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Corporate Governance and Access to Finance in India

Abstract

Purpose: This study examines the impact of board size and director busyness on access to finance (ATF) in developing and large economies.

Study design/methodology/approach: A panel data analysis is conducted to assess these relationships.

Sample and data: The study utilizes a sample of 897 Indian-listed companies covering the period from 2012 to 2017.

Results: The results indicate that board size has a significant positive effect on ATF. However, director busyness does not exhibit a significant influence. The findings remain consistent across various robustness tests.

Originality/value: This study contributes to the understanding of ATF in developing and large economies by highlighting issues related to board independence and corporate governance inefficiencies.

Research limitations/implications: Variations across financial systems and institutional structures may limit the generalizability of the findings to other developing economies. Future research should examine unlisted companies and diverse economic contexts to provide a more comprehensive understanding of corporate governance and ATF.

Keywords: Developing Economy, Access to Finance, Board of Directors' Sizes, Directors' Busyness, Corporate Governance.

JEL classification: M480, M410

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الملخص

حوكمة الشركات والوصول إلى التمويل في الهند

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هدف الدراسة: هدفت هذه الدراسة إلى تحليل تأثير حجم مجلس الإدارة وانشغال أعضائه على القدرة على الوصول إلى التمويل (ATF) في الاقتصادات النامية والكبيرة. تصميم/ منهجية/ طريقة الدراسة: اعتمدت الدراسة نهج تحليل البيانات المقطعية الزمنية. عينة الدراسة وبياناتها: تعتمد الدراسة على عينة مكونة من 897 شركة مدرجة في الهند خلال الفترة من 2012 إلى 2017. نتائج الدراسة: تشير النتائج إلى أن حجم مجلس الإدارة له تأثيراً إيجابياً كبيراً على القدرة على الوصول إلى التمويل (ATF). ومع ذلك، لا يظهر انشغال أعضاء مجلس الإدارة تأثيراً معنوياً. وتظل النتائج متسقة عبر اختبارات المتانة المختلفة. أصالة الدراسة: تسهم هذه الدراسة في تعزيز الفهم حول القدرة على الوصول إلى التمويل (ATF) في الاقتصادات النامية والكبيرة، من خلال تسليط الضوء على القضايا المتعلقة باستقلالية مجلس الإدارة وعدم كفاءة هياكل الحوكمة المؤسسية. حدود الدراسة وتطبيقاتها: قد تحد الاختلافات بين النظم المالية والهياكل المؤسسية من إمكانية تعميم النتائج على اقتصادات نامية أخرى. ينبغي على الأبحاث المستقبلية دراسة الشركات غير المدرجة وسياقات اقتصادية متنوعة للحصول على فهم أكثر شمولاً لدور الحوكمة المؤسسية في الوصول إلى التمويل (ATF). الكلمات المفتاحية: الاقتصاد النامي، الوصول إلى التمويل، حجم مجلس أعضاء الإدارة، انشغال أعضاء مجلس الإدارة، حوكمة الشركات.

تصدر عن مجلس النشر العلمي بجامعة الكويت. جميع الحقوق محفوظة للمجلة.

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Introduction

Access to finance (ATF) is vital for the survival, growth, and competitiveness of firms (Malhotra et al., 2007). Many companies face significant hurdles due to inadequate ATF and capital constraints, particularly in developing countries (Claessens & Tzioumis, 2006). Firms unable to secure financing encounter difficulties in issuing shares, selling illiquid assets, and obtaining loans (Lamont et al., 2001). This is because companies in regions with underdeveloped financial systems, such as emerging countries, face greater challenges in securing financial investments compared to those operating in areas with more developed financial systems (Love & Zicchino, 2006). Understanding the factors affecting capital constraints is essential to assist firms in obtaining ATF, yet research on this issue, especially in developing countries, remains scarce (Fowowe, 2017).

Corporate Governance (CG) mechanisms significantly impact firms' ATF. It is argued that a company's CG quality is positively connected with its related maturities, high credit worthiness, and debt level (Ashbaugh-Skaife et al., 2006). Therefore, enhancing CG effectiveness and mechanisms increases companies' ATF (Farah et al., 2021). The board of directors, a vital governance entity, plays a significant role in strategic financial decision-making (Hasan & Butt, 2009) and acts as a management oversight mechanism (Fama & Jensen, 1983). Larger boards, possessing more oversight resources, can influence a firm's access to financing and are viewed favourably by capital providers for the perceived reliability of financial data (Anderson et al., 2004). Thus, larger boards improve financing potential. The busyness of board members significantly impacts their oversight effectiveness. Serving on multiple boards can enhance members' governance experience and oversight skills (Fama & Jensen, 1983; Hunton & Rose, 2008). Fama and Jensen (1983) demonstrated that directors with more directorships possess better monitoring capabilities, as busy members tend to be more effective. These directors are motivated to excel as they value their reputation and seek additional board opportunities (Kor & Sundaramurthy, 2009). Holding multiple directorships also equips members with diverse skills and expertise for oversight tasks (Haniffa & Hudaib, 2006). Various studies link multiple directorships to firm success, suggesting capital providers perceive these directors as indicators of quality, thus enhancing firms' access to finance.

There are several reasons the Indian setting was considered suitable for this study. India is the world's most populated state, with around 1.428 billion people,

constituting one-fifth of the globe's population. It is a multicultural country featuring many different languages, religions, and ethnic groups. Due to its variety, India is representative of several traits shared by other developing nations. Moreover, India is considered one of the big five economies worldwide (Myers, 2020). Therefore, this study examines the association between Corporate Governance (CG) mechanisms and firms' ATF, using a firm's capital-constraints as a proxy, in India.

The study empirically examined the influence of board size and the busyness of directors on capital-constraints using 3,510 observations of non-financial publicly traded companies on the National Stock Exchange (NSE) and Mumbai Stock Exchange (MSE) for the period from 2012 to 2017 obtained from the CMIE's Prowess database. The results held true following a battery of additional tests, including the modified Kaplan index, two-stage least squares (2SLS) regression, and propensity score matching.

This paper offers significant contributions to Corporate Governance (CG) and financing access literature, specifically in the context of an emerging country, contrasting with the predominant focus on developed nations (Beck et al., 2006; Claessens & Burcin Yurtoglu, 2013; Fowowe, 2017; Srivastava et al., 2019). Al Hares (2020) highlighted the scant research on how CG influences financing access, with limited studies investigating the impact of various CG mechanisms on firms' financing (Matthies, 2013; Tran, 2014). There is a significant gap in the research linking Corporate Governance (CG) to access to financing in India (Srivastava et al., 2019). This gap is particularly concerning as the challenges associated with CG are compounded by inadequate financing and an underdeveloped market structure (Claessens & Burcin Yurtoglu, 2013). Moreover, this study extends the discussion on multiple directorships and the 'busyness' of directors concerning financing access in emerging markets, an area largely overlooked (Hundal, 2017; Lei & Deng, 2014; Sarkar & Sarkar, 2009). By utilizing the limited attention theory, it expands the theoretical framework regarding board dynamics and firm capital constraints, offering valuable insights for regulators and Indian firms seeking improved financing access. Therefore, our findings may help Indian companies that are seeking to enhance their access to financing.

The remainder of this study is organised as follows. The next section is context background. Then, the theoretical perspective of the research as well as the importance of investigating the impact of board size, the busyness of directors, capital-constraints, access to financing, and the development of the hypotheses

are addressed. Next, the methodological framework is discussed. After that, the results are presented. The next section includes the discussion, whereas the final section concludes the paper.

Context Background

Economically, India's economy is among the world's fastest-growing (Cord-eiro et al., 2018). In 2019, India had the fifth biggest economy in the world (Myers, 2020), and is expected to pass Germany and Japan as the world's third largest economy in the upcoming years. Furthermore, the Bombay Stock Exchange (BSE) is one of the oldest exchange stock markets in the world, established in 1875 (Elangovan et al., 2022). Sharma and Singh (2018) stated that the Indian economy attracts numerous foreign investors and multinational companies. In sum, India has become a key global player and a leader in the world economy.

Large family-owned firms dominate the Indian market, as in many other emerging countries, which are characterized by a high level of nepotism and a low level of professionalism (Houqe et al., 2017). According to Narayanaswamy et al. (2012), India is seen as having weak corporate governance standards and insufficient measures for protecting shareholders. Consequently, large-scale scandals have occurred, like the Satyam scandal in 2009. This incident, totalling nearly one billion US dollars, has prompted scholarly discourse regarding the role of CG in supervising managerial actions (Gakhar, 2014). Furthermore, Infrastructure Leasing and Financial Services Limited (IL & FS) scandal in 2018 is another example which shows how infrastructure development and finance firms play a poor role in India. This may impact other important financial system components. Indeed, several accounting violations involving transactions totalling more than US\$1.9 billion were found during the audit (Kukreja et al., 2021). These issues have emerged as significant concerns for capital providers.

Consequently, an in-depth examination of how CG mechanisms, including board size and directors' busyness, which shape the decisions of capital providers in India, offers a pertinent avenue for our investigation, resonating with comparable issues encountered in similar developing nations (e.g., in emerging countries, market insufficiencies are characteristic of developing economies (Yang et al., 2020).

Literature Review and Hypotheses Development

Current research suggests that the expansion of companies is positively influenced by financial development, especially for those considered highly worthy of

funding (Arora, 2014; Tan et al., 2019). Companies that are financially constrained are much less likely to participate in different strategic activities (Campello et al., 2010). Examples of these activities include market share pricing (Chevalier, 1995), purchasing more inventory (Carpenter et al., 1998), and development and research (Hall & Lerner, 2010). Capital-constraints, which are related to access to financing, indicate restrictions on a company's capital for growth (Cheng et al., 2014; Lamont et al., 2001). Consequently, a decrease in a firm's capital constraints has a positive influence on its ability to grow and survive, expanding its financing options.

CG mechanisms and practices have a crucial impact on companies' access to financing (Farah et al., 2021). Farah et al. (2021) found that improving CG practices enhances firms' access to financing. Furthermore, the most critical element of CG is the board of directors (Hasan & Butt, 2009). According to existing research, boards with more members are more effective in guaranteeing close supervision (Abor, 2007). Additionally, empirical data suggests that because of their strict oversight, companies with larger boards have lower borrowing costs (Anderson et al., 2004). Tan et al. (2019) stated that the busyness of director constitutes an important element in CG success, and it has positive relations with the company efficiency. Indeed, busy boards—those with numerous directors holding multiple directorships—indicate outstanding quality and are also in fact advantageous to businesses (Sarkar & Sarkar, 2009). Therefore, this study aims to explore two important factors related to the board: board size and the busyness of directors.

Deviating from the usual approach, agency theory, to interpret the CG practices and mechanisms and boards of directors in developing countries (Francis et al., 2012; Goh & Gupta, 2016)¹, we utilized limited attention theoretical framework in this study to build the hypotheses. “Attention” means “noticing, encoding, interpreting and focusing of time and effort by organisational decision-makers on both issues and answers” (Ocasio, 1997, p. 189). Essentially, Ramos et al. (2020) argue that the way information is perceived affects how it is interpreted, which then influences decision-making. Limited attention framework posits that capital lenders have limited cognitive capacity and attention. This theory, because of the limits of capital providers' attention, assumes that information related to the board's size

¹ Some researchers have suggested that high levels of ownership concentration and under-developed capital markets make the agency theory inadequate for developing countries (e.g., Abdullah et al., 2015; Al-Hiyari, 2017; Dharwadkar et al., 2000; Htay & Salman, 2013).

and the busyness of members is assessed to determine the effectiveness of CG and monitoring of management. As a result of several incidents of corporate fraud in India, overseeing management behavior has become a significant issue for capital providers and investors. For example, Claessens and Tzioumis (2006) state that financial statements issued by listed and major private companies in developing countries are often unreliable, which makes creditors reluctant to provide finance. Limited attention framework can be employed to interpret the relationship of the board size; that is, the board's size and the busyness of directors (multiple directorships) being perceived as a way to grab the capital providers' attention and provide companies with access to financing.

Based on these assumptions, the number of directors and their busyness are likely to impact the cognitive processes of capital providers by verifying the reliability and accuracy of information issued by listed companies in India. Therefore, companies that have a bigger board size and directors with multiple directorships are more inclined to grab the attention of capital lenders when they apply for funding. Indeed, capital providers may perceive these two elements as a crucial indicator of managerial oversight within the company. Regarding board size, it is likely that more resources are available to a larger board than to a smaller one for monitoring management performance. In other words, more members on the board leads to improved control and monitoring functions, as they bring a greater range of perspectives and skills to the table, helping the board fulfil its duties better. For instance, a bigger board might mean a pool of members who are experienced in financial statements, thereby improving the oversight of the calibre of financial reporting (Arioglu, 2020). Furthermore, Upadhyay and Sriram (2011) state that monitoring ensures that members will give more consideration to important company decisions and that managers will inform sensitive problems to stakeholders.

Studies on the relationship between the board's size and access to financing have reported mixed results. Hasan and Butt (2009) proposed that board size plays a significant role in determining a company's financial mix. Upadhyay and Sriram (2011) found a negative association between the cost of capital and board size. According to their study, the debt-to-equity ratio and board size are substantially and negatively associated. Additionally, they discovered a negative relationship between capital costs and board size. This suggests that firms with larger boards may experience lower capital costs than those with smaller boards. Similarly,

Paige Fields et al. (2012) found that firms with higher board quality, including a larger board size, experience a lower cost of debt (i.e., cost of capital). In other words, firms with larger boards have better access to financing. Anderson et al. (2004) argue that bondholders are willing to pay a premium for bonds issued by companies with larger boards because they believe the financial information these companies present is more reliable.

Furthermore, Sani et al. (2020) found that listed companies in Nigeria with bigger board sizes have lower levels of debt. Pham et al. (2012) examined the relationship between the size of board and cost of capital in Australian companies, finding an insignificant positive relationship. Many studies have shown that firms with a large board size have greater access to financing (Ali Shah & Butt, 2009; Bozec & Bozec, 2010; Ongklang, 2016; Singhal, 2014; Skaife et al., 2004; Thibodeau & Xiao, 2015). Overall, it is evident that board size has an important effect on a company's level of access to financing (Anderson et al., 2004; Paige Fields et al., 2012; Upadhyay & Sriram, 2011). Accordingly, it is reasonable to assume that a larger board would attract financiers, positively impacting the company's ATF and reducing its capital-constraints. Drawing from this theoretical framework and existing research, the first hypothesis is as follows

H1: There exists a positive association between board size and listed Indian companies' ATF.

Regarding the busyness of directors, board members holding several board seats could assist the board of directors in gaining knowledge and abilities to help them become more effective monitors (Kor & Sundaramurthy, 2009). Furthermore, Char-Lee and Hooy (2018) emphasized that firms that have directors occupying several directorships have more finance connections than those without multiple directorships. This is because these directors will bring their skills and experience to the boardroom. Ismail et al. (2008) argued that multiple directorships provide and secure vital resources for firms. Conversely, Odat et al. (2021) found no association between multiple directorships and the cost of equity capital in Jordan.

In India, Manna et al. (2020) investigated the impact of multiple directorships on Indian firms' performance, finding a significant positive relationship between directorship multiplicity and firm performance. Creditors are inclined to view a company more favourably when its directors are actively involved, as it is pre-

sumed that these directors will contribute to overseeing the firm's performance and its management team. This, in turn, helps alleviate constraints on accessing financing. Therefore, the second hypothesis is as follows:

H2: *There exists a positive association between director busyness and listed Indian companies' ATF.*

Research Methodology

Data and Sample

The sample included 897 companies from 18 different industry sectors listed on the MSE and the NSE in India. Companies in the financial sector were not considered due to their distinct regulations, operations, and corporate governance structures (Iatridis, 2018). Furthermore, firms that did not furnish data for any variable were excluded from the study due to missing information (Mallin et al., 2015). The data was sourced from the CMIE's Prowess database, which encompasses information on firms listed on both the MSE and NSE. Elango and Pattnaik (2007) state that this comprehensive database offers data on Indian companies and is widely utilized in the literature. This database provides information about financial information for individual firms, along with background data about their operations and CG reports. The data was collected from 2012 to 2017 due to the data availability and the IL&FS scandal in 2018, which shows defaulting in payments and created a significant systemic risk to India's entire financial system. Table 1 shows the process of selecting the sample.

Table 1
Sample Collection

	Companies	Number of Observations
Primary quantity of companies listed in NSE & BSE, period 2012–2017	6,748	76,941
Excluded financial companies	-1,428	-20,081
Excluded companies with no values	-4,423	-53,350
Final sample	897	3,510

Measurement of Variables

ATF means the ability of a firm to attain financing. According to Lamont et al. (2001, p. 529), a lack of such access could be “due to credit constraints or inability to borrow, inability to issue equity, dependence on bank loans, or illiquidity of assets”. Therefore, Cheng et al. (2014) argue that decreased constraints on capital make companies more able to gain financing. In this study, the dependent variable was the "Kaplan index," which measures capital-constraints (Baker et al., 2003; Cheng et al., 2014). The Kaplan index (Kaplan & Zingales, 1997) measures the level of capital-constraints on a particular firm, using an ordered logit specification based on accounting variables. Following prior literature methodologies, we utilize regression coefficients to estimate a Kaplan index for every year of each company, combining five accounting ratios. These ratios include debt-to-total-capital, cash-holdings-to-capital, cash-flow-to-total-capital, dividends-to-total-capital, and market-to-book ratio. Cheng et al. (2014) suggest that an increase in the value of the index indicates a capital-constraint. Similarly, the same coefficients were utilized by Baker et al. (2003)².

The board size is the first independent variable, which is quantified as the total number of board members (board size) (Habbash & Bajaher, 2015; Hakimi et al., 2023; Palmieri et al., 2024). The second independent variable, the number of boards in which directors are members, was calculated by taking the total number of members sitting on other companies' boards (busyness), similar to the studies of Al Daoud and Yaseen (2024) and Manna et al. (2020).

The control variables in this study were established based on prior research. The first control variable, the independent variable, represented the number of independent board members, calculated as the total number of independent directors (Ruiz-Castillo et al., 2024). The second control variable, firm auditor, was indicated as a dummy variable with a value of 1 if the external auditor was one of the Big 4 accounting firms (Chi et al., 2023; Fan & Zhang, 2023). The third control variable, company size, reflected the scope and complexity of a corporation's activities and operations, with bigger firms expected to have more intricate activities and higher-stakes operations (Andreas et al., 2012). Frank and Goyal (2009) find that the size of a company is widely acknowledged as a crucial factor in determining the financing combination. According to Mallin et al. (2015), the

² For a more thorough explanation of the capital constraint indices (Kaplan index), please see Appendix B.

measure of a company's size is usually determined by the total assets at the end of the year. Furthermore, this study takes into consideration both the effect of the year and the industry (Goh & Gupta, 2016). Each company is assigned National Industry Classification codes according to their relevant industry category. The descriptions of the variables are provided in Appendix A.

Model Specification

In our analysis, we utilized the Kaplan index for the present year as the dependent variable to test our hypothesis. The independent variables included the firm's board size and the director's busyness, along with additional control variables such as independence, Big4 status, and company size. In order to avoid outliers in the ratios, we utilized ordinary least squares (OLS) regression to estimate Equation (1). Additionally, we applied winsorization to both the top and bottom percentiles (Chang et al., 2007). To address potential issues related to heteroscedasticity and cross-sectional dependence, we adopted the method outlined by Petersen (2009), which uses company-level clustering standard errors (García Lara et al., 2017). Moreover, in Equation (2), we employed firm-level and year-level clustering, as well (Baboukardos, 2018).

We use the following Equations to test our hypotheses (H1) and (H2):

$$\begin{aligned} \text{Kaplan index}_{it} = & \alpha_0 + \alpha_1 \text{Board size}_{it} + \alpha_2 \text{Busyness}_{it} + \alpha_3 \text{Independent}_{it} + \alpha_4 \\ & \text{Big4}_{it} + \alpha_5 \text{Company size}_{it} + \alpha_6 \text{Industry}_{it} + \alpha_7 \text{Year}_{it} + \varepsilon_{it} \end{aligned} \quad (1)$$

$$\begin{aligned} \text{Kaplan index}_{it} = & \alpha_0 + \alpha_1 \text{Board size}_{it} + \alpha_2 \text{Busyness}_{it} + \alpha_3 \text{Independent}_{it} + \alpha_4 \\ & \text{Big4}_{it} + \alpha_5 \text{Company size}_{it} + \alpha_6 \text{Industry}_{it} + \alpha_7 \text{Year}_{it} + \varepsilon_{it} \end{aligned} \quad (2)$$

Where the (Kaplan index) is the dependent variable, while (Board size) and (Busyness) are independent variables, and control variables include (Independent) (Big4) and (Company size).

Research Results

Descriptive Statistics

Table 2 presents the descriptive statistics for the whole sample, showing descriptive statistics for the numerous measures utilized to capture the degree to

which firms were capitally constrained, beginning with the Kaplan index. The mean value of the Kaplan index was -0.030, and the standard deviation was 1.372, indicating that variations existed across companies concerning the capital-constraints confronted. The average board size in the sample was 10.934, busyness was 16.5, and their standard deviations were 3.052 and 12.534, respectively. As for the Independence, Big4, and log Company size had mean values of 4.995, 0.079, and 5.609 respectively. Table 3 displays the correlation between all variables.

Table 2
Descriptive Statistics for the Variables in the Main Models

Variable	N	Mean	Median	SD
Kaplan Index	3510	-0.030	0.150	1.372
Board size	3510	10.934	11.000	3.052
Busyness	3510	16.530	15.000	12.534
Independence	3510	4.995	5.000	1.740
Big4	3510	0.079	0.000	0.270
Company size	3510	5.609	5.534	1.757

Table 3
Pearson Correlation Coefficients Matrix

	Kaplan Index	Board Size	Busyness	Independent	Big4	Company Size
Kaplan Index	1					
Board size	0.0152	1				
Busyness	0.0746+	0.4956+	1			
Independent	0.0342+	0.6479+	0.4867+	1		
Big4	0.0204	0.0700+	0.0774+	0.0482+	1	
Company Size	0.2599+	0.5933+	0.4712+	0.3802+	0.0686+	1

+ $p < 0.10$

Findings

The association between ATF, board size, and the directors' busyness was examined using the Kaplan index measurements. We controlled for industry, Com-

pany size, year-fixed effects, as well as Independent and Big4. Table 4 demonstrates the application of Equations (1) and (2), analyzing the causality of board size and busyness based on the Kaplan index. The coefficient for board size was negative and statistically significant (-0.066 , $p < 0.01$). Thus, companies with a greater number of directors have improved access to financing, indicating fewer capital constraints. According to the findings, an increase in board members would lead to fewer obstacles for capital providers when it comes to granting financing. Consequently, the findings support our first hypothesis (H1).

Table 4
Regressions' Results

	(1) OLS	(2) Cluster-OLS	(3) Lag -OLS	(4) 2SLS
Board size	-0.0668** (0.0113)	-0.0668** (0.0120)	-0.0514** (0.0100)	-0.0536* (0.0249)
Busyness	-0.0017 (0.0020)	-0.0017 (0.0044)	-0.0025 (0.0049)	-0.0023 (0.0038)
Independent	0.0394* (0.0185)	0.0394+ (0.0223)	0.0210 (0.0188)	0.0164 (0.0304)
Big4	0.0738 (0.0741)	0.0738 (0.0523)	0.0427 (0.0500)	0.0419 (0.0952)
Company size	0.1571** (0.0149)	0.1571** (0.0213)	0.1702** (0.0229)	0.1723** (0.0298)
Constant	-0.0867 (0.1842)	-0.0867 (0.2209)	-0.1802 (0.2068)	-0.1790 (0.3393)
Number of Observations	3,510	3,510	3,510	3,447
R^2	0.1574	0.1574	0.1597	0.1593
Year fixed effect	✓	✓	✓	✓
Industry fixed effect	✓	✓	✓	✓

** $p < 0.01$, * $p < 0.05$, + $p < 0.10$

Clustered by two-way method (firm & year) standard-errors in parentheses.

The findings suggest that there exists no significant evidence to support the notion that the busyness of board directors can impact a company's approach to financing. Despite a negative coefficient of busyness, our study did not find it to be significant, indicating that companies with busier board members may not necessarily face less capital constraints. Consequently, our findings do not support the hypothesis that an increase in director busyness would result in more ATF from creditors and capital providers (H2).

Therefore, the results reveal that board size has a significant positive association with a corporation's access to financing. The findings suggest that capital providers see a larger board size as a positive factor, as it improves its ATF and reduces the company's capital constraints. Conversely, the busyness of board members does not seem to have a significant influence on a company's ATF and capital constraints.

For robustness purposes, our independent variables were all lagged by one year, following the approach by Caramanis and Lennox (2008). This entails using independent variables from the prior year to project the dependent variables for the subsequent year. As presented in column 3 of Table 4, board size exhibited a significant negative relationship with the Kaplan index ($-0.05, p < 0.01$), indicating that companies with a greater number of board members encounter fewer capital constraints. Nonetheless, the impact of busyness was negative, but not statistically significant.

Two approaches were utilized to tackle the issues of endogeneity in the Equations. The first approach employed was the two-stage least squares (2SLS) regression, a common solution for the issues of endogeneity. The instrumental variables used in the 2SLS regression approach likely satisfied the exclusion criteria, being related to the board size and busyness of the board's members but not related to the Kaplan index³. Column 3 of Table 4 presents consistent results, showing a significantly negative coefficient for board size ($-0.05, p < 0.05$). Additionally, the coefficient for busyness was negative but not statistically significant.

Discussion

In accordance with the theory of limited attention, a large board of directors captures the attention of capital providers and increases the ATF. Capital providers

³ We used Instrumental Variables (IV) in line with by Usman et al. (2018). Our IV comprises a year-lag independent variable and its industry-average.

as human have a limited capacity of attention; however, some signals work as trigger to their attention. Therefore, among many firms' signals, some indicators might be more vital to the capital providers rather than others. In other words, these indicators for the capital providers might be positive, negative or no attention.

Therefore, in this investigation, capital providers could take into a larger board as a green flag, a positive sign, in India. It may be that creditors have more trust in bigger boards and believe that such boards are able to provide better oversight because they have more resources and experienced members, which is crucial due to the weak CG in many emerging markets (Claessens & Burcin Yurtoglu, 2013). Kaur and Singh (2018) discovered that significant positive relationship between (ATF) and size of board in India.

Regarding the busyness of board members, the study posited that a board with busy members would positively influence capital providers. In other words, directors with multiple directorships would improve companies' access to financing. This is because these board members have greater board experience (Char-Lee & Hooy, 2018), acquire vital resources (Ismail et al., 2008), enhance board effectiveness (Kor & Sundaramurthy, 2009), and improve company performance (Manna et al., 2020). Conversely, an increased number of appointments in various companies' boards is likewise associated with poorer financial success (Limbasia & Shukla, 2019). However, the busyness of directors had no significant impact on a firm's access to financing in this study. Under limited attention theory, this research does not support the idea that busier directors on firms' boards significantly and favourably impact creditors who are limited in their ability to pay attention. Thus, director busyness does not result in more accessibility to financing for Indian listed firms. Financiers in the Indian setting do not consider high members' busyness a positive sign. This finding is in line with Odat et al. (2021), who measured the cost of equity capital in Jordan and found no association between multiple directorships and access to financing.

This investigation implies to the capital providers the importance of corporate efficiency, which maximizes profitability, in their investment decisions for the Indian listed firms. Additionally, family ownership in Indian listed firms is a main culture characteristic of the Indian economy. Indeed, India is home to an extensive number of family-owned businesses (Gurusamy, 2024). Therefore, family ownership groups who seek to satisfy the capital providers favour to approach their capital by increasing the board size and may not control the busyness of directors.

Conclusion

Our study examined the capital providers' reaction to specific board characteristics (i.e., board size and the busyness of members) of Indian listed companies. We utilized CMIE's Prowess database, which included an imbalanced panel-dataset of 897 publicly traded companies across 18 industry sectors on the NSE and the MSE of India. This totalled 3,510 observations from 2012 to 2017. The Kaplan index has revealed a significant negative association between capital-constraints and firm board size, suggesting that a larger board size can lead to increased access to financing. Our results are in line with previous studies (Ali Shah & Butt, 2009; Bozec & Bozec, 2010; Singhal, 2014; Skaife et al., 2004; Thibodeau & Xiao, 2015), all of whom found that companies with larger board sizes tend to have better access to financing. Based on the research results, companies have the ability to evaluate the costs and benefits of board size and director busyness. The limited attention theory suggests that companies can use board size and director busyness to shape the views of creditors and providers of capital and enhance the company's ATF. This study delves into Indian firms, shedding light on the perspectives of capital providers regarding board size and the engagement of members on firm boards in emerging markets. The findings are particularly pertinent for regulators and industry professionals, highlighting the crucial role of board size and director engagement in an emerging economy. For instance, the Indian Reserve Bank is in talks with the securities oversight agency SEBI about introducing new rules that might have a positive effect on how capital providers pay attention, such as maintaining a large board size of Indian listed firms. Furthermore, the finding of this investigation offers a chance to talk about the inadequate rules and governance standards that seriously harm established and well-known firms like IL & FS. Financing firms in emerging economies such as India might influence other important financial system entities. In addition, the consequences with relation to board size and director busyness could be generalized to some other nations having developing economies, as the Indian context of culture and economy shares some similarities to other nations in the emerging market. Finally, the findings are of interest to experts and practitioners, as they emphasize the signalling role of board size and the busyness of directors in an Indian economy. In sum, our findings may help Indian companies that are seeking to reinforce their access to financing.

Our research adds to existing literature by investigating the under-researched relationship between access to financing and CG (Al Hares, 2020). Prior studies have argued that little attention has been given to this topic in emerging markets (Claessens & Burcin Yurtoglu, 2013; Fowowe, 2017; Srivastava et al., 2019), which this study addresses. In particular, there exists a lack of research that explores the association between CG and access to financing in India context (Srivastava et al., 2019). Our research also adds to the prior literature on director busyness by investigating multiple directorships in an emerging market (Hundal, 2017; Lei & Deng, 2014). Finally, the research findings extend the theoretical understanding of this topic by applying the theory of limited attention, which therefore offers a different interpretation of the association between board size and director busyness and a firm's financial constraints.

Like all studies, our investigation has limitations, which should be addressed in the upcoming studies. Although India affords a good representation of a context for a growing market, our results and theories might not be applicable to all other developing nations, like China, as a result of their differing monetary systems. Future research should also consider the board size and director busyness of unlisted firms as well as such firms' access to financing to gain a better understanding of the influence of governance on firms' boards. Moreover, in-depth data on directors' characteristics are needed to investigate other important factors besides board size and director busyness.

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Appendices

Appendix I. Variable Explanations

Variables	Description
Kaplan Index	Kaplan Index (1997) for measure capital-constraints.
Board size	The number of firm board directors.
Busyness	The number of board firms of which directors are a member.
Independent	The number of independent directors.
Big4	Dummy variable that takes a value of 1 if the external auditor is one of the big4 accounting firms.
Company size	Log total assets of the firm.
Industry	Industry classification as codes by the National Industry Classification (NIC).
YR	Period 2012-2017.

Appendix II. Indices-constructions

“*Kaplan Index*” following (Baker et al., 2003), derived as follows:

$$Kaplan\ Index_{it}\ (five-variable) = -1.002\ cash\ flow_{it}/total\ capital_{i(t-1)} - 39.368\ dividends_{it}/total\ capital_{i(t-1)} - 1.315\ cash\ holding_{it}/total\ capital_{i(t-1)} + 3.139LEVR_{it(t)} + 0.283QM_{it(t)},$$

where $cash\ flow_{it}/total\ capital_{i(t-1)}$ is cash-flow-to-total-capital; $dividends_{it}/total\ capital_{i(t-1)}$ is dividends-to-total-capital; $cash\ holding_{it}/total\ capital_{i(t-1)}$ is cash-holdings-to-capital; $LEVR_{it(t)}$ is leverage; and QM is market-to-book ratio.

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- مراجعات الكتب التربوية الحديثة
- محاضر الحوار التربوي
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