

# **Business Groups Affiliation and Long-Term Borrowing from Internal Networks: An Empirical Study**

**Ateequr Rahman**

Ph.D. Research Scholar  
School of Management & Entrepreneurship  
Indian Institute of Technology, Jodhpur, India  
[rahman.1@iitj.ac.in](mailto:rahman.1@iitj.ac.in)

**Sonam Chawla**

Assistant Professor  
Department of Human Resource  
Jindal Global Business School  
O. P. Jindal Global University, India  
[sonam@jgu.edu.in](mailto:sonam@jgu.edu.in)

**K. K. Lai**

Professor & Vice President  
Department of Business Administration,  
Chaoyang University of Technology Taichung, Taiwan.  
[laikk@cyut.edu.tw](mailto:laikk@cyut.edu.tw)

## **Abstract**

This paper investigates the role of internal networks on long-term borrowing in large business groups. In line with the network-assisted resource-based hypothesis, our findings suggest that firms associated with big business groups tend to use their internal networks for raising long-term borrowings. These findings indicate that an association with a business group increases the ease of access to debt capital within their internal networks.

## **Keywords**

Business group, Capital structure, Internal networks

## **1. Introduction**

In their initial study, Berle and Means (1932), Jensen and Meckling (1976) opined that in a firm's structure, a gap exists between ownership and control, and managers do not always prioritize the maximization of the shareholders' wealth, instead, waste resources for self-benefit. Jensen (1986), in his study, suggested that debt attenuates conflict between managers and shareholders in companies with higher free cash flows. Pinegar and Wilbricht (1989) found that the principal-agent problem can be resolved by capital structure and, more specifically, by increasing debt. Similarly, Lubatkin and Chatterjee (1994) and Boodhoo (2009) reported that an increased debt-to-equity ratio allows the company to ensure the managers' efficiency; with excessive debt, creditors dominate in the decision-making process of the firm, which may lead to conflicts between shareholders and creditors due to difference in ideologies. Creditors lookout for debt payments, while shareholders seek dividend distribution. The conflict between shareholders, managers, and creditors leads us to study the relationship between corporate governance and capital structure. Studies opine that those financial decisions, such as dividend policy, can be mitigated by leverage as dividend policy and governance are substitutes for reducing agency costs; firms with weak CG need to establish a reputation by paying more dividends.

In addition, we can speculate that firms with better quality governance will borrow more because the risk could be perceived as low for lenders. Optimization of capital structure and decisions related to the firm's financial resources significantly affect a firm's economic activities and commercial relationships. Financial managers combine a

plethora of resources to garner funds required for investment and development activities for working capital and future business prospects (Abor and Biekpe 2009). The capital structure comprises decisions concerning an optimal combination of equity and debts to maximize the company's market value using financial resources with the lowest cost (Bokpin and Arko 2010). These decisions are crucial and directly impact the firm value and shareholders' wealth (Kohher and Raul 2007). The central concept of corporate governance is based on managers' accountability, as they are responsible for the interests of shareholders and business growth (Jiraporn et al. 2012).

Shleifer & Vishny (1997) defines the corporate governance concept as a process in which lenders and shareholders assure themselves of getting a return on their investments. In the past two decades, however, attention toward both issues (CG and CS) has triggered as a result of a series of financial crises. The Asian crisis of 1997 is attributed to the excessive usage of debt and a weak monitoring process (Suto 2003). Due to vulnerable corporate governance systems, a crisis is looming in a country as firms become too leveraged (Detthamrong, Chancharat, & Vithessonthi 2017). The challenge is that conventional reforms in most countries focus on accountabilities and investor protections based on agency problems. There is no widely accepted theoretical model, and a single theory constantly fails to explain this association. Therefore, the need of the hour is an in-depth review and conceptual work on the theoretical framework guiding future research (Baker et al. 2020).

While many studies investigate the influence of corporate governance on financial performance, the empirical relationship between corporate governance and the firm's capital structure has largely been unexplored. Several studies (Du and Dai 2005) have analyzed the relationship between corporate governance and debt finance and consider individual governance issues, such as ownership structure, and debt financing, as an important corporate governance mechanism in mitigating agency problems between shareholders and managers (Harris and Raviv 1991). It is essential to analyze the relationship between debt finance and the agency costs incurred between controlling and minority shareholders. In this context, the paper examines whether firm-level corporate governance influences the firm's capital structure pattern in general and debt financing. The OLS regression framework Corporate Governance Index (CGI) to investigate the corporate governance effect on the quality of the capital structure of non-financial listed firms in NSE

Further, this paper has been organized into five parts: Section two discusses the hypothesis; Section three explains sample selection, variable measurement, and research methods. Section four analyses the research results with conclusions and suggestions in section five.

## 2. Literature Review

Advancements in accountability have raised corporate governance issues; agency problems arise from the separation of ownership from control, as Jensen and Meckling (1976) discussed in the agency theory.

Corporate governance is a procedure used for managing an organization, including decisions related to financing, which are critical for an optimal capital structure for a firm. CG is a process, not a state, framed within business ethics, which refers to human excellence and their actions within the framework of their work (Claessens 2003).

Able corporate governance leads to sustainable economic growth and escalating access associations between the management, Board of Directors, shareholders, and other stakeholders. Capital structure determination is considered critical for corporate financing decisions, and managers often face difficulty finding the optimal one. In this study, panel data analysis reveals that the fixed effect model is better than the random effect model in assessing the determinants of capital structure. Under the fixed effects model, board size has a significant and positive impact on the debt-to-equity ratio. In contrast, under panel data analysis, managerial ownership concentration has a positive but insignificant effect on the capital structure.

According to Huang and Song (2002), firms with high-growth opportunities are likely to be more leveraged. In the case of firms with concentrated ownership, it is expected that high-growth firms will require more external financing and could be highly leveraged (Heshmati, 2001). According to Bhaduri (2002); Chen (2004); Tan and Jang (2005); Norvaisiene and Stankeviciene (2007); Oyesola (2007); Shah and Khan (2007); Al-Najjar and Taylor (2008), and Cespedes et al. (2009), there is a positive relationship between growth and total debt. New projects are often presented to investors and shareholders as growth opportunities face an underinvestment problem, leading to forgoing investment projects with a positive net present value (Saraani & Faridah 2013).

The debt-to-equity ratio measures the capital structure in which the investors and lenders analyze the firm's excessive debt use and bankruptcy chances. Corporate governance methods are a complex system of controls from a larger perspective (Zingales 1998). Shleifer and Vishny (1997) opined as to how companies ensure that they would get a maximum return on their investments; corporate governance is defined as the system of rules, laws, and factors that take control of operational activities in a company (Gillan & Starks 1998) and are viewed as two distinct groups, i.e., internal to firms and external to firms (Stuart 2006).

## 2.1. Agency Theory

Jensen and Meckling(1976) opined that separation of ownership and management creates agency problems due to conflict of interests. To resolve this problem, the concept of corporate governance evolved; firms with good corporate governance are less likely to be affected by agency issues. Managers involved in a company's financing decisions may influence the level of leverage financed by external sources to satisfy their self-driven interests, creating conflicts between managers' and shareholders' interests. At this juncture, the two critical concepts, i.e., corporate governance and capital structure, meet; alternatively, when managers make financing decisions about the use of leverage in a firm's capital structure, the element of CG should also be considered (ROSC 2005).

## 2.2. Capital Structure:

The capital structure includes long-term debts, preferred stock, and common stock (Maximiliano and Molina 2009); (Wen et al. 2002) investigated the relationship between characteristics of the corporate board and the firm's capital structure in Chinese listed firms. The results of this study provided empirical evidence and seemed to suggest that managers tend to pursue lower financial leverage when they face more robust corporate governance from the board. Harvey et al. (2004) investigated the relationship between capital structure and agency costs in emerging countries; their results show that debt combined with financial resources may decrease agency problems, which raised the separation of ownership from management.

## 2.3. Managerial Ownership and DE Ratio

Moreover, debt issues could increase firm value. Chaganti and Damanpour (2005) examine the relationship between institutional ownership, capital structure, and firm performance. They conclude that the size of outside institutional stockholders has a significant effect on the firm's capital structure. Shareholdings moderate the relationship between outside institutional shareholdings and capital structure. Holdings by corporate executives strengthen the relationship between external holdings and a firm's performance. The results show a direct relationship between the size of the board and the amount of using debt in the capital structure. Hassan and Butt (2009) explored the corporate governance and the capital structure relation of listed companies in an emerging equity market. Results expressed that the board size and managerial shareholding are inversely proportional to the debt to equity ratio; other variables of ownership structure and managerial shareholdings play an essential role in determining the firm's financing. Al-Najjar and Taylor (2008) investigated the relationship between ownership and capital structures.

## 2.4. Debt to Equity Ratio and Board Size

Critical and strategic decisions concerning the growth of a company depend primarily upon the consensus of the board members. Boards affect the annual reports (Anderson et al. 2004). Moreover, it has an inverse relationship with the cost of debt; larger boards effectively monitor financial reporting, which is the core responsibility of Adams and Mehran (2003).

## 2.5. Trade-off Theory

Modigliani and Miller (1958) proposed the hypothesis of capital structure; further, with the introduction of taxes, bankruptcy costs, borrowing costs differences, and realization of asymmetric information, Modigliani and Miller (1963) proposed the trade-off theory stating that the tax advantage gained due to increased level of leverage is traded off against the costs of higher level.

Debt such as bankruptcy and administrative costs.

## 2.6. Pecking-order Theory

The pecking order hypothesis by Myers (1984) opines that managers prefer internal sources of financing over the other sources; initially, debt is used, and equity is chosen as a last resort. (Abor 2007; Anderson et al. 2004; Berger et al. 1997; Booth et al. 2001; Fosberg 2004; Friend & Lang 1988; Kyereboah et al. 2006; Sheikh & Wang 2012; Wen et al. 2002; Wiwattanakantang 1999).

One of the methods for controlling a firm's operations and corporate governance is to determine the optimum combination of ownership structures. Ownership of stock and its impact on firm performance is among the most critical issues in corporate governance literature that researchers have considered for several decades (Shleifer and Vishny 1997). One of the essential aspects of successful corporate governance is its impact on the company's outsourcing financing decisions at the director's level (Hassan and Butt 2009).

Moreover, according to the fact that a company's corporate governance arises from the conflict of interest between shareholders and management and also according to modern theories, agency costs (costs of monitoring managers to

ensure they function based on shareholder's interest) are considered as one of the determinants of capital structure. Thus, it is essential to investigate the effect of a company's corporate governance on capital structure. The influence of institutional investors as the main actors in financial markets on capital structure is also remarkable. In recent years, the central part of most companies' stock listed on the National Stock Exchange of India (NSE) has been owned by institutional shareholders. Institutional shareholders affect monitoring and controlling management in determining the firm's operational and financial policies. Today's organizations' emphasis on the separation of ownership from management reduces conflicts of interest between shareholders and management. Thus, increasing the number of shareholders, especially institutional shareholders, try to control management decisions. The most crucial issue in the capital structure issue is how to resolve conflict of interest between management and owners. Therefore, it is essential to investigate this relationship to solve the problem (Jensen 1986).

### 3. Methods & Data Collection

We take annual financial and non-financial data of Bombay Stock Exchange (BSE) listed firms as reported in the Centre for Monitoring Indian Economy (CMIE) database. CMIE database is considered a reliable source of information for Indian listed firms. We take data from the financial year (FY) 2010-2011 to FY 2018-19 for our study. We use OLS regression to analyze the effect of business group affiliation on long-term borrowing within the firm's networks. Our dependent variable is the long-term loans from promoters, directors, and shareholders. Our key independent variable is the top 50 business group affiliation dummy. Our other control variables include the firm's Age, Firm Size, and debt to equity ratio. We also take the year dummies to control for the time effect. Table 1 provides the definitions of the variables.

**Table 1: Variable's definition**

Top_50_dum	It takes the value of 1 if the firm is affiliated with the top 50 business groups in terms of size as of the year 2019 and 0 otherwise
Firm's Age (Age)	Age of the firm from the date of incorporation in that particular year.
Firm's Size (Size)	Natural log of total assets.
Debt/Equity (DE)	Debt to Equity ratio.
lt.bor.prom.dir.share	Long term loans from promoters, directors and shareholders
Year_dum	Year dummy

### 4. Results and Discussion

We use OLS regression to inquire whether a firm belonging to the top 50 business groups raises higher long-term loans from promoters, directors, and shareholders than firms that do not belong to the top 50 business groups. To control for other factors which may affect the long-term borrowing from promoters, directors, and shareholders, we take the firm's age, size, and debt to equity ratio as our control variables. Our model is given in equation 1.

$y_{\text{oult. bor. prom. dir. share}} = \beta_1 \text{Top\_50\_dum} + \beta_2 \text{Age} + \beta_3 \text{LNTA} + \beta_4 (\text{Year\_dum}) + \beta_1 \text{DE} + \epsilon$	(1)
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#### 4.1 Numerical Results

Table 2 gives the summary statistics for the variable used in the study.

Table 2: Summary statistics of the variables

	<i>Mean</i>	<i>Median</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
<i>Debt to Equity</i>	2.91	1.05	15.68	0.00	752.30
<i>Age</i>	31.23	30.00	13.39	5.00	117.00
<i>TA</i>	366.40	378.32	6.16	0.30	157401.74
<i>Long term borrowing</i>	52.61	12.25	162.22	0.10	4789.00

Table 3 provides the bi-variate Karl's Pearson correlation. We can see from table 2 that the bivariate correlation between different variables is not very high. Therefore, the chances of multicollinearity in our OLS regression are significantly less.

Table 3: Pair-wise correlation Karl's Pearson

	<i>Debt to Equity</i>	<i>Age</i>	<i>LNTA</i>	<i>Long term borrowing</i>
<i>Debt to Equity</i>	1.00	-0.02	0.01	0.03
<i>Age</i>	-0.02	1.00	0.16	0.06
<i>LNTA</i>	0.01	0.16	1.00	0.36
<i>Long term borrowing</i>	0.03	0.06	0.36	1.00

Table 4 provides the OLS regression results. It can be seen that the coefficient of our variable of interest is positive and significant, suggesting that a firm affiliated with the top 50 business groups has a significantly higher borrowing from the promotor, directors, and shareholders compared to firms that are not affiliated with the top 50 business groups. As expected, the coefficient of the firm's size is also positive and significant, suggesting that the larger the firm size higher the long-term debt raised by promoters, directors, and shareholders.

Table 4: Output from the regression model

<i>Dependent variable=lt.bor.prom.dir.share</i>	<i>Estimate</i>	<i>Std. Err</i>	<i>t-value</i>	<i>p-value</i>
<i>Intercept</i>	-137.28	151.45	-0.91	0.36
<i>top.50.dummy</i>	90.47	28.60	3.16	<b>0.00***</b>
<i>Age</i>	0.01	0.20	0.05	0.96
<i>LNTA</i>	31.50	1.47	21.39	<b>0.00**</b>
<i>Debt to equity ratio</i>	0.26	0.17	1.55	0.12
<i>2011</i>	-8.30	151.39	-0.06	0.96
<i>2012</i>	-2.35	151.35	-0.02	0.99
<i>2013</i>	-7.32	151.34	-0.05	0.96
<i>2014</i>	0.10	151.33	0.00	1.00
<i>2015</i>	5.49	151.32	0.04	0.97
<i>2016</i>	5.69	151.32	0.04	0.97
<i>2017</i>	14.28	151.34	0.09	0.92
<i>2018</i>	3.57	151.35	0.02	0.98
<i>2019</i>	6.27	151.37	0.04	0.97

Note: Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1, Residual standard error: 151.1 on 3326 degrees of freedom, Multiple R-squared: 0.1353, Adjusted R-squared: 0.1319, F-statistic: 40.04 on 13 and 3326 DF, p-value: < 2.2e-16

## 5. Conclusion

Our results show that firms belonging to big business groups raise higher long-term debt from promoters, directors, and shareholders. These results support the hypothesis that firms affiliated with big business groups use their internal-network sources of capital to raise long-term debt from promoters, directors, and shareholders.

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### **Biography**

**Ateequr Rahman** is a Ph.D. research scholar in the school of Management and Entrepreneurship, IIT Jodhpur. He is currently designated as Assistant Registrar (Academic Affairs) at the Indian Institute of Technology Kanpur. He has done a Master of Business Administration with a specialization in Finance. He is working in the field of sustainable strategy and green Finance. He has published 5 of his manuscripts in various Scopus indexed conferences.

**Dr. Sonam Chawla** is currently working as an assistant professor at Jindal Global Business School, O. P. Jindal Global University; she is a Fellow in Management from Management Development Institute, Gurgaon (India), in the area of Organizational Behavior. Before that, she worked for five years with leading companies across different verticals in the human resource function, contributing primarily to organizational development, learning, and development roles. She has done her MBA in HR from FORE School of Management, Delhi, and B. Com (Hons.) from Jesus & Mary College, Delhi University.

Her doctoral thesis is on gender diversity and women's career advancement at the board level. Her research interests include gender diversity in organizations, well-being, careers, psychological capital, and qualitative research methodology. She has published research papers, book chapters, and cases in peer-reviewed high impact factor and ABDC-listed journals like *Frontiers in Psychology*. She has also been selected to present her research at international conferences of repute like the Academy of Management (AOM), the Indian Academy of Management (INDAM), and Oxford University. She is also a reviewer for international journals and conferences of repute. Additionally, she is an active member of the Academy of Management (OB, Careers & GDO division).

**Prof. (Dr.) K. K. Lai** is the Vice President and a Professor of the Department of Business Administration, Chaoyang University of Technology Taichung, Taiwan. He has served as a professor and the Chairman of the Department of Business Administration, National Yunlin University of Science and Technology, Taiwan. He received his Ph.D. degree in the Graduate Institute of Management Sciences from Tamkang University in Taiwan. His research interest focuses on technology management in patent citation analysis, patent portfolio, patent family, and technological forecasting. He has published more than many of his academic papers in journals of national and international repute.