm performance: Evidence from an emerging market. *Corporate Governance and Sustainability Review*, 5(4), 20–27. https://doi.org/10.22495/cgsrv5i4p2

Copyright © 2021 The Author

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). https://creativecommons.org/licens es/by/4.0/

ISSN Online: 2519-898X ISSN Print: 2519-8971

Received: 12.08.2021 Accepted: 28.10.2021

JEL Classification: G32, G34 DOI: 10.22495/cgsrv5i4p2

Abstract

The study analyses the role of institutional investors in improving firm performance. Unlike in developed economies where firm ownership is widely dispersed, firms in emerging economies such as India have substantial promoter shareholdings (often in a majority or close to a majority). Given the promoter control of Indian companies, the role of institutional investors as external monitors is analysed. Following Brickley, Lease, and Smith (1988) and Almazan, Hartzell, and Starks (2005), the study categorises institutional investors as pressuresensitive and pressure-insensitive institutional investors. Panel data for non-financial firms from India included in National Stock Exchange (NSE) 500 over the period 2008-2017 is studied using fixed-effects models. The study finds that the increased ownership of pressureinsensitive institutional investors is positively associated with firm performance. Also, the increased ownership of pressure-sensitive institutional investors is negatively associated with firm performance. These findings are consistent with the view that pressure-insensitive institutional investors are more effective monitors compared to pressure-sensitive institutional investors. The study offers insights into the role of institutional investors in economies where firms have a substantial promoter shareholding. The study documents that even with a substantial promoter shareholding and control, pressureinsensitive institutional investors aid in enhancing firm value.

Keywords: Corporate Governance, Board of Directors, Institutional Investors, Firm Ownership, Firm Performance

Authors' individual contribution: The Author is responsible for all the contributions to the paper according to CRediT (Contributor Roles Taxonomy) standards.

Declaration of conflicting interests: The Author declares that there is no conflict of interest.

1. INTRODUCTION

Corporate governance mechanisms can be viewed as internal and external governance mechanisms. For instance, the composition of the board and the compensation structures can be regarded as part of internal governance mechanisms. Other mechanisms like the market for corporate control, the environment in which the firms compete and the legal environment can be perceived as part of the external governance mechanisms (Walsh & Seward, 1990). Proposed governance reforms like the Sarbanes-Oxley Act of 2002^1 in the US or the Companies Act of 2013^2 in an emerging economy such as India emphasize the need to strengthen monitoring of management decisions. One of the key aims of these proposed governance reforms is to include more "independent" actors on the board. At the same time, in developing economies like India, the evidence with regards to independent members on the board and metrics of firm

¹ https://www.congress.gov/bill/107th-congress/house-bill/3763
² http://ebook.mca.gov.in/default.aspx

profitability is counterintuitive. For example, recent studies (Bansal & Sharma, 2016; Arora & Sharma, 2016; Vinjamury, 2020) report a negative relationship between increased board independence and the profitability of firms. Therefore, a uniform approach across economies in enforcing corporate governance mechanisms may not be appropriate.

Ngwu, Osuji, and Stephen (2016) highlight that governance outcomes in emerging economies are likely to be different from developed economies. In developing economies like India, where firm shareholdings are dominated by promoters (Jameson, Prevost, & Puthenpurackal, 2014) the function of institutional investors as external monitors may not be clear. Conventional wisdom suggests that, in addition to the board, the institutional investors are often viewed as monitors who have incentives to safeguard the interest of the shareholders. Prior studies in developed economies starting from Brickley et al. (1988) and later (Almazan et al., 2005) posit that all institutional investors are not equal. For example, institutional investors such as banking institutions and insurance companies may have existing relationships with firms. To continue their business relationship, these institutional investors may not be willing to confront and challenge the management decisions. Such investors can be considered pressure-sensitive institutional investors. At the same time, institutional investors such as mutual funds and foreign institutional investors are less likely to get into business relationships and are in a better position to monitor and enforce discipline on the management. Such investors can be considered as pressure-insensitive institutional investors.

Following Brickley et al. (1988) and Almazan et al. (2005), the study classifies institutional investors as pressure-sensitive and pressureinsensitive institutional investors. Because of the emerging evidence from studies such as Ngwu et al. (2016) that the governance outcomes in emerging and developing economies can often depart from developed economies, the study seeks to analyse whether all institutional investors are created equal in the context of an emerging economy. Specifically, the study seeks to analyse pressure-sensitive the relationship between institutional investors and pressure-insensitive institutional investors concerning firm performance. The findings of the study support the view that the increased ownership of pressure-insensitive institutional investors is positively associated with firm performance. On the other hand, increased ownership of pressure-sensitive institutional investors is negatively associated with firm performance.

The rest of the paper is organised as follows. Section 2 provides a review of the literature. Section 3 presents data and research methodology. Section 4 discusses the results of the study. Section 5 concludes the study.

2. LITERATURE REVIEW

Prior studies have considered institutional investors as corporate monitors. Grossman and Hart (1980) posit that the institutional investors due to their relatively large shareholdings have an incentive to monitor. The larger shareholdings allow these investors to achieve sufficient benefits bv monitoring. In a similar vein, Shleifer and Vishny (1986)argue that investors with larger shareholdings may have a greater motivation to keep track of the management decisions than the board of directors since the board members may have little or no ownership stake in the firm. Consistent with this view, other studies such as Nesbitt (1994), McConnell and Servaes (1990), and Smith (1996) show that monitoring by institutional investors can stem the self-serving behaviour of managers and can enhance firm performance.

An argument can be made that large investors will have a greater incentive to monitor managers. (1998) highlights that monitoring Maug bv institutional investors is partly dependent on the size of their ownership stake. When institutional investors have substantial ownership stakes (which may be potentially illiquid), investors have a greater motivation to monitor. On the other hand, if the institutional investors hold fewer shares, they can liquidate their holdings quickly and may not have a strong incentive to monitor. Consistent with the later view, studies such as Coffee (1991), Bhide (1994), and Maug (1998) document that the institutional investors are likely to be driven by short-term profits and may have less incentive to monitor the management.

Nevertheless, with greater emphasis given to governance mechanisms at the firm level, the function of institutional investors has received greater attention in developed economies. Evidence attests to the important function of institutional investors in "taming" the management. For example, Parrino, Sias, and Starks (2003) document that the selling of shares by institutional investors is linked to forced CEO exits and that the replacement is likely to be an outsider. Similarly, Chung, Firth, and Kim (2002) document that the presence of large shareholders in a firm may hinder managers from adopting accrual choices that are discretionary and opportunistic. Other studies have analysed the impact of institutional investors on the enhanced performance of the firm. Prior studies such as Karpoff, Malatesta, and Walking (1996), Duggal and Millar (1999), Agrawal and Knoeber (1996) and Faccio and Lasfer (2000) find a statistically insignificant relationship between institutional investor shareholdings and metrics of firm profitability. However, McConnell and Servaes's (1990) are one of the early studies that document positive a significant between institutional ownership and market-based firm performance measures. In a similar vein, Nesbitt (1994), Smith (1996) and Del Guercio and Hawkins (1999) show a positive association between increased institutional shareholdings and various metrics of firm profitability. More recently, Michel, Oded, and Shaked (2020) document that initial public offering (IPO) operating performance is positively associated with institutional ownership, and show that institutional ownership is important for a firm's operating performance in its initial years after going public. In a similar vein, Kao, Hodgkinson, and Jaafar (2019) using a set of listed firms domiciled in Taiwan, show that institutional ownership is positively related to firm value. Also, Hunjra, Perveen, Li, Chani, and Mehmood (2020) show that among other factors, institutional ownership impacts stock market liquidity.



Brickley et al. (1988) provide a framework where they categorize institutional investors as pressure-sensitive and pressure-insensitive. They argue that the latter category of investors is better placed to discipline the managers. The pressuresensitive investors are likely to have an existing business relationship with the firm and are less likely to be effective monitors. Consistent with this view, Almazan et al. (2005) show that the pressuresensitive institutional investors' ownership is negatively associated with the level of executive compensation. In a similar vein, Cornett, Marcus, Saunders, and Tehranian (2007) document a positive pressure-insensitive relationship between institutional investors and corporate operating performance. However, the presence of pressuresensitive institutional investors has no impact on a firm's operating cash flow returns. Recently, Lin and Fu (2017) using a sample of Chinese firms show that pressure-insensitive institutions had a pronounced impact on the firm performance. Similarly, Aggarwal, Hu, and Yang (2015) analysing Chinese firms document that pressure-insensitive investors are better at preventing corporate scandals.

3. RESEARCH METHODOLOGY

Many studies exploring the relationship between different categories of institutional investors have focused their attention on large firms in developed economies such as the US where firms are characterised by dispersed share ownership and are not dominated by promoter shareholdings. On the other hand, most Indian firms have concentrated ownership with substantial promoter shareholdings (Jameson et al., 2014). Given the difference in the ownership structure, the study intends to explore the relationship between institutional ownership and firm performance in the Indian context.

For the analysis, data for firms (non-financial) included in NSE 500 index for the period from 2008 to 2017 was collected from the Centre for Monitoring Indian Economy (CMIE) database. Two models are considered for the study. In the first model, the impact of institutional investors (without any sub-categorisation) on firm profitability is analysed. In the alternative model, the impact of pressure-sensitive and pressure-insensitive institutional investors on firm performance is analysed.

The data for the analysis comprises unbalanced panel data. Given the nature of the data, pooled ordinary least squares regression models, structural equation models along fixed and random effects models can be considered for the analysis. In this context, models were considered to evaluate fixed and/or random effects. Specifically, fixed/random models allow us to measure any changes within the firm over time. Fixed-effects panel data regression models were used for the analysis in the study. Based on the Hausman (1978) test, the random-effects model was rejected. To account for outliers, independent variables were winsorized at a 1% level.

The following variables are used as controls for the analysis.

Corporate board size

In terms of the board size, previous studies in developed economies have documented that large

boards negatively impact the value of the firm (Yermack, 1996). From a theoretical perspective, Jensen (1993) argues that bigger boards are characterized by problems of coordination and communication. However, an argument can be made that more members on corporate boards can bring more knowledge and expertise to decision-making which potentially would increase the value to shareholders (de Oliveira Gondrige, Clemente, & dos Santos Bortolocci Espejo, 2012; Saibaba & Ansari, 2002). Put differently, smaller boards may not be well informed for taking effective decisions (Hambrick, Werder, & Zajac, 2008). Similarly, Alanazi (2019) shows that board size is positively associated with improved governance quality and leads to better corporate governance outcomes. The latter view appears to be more relevant in the Indian context. Studies on Indian firms showcase a significantly positive association between larger boards and metrics of firm profitability (Bansal & Sharma, 2016; Vinjamury, 2020).

Board independence

Conventional wisdom suggests that greater board independence may improve monitoring and aid the decision-making process. Weisbach (1988) documents that the boards which are more independent than those that are insider-dominated are significantly more likely to remove a CEO based on the CEO's lack of performance. This study also shows that greater board independence enhances firm value through these changes. Byrd and Hickman (1992) study the relationship between board composition of bidding firms and the associated impact on shareholders' wealth in tender offer bids. The study shows that lower negative returns are realized by the shareholders for firms that have constituted boards in such a way that at least fifty per cent of the board members are independent or unaffiliated. This evidence, the authors argue is in tune with the argument that more independent boards enhance shareholders' wealth. In another study, Fama and Jensen (1983) posit that outside directors on boards may be motivated to establish a reputation as experts in decision making. From this perspective, independent directors may pursue to augment their appeal and credibility as candidates for subsequent board appointments. These subsequent board appointments are likely due to their acquired favourable reputation as competent independent monitors. Supporting this view, Algatan, Chbib, and Hussainey (2019) document a positive correlation between board independence and metrics of performance. Other researchers (Koerniadi & Tourani-Rad, 2012; Leung, Richardson, & Jaggi, 2014; Shan & McIver, 2011) show that more independent boards need not contribute to firm profitability. favourably The argument in this context is that the outside directors are less likely to have sufficient information regarding the firm and may not act as effective monitors.

CEO duality

Prior studies have shown that bifurcating the roles of CEO and chairman leads to enhanced firm operating performance (Bhagat & Bolton, 2008). More recently, Rompotis (2020) shows that not bifurcating the roles exerts a favourable impact on firm performance. However, other studies (Daily & Dalton, 1997) find no significant difference by bifurcating the roles.

Audit committee independence

Auditing is one of the crucial aspects of corporate governance mechanisms. The audit committee is expected to monitor the accounting, reporting, and auditing of financial statements. Needless to say, the independence of the audit committee is crucial for its effective performance (Cohen, Gaynor, Krishnamoorthy, & Wright, 2011). Beasley (1996) shows that firms with more independent members in the audit committee are less likely to be victims of fraud. With independent audit committees, earnings management can be curtailed (Bukit & Iskandar, 2009). Studies such as Abbott, Parker, and Peters (2002) show an inverse relationship between audit committees and earnings management due to enhanced monitoring. More recently, Masmoudi and Makni (2020) provide evidence that audit committee independence curtails real earnings management.

Audit committee meetings

Frequent audit committee meetings may help enhance monitoring. For example, Menon and Williams (1994) show that the frequency of audit committee meetings led to better monitoring of the firm. This enhanced monitoring can enhance the performance of the firm. Similarly, DeZoort, Hermanson, Archambeault, and Reed (2002) report that the frequent audit committee meetings allow the audit committees to be more vigilant in protecting the interest of investors. More recently, Al-Mamun, Yasser, Rahman, Wickramasinghe, and Nathan (2014) posit that frequent audit committee meetings may reduce asymmetric information and agency problems by providing timely information to investors.

Leverage

Many studies have documented that financial leverage is a significant determinant of firm performance. From a theoretical perspective, if agency costs can be minimized due to increasing leverage, one can find a positive association between financial leverage and metrics of profitability (Jensen, 1986). On the other hand, studies in the Indian scenario document a negative and significant association between firm profitability and leverage (Bansal & Sharma, 2016; Arora & Sharma, 2016).

Firm age

Many studies in the Indian context have documented a negative association between the age of the firm and Tobin's Q (Arora & Sharma, 2016).

The variables used in the analysis are *BSIZE*, *BIND*, *AIND*, *AMEET*, and *INT_INV*. Four performance indicators were considered as part of the study. *ROA*, *ROE*, and net profit margin (*NPM*) were used as accounting measures. Adjusted Tobin's Q (*TQ*) is also considered. *TQ* was obtained using the methodology adopted by (Gompers, Ishii, & Metrick, 2003). *LEV*, *FAGE*, and *LOG_TA* are control variables. Table 1 provides a detailed description of these variables. The following models are considered:

$$Y_{it} = \alpha_0 + \beta X_{it} + \delta II_{it} + \gamma C_{it} + \varepsilon_{it}$$
(1)

$$Y_{it} = \alpha_0 + \beta X_{it} + \delta P S_P I_{it} + \gamma C_{it} + \varepsilon_{it}$$
(2)

where, Y_{it} represents metrics for firm profitability. X_{it} represents the array of governance variables. C_{it} represents control variables. II_{it} is institutional investor ownership for firm *i* at time *t*. Initially, institutional the association between total shareholdings and metrics of firm profitability is evaluated. For more detailed analysis, in equation (2) the relationship between the different sets of institutional investors on firm performance is evaluated. PS_PI_{it} represents the pressure-sensitive and pressure-insensitive institutional ownership for the firm *i* at time *t*. α_0 represents the intercept. Similarly, δ and Υ represent the model parameters for the governance, institutional ownership, and control variables respectively. ε_{it} is the error term.

Variables	Description	Measurement				
Performance						
TQ	Adjusted Tobin's Q	(Total assets + market capitalization - book value of equity - deferred tax liability) as a proportion of total assets				
ROA	Return on assets	Net income as a proportion of total assets				
ROE	Return on equity	Net income as a proportion of (paid-up equity capital + reserves and funds)				
NPM	Net profit margin	Net income as a proportion of sales				
Corporate gover	nance					
BSIZE	Board size	Total number of board members				
BIND	Board independence	Number of independent board members as a proportion of board size				
BODMEET	Board meetings	Frequency of annual board meetings				
CEO_DUAL	CEO duality	When CEO is also the chairman of the board, then the variable takes a val of 1; 0 otherwise				
AIND	Audit committee independence	% of independent directors on the audit committee				
AMEET	Audit committee meetings	Number of audit committee members times no of audit committee meetings in a financial year				
Institutional ownership						
INT_INV	Institutional investor ownership	% of shares with institutional investors				
P_INSENSITIVE	Institutional investors who are pressure-insensitive	% of shares held by non-promoter mutual funds and for eign institutional investors				
P_SENSITIVE	Institutional investors who are pressure-sensitive	% of shares held by non-promoter banks and financial institutions				
Controls						
FAGE	Firm's age	Firm's age (in years) since its incorporation				
LEV	Financial leverage	Borrowings as a proportion of total assets				
LOG_TA	The logarithm of firm total assets	Natural logarithm of total assets				

Table 1. Variable description

VIRTUS 23

4. RESULTS AND DISCUSSION

Table 2 reports summary statistics. The median board size (*BSIZE*) of the firms used in the analysis is 11. The median board independence (*BIND*) is 50%. The mean and median non-promoter institutional investor ownership (*INT_INV*) is 22.28 % and 20.82% respectively. Of the total institutional shareholdings, the mean *P_SENSITIVE* and *P_INSENSITIVE* institutional ownership is 5.25% and 16.85% respectively. Median audit committee independence (*AIND*) is 80%.

Variable	Mean	Median	Std. Deviation
BSIZE	11.113	11.000	3.436
BIND	0.501	0.500	0.138
CEO_DUAL	0.011	0.000	0.103
AMEET	16.987	15.000	7.707
AIND	0.793	0.800	0.219
LEV	0.215	0.197	0.186
LOG_TA	10.497	10.384	1.406
FAGE	41.831	34.000	24.327
INT_INV	22.282	20.825	13.528
P_INSENSITIVE	16.854	15.765	11.857
P_SENSITIVE	5.258	3.115	6.444

Table 2. Descriptive statistics

Multi-collinearity may be a concern for the variables used in the study. Therefore, correlation analysis for variables used in the study was carried out. Table 3 documents the results of Pearson correlation coefficients. The highest value is 0.406 between the natural log of total assets (*LOG_TA*) and *P_SENSITIVE*. Also, variance inflation factors were within acceptable limits.

Results from Table 4 document a significant positive association between *BSIZE* and *TQ*. Accounting measures *NPM*, *ROE*, and *ROA* are not significantly related to *BSIZE*.

CEO duality (*CEO_DUAL*) is positively related to *ROE* and *ROA*. Also, CEO duality is not associated with *TQ* and *NPM*. *AMEET* is positively associated with TQ and audit independence (*AIND*) is positively associated with *NPM*. Non-promoter institutional ownership (*INT_INV*) is positively associated with *TQ*, *ROA*, and *NPM* used in the study suggesting an overall positive impact of the institutional ownership on metrics of firm performance.

Table 3. Correlation matrix

	BSIZE	BIND	CEO_DUAL	AMEET	AIND	LEV	LOG_TA	FAGE	<i>P_INSENSITIVE</i>	P_SENSITIVE
BSIZE	1.000									
BIND	-0.197	1.000								
CEO_DUAL	-0.045	0.067	1.000							
AMEET	0.274	-0.051	-0.018	1.000						
AIND	-0.012	0.431	0.027	0.058	1.000					
LEV	0.026	0.089	-0.015	-0.051	0.083	1.000				
LOG_TA	0.430	-0.065	-0.051	0.272	-0.007	0.132	1.000			
FAGE	0.066	0.007	-0.041	0.130	0.032	-0.057	0.122	1.000		
P_INSENSITIVE	0.103	0.124	-0.011	0.050	0.099	-0.162	0.203	-0.029	1.000	
P_SENSITIVE	0.250	-0.133	-0.022	0.203	-0.035	-0.015	0.406	0.316	0.002	1.000
P_INSENSITIVE P_SENSITIVE	0.103	0.124 -0.133	-0.011	0.050	-0.035	-0.162	0.203	-0.029 0.316	0.002	1.000

Notes: Pearson correlation coefficients are reported above.

Table 4. Model estimates (fixed effects)

Independent variables	Model 1 (TQ)	Model 2 (ROA)	Model 3 (ROE)	Model 4 (NPM)
Intercent	-3.82962***	0.615014***	1.231764***	51.1768***
Intercept	(-6.32)	17.73	(6.42)	(5.08)
PCIZE	0.032231**	-0.00071	0.002855	-0.23958
BSIZE	(2.5)	(-0.96)	(0.7)	(-1.12)
PIND	-0.37357	-0.02489	$\begin{array}{r} \textbf{Model 3 (ROE)} \\ \hline \textbf{Model 3 (ROE)} \\ \hline 1.231764^{***} \\ \hline (6.42) \\ \hline 0.002855 \\ \hline (0.7) \\ \hline -0.08132 \\ \hline (-0.94) \\ \hline 0.170737^* \\ \hline (1.82) \\ \hline 0.000953 \\ \hline (0.73) \\ \hline -0.02517 \\ \hline (-0.48) \\ \hline 0.014301 \\ \hline (0.19) \\ \hline -0.08047^{***} \\ \hline (-2.71) \\ \hline -0.00194 \\ \hline (-0.47) \\ \hline -0.00194 \\ \hline (-0.47) \\ \hline -0.00202^* \\ \hline (-1.67) \\ \hline 2688 \\ \hline 0.2538 \\ \hline < 0.0001 \\ \textbf{pcruthecis} \\ ** duantset \\ \end{array}$	-4.91989
BIIND	(-1.36)	(-1.59)	(-0.94)	(-1.08)
CEO DUAL	0.298961	0.030739*	0.170737*	0.759452
CEO_DOAL	(1.01)	(1.82)	(1.82)	(0.15)
AMEET	0.008573**	-0.00008	0.000953	0.015114
AMEEI	(2.09)	(-0.35)	(0.73)	(0.22)
	0.147072	-0.00553	-0.02517	5.088743*
AIND	(0.88)	(-0.58)	(-0.48)	(1.83)
LEV	-1.85835***	-0.1917***	0.014301	-35.8576***
LEV	(-7.76)	(-13.97)	(0.19)	(-9.01)
LOC TA	-0.05158	-0.03251***	-0.08047***	0.511389
LOG_IA	(-0.55)	(-6.07)	(-2.71)	(0.33)
EACE	0.115476***	-0.00055	$\begin{array}{r} 1.231764^{***} \\ \hline (6.42) \\ 0.002855 \\ \hline (0.7) \\ -0.08132 \\ \hline (-0.94) \\ 0.170737^* \\ \hline (1.82) \\ 0.000953 \\ \hline (0.73) \\ -0.02517 \\ \hline (-0.48) \\ 0.014301 \\ \hline (0.19) \\ -0.08047^{***} \\ \hline (-2.71) \\ -0.00194 \\ \hline (-0.47) \\ -0.00202^* \\ \hline (-1.67) \\ 2688 \\ \hline 0.2538 \\ < 0.0001 \\ \hline exerthesis , *** denotes size \\ \end{array}$	-0.87615***
FAGE	(8.8)	(-0.74)	(-0.47)	(-4.02)
NIT INT	0.018833***	0.000324	-0.00202*	0.257011***
	(4.92)	(1.48)	-0.02517 (-0.48) 0.014301 (0.19) -0.08047*** (-2.71) -0.00194 (-0.47) -0.00202* (-1.67) 2688	(4.04)
Observations	2688	2688	2688	2688
R-squared	0.7344	0.6113	0.2538	0.4324
Pr (F-statistic)	< 0.0001	< 0.0001	< 0.0001	< 0.0001

*Notes: Results from the fixed-effects models are reported above. T-statistics is in parenthesis. *** denotes significance at 1%, ** denotes significance at 1%, ** denotes significance at 10%.*

Focusing on the results in Table 5, the association between the governance variables and firm profitability is consistent with the results documented in Table 4. However, now *BIND* is negatively associated with *TQ*. Among the institutional ownership variables, *P_INSENSITIVE*

is positively linked to the metrics of firm performance *TQ*, *ROA*, and *NPM*. The increased ownership of *P_SENSITIVE* is negatively associated with *TQ*, *ROA*, and *ROE*.

In summary, the results from the analysis document a positive association between board size

VIRTUS 24

and the market-based performance measure adjusted Tobin's Q. The increased frequency in audit committee meetings is also positively associated with adjusted Tobin's Q. The increase in nonpromoter holdings positively impacts firm performance. This may be due to increased monitoring. On the other hand, CEO duality is positively related to accounting measures of firm performance ROA and ROE. The results show that an increase in pressure-insensitive institutional ownership is positively associated with measures of firm performance. At the same time, an increase in pressure-sensitive institutional ownership is negatively associated with firm performance measures. The findings strengthen the view that pressure-insensitive institutional investors are better monitors compared to pressure-insensitive institutional investors.

 Table 5. Fixed-effects models (with pressure-insensitive institutional ownership and pressure-sensitive institutional ownership variables)

Independent variables	Model 1 (TQ)	Model 2 (ROA)	Model 3 (ROE)	Model 4 (NPM)
Intercent	-3.24146***	0.627765***	1.302233***	54.91738***
Intercept	(-5.37)	(17.98)	(6.74)	(5.42)
DCIZE	0.038471***	-0.00058	0.003502	-0.19387
DSIZE	(3.01)	(-0.79)	(0.86)	(-0.90)
RIND	-0.46936*	-0.02743*	$\begin{array}{c c} \textbf{Model 3 (RCP)} \\ \hline 1.302233^{***} \\ \hline (6.74) \\ \hline 0.003502 \\ \hline (0.86) \\ \hline -0.09724 \\ \hline (-1.12) \\ \hline 0.165826^* \\ \hline (1.77) \\ \hline 0.000778 \\ \hline (0.60) \\ \hline -0.02653 \\ \hline (-0.50) \\ \hline -0.02653 \\ \hline (-0.50) \\ \hline 0.048382 \\ \hline (0.63) \\ \hline -0.08524^{***} \\ \hline (-2.88) \\ \hline -0.00279 \\ \hline (-0.67) \\ \hline -0.00003 \\ \hline (-0.02) \\ \hline (-0.67) \\ \hline -0.00704^{***} \\ \hline (-3.24) \\ \hline 2688 \\ \hline 0.2563 \\ \hline < 0.0001 \\ \hline nventhecis, *** danatas sin (-2.83) \\ \hline -0.001 \\ \hline -0.00101 \\ \hline -0.0011 \\ \hline -0.001 \\ \hline -0.001 \\ \hline -0.0011 \\ \hline -0.0011 \\ \hline -0.0011 \\ $	-5.20698
BIND	(-1.73)	(-1.75)	(-1.12)	(-1.14)
CEO DUAL	0.2472	0.029638*	0.165826*	0.390843
CEO_DUAL	(0.85)	(1.75)	(1.77)	(0.08)
AMEET	0.007363*	-0.00011	0.000778	0.009472
AMEEI	(1.82)	(-0.47)	(0.60)	(0.14)
	0.1392	-0.00568	-0.02653	5.039209*
AIND	(0.84)	(-0.60)	Model 3 (RCP) 1.302233*** (6.74) 0.003502 (0.86) -0.09724 (1.12) 0.165826* (1.77) 0.000778 0.660) -0.02653 (-0.50) 0.048382 (0.63) -0.08524*** (-2.88) -0.00279 (-0.67) -0.0003 (-0.02) -0.00704*** (-3.24) 2688 0.2563 0.2563 0.2563	(1.82)
LEV	-1.62531***	-0.1867***	0.048382	-34.4916
LEV	(-6.81)	(-13.52)	(0.63)	(-8.61)
LOC TA	-0.06665	-0.03272***	$\begin{array}{r} 1.302233^{***} \\ \hline 1.302233^{***} \\ \hline (6.74) \\ \hline 0.003502 \\ \hline (0.86) \\ \hline -0.09724 \\ \hline (-1.12) \\ \hline 0.165826^{*} \\ \hline (1.77) \\ \hline 0.000778 \\ \hline (0.60) \\ \hline -0.02653 \\ \hline (-0.50) \\ \hline 0.048382 \\ \hline (0.63) \\ \hline -0.08524^{***} \\ \hline (-2.88) \\ \hline -0.00279 \\ \hline (-0.67) \\ \hline -0.00003 \\ \hline (-0.67) \\ \hline -0.00279 \\ \hline (-0.67) \\ \hline -0.00003 \\ \hline (-0.22) \\ \hline (-3.24) \\ \hline 2688 \\ \hline 0.2563 \\ \hline < 0.0001 \\ \hline orontasis *** dances sign \\ \hline \end{tabular}$	0.425127
LOG_IA	(-0.72)	(-6.12)	(-2.88)	(0.27)
EACE	0.105873***	-0.00077	-0.00279	-0.9375***
FAGE	(8.15)	(-1.03)	(-0.67)	(-4.30)
D INCENCITRUE	0.031033***	0.000567**	-0.00003	0.33235***
P_IINSEINSITIVE	(7.53)	(2.38)	(-0.02)	(4.80)
D CENCITRIE	-0.02774***	-0.00078**	-0.02653 (-0.50) 0.048382 (0.63) -0.08524*** (-2.88) -0.00279 (-0.67) -0.00003 (-0.02) -0.00704*** (-3.24)	-0.00767
P_SENSITIVE	(-4.09)	(-1.99)	(-3.24)	(-0.07)
Observations	2688	2688	2688	2688
R-squared	0.741	0.6128	0.2563	0.4341
Pr (F-statistic)	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Pr (F-statistic)	< 0.0001	< 0.0001	< 0.0001	< 0.0001

*Notes: Results from the fixed-effects models are reported above. T-statistics is in parenthesis. *** denotes significance at 1%, ** denotes significance at 1%, ** denotes significance at 10%.*

VIRTUS

5. CONCLUSION

Prior studies posit that all institutional investors are not equal. Some institutional investors, to continue their existing business relationship with the firm, may not be willing to confront and challenge the management decisions. These institutional investors can be considered pressure-sensitive institutional investors. On the other hand, institutional investors who are less likely to have business relationships with the firms are in a better position to monitor and enforce discipline on corporate managers. The latter can be considered as pressure-insensitive institutional investors.

Given this background, the study analysed the role of institutional investors in monitoring and subsequently enhancing firm performance. Specifically, the study analysed whether all institutional investors are created equal in the context of an emerging economy such as India. Unlike in developed economies such as the US where ownership is widely dispersed, firms in emerging economies such as India have substantial promoter shareholdings (often in a majority or close to a majority). Therefore, analysing the role of institutional investors as effective monitors becomes important. The findings of the study show that the increased ownership of pressure-insensitive institutional investors is positively associated with firm performance. At the same time, the increased ownership of pressure-sensitive institutional investors is negatively associated with firm performance. These findings are consistent with

the view that pressure-insensitive institutional investors are more effective monitors compared to pressure-sensitive institutional investors.

The study has implications for firms operating in emerging markets such as India. Firstly, the study lends support to the view that not all institutional investors should be viewed from the same lens in terms of their monitoring role. The study shows pressure-insensitive institutional investors are better monitors and can enhance firm performance. The analysis shows that even with substantial promoter shareholding and control, the pressure-insensitive institutional investors' aid in enhancing firm value. In emerging economies where investor protection mechanisms are not as robust, pressureinsensitive institutional investors can act as active monitors and can contribute towards enhancing shareholder wealth. Secondly, the research evidence in emerging economies such as India shows that increased board independence often does not lead to better monitoring and improved firm performance. In this context, an increase in pressure-insensitive institutional ownership can be viewed by the investors and policymakers as an alternative corporate governance mechanism to monitor and discipline the management.

Since the study focuses on large listed firms in India, the evidence may not be generalized for smaller unlisted firms. Future research on smaller unlisted firms may help shed more light on this issue. Nonetheless, the current study offers insights for policymakers and investors about the role of different institutional investors in enhancing firm performance in emerging economies like India.

REFERENCES

- 1. Abbott, L. J., Parker, S., & Peters, G. F. (2002). Audit committee characteristics and financial misstatement: A study of the efficacy of certain Blue Ribbon Committee recommendations. https://doi.org/10.2139/ssrn.319125
- 2. Agarwal, A., & Knoeber, C. (1996). Firm performance and mechanism to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, *31*(3), 377–397. https://doi.org/10.2307/2331397
- 3. Aggarwal, R., Hu, M., & Yang, J. (2015). Fraud, market reaction, and the role of institutional investors in Chinese listed firms. *The Journal of Portfolio Management*, *41*(5), 92–109. https://doi.org/10.3905/jpm.2015.41.5.092
- 4. Alanazi, A. S. (2019). Corporate governance and the characteristics of the board of directors: Evidence from an emerging market. *Corporate Board: Role, Duties and Composition, 15*(1), 17–24. https://doi.org/10.22495/cbv15i1art2
- 5. Al-Mamun, A., Yasser, Q. R., Rahman, M. A., Wickramasinghe, A., & Nathan, T. M. (2014). Relationship between audit committee characteristics, external auditors and economic value added (EVA) of public listed firms in Malaysia. *Corporate Ownership & Control, 12*(1), 899–910. https://doi.org/10.22495/cocv12i1c9p12
- 6. Almazan, A., Hartzell, J. C., & Starks, L. T. (2005). Active institutional shareholders and cost of monitoring: Evidence from executive compensation. *Financial Management, 34*(4), 5–34. https://doi.org/10.1111/j.1755-053X.2005.tb00116.x
- 7. Alqatan, A., Chbib, I., & Hussainey, K. (2019). How does board structure impact on firm performance in the UK? *Corporate Board: Role, Duties and Composition, 15*(2), 18–27. https://doi.org/10.22495/cbv15i2art2
- 8. Arora, A., & Sharma, C. (2016). Corporate governance and firm performance in developing countries: Evidence from India. *Corporate Governance: The International Journal of Business in Society*, *16*(2), 420-436. https://doi.org/10.1108/CG-01-2016-0018
- 9. Bansal, N., & Sharma, A. (2016). Audit committee, corporate governance and firm performance: Empirical evidence from India. *International Journal of Economics and Finance, 8*(3). 103–116. https://doi.org/10.5539/ijef.v8n3p103
- 10. Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, *71*(4), 443–465. https://www.jstor.org/stable/248566
- 11. Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, *14*(3), 257–273. https://doi.org/10.1016/j.jcorpfin.2008.03.006
- 12. Bhide, A. (1994). Efficient markets, deficient governance. *Harvard Business Review, 72,* 128–140. Retrieved from https://hbr.org/1994/11/efficient-markets-deficient-governance
- 13. Brickley, J. A., Lease, R. C., & Smith, C. W. (1988). Ownership structure and voting on antitakeover amendments. *Journal of Financial Economics, 20*, 267–291. https://doi.org/10.1016/0304-405X(88)90047-5
- 14. Bukit, R. B., & Iskandar, T. M. (2009). Surplus free cash flow, earnings management and audit committee. *International Journal of Economics and Management, 3*(1), 204–223. Retrieved from http://www.ijem.upm.edu.my/vol3no1/bab13.pdf
- 15. Byrd, J. W., & Hickman, K. A. (1992). Do outside directors monitor managers?: Evidence from tender offer bids. *Journal of Financial Economics, 32*(2), 195–222. https://doi.org/10.1016/0304-405X(92)90018-S
- 16. Chung, R., Firth, M., & Kim, J.-B. (2002). Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance*, *8*(1), 29-48. https://doi.org/10.1016/S0929-1199(01)00039-6
- 17. Coffee, J. C., Jr. (1991). Liquidity versus control: The institutional investor as corporate monitor. *Columbia Law Review*, *91*(6), 1277–1368. https://doi.org/10.2307/1123064
- 18. Cohen, J. R., Gaynor, L. M., Krishnamoorthy, G., & Wright, A. M. (2011). The impact on auditor judgments of CEO influence on audit committee independence. *Auditing: A Journal of Practice & Theory, 30*(4), 129–147. https://doi.org/10.2308/ajpt-10146
- 19. Cornett, M. M., Marcus, A. J., Saunders, A., & Tehranian, H. (2007). The impact of institutional ownership on corporate operating performance. *Journal of Banking & Finance, 31*(6), 1771–1794. https://doi.org/10.1016/j.jbankfin.2006.08.006
- 20. Daily, C. M., & Dalton, D. R. (1997). Separate, but not independent: Board leadership structure in large corporations. *Corporate Governance: An International Review*, *5*(3), 126–136. https://doi.org/10.1111/1467-8683.00053
- 21. de Oliveira Gondrige, E., Clemente, A., & dos Santos Bortolocci Espejo, M. M. (2012). Composition of the board and firm value of Brazilian public companies. *Brazilian Business Review*, *9*(3), 71–93. https://doi.org/10.15728/bbr.2012.9.3.4
- 22. Del Guercio, D., & Hawkins, J. (1999). The motivation and impact of pension fund activism. *Journal of Financial Economics*, *52*(3), 193–340. https://doi.org/10.1016/S0304-405X(99)00011-2
- 23. DeZoort, F. T., Hermanson, D. R., Archambeault, D. S., & Reed, S. A. (2002). Audit committee effectiveness: A synthesis of the empirical audit committee literature. *Journal of Accounting Literature, 21*, 38–75. Retrieved from https://ecommons.udayton.edu/acc_fac_pub/64/
- Duggal, R., & Millar, J. A. (1999). Institutional ownership and firm performance: The case of bidder return. *Journal of Corporate Finance*, 5(2), 103-117. https://doi.org/10.1016/S0929-1199(98)00018-2
- 25. Faccio, M., & Lasfer, A. M. (2000). Do occupational pension funds monitor companies in which they hold large stakes? *Journal of Corporate Finance, 6*(1), 71–110. https://doi.org/10.1016/S0929-1199(99)00016-4
- 26. Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics, 26*(2), 301–325. https://doi.org/10.1086/467037
- 27. Gompers, P. A., Ishii, J. L., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, *118*(1), 107–155. https://doi.org/10.1162/00335530360535162
- 28. Grossman, S. J., & Hart, O. D. (1980). Takeover bids, the free-rider problem, and the theory of the corporation. *Bell Journal of Economics*, *11*(1), 42–64. https://doi.org/10.2307/3003400
- 29. Hambrick, D. C., Werder, A. v., & Zajac, E. J. (2008). New directions in corporate governance research. *Organization Science*, *19*(3), 381–385. https://doi.org/10.1287/orsc.1080.0361
- 30. Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica*, *46*(6), 1251–1271. https://doi.org/10.2307/1913827

VIRTUS 26

- 31. Hunjra, A. I., Perveen, U., Li, L., Chani, M. I., & Mehmood, R. (2020). Impact of ownership concentration, institutional ownership and earnings management on stock market liquidity. *Corporate Ownership & Control, 17*(2), 77–87. https://doi.org/10.22495/cocv17i2art7
- 32. Jameson, M., Prevost, A., & Puthenpurackal, J. (2014). Controlling shareholders, board structure, and firm performance: Evidence from India. *Journal of Corporate Finance, 27*, 1–20. https://doi.org/10.1016 /j.jcorpfin.2014.04.003
- 33. Jensen, M. C. (1986). Agency cost of free cash flow, corporate finance, and takeovers. *The American Economic Review, 76*(2), 323–329. Retrieved from https://www.jstor.org/stable/1818789
- 34. Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance, 48(3),* 831–880. https://doi.org/10.1111/j.1540-6261.1993.tb04022.x
- 35. Kao, M.-F., Hodgkinson, L., & Jaafar, A. (2019). Ownership structure, board of directors and firm performance: Evidence from Taiwan. *Corporate Governance*, *19*(1), 189–216. https://doi.org/10.1108/CG-04-2018-0144
- 36. Karpoff, J. M., Malatesta, P. H., & Walking, R. A. (1996). Corporate governance and shareholder initiatives: Empirical evidence. *Journal of Financial Economics*, *42*(3), 365–395. https://doi.org/10.1016/0304-405X(96)00883-5
- 37. Koerniadi, H., & Tourani-Rad, A. (2012). Does board independence matter? Evidence from New Zealand. *Australasian Accounting, Business and Finance Journal, 6*(2), 3–18. Retrieved from https://ro.uow.edu.au/aabfj/vol6/iss2/2/
- 38. Leung, S., Richardson, G., & Jaggi, B. (2014). Corporate board and board committee independence, firm performance, and family ownership concentration: An analysis based on Hong Kong firms. *Journal of Contemporary Accounting & Economics*, *10*(1), 16–31. https://doi.org/10.1016/j.jcae.2013.11.002
- 39. Lin, Y. R., & Fu, X. M. (2017). Does institutional ownership influence firm performance? Evidence from China. *International Review of Economics and Finance, 49*, 17–57. https://doi.org/10.1016/j.iref.2017.01.021
- 40. Masmoudi, S. M., & Makni, Y. F. (2020). The impact of audit committee on real earnings management: Evidence from Netherlands. *Corporate Governance and Sustainability Review*, *4*(1), 33–46. https://doi.org/10.22495/cgsrv4i1p3
- 41. Maug, E. (1998). Large shareholders as monitors: Is there a trade-off between liquidity and control? *The Journal of Finance*, *53*(1), 65–98. https://doi.org/10.1111/0022-1082.35053
- McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27(2), 595–612. https://doi.org/10.1016/0304-405X(90)90069-C
- 43. Menon, K., & Williams, J. D. (1994). The use of audit committees for monitoring. *Journal of Accounting and Public Policy*, *13*(2), 121–139. https://doi.org/10.1016/0278-4254(94)90016-7
- 44. Michel, A., Oded, J., & Shaked, I. (2020). Institutional investors and firm performance: Evidence from IPOs. *The North American Journal of Economics and Finance, 51*, 101099. https://doi.org/10.1016/j.najef.2019.101099
- 45. Nesbitt, S. (1994). Long-term rewards from shareholder activism: A study of the "CalPERS" effect. *Journal of Applied Corporate Finance, 6*(4), 75–80. https://doi.org/10.1111/j.1745-6622.1994.tb00251.x
- 46. Ngwu, F., Osuji, O., & Stephen, F. (Eds.). (2016). Corporate governance in developing and emerging markets. https://doi.org/10.4324/9781315666020
- 47. Parrino, R., Sias, R. W., & Starks, L. T. (2003). Voting with their feet: Institutional ownership changes around forced CEO turnover. *Journal of Financial Economics*, *68*(1), 3–46. https://doi.org/10.1016/S0304-405X(02)00247-7
- 48. Rompotis, G. G. (2020). Board structure, firm performance and risk: Recent evidence from Greece. *Corporate Board: Role, Duties and Composition, 16*(2), 35–46. https://doi.org/10.22495/cbv16i2art3
- 49. Saibaba, M., & Ansari, V. A. (2012). Impact of board size: An empirical study of companies listed in BSE 100 Index. *Indian Journal of Corporate Governance, 5*(2), 108–119. https://doi.org/10.1177/0974686220120202
- 50. Shan, Y. G., & McIver, R. P. (2011). Corporate governance mechanisms and financial performance in China: Panel data evidence on listed non-financial companies. *Asia Pacific Business Review*, *17*(3), 301–324. https://doi.org/10.1080/13602380903522325
- 51. Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, *52*(2), 737–783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x
- 52. Smith, M. (1996). Shareholder activism by institutional investors: Evidence from CalPERS. *The Journal of Finance*, *51*(1), 227–252. https://doi.org/10.1111/j.1540-6261.1996.tb05208.x
- 53. Vinjamury, R. S. (2020). Corporate board subcommittees and firm performance: Evidence from India. *Financial Issues in Emerging Economies, 36,* 187–200. https://doi.org/10.1108/S0196-38212020000036008
- 54. Walsh, J. P., & Seward, J. K. (1990). On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review*, *15*(3), 421–458. https://doi.org/10.5465/amr.1990.4308826
- 55. Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics, 20,* 431–460. https://doi.org/10.1016/0304-405X(88)90053-0
- 56. Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-212. https://doi.org/10.1016/0304-405X(95)00844-5

VIRTUS