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Examining the Relationship between Corporate Governance and the Corporate Performance Valuation

Forogh Khorshidvand^{*}^a, Ahmad Sarlak^b

^aDepartment of Accounting, Faculty of Humanities, Islamic Azad University, Delijan, Iran ^bDepartment of Economical science, Faculty of Management, Islamic Azad University, Arak, Iran.

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Abstract

The aim of this study was to investigate the relationship between corporate governance characteristics and valuation of the firm's performance in Iran. After designing performance evaluation indexes, information of transactions made during the five-year study from 2011 to 2015 from the Stock Exchange were collected and the sample consists of 129 companies was selected by systematic elimination that was a total of 645 year-firm. In this study we used the linear regression and correlation for testing the research hypotheses, and Eviews software for analysing the data and testing hypotheses. What can be said in summary and conclusion of research hypotheses test is that, there are a significant and positive relationship between the intensity of supervision, the stock in the hands of the board, executive's changes and board size with the company's performance; in addition, we found a significant and negative relation between firm size and financial leverage with the company's performance. The other results showed no significant and positive relationship between the number of board meetings and the firm's performance; the results in this study corresponded to the documentation mentioned in the theoretical framework and financial literature.

1 Introduction

One of the issues raised in the last few decades in the financial markets is corporate governance that many researchers and experts in different fields such as accounting, business, economics, law, etc. have examined it from different aspects. In fact, corporate governance has established over the last century with the aim of increasing efficiency and effectiveness of savings allocation process to high-yielded investments. Corporate governance is the set of firm's internal and external controlling mechanisms that determines how and by whom firm is managed. [10] Nowadays there is no doubt in importance of corporate governance for firm's achievement, since this issue due to recent events and the financial crisis have found more and more importance. One of the most challenging issues for corporate executives is creation of value for shareholders by improving the corporate performance. However, according to agency theory, executives may think to optimize the interests of shareholders.

E-mail address: foroghkhorshidvand2016201600@gmail.com

So for many, there is a strong belief that good corporate governance practices lead to increase in performance firm and reflects control and balances on the behaviour of managers in lack of optimizing shareholder value. Researches in this area have shown some evidences of the existence of such a relationship in developed countries and emerging markets. Most countries by improving corporate governance, have adopted the best practices in order to get the expected impacts on corporate performance and maximizing shareholder wealth. However, despite the commitment in the implementation of good governance practices among international changes, the evidences have shown that there are exaggerated beliefs about corporate governance practices and there are different and widespread evidence about the impact of corporate governance on corporate performance [15].

Generally, regarding to mentioned issues, first this paper will address the effect of corporate governance mechanisms on corporate performance with particular focus on the features of the board, and then the how strictly monitor effect on performance. So our question in this paper will be:

Is there a significant relationship between the features of the corporate governance and corporate performance valuation?

2 Literature and Review

A myriad of literature has explored the impact of corporate governance and performance across the globe. Over the past decades, these studies provide inconclusive evidence on the relationship between corporate governance and performance across the countries and particularly for Malaysia. Several indicators might signal the mixed findings, some of which are the various governance structure, context and methodological pprr cccsss. Tii s aarrr 's rr gumttt is grdddddd on different estimation method which could produce different results. For the particular case of Malaysia, the extant literature has adopted various approaches and produced a mixed conclusions and most of them have some indications of ineffectiveness of the corporate governance, for example, [1], [15]. Therefore, this paper attempts to provide evidence using another estimation approach with aim of providing reconciliation for the conflicting results. Various governance measures have been used by prior literature in a link with corporate performance indicators. In this study, we highlight some of the corporate governance variables and the focus will be given to the committee intensity of monitoring, board meetings, directorships of the board members, ownership of the directors and board size, with firm size and leverage being as control variables. Firstly, intense monitoring of directors (INTENSE) is measured by the number of committees each director setting on. It is argued that whenever the director is setting on more than two committees, it is considered as intense monitoring. Prior literature suggests that emphasizing more on monitoring function through more involvemttt in oorrd' oommittee will hhift tee focus of directors to monitor action rather than advising function [8]. These authors argued that monitoring performance comes at the expense of advising performance as both roles will compete for time and focus. Since board role has two functions, monitoring and advising, the more focus on monitoring may lead to more time devoted to and hence the advising function will be sacrificed. Setting on more committees would able directors to have a better knowledge regarding operational issues and this requires attention on these issues and hence deprives thmmfrmmfssss igg nn mrr e ttrtt ggic issuss "advising role..

Second, directors' iiii ty wwrr hhip (DOHHI)) rr oorrd member equity ownership is measured by percentage of the ownership of directors out of total equity. Prior studies argued that with board ownership, the oversight of board of directors on management would increase and their monitoring activi-

ties on managers are more likely to be more diligent [7]. [15] find that firm performance is positively related to stock ownership of board members.

Third, board meetings (BMEET) which measured by the average number of meeting of board members is another contributing factor that has been discussed in literature and is associated with firm performance and valuation [3]. opine that board activity through their meeting is an important factor influencing the performance. Both studies provide support that past poor performance is related inversely with the board meetings. [6] find that board activity has positive impact on firm valuation. In Malaysian context, While Sanni and Ahmed Haji [14] find no association between board meeting and performance [15], [1] finds a negative association with performance in a period of 2009. Despite the conflicting results, we expect the more meetings, the more involvement and discussion on various issues related to performance and other operations.

Fourth, multiple directorship (DSHIP) is another important element that may have its contribution to the performance of firms According to Pombo and Gutiérrez [13], the multiple director-ships occur when the director or the member of the board set on the board of more than one corporation and consequently generating inter lock among the companies [13]. [9] argue that serving on multiple boards can be explained by two different perspectives. The first perspective is the reputation hypothesis whereby the director develops expertise and hence becomes a signal or indicator of the ability of the director with outstanding and greater diversity of experience or extensive experience and knowledge. They further opine that this would lead to positive effect confirm behaviour due to wide expertise gained from serving in various firms and industries. On the other hand, the other perspective is the busyness hypothesis in which serving on more than one board could be an indicator of inability of directors to monitor the company appropriately. According to them, the ability of directors holding more than one seat to serve on different board committees will be reduced and the company willingness to assign different committees to those directors to serve on will be diminished, as their monitoring would be affected accordingly.

We control for firm size (total assets) and leverage. [12] argued that the characteristics of the companies can affect both financial performance and corporate governance structure and practices. It is expected that larger firms may perform better taking the advantages of economy of scales [11] Furthermore, larger firms would be able to adapt good practices stemming from the huge resources at hands. We use logarithm of total assets to proxy for the company size. Thus we propose the following hypothesis.

Similarly, leverage would be another important factor to affect the performance as the more debts, the high monitoring needed by the fund providers on the company so as to encourage them to adopt good practices of governance. In line with [15] [1] we propose the following hypothesis.

3 The Proposed Methodology

According to the theoretical foundations and to achieve the objectives of the study, the following hypotheses are presented:

First hypothesis: there is a positive correlation between the intensity of supervision and corporate performance.

Second hypothesis: there is a significant and positive correlation between the stock in the hands of

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the board and the corporate performance.

Third hypothesis: there is a positive relationship between the number of board meetings and corporate performance.

Fourth hypothesis: there is a negative correlation between manager changes and corporate performance.

Fifth hypothesis: there is a significant and positive relationship between board size and corporate performance.

Sixth hypothesis: there is a significant and positive relationship between firm size and corporate performance.

Seventh hypothesis: there is a significant and negative relationship between financial leverage and corporate performance.

This study has been done using ex post facto approach. The aim of applied research is development of practical knowledge in a particular field. Also this research, in terms of methodology and the nature is descriptive-correlation research. Information and data are collected by library and refer to the financial statements and explanatory notes and with Rahavard Novin and Tadbir Pardaz software's.

3.1 The population and sample selection

Our population is all companies listed on Tehran Stock Exchange from 2011 to 2015. The sample selection process is presented in Table 1:

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Number	Sampling steps
538	The number of companies listed on Tehran Stock Exchange at the end of 2015
73	The number of companies that exit of exchange in this period of time
57	The number of companies that inter into the exchange in this period of time
42	The number of companies that change their financial year in this period of time
62	The number of companies that their financial information for this period of study was not available.
123	The number of companies that has more than trading 3 months interval in this peri- od of time
52	The number of companies that their fiscal year does not end on 29/12
129	The number of sample firms

Table 1:	Sampling	steps
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In Table 1, 129 companies were selected to test the statistical hypothesis.

3.2 Models and Variables

To investigate the hypothesis, model (1) is presented that in the following will be discussed:

 $CAP_q = \alpha + \beta_{1q}INTENSE + \beta_{2q}BDSHPs + \beta_{3q}DOWNSHIP$

(1)

$$+\beta_{4q}BM + \beta_{5q}Bsize + \beta_{6q}FSIZE + \beta_{7q}LEV + \epsilon$$

Where:

 CAP_q = The value of capitalization in market (measuring index of the performance valuation)

INTENSE: measuring Index of the intensity of supervision

DOWNSHIP: is the percentage of stocks in the hands of the board from total stocks

BM: the average number of board meetings during the year

DSHIP: changes of managers

BSIZE: board size

F size: firm size

Lev: financial leverage

We represent a method for measuring the study variables in the following:

3.3 Dependent Variable

Corporate performance: It's index is market capitalization value that use Tobin's Q ratio to measure it that is presented in the model (2):

Tobin's Q = (MVCS + BVPS + BVLTD + BVINV + BVCL - BVCA)/BVTA(2)

Where:

MVCS: the market value of the firm common stock

BVPS: book value of preferred stocks

BVLTD: book value of long-term financial liabilities

BVINV: book value of inventory

BVCL: book value of current liabilities

BVCA: Book value of current assets

BVTA: book value of total assets [10]

3.4 Independent Variable

The corporate governance features include:

1) The ratio of intensity of supervision which is equivalent to the percentage of managers who have participated in the meetings of the various committees of the board to the total number of committee

members.

- 2) percent of the stocks in the hands of the board from total stocks
- 3) The logarithm of the number of board meetings during the year
- 4) Manager changes
- 5) The term time of CEO
- 6) The size of the board
- 7) The number of directors on the board
- 8) The size of the company, which is the logarithm of total assets.

9) Financial leverage that is equal to total debt (long-term and short-term) to the total value of the stock market value.

	Financial leverage	Firm size	Board size	The average number of meetings during a year	the percent- age stocks in the hands of the board from total stocks	Manager changes	measuring index of the intensi- ty of su- pervision	The value of invest- ments in the market
average	1.531752	14.86482	1.620171	2.739659	0.405070	2.666667	0.882248	1.258961
Median	0.850000	14.18000	1.610000	2.670000	0.440000	2.000000	0.800000	0.980000
The most	26.86000	19.11000	1.950000	3.640000	0.860000	10.00000	1.000000	7.270000
The lowest	0.030000	10.35000	1.610000	1.390000	0.000000	1.000000	0.600000	0.120000
Standard deviation	2.078937	2.066761	0.046393	0.551017	0.201742	1.954980	0.106313	0.914101
Skewness	5.473846	0.622210	4.840348	0.198578	-0.341978	1.097355	-0.050869	2.578954
Elongation	51.30402	2.270992	27.40865	2.248404	2.404260	3.381753	1.832553	12.48760
Jarck-Bera	0.625550	0.552450	0.185455	0.165550	0.225455	0.133550	0.365550	0.312550
probability	0.355445	0.458546	0.724555	0.845550	0.785545	0.755876	0.466556	0.698544
summation	987.9800	9587.810	1045.010	1767.080	261.2700	1720.000	569.0500	812.0300
Standard deviation	2783.353	2750.846	1.386081	195.5313	26.21072	2461.333	7.278840	538.1144
observations	645	645	645	645	645	645	645	645
sections	129	129	129	129	129	129	129	129

Table 2: Descriptive statistics of variables

4 Results 4.1 Descriptive Statistics

Results of descriptive statistics of variables are provided in Table 2. In Table 2, the average represents a good indicator of balance and centre of distribution gravity and of the data centrality that for a variable value of market capitalization is 1.258961. The median is another central characteristic that identical average and median represents being normal of this variable that for the variable of market investment value is 0.980000.

Standard deviation is one of the most important dispersion indicators that for the variable value of investment in the market is 0.914101. Coefficient of skewness for variable market capitalization value is positive and near to zero and shows that the normal distribution is skewed to the right and in this study, elongation is positive for all variables. In this study we used Jark Bera test for normality of the dependent variable.

4.2 Similarity Test of Variables

Before the estimation of pattern, we need to examine the similarity of variables that unit root test results for variables in level and first order differences are listed in Table 3:

Method	The test statistic	Probability	Sections	Number of observations				
The null hypothesis: there is a single root (common unit root process)								
Levin, Lin and Chow	-26.6612	0000.0	129	516				
The null hypothesis: there is a single root (single unit root process)								
Iem-sons and Shin (W-test)	-5.97187	0000.0	129	516				
ADF- Fisher (K2- test)	343.321	0003.0	129	516				
PP-Fisher	411.822	0000.0	129	516				

 Table 3: Unit root test of the investment value in market

In Table 3, the null hypothesis that said there is a unit root is rejected in considering of the common unit root process and using Levin, Lin and Chaw, as well as Lem, sons and Shin and ADF Fisher and the method of PP Fisher with 129 section and 645 observations all placed at the level of 5%. Unit root test results on all variables reflect the absence of a single root.

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4.3 F Limer and Haussmann Test

In this study we used F-statistic to determine whether presence or lack of separate interception for each of the companies that it's results are presented in Table 4:

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Table 4: F Limer test of research hypotheses

Panel Data 0.0000	(128,509)	3.344650	F-Statics
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As Table 4 shows the significance level of the test on all models of research is less than 0.05, for the estimation of pattern will be used of panel data. According to the results, panel data model is accepted for hypothesis model. Due to the fact that the F-Limer test is used of unaccepted panel data of Hausman test, its results is presented in Table 5:

Table 5: Hausman test of research hypotheses

result	Significant level	Freedom degree	k-squre statics
Fixed effects	0.00000	7	10.769260

As Table 5 shows, according to calculations for all hypotheses using fixed effects is more suitable.

4.4 Analyses for each hypothesis

The results of the research hypotheses are provided in Table 6.

Variable	Coefficient	Standard de- viation	t-statics	Probability
y-intercept	-0.047915	0.807900	-0.059308	0.9527
Measuring index of intensity of supervision	0.795797	0.222400	3.578218	0.0004
Manager changes	0.058856	0.009329	6.308648	0.0000
Percentage of stake in the hands of the board from total stock	0.167029	0.012131	13.76841	0.0000
The average number of board meetings during the year	0.096822	0.053793	1.799916	0.0725
The size of board	0.150812	0.047658	3.164435	0.0016
The firm size	-0.136716	0.016775	-8.149946	0.0000
Financial leverage	-0.101173	0.008154	-12.40848	0.0000
Deterministic coefficient		0.86	Watson - Durbin	2.33
Modified deterministic coefficient		0.853	Level of F- probability	0.0000

 Table 6: The estimation of hypothesis model coefficients

Table 6, the probability of t-statics ratio for variable of measuring index the intensity of supervision, manager changes, the percentage shares of the total shares in the hands of the board, board size, firm size and financial leverage is less than 5%; then mentioned relationship is statistically significant and the relationship between firm size and financial leverage with investment value in market is negative. But because the t-statistics probability of y-intercept and variable of average num-

ber of board meetings during the year is more than 5%, then this relation is not significant statically.

Modified deterministic coefficient shows the explanatory power of the independent variables that can explain 85.3% of dependent variable changes. F-statistics probability indicates that the model is statistically significant. From results of Durbin-Watson statistic can be confirmed the lack of correlation in tii m null wwwwwrt ttt t ttt tt rrr ioo of tim' '''' 'reiii re tr r vvihh hhbs statistic.

Thus, as shown in Table 6 we can by 95% trustful say that the fourth and sixth research hypothesis is confirmed and rest of hypothesis are refuted.

5 Conclusions and Future Directions

This study sought to find the attributes of corporate governance and performance valuation of the company that after studies we found a positive correlation between the intensity of supervision, the stock in the hands of the board, replacing executives and board size by corporate performance valuation; In addition, the size of the company and financial leverage have a significant negative relationship with performance valuation; On the other hand, results showed no significant positive relationship between the number of board meetings and performance valuation, then the results obtained in this study is correspondence with the documentation mentioned in the theoretical framework and financial literature.

Chi et al. [7] ttatdd taat maaagrr's wwrr iii p in tee iiii ty rr ttokk wwrr hhip ff aaard mmmrr s increases supervisory board in management and controlling the activities of managers is likely lead to work hard and improve their performance that confirmed by our findings. But about Adams et al [2] that reported the activity of the board through their meeting was a factor affecting performance and ssst oorr eerformccce is invrreely ssecciated with meetiggs ff tee oorr, we did''t fidd ayy rll vvttt result. Jiraporn et al. [9] argued that manager reputation by expertise and extensive experience as well as knowledge has a positive impact on the corporate performance; and also employment of the board in several firms could cause an inability to manage the firm control. The composition of board members plays a vital role in corporate governance mechanisms. When the number of independent managers on the board is increased, the likelihood of false and falsified reports is reduced; in terms of agenyt trrr y tee prssccce ff ott siee maaagrrs iii i iii eettttt th firm'' oorrd add tiii r rggll atory functions as independent individuals helps to reduce the number of interests between shareholders and managers. Board size is measured by the number of board members on the board.

Alexander & Matts Rosenberg [4] found that rather the firms with poor corporate governance system, companies that properly implement corporate governance have greater stock returns, corporate value and higher ratio of cash flow to assets. CEO in a company has the role of executive and chairman of the board monitors the implementation of this role; non-separation of these two sides and the lack of conflict of interest between the Chairman and CEO resulted in the reduction of regulatory function for shareholders that in some ways is consistent with the findings of our study.

Regarding the results presented based on the findings of each hypothesis, suggestions will be presented as follows; based on the results of the first hypothesis, it is suggested that with legal requirements and mandatory disclosure of financial information about the severity of companies and organizations supervision, could effort as effective mechanisms for the development of relations between business units and stakeholders and thus increases the corporate performance.

According to the results of the second hypothesis, users of financial statements must be careful in analysis to the stock in the hands of the board as well as the stock exchange should be careful about this issue in the pricing of the company's stock. The findings could be useful for both exchange policy makers and accounting as well as financial managers. Financial managers can by changing the amount of stock in the hands of the board, raise the corporate performance.

According to rejection of third hypothesis, the number of board meetings cannot decrease the information asymmetry at the firm level and lead to resource allocation properly (the right choice rather inappropriate), and the efficiency of company performance (management effort in order to protect the interests of shareholders rather than hypothyroidism or moral hazard). Thus the number of board cannot alone be an effectiveness criterion to predict the performance of the company.

According to the results of the fourth hypothesis, there is a significant and positive relationship between the changes of managers and corporate performance. The results of this study are informative for economic managers, financial analysts, researchers and students, as in all assessments, decisionmaking and financial analyses, taking into account the changes managers can adopt decisions based on the facts available and have greater assurance of the favourable results of the final decision. According to the fifth hypothesis, this study in addition to predicts an increase knowledge can identify the importance and role of the government's status in forecasting the performance for investors, creditors, analysts, managers and other capital market participants. Therefore, it is suggested that participants in the capital market, while respecting the importance of the board size, consider our findings about long-term fluctuations predictions investment value in the market. Considering the results of the sixth hypothesis, the size of the company has the information interests and makes change in performance; therefore, organizations must identify the factors that affect performance, including the size of the company and through attention to these factors promote their organization's performance. To all capital market participants, decision makers, financial analysts and potential and de facto investors on the Stock Exchange recommended in the analysis of investment projects in financial assets and securities for the assessment, the risks, the timing and their investments with respect to different levels and heterogeneous degree of risk taking, consider the firm size factor; since considering this important factor leads to the selection of optimal investment portfolio with the minimum risk and maximum efficiency. According to the results of the seventh hypothesis, this study can be useful for exchange policymakers and accounting in order to extend the financial leverage disclosure requirements. It is suggested that educational institutions and students use these results in comparative studies and other finance research and investors, investment managers and funders use these results to better predict the corporate performance.

The researchers are suggested in the future studies review the following topics:

The effect of the quality of financial reporting on the corporate performance listed in the Tehran Stock Exchange.

The effect of financial reporting quality on performance valuation.

The effect of earning quality on performance valuation.

The effect of financial and nonfinancial variables on performance valuation using other methods such as Profit, neural network and multi-agent analysis.

References

[1] Abdul Rahman, R., Haniffa, R. M., *The effect of role duality on corporate performance in Malaysia*, Corporate ownership and control, 2005, **2**(2), P. 40–47.

[2] Adams, R. B., Mehran, H., Corporate performance, Board structure and its determinants in the banking industry. In EFA 2005 Moscow meetings. 2005.

[3] Ahmed Haji, A., *The relationship between corporate governance attributes and firm performance before and after the revised code*: Some Malaysian evidence. International Journal of Commerce and Management, 2014, **24**(2), P.134–151.

[4] Alexander V.N., *Matts Rosenberg*, Corporate Governance Mechanisms and Firm Performance: Evidence from Finland, Working Paper, Swedish School of Economics and Business Administration, Helsinki, Finland, 2003, **47**(3), P.4-22.

[5] Bhagat, S., Bolton, B., *Director ownership, governance and performance*, Journal of Financial and Quantitative Analysis, 2013, **48**(1), P.105–135.

[6] Brick, I. E., Chidambaran, N. K., Board meetings, *Committee structure and firm value*. Journal of corporate finance, 2010, **16**(4), P.533–553.

[7] Chi, W., Huang, H., Xie, H., A quantile regression analysis on corporate governance and the cost of bank *loans:* a research note, Review of Accounting and Finance, 2015, **14**(1), P.2–19.

[8] Faleye, O., Hoitash, R., Hoitash, U., *The costs of intense board monitoring*, Journal of Financial Economics, 2011,**101**(1), P. 160–181.

[9] Jiraporn, P., Singh, M., Lee, C. I., *Ineffective corporate governance: Director busyness and board committee memberships*, Journal of Banking & Finance, 2009, **33**(5), P. 819–828.

[10] Kim, K., Mauldin, E., Patro, S., *Outside directors and board advising and monitoring performance*, Journal of Accounting and Economics, 2014, **57**(2), P.110–131.

[11] Klapper, L. F., Love, I., *Corporate governance, investor protection and performance in emerging markets,* Journal of corporate Finance,2004, **10**(5), P.703–728.

[12] Munisi, G., Randoy, T., Corporate governance and company performance across Sub-Saharan African countries, Journal of Economics and Business, 2003,70(15), P. 92–110.

[13] Pombo, C. Gutiérrez, L. H., *Outside directors, board interlocks and firm performance: Empirical evidence from Colombian business groups,* Journal of Economics and Business,2011, **63**(4), P. 251–277.

[14] Sanni, M., Ahmed Haji, A., *The impact of corporate governance attributes on firm performance following the revised code:* some Malaysian evidence, paper presented at the 2nd Accounting Research and Education Conference (AREC 2012). Kuala Lumpur.2012.

[15] Shawtari, F. A., Salem M. A,Hussain H. I., Alaeddin O., Corporate governance characteristics and valuation: Inferences from quantile regression, Journal of Economics, Finance and Administrative Science, 2016, 2(1), P. 112-193.