Examining the Relationship between Corporate Governance Mechanisms and Capital Structure among Listed Firms in Tehran Stock Exchange (TSE)

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ABSTRACT

Much of the researchers' attention of the last decades had its origin studying capital structure and factors affecting it. They conclude that corporate governance is one of these factors. Corporate governance is policies, procedures and actions developed and implemented in support of stakeholders' interests. The goal of corporate governance is to increase the reliability of firm's activities and management policies in favor of stakeholders' interests. Accordingly, this study aims to examine the relationship between corporate governance mechanisms and firm's capital structure. Therefore, the research population consists of 92 firms listed in Tehran Stock Exchange during 2005 to 2010. This study suggests CEO duality, percentage of outside directors in board of directors and institutional shareholders' ownership as independent variables and short-term debt to total assets ratio, long-term debt to total assets ratio and total debt to total assets ratio as dependent variables. To test the research hypotheses, three multivariate regression models are fitted using panel data. The results revealed that there is a significant relationship between CEO duality and institutional investors' ownership ratio, and short-term debt to total assets ratio. Also, a significant relationship was found between CEO duality and institutional investors' ownership ratio, and total debt to total assets ratio. However, the results show no significant relationship between CEO duality and institutional investors' ownership ratio, and long-term debt to total assets ratio. Moreover, it is revealed that there is no significant relationship between percentage of outside directors and capital structure criteria.

KEYWORDS: corporate governance, capital structure, percentage of outside directors, CEO duality and institutional investors' ownership ratio.

INTRODUCTION

Legally speaking, firms tend to have a legal entity independent and separate from their owners. However, Wats&Zimmerman (1986) suggest that firms can be considered as a set of contracts between various parties. One of the most important types of these contracts is the contract between directors and shareholders of the firms, resulted from separation of ownership and management and based on agency theory. According to this contract shareholders assign firm affairs to directors and in contrast, they preserve the rights for themselves to ask about directors' performance. However, there is always a possibility in these contracts that directors always prefer their benefits over those of shareholders and this may cause a conflict of interests in agency relationship. To ensure whether directors act in the interest of their shareholders, on the other hand, they bear expenses called agency expenses.

To reduce agency problems, various solutions are suggested in the financial literature, the most important of them is corporate governance. Corporate governance is a strategy employed to direct and manage firms to increase work resources and take the shareholders' interests into account (Abor&Biekpe, 2008).Cadbury (1992) defines corporate governance as a system used to control and manage firms. It is also believed that corporate governance can be used as a motivational tool to reduce agency expenses and to preserve firms' assets and rights (Kumar, 2004). Firms involving appropriate corporate governance may tolerate agency incompatibilities in smaller scale (Jiraporn et al, 2008).The goal of applying corporate governance is to ensure a framework providing an appropriate balance between directors' freedom of action, accountability and various stakeholders' interests. It is noteworthy that the primary goal of corporate governance is improving firm's performance and aligning shareholders' interests with those of directors (Maher &Andersson, 2000). Therefore, one can conclude that agency problems or conflict between directors and shareholders' interests is the main cause of creating corporate governance. Financial literature also points out that agency problems may affect financing decisions (capital structure) of the firms (Anderson et al,2004).It is interesting to note that a long history of literature can be found about corporate governance and capital structure. Most of the previous studies on capital structure have ignored the role of the mechanisms of corporate governance as a factor affecting firm's capital structure and it itself motivates conducting the present research. Thus, present study aims to show if corporate governance mechanisms of a firm influence capital structure and how firms listed in Tehran Stock Exchange are financed? and if the answer is positive, how much this effect will be?

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THEORETICAL FRAMEWORK AND LITERATURE

According to the literature, decisions on capital structure are one of the most important issues considered by financial managers. Cole (2008) has studied these decisions defined as the optimal combination of various financial resources. Modigliani and Miller (1958) suggest that under certain assumptions including perfect competitive market, lack of income tax, lack of bankruptcy expenses, lack of agency expenses and information asymmetry among participants in capital market, directors may not alter firm's value due to making change in financial resources. In other words, firm's value is independent of its capital structure.

Wen et al (2002) investigated the relationship between corporate governance and capital structure decisions in Chinese firms and found a positive relationship between size of board of directors and capital structure. The results of their study indicated that larger board of directors, especially when they are more controlled by legal authorities look for higher levels of debt to increase firm's value. Moreover, they showed that firms with more outside directors enjoy less debt for financing due to more effective control on directors' performances.

Short et al (2002) also examined the relationship between percentage of director's ownership and that of institutional investors' ownership, and capital structure from agency theory perspective in British firms and concluded that there is a positively significant relationship between director's ownership and debt ratio while there is a negatively significant relationship between percentage of institutional investors' ownership and debt ratio.

Fosberg (2004) found a positively significant relationship between percentage of institutional investors' ownership and debt ratio. Additionally, it is also revealed that rate of applying debt in firm's capital structure will be decreased in those firms where CEO responsibilities are not separated from those of chairman and vice chairman.

Having employed capital structure as a criterion for firm's corporate governance during 1994-2000 in India, Kumar (2005) suggested that there is a non-linear relationship between capital structure and firm's corporate governance. He found that firms with weaker corporate governance(dispersed ownership) have higher debts. However, firms with external ownership or less institutional ownership show less debt in capital structure. Hence, his research didn't show a significant relationship between director's ownership and capital structure.

Having analyzed the panel data of 47 firms listed in Nairobi Stock Exchange during 1999 to 2003, Coolman and Biekpe (2006) revealed that firms with larger board of directors enjoy more debts for financing and firms in which CEO plays the role of chairman or vice chairman enjoy less debt for financing.

Bahadur and Ranjana (2006) considered the relationship between some characteristics of board of directors or capital structure in firms listed in Nepal Stock Exchange during 2002 to 2005 and came to this conclusion that there is a negatively significant relationship between percentage of outside directors and debt level.

Hussainey and AlJifri (2006) analyzed the data for 71 Emirate firms and examined the relationship between corporate governance mechanisms and capital structure. He finally found a negatively significant relationship between percentage of institutional investors' ownership and debt ratio. The results of their study also indicated that there is no significant relationship between size of board of directors and types of auditing, and capital structure.

Abor and Biekpe (2008) considered the effect of corporate governance mechanisms on the capital structure of small and medium-sized entities in Ghana using regression model. They used various variables, namelysize of board of directors, combination of the board, skills of board of directors and CEO duality. The results of their study show thatsmall and middle-sized entities expect less debt and larger board of directors. Additionally, they concluded that those small and middle-sized entities whose external directors are more than internal directors make use of more debt policy.

Jiraporn et al (2008) pointed to a strongly negative relationship between appropriate corporate governance and lever. The findings of their study revealed that firms with weak corporate governance are dramatically being financed through debt.

Using data from 58 firms listed in Karachi Stock Exchange during 2002 to 2005, Hassan and Boot (2009) found that there is a negatively significant relationship between size of board of directors and directors' ownership, and debt ratio. On the other hand, they found that use of debt increases as percentage of institutional investors' ownership increases, too. However, they observed no significant relationship between CEO duality and outsidedirectors to debt ratio.

Heng et al (2012) examined the relationship between characteristics of board of directors and capital structure in Kualalampour Stock Exchange during 2005 to 2008 and eventually, concluded that there is a negatively significant relationship between size of board of directors and debt ratio while no significant relationship was found between CEO duality and debt ratio.

Namazi and Shirzadeh (2004) considered the relationship between capital structure and profitability of the firms listed in Tehran Stock Exchange. The results of their study revealed that there is a weak relationship between capital structure and profitability, and this relationship is believed to be different in various industries.

Rajabi (2007) conducted a research titled "examining the effect of corporate governance on firm's capital expense" and examined the effect of characteristics of corporate governance on the firm's capital expense. Characteristics of corporate governance such as quality of financial information, capital structure and structure of board of directors are considered as independent variables and firm's capital expense is used as dependent

variable. The results of testing and analyzing research hypotheses showed that there is a significant relationship between characteristics of corporate governance and amount of firm's capital expense.

Totakhaneh (2008) investigated the relationship between firm's performance and some characteristics of the board of directors including CEO duality and percentage of outside directors during 2002 to 2006. To evaluate the performance, various criteria like return on assets, return on owners' equity and earnings per share are used. The results indicated that there is no significant relationship between percentage of outside directors and CEO duality, and firm's performance.

Research hypotheses
According to the research questions, theoretical framework and literature, the research hypotheses are as follow:
1- There is a significant relationship between CEO duality and short-term debt to total assets ratio of the firms.
2- There is a significant relationship between outside directors and short-term debt to total assets ratio of the firms.
3- There is a significant relationship between institutional investors 'ownership and short-term debt to total assets ratio of the firms.
4- There is a significant relationship between CEO duality and long-term debt to total assets ratio of the firms.
5- There is a significant relationship between outside directors and long-term debt to total assets ratio of the firms.
6- There is a significant relationship between institutional investors 'ownership and long-term debt to total assets ratio of the firms.
7- There is a significant relationship between CEO duality and total debt to total assets ratio of the firms.
8- There is a significant relationship between outside directors and total debt to total assets ratio of the firms.
9- There is a significant relationship between institutional investors 'ownership and total debt to total assets ratio of the firms.

RESEARCH METHODOLOGY

As a descriptive-correlational research, this study enjoys post-event method and a multivariate regression model to test the research hypotheses. The research population consists of all the firms listed in Tehran Stock Exchange. To do the research, a sample is selected based on the following criteria:
1- They are listed in Tehran Stock Exchange before 2005.
2- Their fiscal year is due on 19th of March.
3- They have not changed their activity and fiscal year during 2004 to 2010.
4- They are not investment and financial intermediation firms.
5- Their required data are available.

According to the above-mentioned criteria, 92 firms listed in TSE during 2005 to 2010 are selected. The required data are collected through audited financial statements of the selected firms and Rah Avardeh Novin software. Finally, Eviews 6 software is employed to analyze the collected data.

To test the research hypotheses, multivariate regression models are used. These models can be defined as follow:

Model for testing the first three hypotheses:

$SDA_{i,t} = \alpha + \beta_1 DUAL_{i,t} + \beta_2 OUT_{i,t} + \beta_3 INST_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 ROA_{i,t} + \beta_6 GWT_{i,t} + \varepsilon_{i,t}$

Model for testing hypotheses 4 to 6:

$LDA_{i,t} = \alpha + \beta_1 DUAL_{i,t} + \beta_2 OUT_{i,t} + \beta_3 INST_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 ROA_{i,t} + \beta_6 GWT_{i,t} + \varepsilon_{i,t}$

Model for testing hypotheses 7 to 9:

$TDA_{i,t} = \alpha + \beta_1 DUAL_{i,t} + \beta_2 OUT_{i,t} + \beta_3 INST_{i,t} + \beta_4 SIZE_{i,t} + \beta_5 ROA_{i,t} + \beta_6 GWT_{i,t} + \varepsilon_{i,t}$

The definition of the variables used in the above model is presented in Table 1

Table 1Definitions of the research variables

Symbol	Name	Definition
SDA	Debt ratio	Short-term debt to total assets ratio
LDA	Debt ratio	Long-term debt to total assets ratio
TDA	Debt ratio	Total debt ratio to the total assets
DUAL	CEO duality	Virtual variable is supposed to equal zero if CEO plays role of chairman and vice-chairman, otherwise one
OUT	Outside directors' ratio	The number of outside members of the board to the whole board of directors
INST	Institutional investors' ownership	The amount of firm's share kept by investment institutions
SIZE	Firm's size	Natural logarithm of the firm's net sale
ROA	Profitability ratio	Net income divided by total assets
GWT	Annual growth rate of firm's sale	GWT

To estimate the research models, panel data technique which combines cross-sectional and time series data is employed since it may increase number of observations, degree of freedom and reduce variance anisotropy and linearity between variables. Regarding panel data modeling approach, one has to determine which of the assumptions of equality of intercepts or inequality of intercepts should be applied. To do so, F-statistic is employed. F-statistic is used to test the null hypothesis, i.e. equality of intercept. If the computed F-statistic is larger than Table's f, the null hypothesis is rejected and variety of intercepts for various levels is accepted.

The results of F-statistic are presented in Table 2. It indicates that the null hypothesis (equality of intercept) is rejected in all models and different levels, and thus, inequality of intercept is accepted at 99% level of significance.

Table 2 results of F-statistic for research models

results of F-statistic for research models				
	Effects Test	**Statistic**	**d.f.**	**Prob.**
Model (1)	Cross-section F	30.909093	91,453	0.0000
Model (2)	Cross-section F	23.485936	91,453	0.0000
Model (3)	Cross-section F	27.431771	91,453	0.0000

Having determined the inequality of intercept for different levels, Hausman model is used to estimate the model. Hausman test examines H_0 against H_1. The results of Hausman test are presented in Table 3. The results of X^2 statistic in Hausman test reveal that H_0, stating that random effect model can be used instead of fixed effect model is rejected in all models. Regarding the findings of Hausman test, therefore, models seem to be estimated based on fixed effect method.

Table 3 The results of Hausman test for research models

The results of Hausman test for research models				
	Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Model (1)	Cross-section random	35.497466	6	0.0000
Model (2)	Cross-section random	15.2807	6	0.0182
Model (3)	Cross-section random	48.629893	6	0.0000

RESEARCH FINDINGS

- **Descriptive statistic of data**

To consider the general characteristics of the variables and to estimate and analyze them, it is necessary to introduce descriptive statistic of variables. Table 4 presents descriptive statistic of the variables including some central and dispersion indices for 92 firms within 6 years during 2005 to 2010.

Table 4 Descriptive statistic for research variables

	SDA	LDA	TDA	DUAL	OUT	INST	SIZE	ROA	GWTH
Mean	0.5531	0.0867	0.6398	0.8732	0.5779	0.4469	5.6262	0.1688	0.2035
Median	0.5649	0.0518	0.6497	1.000	0.600	0.36	5.5529	0.1428	0.1614
Maximum	0.9787	0.574	1.1175	1.000	1.000	0.987	7.9223	0.6039	9.4685
Minimum	0.1061	0.0004	0.1569	0.000	0.000	0.000	4.5097	0.0002	-1.000
Std. Dev.	0.1759	0.094	0.1565	0.3331	0.2204	0.337	0.584	0.1095	0.5135
Skewness	-0.1636	2.256	-0.344	-2.243	-0.7651	0.1839	1.0052	1.043	11.549
Kurtosis	2.5126	8.6368	3.1717	6.0309	3.4745	1.4295	4.8199	3.9172	198.2605
Observations	552	552	552	552	552	552	552	552	552
Cross sections	92	92	92	92	92	92	92	92	92

The results of descriptive analysis of data indicate that the mean of short-term debt to total assets ratio (SDA) equals %55.31 and the mean of long-term debt to total asset ratio (LDA) equals %8.67. Comparing these two means, one can conclude that a major part of total debt of Iranian firms is due to the short-term debts. Considering the mean of DUAL, one can conclude that chairman of the board and vice-chairman of the board are separated from CEO in %87 of Iranian firms. Also, the average of outside members of board of directors to the total members of board of directors ratio is %58, suggesting three members of board of directors are on average outside directors.

Results of testing hypotheses
- **Results of testing hypotheses 1to3**

Regarding three dependent variables and consequently, three models used for testing nine research hypotheses, results of testing the first three hypotheses based on dependent variable are presented in a statistical table.

Since the same model is employed to test hypotheses 1, 2 & 3, Table 5 presents the results of testing these hypotheses. It is noteworthy that dependent variable in these three hypotheses is short-term debt to total asset ratio (SDA):

Table 5 the results of estimating the first model

$SDA_{i,t} = \alpha + \beta_1\,DUAL_{i,t} + \beta_2\,OUT_{i,t} + \beta_3\,INST_{i,t} + \beta_4\,SIZE_{i,t} + \beta_5\,ROA_{i,t} + \beta_6\,GWT_{i,t} + \varepsilon_{i,t}$				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	1.1234	0.1000	11.2328	0.0000
DUAL	-0.0480	0.0174	-2.7672	0.0059
OUT	-0.0096	0.0179	-0.5381	0.5908
INST	-0.0772	0.0360	-2.1427	0.0327
SIZE	-0.0828	0.0167	-4.9480	0.0000
ROA	-0.1450	0.0467	-3.1031	0.0020
GROWTH	0.0100	0.0057	1.7406	0.0824
Weighted Statistics				
R-squared	0.940262	Mean dependent var		0.984659
Adjusted R-squared	0.92747	S.D. dependent var		1.171165
S.E. of regression	0.101283	Sum squared resid		4.647006
F-statistic	73.5064	Durbin-Watson stat		1.769705
Prob (F-statistic)	0.0000			

Comparing the amount of F-statistic (73.5064) in the above table with f shown in the table suggest that the fitted regression model is significant at 95% level of confidence. Regarding the determination coefficient of the fitted model, one can claim that about 94.02% of the changes in the dependent variable (short-term debt to total asset ratio (SDA)) is explained through independent variable.

The amount of Durbin-Watson statistic is 1.7697 in this model and it implies that this statistic is in the absence of autocorrelation area and this model does not encounter the problem of autocorrelation among residual sentences.

The first hypothesis of the study states "there is a significant relationship between CEO duality and short-term debt to total assets ratio". The amount of estimated coefficient and t-test of DUAl in the above table suggests a negatively significant relationship between CEO duality and short-term debt to total assets ratio at 0.05 level of significance, according to which the first hypothesis is accepted. The results of this hypothesis are along with those of Abor (2007) and Biekpe (2008). They concluded that tendency to use debt in making financial decisions decreases in firms where chairman's responsibilities or vice-chairman's responsibilities are separated from those of CEO.

The second hypothesis says "there is a significant relationship between outside members of board of directors' ratio and short-term debt to total assets ratio". According to the above table, the coefficient for OUT is negative while it is not statistically significant and eventually, the second hypothesis is rejected. The results of testing this hypothesis are inconsistent with those of Van et al (2002) and Bahadur and Rijal (2006) which found that there is a negatively significant relationship between outside members of board of directors' ratio and short-term debt to total assets ratio.

The third hypothesis suggests "There is a significant relationship between institutional investors' ownership and short-term debt to total assets ratio of the firms". According to Table 5, one can conclude that there is a negatively significant relationship between major variable of the research (institutional investors' ownership) and short-term debt to total assets ratio and the third sub-hypothesis is confirmed at 0.05 level of significance. . The findings of testing this hypothesis are compatible with those of Short et al (2002) and Hussainey and AlJifri (2006). Considering the important role of institutional shareholders' ownership in reducing agency problems, they suggest that institutional shareholders' ownership increases as using debt decreases, too. Examining the values of estimated coefficients of the research control variables namely firm size, profitability and sale growth points to the significance of estimated coefficients at 0.05 level. Therefore, there is a negatively significant relationship between firm size and rate of return on assets, and research dependent variable while a positively significant relationship was found between sale growth and research dependent variable.

- **Result of testing hypotheses 4 to 6**

Since the same model is employed to test the hypotheses 4, 5 & 6, Table 6 presents the results of testing these hypotheses. It is noteworthy that dependent variable in these three hypotheses is long-term debt to total asset ratio (LDA):

Comparing the amount of F-statistic in the above table with f shown in the table, one can suggest that the fitted regression model is significant at 95% level of confidence. Regarding the determination coefficient of the fitted model, one can claim that about 85.21% of the changes in the dependent variable (long-term debt to total asset ratio (LDA)) is explained through independent variable.

The amount of Durbin-Watson statistic is 1.89657 in this model and it implies that this statistic is in the absence of autocorrelation area and this model does not encounter the problem of autocorrelation among residual sentences.

The fourth hypothesis of the study states "there is a significant relationship between CEO duality and long-term debt to total assets ratio". The estimated coefficient of the main research independent variable suggests that there is no significant relationship between CEO duality and long-term debt to total assets ratio at 0.05 level, according to which the fourth hypothesis is rejected. The results of this hypothesis are along with those of Hassan and Bout (2009) and Hang et al (2012).

Table 6 The results of estimating the second model

LDAi,t= α + β1 DUALi,t + β2 OUT i,t +β3 INSTi,t+ β4 SIZEi,t + β5 ROAi,t + β6GWTi,t +εi,t				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	0.2654	0.0371	7.1552	0.0000
DUAL	-0.0112	0.0079	-1.4121	0.0798
OUT	-0.0015	0.0077	-0.1889	0.8502
INST	-0.0108	0.0183	-0.5873	0.5573
SIZE	-0.0307	0.0061	-5.0570	0.0000
ROA	-0.1260	0.0171	-7.3609	0.0000
GROWTH	0.0061	0.0025	2.4414	0.0150
Weighted Statistics				
R-squared	0.852186	Mean dependent var		0.120828
Adjusted R-squared	0.820535	S.D. dependent var		0.088126
S.E. of regression	0.04698	Sum squared resid		0.999827
F-statistic	26.92436	Durbin-Watson stat		1.89657
Prob (F-statistic)	0.0000			

The fifth hypothesis says "there is a significant relationship between outside members of board of directors' ratio and long-term debt to total assets ratio". According to the estimated coefficients of OUT and t-test presented in Table 6, one can come to this conclusion that there is no significant relationship between outside members of board of directors' ratio and long-term debt to total assets ratio at 0.05 level of significance and thus, the fifth hypothesis is rejected. The results of testing this hypothesis are inconsistent with those of Wen et al (2002), Bahadur and Rijal (2006) and Abor (2007).

The sixth hypothesis suggests "There is a significant relationship between institutional investors' ownership and long-term debt to total assets ratio of the firms". According to Table 6, one can conclude that there is no significant relationship between major variable of the research (institutionalinvestors' ownership) and long-term debt to total assets ratio and thus, the third sub-hypothesis is rejectedat0.05 level of significance.

The results of testing sixth hypothesis indicate that there is a significant relationship between institutional investors' ownership and long-term debt to total assets ratio. Our findings suggest that institutional investors do not affect capital structure decisions of the sample firms. This hypothesis can be rejected due to the low amount of long-term debt in financing firms, risk aversion spirit of directors in financing firms through debt and long-term credits and high rates of long-term bank facilities.However, the amount of t-test for research control variables suggests that there is a significant relationship between research dependent variable and those control variables. Also, a negatively significant relationship was found between firm size and rate of return on assets, and long-term debt to total assets ratio while a positively significant relationship was proved between sale growth and long-term debt to total assets ratio.

- **The results of testing hypotheses 7 to 9**

Since the same model is employed to test the hypotheses 7, 8 & 9, Table 7 presents the results of testing these hypotheses. It is noteworthy that dependent variable in these three hypotheses is total debt to total asset ratio (TDA):

Table 7The results of estimating the third model

TDAi,t= α + β1 DUALi,t + β2 OUT i,t +β3 INSTi,t+ β4 SIZEi,t + β5 ROAi,t + β6GWTi,t +εi,t				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	1.3826	0.0908	15.2191	0.0000
DUAL	-0.0119	0.0053	-2.2492	0.0246
OUT	-0.0258	0.0170	-1.5165	0.1301
INST	-0.0490	0.0241	-2.0357	0.0393
SIZE	-0.1139	0.0156	-7.3107	0.0000
ROA	-0.3434	0.0450	-7.6286	0.0000
GROWTH	0.0147	0.0065	2.2653	0.0240
Weighted Statistics				
R-squared	0.921662	Mean dependent var		1.096985
Adjusted R-squared	0.904888	S.D. dependent var		1.003268
S.E. of regression	0.090295	Sum squared resid		3.693363
F-statistic	54.94489	Durbin-Watson stat		1.829066
Prob(F-statistic)	0.0000			

Considering the calculated F-statistic, the total significance of fitted regression modelis confirmed at 95% level of confidence. Regarding the determination coefficient of the fitted model, one can conclude that the estimated variables of model can explain dependent variable with 92 percent of its capacity.

The seventh hypothesis of the research states "there is a significant relationship between CEO duality and total debt to total assets ratio". The estimated coefficient of independent variable (DUAL) is negative and significant at 0.05 level approving a negatively significant relationship between CEO duality and total debt to total assets ratio. Therefore, the seventh hypothesis is accepted. The results of this hypothesis are along with those of Abor (2007) and Biekpe (2008).

The eighth hypothesis suggests "There is a significant relationship between outside members of board of directors and total debt to total assets ratio of the firms". According to Table 7 and t-statistic of OUT, one can conclude that there is a significant relationship between outside directors' ratio and research dependent variable. Thus, the eighth hypothesis is rejected at 0.05 level of significance. This hypothesis is rejected due to the lack of supervisory role, weak participation and lack of sufficient independence of outside directors.

The ninth hypothesis says "there is a significant relationship between institutional investors' ownership and total debt to total assets ratio". According to the coefficients and t-statistic of INST (independent variable) presented in Table 7, one can come to this conclusion that there is a negatively significant relationship between this variable and total debt to total assets ratio at 0.05 level of significance and the ninth hypothesis is accepted at 95% confidence level. The results of testing this hypothesis are consistent with those of Short et al (2002) and Hussainey and AlJifri (2006).

The probability values and the calculated t-statistic values of the research control variables presented in Table 7 suggests a significant relationship between research dependent variable and those variables. Moreover, a negatively significant relationship was found between firm size and rate of return on assets and total debt to total assets ratio (TDA) while sale growth has a positively significant relationship with TDA.

Conclusion

Capital structure decisions is one of the most essential subjects attracted the attention of directors. According to the modern theories of capital structure, various factors may affect these decisions. One of these factors is corporate governance. Therefore, this study aims to investigate the relationship between some corporate governance mechanisms and capital structure of the firms. Nine hypotheses are formulated, among which five hypotheses are rejected and four ones are confirmed. The results of test indicated that there is a significant relationship between CEO duality and institutional investors' ownership ratio and short-term debt to total assets ratio. Additionally, a significant relationship was found between CEO duality and institutional investors' ownership ratio and total debt to total assets ratio. However, it is indicated that there is no significant relationship between CEO duality and institutional investors' ownership ratio and long-term debt to total assets ratio. It is noteworthy that no relationship was found between percentage of outside directors and capital structure criteria.

Research suggestions
Considering the research findings, the following suggestions are presented:
1. Regarding the significant relationship between corporate governance mechanisms of firm and capital structure, this study suggests directors pay attention to the importance of corporate governance mechanisms in making financing decisions about firms.
2. Considering lack of significant relationship between outside members of boards of directors and capital structure and due to the importance of role of outside directors in corporate governance, we suggest Stock Exchange emphasize more highlighted participation of outside directors in formulating corporate governance regulations.

Suggestions for further study
1- This study suggests that future research consider the effect of corporate governance mechanisms including ownership structure, independent accountants, internal controls, etc. on capital structure.
2- Some control variables such as firm size, profitability and sale growth are considered. Additionally, some variables including industry, interest rate, etc. can be controlled in future studies.
3- Conducting the same research covering a 10- to- 15-year period.

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