Corporate governance and firm performance: evidence from India

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ABSTRACT

There is ongoing interest in the area of corporate governance. Much of the recent published research into corporate governance and financial performance has focused primarily on U.S. firms and others in developed countries. Less attention has been devoted to firms in emerging markets. This research investigates the relationship between the financial performance and some characteristics of corporate governance for Indian firms. Relevant corporate governance variables were selected in view of alternative hypotheses regarding board structure and financial performance. This study finds that a governance structure incorporating larger board size creates better opportunities and more resources, thus enhancing financial performance. An excessively autonomous board (high proportion of independent directors) lowers performance. The situation of CEO-duality does not seem to create any measurable synergies in financial performance.

Keywords: financial performance, corporate governance, India

INTRODUCTION AND OVERVIEW

There has been much recent interest among scholars, researchers, and governments, including international agencies, in the realm of corporate governance, particularly after the financial scandals of late 1990s and attempts at legislative reforms, such as the Sarbanes-Oxley Act. Much of the recent published research has focused primarily on U.S. firms and others in developed countries. In contrast, this paper investigates the relationship between the characteristics of the board of directors and the financial performance of a sample of large, publicly traded firms in India.

The modern corporation embodies a separation of management and ownership. Shareholders, as owners of the company, are expected to elect the directors who appoint and monitor management. There may be conflicts between the interests of management and shareholders. Conflicts may include management's pursuit of personal financial interests, including entrenchment, leading to diminished firm performance. This reduction in performance has come to be called the agency problem, or agency costs (Fama and Jensen, 1983).

There is some empirical evidence that greater shareholder rights create higher growth rates, higher profitability and lower cost of capital. Shareholder rights have often been measured in terms of the G-Index of 24 criteria regarding corporate governance (Gompers, Ishii and Metrick, 2003; Bebchuk, Cohen and Ferrell, 2004; Bebchuk, 2006). On the other hand there is also empirical evidence that greater shareholder rights involve costs such as more disclosure, less efficient decision making, short-term focus on profitability, and higher cost of capital (Weber, 2006; Hermalin and Weisbach, 2007; and Ashbaugh-Skaife, et.al. 2006). It can be argued that there is an optimum level of shareholder rights, beyond which there is diminishing performance of the firm (Chugh and Meador, 2008; Chugh and Meador, 2010).

Another line of research in the area of corporate governance has been the investigation of various elements of board governance, such as board size, composition of the board, frequency of board meetings, and the independence of the board chair, as they relate to financial performance. Most of this research also has been done for U.S. corporations (Fama and Jensen, 1983; Shleifer and Vishny, 1997; Hillman and Dalziell, 2003; Nicholson and Kiel, 2007). As noted above, this paper deals with corporate governance and performance amongst Indian firms.

The first part of the paper reviews the existing literature and develops alternative hypotheses concerning board structure and its impact on financial performance. The second part describes the regulatory standards for corporate governance in India as embodied in Clause 49. The third section describes the data, sample and variables. The final section sets out the methodology, empirical results and conclusions.

HYPOTHESES DEVELOPMENT

The following section reviews the literature and describes alternative hypotheses regarding the relationship between financial performance and board size, board autonomy and the independence of the board chair.

Size of the Board: Resource Enrichment versus Resource Wasting

Some researchers have argued that a relatively large board size can improve the performance of the company by providing managerial talent (Nicholson and Kiel, 2007; Van den

Berghe and Levrau, 2004), access to financial and product markets (Frooman, 1999), access to and relationships with suppliers (Banerji and Sambharya, 1996) and potential alliances with other stakeholders and interest groups (Korac-Kakabadse, Kakabadse and Kouzmin, 2001). This line of thought is referred to in this paper as "Resource Enrichment Theory," which asserts that a larger board size will enhance a firm's financial performance.

There is some contrary evidence in the literature which casts doubt on the effectiveness of a larger board size. For example, one recent paper argues that there is an optimal board size (Bennedsen, Kongsted, and Nielson, 2008), beyond which performance of the company is impaired. This view is further supported by research that finds larger boards can result in poorer communications and less effective and timely decision-making (Jensen, 1993; Yermack, 1996; and Van den Berghe and Lebrau, 2004). This theory is referred to in this paper as "Resource Wasting Theory," in contrast to the Resource Enrichment Theory described above.

Principal-Agent Alignment versus Excessive Autonomy of the Board

It is argued in the literature that board autonomy is critical to aligning the interests of owners and managers. An autonomous board can more effectively monitor and supervise management, enhancing shareholder value (Fama and Jensen, 1983; Baysinger and Butler, 1985). Board autonomy is generally measured by the proportion of independent/outside/non-executive directors on the board. This theory states that a relatively autonomous board will help to minimize agency costs and thereby improve financial performance.

However, other studies suggest that excessive autonomy of the board can hurt a firm's performance. Excessive board autonomy may put the management at career risk with higher management turnover (Heffes, 2007), create higher agency costs for creditors (Weber, 2006), and generate higher costs to protect the proprietary position of the firm. Therefore, a high percentage of outside directors may result in lower financial performance (Agrawal and Kenoeber, 1996; Coles, McWilliams and Sen, 2001).

CEO--Duality versus Stewardship

CEO--duality describes a situation in which the CEO and the board chair is one and the same person. It is argued that situations in which the CEO is also the chair may enhance the performance of the firm as there is one responsible and accountable steward. This one person is empowered to make effective and timely decisions. This view has been called the "Stewardship Theory" (Donaldson and Davis, 1991; Braun and Sharma, 2007).

On the other hand, research also supports the notion that combining the positions of CEO and chair in one person may prevent the board from effectively exercising its monitoring and oversight duties (creating agency costs) and will result in lower performance (Lorsch and MacIver, 1989; Millstein, 1992; Coles, et al. 2001).

The paper tests the three competing hypotheses about the relationship of governance characteristics--board size, board autonomy and CEO-duality--to financial performance for a sample of Indian firms.

CORPORATE GOVERNANCE IN INDIA

This section summarizes the structure of corporate governance in India as set forth in Clause 49. Clause 49 was passed primarily to attract long-term, patient capital and foreign investments into India.

Clause 49 does not insist upon a particular size of the board, but specifies an "optimum combination" of executive and non-executive directors. If the chair of the board is an executive, the non-executive directors must comprise at least half of the board. If the chair of the board is a non-executive director, at least one-third of the board should be made-up of independent directors. Clause 49 also specifies criteria for defining independent directors. For example, an independent director cannot be a supplier or a customer. In addition, the independent director cannot be affiliated with the company's legal or consulting firms. Independent directors also cannot be related to officers of the company.

There are other provisions of Clause 49 which describe the composition of the audit and compensation committees. Other provisions deal with minimum levels of financial expertise of the directors, limits on memberships on boards of other companies, and certification of financial reports by officers of the company (SEBI Clause 49 Listing Agreement *http://www.directorsdatabase.com/Clause* 49.asp.).

SAMPLE, DATA AND VARIABLES

The paper analyzes board structure and financial performance of major companies listed on the National Stock Exchange (NSE) in India. These companies comprise the S&P CRISIL Index NSE--50. Data on 41[1], representing 60 percent of the total market capitalization on the NSE, were gathered for 2009 from moneycontrol.com and the firms' audited financial statements. The sample covers many sectors of the Indian economy, as set out in Table 1.

The choice of corporate governance variables: board size, board autonomy, and CEO-duality, were selected for their effect on decisions regarding asset and product management. This is a cross-sectional study and uses return on assets ("ROA") as the dependent variable, instead of return on equity ("ROE") in order to minimize the impact of capital structure decisions. Table 2 presents the descriptive statistics for the sample. The median ROA is 16 percent and the median size of the board is 12. The median proportion of independent directors is 50 per cent, and in only about one-third of the firms is the CEO also the chair of the board. Thus, most of the firms in the sample have separate positions of CEO and board chair.

METHODOLOGY, EMPIRICAL RESULTS AND CONCLUSIONS

The study uses regression models to test the relationship of a firm's financial performance and the corporate governance variables. The three independent variables are board size, board autonomy and CEO-duality; size is used as a control variable. Size is measured by both sales and assets, including their transformations. The models also tested for interaction effects amongst corporate governance variables and amongst the controls but did not discover any significant results.

[1] Nine banks and financial companies were excluded as they are highly regulated.

The correlations among the variables are set forth in Table 3. One may observe in the correlation matrix that the board size and financial performance are positively related, providing some evidence for the resource enrichment theory. On the other hand, the proportion of independent directors is negatively related to firm performance, suggesting that excessive board autonomy reduces profitability. CEO-duality, which combines the positions of CEO and board chair in one person, is also negative correlated with profit performance.

Table 4 reports the regression results for three models. The three control for different indexes of size. One may note that board size and financial performance are positively related in all three models and at a statistical significance of 1 percent.[2] This finding reinforces the resource enrichment theory. The variable measuring excessive board autonomy (proportion of independent directors) has a negative coefficient in all three models, although not statistically significant. This suggests the need for further investigation into the distribution of the sample data.

Similarly, CEO-duality has a negative coefficient, though not significant in the first two models, but becomes significant at the 10 percent level in model three. Model three controls for both asset size and sales size. Thus, combining the positions of CEO and chair in one person seems to create agency costs and lowers the ROA. There is an absence of any positive effects associated with stewardship.

Table 5 sets out descriptive statistics for the control variables. It is worth noting that the mean and median of the data differ significantly, suggesting that a test for heteroskedasticity is needed. Table 6 reports the results for the White and Breusch-Pagan tests, which confirm the presence of heteroskedasticity. Therefore, another regression of model three was performed using heteroskedasticity robust standard errors ("RSE"), and the results are presented in Table 7. This model is quite robust and is significant at the 1 percent level.

The RSE regression model confirms that board size and financial performance are positively related and highly significant at 1 percent, again validating the resource enrichment theory. The second variable, proportion of independent directors, has a negative coefficient and is significant at the 10 percent level, confirming that excessive board autonomy may hurt financial performance. The third variable, CEO—duality, after correcting for heteroskedasticity, has a negative coefficient and is significant at the 5 percent level. This result confirms the presence of agency costs under CEO—duality and a lack of support for the stewardship theory.

In summary, the board structure has a definite impact on the firm's financial performance. A larger board size creates more opportunities and resources for better financial performance, confirming the resource enrichment theory. An excessively autonomous board, with a high proportion of independent directors, lowers profitability. CEO-duality, combining the positions of CEO and chair in one person, creates additional agency costs, and impairs performance. CEO-duality does not create any synergies and there is no support for the stewardship theory.

[2] Joint tests of significance were conducted for the independent and the control variables. Results were strongly significant suggesting robust predictive associations.

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APPENDIX

TABLE 1: NUMBER OF FIRMS BY INDUSTRY GROUP

Group	Industry	No. of Firms
Auto	Automobiles	5
Oil & Petroleum	Oil Exploration/Drilling/Refining	5
Utilities &Telecom	Power Generation/Supply + Telecom	8
IT	Information Technology	4
Pharma	Pharmaceuticals & Drugs	4
Engineering & Construction	Cement & Construction Materials, Project Contracting/Machinery Manufacture, Real Estate/Civil Construction, Heavy Engineering	7
Metals & Alloys	Steel/Sponge Iron/Pig Iron, Mining/Minerals/Metals, Aluminum & Aluminum Products	6
Consumer Products	Cigarettes/Tobacco, Household & Personal Products	2

TABLE 2: DESCRIPTIVE STATISTICS

VARIABLES	Min	Max	Mean	Median	Standard Deviation
ROA	-0.11	0.85	0.17	0.16	0.17
Board Size	5	19	11.51	12	3.41
Number of Independent Directors	2	11	6.07	6	1.95
Proportion of Independent Directors	0.18	0.8	0.54	0.5	0.11
CEO--Duality (dual=1, separate=0)	0	1	0.34	0	0.48

TABLE 3: CORRELATION MATRIX

	Variables	1	2	3	4	5	6	7
1	ROA	1.0						
2	Board size	0.287	1.0					
3	Proportion of Independent Directors	-0.169	-0.251	1.0				
4	CEO-duality	-0.225	0.237	0.123	1.0			
5	Log of Total Assets	-0.584	0.150	-0.094	0.296	1.0		
6	Log of Total Assets Squared	-0.531	0.159	-0.089	0.310	0.993	1.0	
7	Log of Sales	0.186	0.318	0.007	0.204	0.271	0.294	1.0

TABLE 4: REGRESSION RESULTS

Variable	Regression Model 1		Regression Model 2		Regression Model 3	
	coeff	p-value	coeff	p-value	coeff	p-value
Board size	0.020	0.003*	0.018	0.001*	0.015	0.009*
Proportion of independent directors	-0.189	0.311	-0.205	0.183	-0.232	0.124
Duality (duality=1, separation=0)	-0.040	0.380	-0.059	0.123	-0.062	0.092**
Log of assets	-0.104	0.000	-0.681	0.000	-0.629	0.000
Log of assets squared	-	-	0.055	0.000	0.049	0.000
Log of sales	-	-	-	-	0.024	0.031

Intercept	0.592	2.082	1.916
R-squared	0.523	0.688	0.724
F- Statistic	9.870	15.410	14.420
Prob > F	0.000	0.000	0.000

* - Significant at 1% ** - Significant at 10%

TABLE 5: DESCRIPTIVE STATISTICS: CONTROL VARIABLES

	Min	Max	Mean	Median	Standard Deviation
Total Assets	25.84	1,996.65	293.58	164.96	365.26
Log of Total Assets	3.25	7.60	5.17	5.11	1.01
Sales	0	2,004	249.61	136.77	361.64
Log of Sales	-3.442	7.603	4.818	5.023	1.675

TABLE 6: TEST FOR HETEROSKEDASTICITY

Test	F-statistic	p-value
Breusch-Pagan Test	2.690	0.0308
White Test	12.780	0.0001

TABLE 7: REGRESSION RESULTS WITH HETEROSKEDASTICITY ROBUST STANDARD ERRORS

Variable	Regression Model	
	coeff	p-value
Board Size	0.015	0.002*
Proportion of Independent Directors	-0.232	0.062***
CEO-duality	-0.062	0.027**
Log Total Assets	-0.629	0.005
Log Total Assets Squared	0.049	0.013

Log Sales	0.024	0.033
intercept	1.916	
R-squared	0.724	
F- Statistic	7.720	
Prob > F (or) p-value	0.000	

* - Significant at 1% ** - Significant at 5% *** - Significant at 10%