Board Structure and the Cost of Debt Capital: Evidence of Iranian Firms

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Abstract: The purpose of this research is investigation of the relationship between characteristics of board of directors and cost of equity capital in companies listed in Tehran Stock Exchange as an emerging financial market. Therefore 86 manufacturing companies listed in Tehran Stock Exchange were selected for applying statistical analysis within seven years (2005-2011). Pooled regression analysis was used to test hypotheses with panel data. The main hypothesis is based on the relation between characteristics of board of directors as a corporate governance mechanism and cost of equity capital. The dependent variable is cost of equity capital and independent variables are size of board of directors, proportion of outside directors and CEO-Chairman Duality (CEO: Chief Executive Officer). The results show a negative and significant relation between sizes of board of directors. But there is no significant relation between CEO-Chairman Duality with cost of equity, however; our examinations indicate a positive and significant relation between proportion of outside directors and cost of equity capital. The results comply with the previous researches about characteristics of board of directors as a corporate governance mechanism.

Key words: Cost of Debt Capital · Size of Board of Directors · Proportion of Outside Directors · CEO-Chairman Duality · Corporate Governance Mechanism

INTRODUCTION

Some recent theoretical researches support the notion that increasing the strength of corporate governance can reduce agency costs and, therefore, a firm's cost of financing. La Porta et al. [1] and Merton [2] state that stronger corporate governance regimes will increase ownership of firms and greater ownership should reduce costs of equity or debt. One of important governance qualities are related to the corporate board. Some studies indicate that independent boards and higher board equity ownership are associated with lower cost of equity and debt [3, 4]. Cost of debt capital, specially, is interesting for creditors. When the firm has good and qualitative corporate governance, it can signal to creditors that the firm can be managed better and therefore, creditors' capital will be safe and increase. Thus they will want lower interest rate for their resources.

The role of firm boards in resolving the conflict between shareholders and debt holders is important. Because governance mechanisms influence agency costs and firm costs of capital. Boards that strengthen the position of shareholders in comparison with creditors may result in firms accepting high-risk projects since stockholders gain more return and more wealth from bondholders. In this case to solve this conflict, creditors of firms with stronger pro-shareholder governance may want higher interest rates. It means more cost of dent for the firm. In contrast, some boards may improve firm efficiency in such a way that both creditors and shareholders benefit this can be resulted in reducing the cost of debt and/or their covenant requirements. Therefore the characteristics of the firm board can be important to the amount of debt costs. For example, board diversity may cause creditors to have greater faith in internal governance mechanisms and thus reduce borrowing costs. Or, greater board experience may lead to better quality advice to management and lead to better terms for debt.
The literature classifies corporate governance mechanisms into a number of categories, including legal and regulatory mechanisms, disclosures, shareholder rights, ownership structures and board monitoring [5, 6]. The focus of this paper is on board quality and its effect on increasing the financing costs of the firm specially cost of debt capital.

In this paper, we conduct an empirical study of how board structure affects the cost of debt capital of these firms. We focus on an emerging market (Iranian market). The study of Tehran Stock Exchange (TSE) as an emerging market can add to our knowledge about the role of a strong board on providing cheap resources for the firm. We study debt because the relation between board quality and debt capital has not previously been explored comprehensively, also debts in firm capital structures are quantitatively quite significant [7].

Our basic hypothesis is that high quality boards, by better governance, may complement the monitoring role of creditors [8] and thus reduce the costs of debts. We consider three measures for board such as board size, board member and share ownership of managers. Some of our results support the notion that high quality boards reduce firm borrowing costs in Iranian context.

Theoretical Framework and Literature Review: In the firm shareholders and creditors have no direct role on the controlling corporate but a board of directors whom are selected by stockholders will run the company. Therefore, In fact, managers are agents that the Boards select them. This linkage between owners and creditors and, agents, is called agency relationship [9]. Separation between ownership and management (control) resulted in an organizational problem so called agency problem. One of the main hypotheses of agency theory is that agents and ownership are in interest conflict problem. One of the main hypotheses of agency theory is that agents and ownership are in interest conflict [10].

In the agency theory, managers are owner's agent but more often they are attempted and prefer their personal interest [11]. In agency hypothesis managers may not always act on interest of shareholders and specially creditors, when ownership is separate from management. In other words, they prefer their interest over owners and creditors [12]. Therefore, evaluation of management performance is important for shareholders and specially creditors, because they have even lower power in the firm. They need to ensure that managers or agents follow their benefits and maximize their wealth in the company [13]. Distinction to chief executive officer and chairman (CEO-chairman Duality), using powerful and influential (members in board and proportion of non-responsible members of the board (outside directors) are arguable in the agency theory [11]. Thus evaluation of manager's performance is important in view of shareholders and creditors. Committee of board of directors specifies Reward managers. Board features is an important mechanism of corporate governance that can affect performance managers of the firm. Then a strong board can cause that managers improve firm performance. Therefore, the interest rate of creditors can guarantee by the firm.

Prior research [14-19] present a significant contribution about relating the cost of debt - specially the cost of bonds – to firm characteristics. For instance, Fields, Fraser and Subrahmanyam [20] analyze the relation between comprehensive measures of board quality and the cost as well as the non-price terms of bank loans. They show that firms that have higher quality boards with a greater advisory presence borrow at lower interest rates. This relation exists even after controlling for ownership structure, CEO compensation policy and shareholder protection, as well as the size and financial characteristics of the borrower firm and of the loan. They also show evidence that board quality and other governance characteristics influence the likelihood that loans have covenant requirements, but the relations differ by covenant type. When they combine the direct and indirect costs of bank loans we find that firms with large, independent, experienced and diverse boards and lower institutional ownership borrow more cheaply. Overall, the evidence indicates that board quality impacts the cost of bank debt.

Some Other studies focus on the importance of the board. They studied the influence of the size and independence of the board [21, 22] on firm valuation. There are so many studies on the board characteristics and performance. For instance, research of Kumar and Singh [23] explores the relationship of board size and promoter ownership on firm value for a sample of firms listed on the Bombay stock exchange (BSE) of India. The sample includes 176 firms listed on the BSE during years 2008- 2009. Tobin's Q was considered as a performance variable. The study shows a negative relationship of board size with firm value.

Research of Ujunwa [24], investigates the impact of corporate on the financial performance of Nigerian quoted firms. Board size, board skill, board nationality, board gender, board ethnicity and CEO duality are parameters of board characteristics. The study uses panel data from 122 quoted firms in Nigeria between 1991 and 2008. This study shows that board size, CEO duality and gender
diversity have negative relationship with firm performance, whereas board nationality, board ethnicity and the number of board members with a PhD qualification have positive relationship with firm performance. The result of the robustness test using the same board characteristics for 160 small firms showed that board duality was positively linked to firm performance, while a PhD qualification was negatively linked to firm performance.

Research of Hyun Kim et al. [25] explores the effects of size of the board of directors and board involvement in strategy on financial performance in the private club industry. And the results showed that board members' involvement in strategy and the size of the board of directors have a positive influence on a private club's financial performance.

Mentes [26] has explored the linkage of board size and corporate performance in his research in 120 firms of Turkey Stock Exchange during 6 years (2004 - 2009). He explains that board of directors is the first protective bumper of shareholders right. Dependent variable in this research is board size and independent variable, ROA (return on assets) and EVA (economic value added). The results of research indicate a positive relationship between ROA and EVA with board size. In addition, the family relationship, social culture, legal structure and ownership focus have a major role in findings of this research [26].

In research of Mubbsher et al. [27], the relation between corporate governance and financial performance of firms listed in Pakistan Stock Exchange was studied. Corporate governance as an independent variable include seven elements: risk management, internal audit, responsiveness, shareholders structure, reward of board, dividend policy and activity sustainability. Financial performance as a dependent variable includes three elements: return on equity (ROE), price/earnings ratio (P/E) and earnings per share (EPS). The results show that shareholders structure, internal audit, responsiveness and sustainability have direct relation with performance and reward of board of directors, risk management and dividend policy have reverse relation with financial performance [27].

Few studies examine other characteristics of the board though Erhardt et al. [28], Carter et al. [29] and Jurkus et al. [30] report that the number of female board members is positively related to financial indicators of firm performance. Ryan and Wiggins [31] show that director equity-based compensation is related to the power of independent directors versus the CEO. Additionally, Brick et al. [32] test director compensation and share ownership and find evidence that excess compensation of directors (and CEOs) is associated with poor firm performance.

In Iranian context there are some related studies too. For instance, Bavandpour [33] investigated corporate governance effect on the listed firm's performance in Tehran Stock Exchange. His results showed that there is a positive relationship between institutional investor's proportion and firm performance, but between large stockholder, outside directors and firm performance there is no significant relationship. In the research by Izadnia and Rasaedian [34] the relationship between some corporate governance mechanism tools and economical and financial criteria of performance and governance was investigated. Percentage of Outside directors and institutional shareholders percentage were considered as corporate governance mechanisms and ROA, Q Tobin ratio, ROE and market value added as performance evaluation criteria. The results showed that there was a positive relationship between corporate governance and ROA, Q Tobin, ROE and market value added. Heydarian Chali [35] studied the relationship between some corporate governance mechanisms and profit quality in companies listed in TSE. The results showed that there was a relationship between proportion of outside directors, CEO-chairman duality and profit quality. There is no research that investigates the relation between board characteristics and cost of equity capital in Iranian context.

Hypotheses: The main question of this research is that “is there a significant relationship between Board of Directors Characteristics and the amount of cost of equity capital in Iranian context?” we expect a lower amount for cost of equity capital when the firm signs to creditors about better corporate governance. According to respond to this question, the following main hypothesis and 3 sub hypotheses are provided:

Main Hypothesis: There is a significant relationship between board of directors' characteristics (as a managerial mechanism of good corporate governance) and cost of equity capital;

We developed sub hypotheses as bellow:

- There is a significant relationship between size of board of directors (SIZEB) and cost of equity capital;
- There is a significant relationship between proportion of outside board directors (OBD) and cost of equity capital;
• There is a significant relationship between CEO-chairman duality (DUALIT) and cost of equity capital (CEO: Chief Executive Officer).

• Research Variables and Model

In the research (like previous researches [36, 11, 27, 23], size of board of directors (SIZEB), Proportion of outside board directors (OBD) and CEO-chairman Duality (DUALIT) have been taken as independent variables, we also used cost of debt capital measure as a dependent variable (CD) and earnings quality (EQ), firm size (SIZE), cash flow from operation (CFO), firm risk (BETA), firm leverage (LEVERAGE) and debt maturity (MATURITY) as control variables. Some studies indicated these control variables affect cost of debt capital [37, 38]. Therefore, we controlled the effect of these variables on CD.

Size of Board of Directors (SIZEB): In the research number of board members has been taken as a criterion to measure SIZEB.

Proportion of Outside Directors (OBD): Under definition of regulation draft of corporate governance rules issued by Tehran Stock Exchange (TSE), outside director is a part-time member of board who has no executive responsibility in the firm. In this research, proportion of outside directors has been obtained by dividing number of outside board directors' members to all number of board members.

Duality of Board of Directors (DUALIT): According to definition of regulation draft of TSE corporate governance rules, one member of board should not be chairman and Chief Executive Officer simultaneously.

Cost of Debt Capital (CD): In this research, CD is dependent variable. According to the prior researches [37, 38], we used from rate of interest as a proxy of cost of debt capital. Rate of interest is extracted from total financial expenses for each year to average of total of debts (first and end of the year).

The model includes controls for EQ, Leverage, Beta and Size Consistent with Francis et al. [37], Li et al. [38]. We measured these variables as bellow:

Earning Quality (EQ): Total accruals (TAC) are chosen as the proxy for earnings quality and are measured as operating profit less operating cash flows.

Firm Risk (BETA): Calculated from the firm-specific CAPM using 36-month rolling returns.

Financial Leverage (LEVERAGE): Defined as total debt to total assets.

Firm Size (SIZE): Natural log of firm’s total asset.

Debt Maturity (MATURITY): Defined as total short term debts to total debts.

Cash Flow from Operation (CFO): Defined as total operational cash flow to total assets.

Regarding to hypotheses and variables of this research, the research model is:

\[
CD = \beta_0 + \beta_1(SIZEB) + \beta_2(OBD) + \beta_3(DUALIT) + \beta_4(EQ) + \beta_5(SIZE) + \beta_6(CFO) + \beta_7(BETA) + \beta_8(LEVERAGE) + \beta_9(MATURITY) + \epsilon
\]

(1)

Population, Sample and Data: Statistical population includes manufacturing companies listed in TSE with the following constraints:

Company Was a Member of TSE During 2005-2011: In terms of increasing comparability, their fiscal year ends in March (the end of Iranian year). Required data for research variable must be available. The company has not changed its financial year during the research period. The firm must not have operational delay more than one year.

After applying these conditions, the statistical sample included 86 companies. Time period of this research is 7 years since 2005 to 2011. We provided a final sample of 602 firm-level yearly observations.

Our data are taken from financial reports, notes and management operation reports to stock holders. We use from formal databases of TSE that provide a large set of financial reports for Iranian public listed firms. Variables related to the board of directors, to cost of debt capital and control variables are extracted for the years 2005 through 2011.

RESULTS

Descriptive Statistics: Theoretical model and hypotheses were examined by multi-variable regression and panel data. The results of descriptive statistics of independent and explanatory variables are as follows. Table 1 presents descriptive statistics for our variables used in the tests. To test the hypotheses we used cross sectional and panel data techniques.
Table 1: Deceptive statistics for interval scale variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Deviation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZEB</td>
<td>602</td>
<td>5.910</td>
<td>0.720</td>
<td>0.518</td>
<td>-2.984</td>
<td>18.741</td>
<td>-29.963</td>
</tr>
<tr>
<td>OBD</td>
<td>602</td>
<td>0.476</td>
<td>0.231</td>
<td>0.053</td>
<td>-0.499</td>
<td>0.576</td>
<td>-5.009</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>602</td>
<td>0.626</td>
<td>0.206</td>
<td>0.042</td>
<td>0.776</td>
<td>5.571</td>
<td>7.787</td>
</tr>
<tr>
<td>BETA</td>
<td>602</td>
<td>0.310</td>
<td>1.513</td>
<td>2.288</td>
<td>-2.141</td>
<td>18.243</td>
<td>-21.497</td>
</tr>
<tr>
<td>SIZE</td>
<td>602</td>
<td>13.220</td>
<td>1.327</td>
<td>1.760</td>
<td>0.749</td>
<td>1.460</td>
<td>7.523</td>
</tr>
<tr>
<td>EQ</td>
<td>602</td>
<td>1.165</td>
<td>9.003</td>
<td>81.061</td>
<td>6.191</td>
<td>63.225</td>
<td>62.170</td>
</tr>
<tr>
<td>CFO</td>
<td>602</td>
<td>0.134</td>
<td>0.143</td>
<td>0.020</td>
<td>0.632</td>
<td>1.691</td>
<td>6.351</td>
</tr>
<tr>
<td>MATURITY</td>
<td>602</td>
<td>0.857</td>
<td>0.145</td>
<td>0.021</td>
<td>-1.694</td>
<td>4.788</td>
<td>-17.013</td>
</tr>
</tbody>
</table>

Table 2: CEO-Chairman duality position in the sample

<table>
<thead>
<tr>
<th>CEO-Chairman Duality position</th>
<th>Frequency</th>
<th>Frequency percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO-Chairman Duality</td>
<td>550</td>
<td>91.4</td>
</tr>
<tr>
<td>Not CEO-Chairman Duality</td>
<td>52</td>
<td>8.6</td>
</tr>
<tr>
<td>Sum</td>
<td>602</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 shows mean standard deviation, variance, skewness and kurtosis of variables. As it can be considered from Table 1, deviations of skewness and kurtosis of all variables, except OBD, are greater than absolute of 1.96, which indicates an asymmetric distribution. This indicates that there are some far points in the left and right domains, but compression is around the central index (left domain means a negative skewness and right domains means a positive skewness). Skewness of OBD is less than absolute of 1.96, which indicates a symmetric distribution. The average of CD is 2.401, which indicates average of cost of debt capital of sample companies (interest rate). It means in Iranian firms the rate of interest is about 24 percent.

SIZEB has a negative skewness and a positive kurtosis with mean of 5.91, standard deviation of 0.72 and variance of 0.518. Deviation of skewness and kurtosis factors are greater than absolute of 1.96 and then the distribution is not symmetric. Namely, the distribution deviates from normal distribution. It means in Iranian context average number of members of board is about 5.

OBD has a negative skewness and a positive kurtosis with mean of 0.476, standard deviation of 0.053 and variance of -0.499. Deviation of skewness and kurtosis factors are greater than absolute of 1.96 and then the distribution is not symmetric. Namely, the distribution deviates from normal distribution.

We can investigate on some of our control variables. The average of BETA is 0.31, whereas this number in research of Li et al. [38] is equal 0.356, it shows that average risk in firms listed in TSE is lower than those in ASX for Australian firms. The average of size in our sample firms is 13.22, whereas this number in research of Li et al. [38] is 18.678, so it indicates that average of size in TSE is smaller than ASX.

Table 2 indicates that in 91.4% percentage of firms in TSE, CEO and Chairman are separated.

**Hypotheses Testing:** Given that in the present research, the information has been gathered from a sample group of accepted firms in Tehran stock exchange and during a few years. We used from Panel data analysis to test our hypotheses. The research aims to test hypothesis and evaluate cost of debt capital of Iranian firms' model based on board of director's characteristics. Thus required test is appropriate with regression analysis problem. Regarding to being temporal and fragmental, regression analysis has been used in this research. In the analysis with compositional data, this model has been evaluated based on the temporal a fragmental data. Statistical tests show that the studied variables distribution is not normal. As variables of research distribution are not normal, but because of big sample volume and central limit theorem in statistics, we could take the variables normal.

We developed 3 sub hypotheses for testing our main hypothesis. To examine the main hypothesis, a model including 9 explanatory variables and a dependent variable was fitted. In the first sub hypothesis we examine the relationship between size of board of directors (SIZEB) and cost of debt capital. In this model, we aimed to examine the effect of size of board of directors on cost of debt capital along with other explanatory variables. Since significance level of Hausman test for the main model was less than 0.05, this model was fitted by
Table 3: Results of regression analysis to test hypothesis

Dependent Variable: Cost of debt capital, Periods included: 7, Cross-sections included: 86, Total panel observations: 602

<table>
<thead>
<tr>
<th>Prob</th>
<th>t-Statistic</th>
<th>Std. Error</th>
<th>Coefficient</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0002</td>
<td>3.19805</td>
<td>0.827154</td>
<td>3.159566</td>
<td>C</td>
</tr>
<tr>
<td>0.0445</td>
<td>-2.013940</td>
<td>0.046244</td>
<td>-0.093133</td>
<td>SIZEB</td>
</tr>
<tr>
<td>0.0042</td>
<td>2.974161</td>
<td>0.165153</td>
<td>0.474676</td>
<td>OBD</td>
</tr>
<tr>
<td>0.3775</td>
<td>0.883285</td>
<td>0.114081</td>
<td>0.100766</td>
<td>DUALIT</td>
</tr>
<tr>
<td>0.1410</td>
<td>-1.474524</td>
<td>0.005992</td>
<td>-0.008835</td>
<td>EQ</td>
</tr>
<tr>
<td>0.0000</td>
<td>-4.735073</td>
<td>0.051423</td>
<td>-0.243490</td>
<td>SIZE</td>
</tr>
<tr>
<td>0.2577</td>
<td>-1.133015</td>
<td>0.201199</td>
<td>-0.227962</td>
<td>CFO</td>
</tr>
<tr>
<td>0.0123</td>
<td>2.512247</td>
<td>0.009384</td>
<td>0.023576</td>
<td>BETA</td>
</tr>
<tr>
<td>0.0211</td>
<td>2.313093</td>
<td>0.125055</td>
<td>0.289263</td>
<td>LEVERAGE</td>
</tr>
<tr>
<td>0.0000</td>
<td>-8.891619</td>
<td>0.296021</td>
<td>-2.632110</td>
<td>MATURITY</td>
</tr>
<tr>
<td>1.707983</td>
<td>Durbin-Watson stat</td>
<td>0.897328</td>
<td>R-squared</td>
<td></td>
</tr>
<tr>
<td>47.13901</td>
<td>F-statistic</td>
<td>0.878292</td>
<td>Adjusted R-squared</td>
<td></td>
</tr>
<tr>
<td>0.0000</td>
<td>Hasmann’s test (Prob)</td>
<td>8.578924</td>
<td>Hasmann’s test (statistic)</td>
<td></td>
</tr>
</tbody>
</table>

CD = 3.159 - 0.093*SIZEB + 0.474*OBD + 0.1007*DUALIT - 0.008*EQ - 0.243*SIZE - 0.227*CFO + 0.023*BETA + 0.289*LEVERAGE - 2.632*MATURITY

rejection of random effect. The results showed that this model is without auto-correlation and Durbin-Watson’s statistic is 1.7. The significance level of Fischer’s statistic is less than the acceptable error level, which indicates a linear relationship between the independent variable with the dependent variable. The adjusted R² is 0.87%, shows that the independent variables (SIZEB, OBD and DUALT) and the other 6 variables justify and interpret about 0.87% of cost of equity capital changes together; that is a rather high percentage. Although DUALIT did not have any significant effect on CD. As Table 3 indicates, the Prob (significant level) for SIZEB, OBD and DUALIT is 0.0445, 0.0042 (that is less than 5 percent) and 0.3775 (that is more than 5 percent of error level). Therefore, we can expect in the model just SIZEB and OBD affect cost of debt capital as managerial mechanisms of corporate governance.

The statistic t calculated for independent variable in the first sub hypothesis (board size) is more than absolute of 1.96 (-2.013940) and significance level is less than error level 0.05. The board size coefficient is -0.093133, which indicates that, there was a negative significant relationship between board size and cost of equity capital. It means that large board can decreases the cost of debt capital for firms listed in Tehran Stock Exchange (TSE). Some related studies show that in a large board integration of decisions and conflicts are less and democratic decisions are more therefore board can make strong and better decisions and take better policies to lead the firm. Thus, this sub hypothesis is supported (in 95% of confidence) according to the gathered data and statistical sample. The results are shown in Table 3. The t statistic for OBD is 2.874161. It means that the relation between OBD and CD is positive and it implies that more outside managers in the board increase cost of debt capital and they can not have a decreasing effect on cost of financing from creditors in Iranian context.

As we noticed before, duality of board of directors did not have any significant effect on cost of capital in the model and together with other explanatory variables. The prob statistic for this variable is more than 5 percent (0.3775). Finally as the table indicates the model of cost of debt capital is as follow according to sample firms listed in Tehran Stock Exchange (relation no. 2):

CD = 3.159 - 0.093*SIZEB + 0.474*OBD + 0.1007*DUALIT - 0.008*EQ - 0.243*SIZE - 0.227*CFO + 0.023*BETA + 0.289*LEVERAGE - 2.632*MATURITY

According to Table 3 from control variables firm size with the significant level 0.0000, firm BETA with the significant level 0.0123, financial leverage with the significant level 0.0211 and maturity with the significant level 0.0000 have significant relationship with cost of debt capital.

**DISCUSSION AND CONCLUSION**

In this research, we studied the relationship between corporate board quality and cost of debt capital in Iranian listed companies as an emerging capital market. We examined the effect of size of board of directors, proportion of outside directors and duality of board of directors as managerial corporate governance mechanisms on cost of debt capital.
Our results for the first hypothesis showed that there was a reverse and significant relationship between size of board of directors and cost of debt capital. This means that companies which have large board have lower cost of debt capital than those which do not. Large board has more power to bring to the firm more debt capital in lower costs. They may have better knowledge and relations.

Our results for the second hypothesis showed that there was a positive and significant relationship between proportion of outside board directors and cost of debt capital. This means that companies which have more outside member of board have higher cost of debt capital than those which do not. It means the firms have more inside managers can receive debt capital with low costs. Non-responsible managers (outside managers in the board) have no enough strategic and financial knowledge to create value added for creditors, because they have not sufficient financial resources from corporate than have no necessary motorization to supervise and create value added and no power to bring cheap debt in Iranian context.

In the third hypothesis there was no significant relation between duality of board of directors and cost of debt capital. It means in Iranian firms duality of CFO position and chair man of the board cannot take any advantages for the firm to bring cheap debt capital.

Our results are consistent with some international studies in some aspects [14, 15, 16, 17, 19, 20].

We analyze the hypothesis that board quality is linked to the cost of debt capital in an emerging country of Iran. Our results suggest that some measures of quality of firms' boards of directors bear a material relation with cost of debt capital. We find that firms with larger boards are able to borrow at lower interest rates. This finding is compatible with the result of Fields et al., (2012) ’ research [20]. They analyzed the relation between measures of board quality and the cost of debt capital in bank loans. They indicated that firms that have higher quality boards with a greater advisory presence borrow at lower interest rates. We also find there is positive relation between the number of outside directors and cost of debt capital. This finding is in conflict with Fields et al., (2012)' result [20]. They found more independent and more experienced boards are able to borrow at lower interest rates. They also indicated that firms with a greater advisory presence on their boards also are able to obtain better credit terms.

Our results suggest that high board quality, thought to be useful for shareholders, is also good for creditors in some aspects. These results have important implications for firms that are borrowers as well as for public policy. Tehran Stock Exchange can use from the results too for standard setting. But the readers must inform that our results may be not generalized to firms not represented in the TSE and to other time periods. Researchers should examine other characteristics of firms' board in Iranian context to determine the relationship between board quality and cost of debt capital.

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REFERENCES


