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THE RELATIONSHIP BETWEEN CERTAIN MECHANISMS OF CORPORATE GOVERNANCE AND STOCK RETURNS IN THE COMPANIES LISTED IN TEHRAN STOCK EXCHANGE DURING 2008-2012

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Abstract: *This article analyzes the relationship between certain mechanisms of corporate governance and stock returns in the companies listed in Tehran Stock Exchange during 2008-2012. Corporate ownership structure, board structure and quality of the financial information are considered as the mechanisms of corporate governance. Correlation analysis cannot explain the relationship between corporate governance structure, board structure and the quality of financial information and stock returns. The results of hypothesis testing with multiple regression coefficients show that there is no significant relationship among institutional investors and the concentration of ownership and the quality of financial information with emphasis on discretionary accruals (in the Jones Model) and outside board members with stock returns.*

Keywords*: corporate governance, ownership structure, board structure, stock returns, the quality of financial information.*

INTRODUCTION

International competition is essential to optimize the use of flow of capital around the world. Inadequacy of the principles of good corporate governance in the public and private sectors can be one of the important factors underlying the recent financial crises and corporate scandals that took over the world. Proper corporate governance practices bring many benefits to countries and companies. High quality corporate governance tools reduce the cost of capital, increase liquidity and potential, facilitate the ability to overcome the crisis and prevent the exclusion of companies with good management of the capital markets. For countries, good corporate governance practices prevent the outflow of domestic funds, increase in foreign investments, increase the competitive strength of the economy and capital markets, overcome the crisis and achieve higher levels of development and advancement (the Imani Barandagh, 2009). Governance is

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effective on different financial aspects and company's stock returns. Nowadays, managers and investors' attention on stock returns have led them to investigate its effective factors. Corporate governance is responsibilities and practices used by the board of directors and the administrators to determine the strategic direction that provides achievement of its objectives, risk control and responsible consumption (Hasas Yeganeh & Kheirolahi, 2008). Corporations had become the places for accumulation of the interests of stakeholders in the company including shareholders, managers, creditors, employees and other stakeholders. Then, structured finance markets have emerged in most countries. Natural and legal persons, organizations, credit institutions and governments are suppliers of capital in the financial markets. Encouraging public participation and legal protection of capital suppliers are essential for the efficiency of the markets. This leads to economic prosperity and spreading the culture of shareholders in most countries (Jensen and Meckling, 1976).

THEORETICAL BACKGROUND

Public sector companies are less efficient rather than private sector companies due to poor management incentives and coordination of interests. In such cases, the pattern of investment can make a difference in performance (Kumar, 2004). In general,corporate governance is set of relationships between shareholders, directors and auditors of the company that ensure the establishment of control system in order to respect the rights of minority shareholders, the correct implementation of the decisions of the Assembly and the prevention of probable abuses. This principle is based on a system of accountability and social responsibility and includes a set of responsibilities that have to be done by the organs of the company to lead to accountability and transparency (Eghdam &Abbasi, 2008). From the perspective of agency theory, the presence of independent outside directors on the board of companies and their regulatory functions as independent individuals reduces conflicts of interests between shareholders and company executives in board meetings (Bird & Hickman, 1992). Corporate governance systems follow a common goal that is to control over the management in the assigned tasks and to protect the interests of stakeholders (Hasas Yeganeh, 2006). Ownership structure and legal framework are the main determining factors in the system of corporate governance. Corporate governance mechanism by which the problems of stakeholders' representatives such as shareholders, creditors, management, employees, consumers and the public are formulated to make a appropriate decision. Transparency, accountability and adequate disclosure are three main elements of corporate governance. Rate of return on investment is a concept has different connotations for different investors. According to the general definition of corporate governance, it is like tool that help to control and direct companies.

The place of company's board of directors of the as the leading role in the care and control of executive directors for maintaining the ownership interests of shareholders is very important (Hasas Yeganeh, 2006). Transparency of information is one of the significant aspects of corporate governance. Transparent information can be considered as one of the tools to fulfill accountability of managers. The more is transparency of information in a society, the higher will be the possibility of making informed decisions and accountability about how to obtain and consume resources. According to Fama and Jensen (1983), they play the central role in corporate governance. For Lim (2009), the independence of board members is an important feature to assess the effectiveness of the Board. Managerial ownership, ownership concentration, major and institutional shareholders are studied to investigate the ownership structure of companies. Major and institutional shareholders have powerful positions in the governance of a company; they can monitor the company management effectively. The concentration of management, which results from absolute control of major shareholders on corporate governance, can reduce many of the agency problems (Mahmood Zadeh, 2010). Preparation and presentation of useful financial information for making decisions is a prerequisite to ensure investors and creditors for productive economic activities (Ball et al, 2000). Financial statement is one of the most important tools to show the economic performance of business units. Measurement of the results and the allocation of the value to the assets and liabilities in a particular time are the duty of accounting (Eghdam & Abbasi, 2008). Return of investment is important for investors because they do all their efforts to get return.

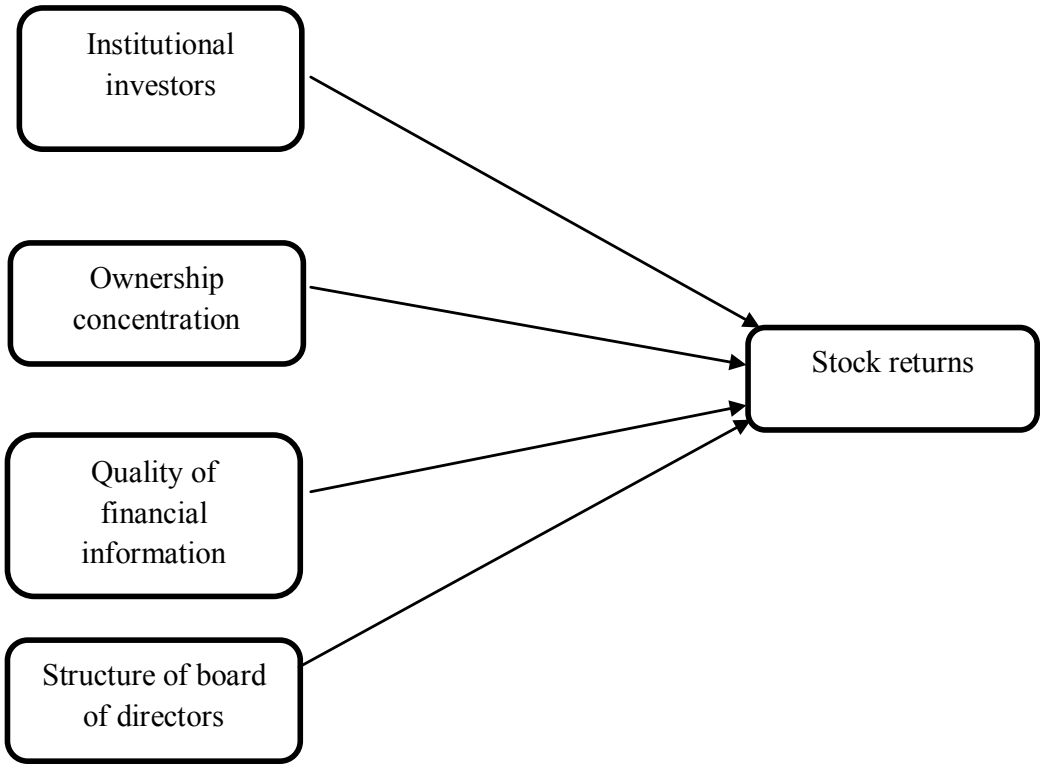
RESEARCH BACKGROUND

Studying the effect of ownership structure on corporate performance, Kim et al (2006) concluded that a significant and positive relationship exists between ownership structure and firm performance. Chan et al (2006) examined the relationship between the quality of earnings and stock returns. Tasia and Gu (2007) investigated the relationship between institutional ownership and corporate performance from 2003 to 1999. Kapopoulos and Lazaretou (2007) checked the impact of ownership structure on the performance of 175 companies in Greek. In a research titled "The empirical evidence of corporate governance in Europe," Bauer et al (2009) studied the impact of corporate governance mechanisms on stock returns of 300 European companies in 2006 and 2007. Imani Barandagh and Jabar Zadeh Langar Loei (2009) explained the relationship between corporate governance mechanisms and stock returns in listed companies in Tehran Stock Exchange. NikoMaram and Mohammad Zadeh Salteh (2010) presented a pattern for explaining corporate governance and the quality of earnings. Mahmood Zadeh Baghbani (2010) conducted a research to investigate the relationship between

corporate governance and conservatism.

CONCEPTUAL MODEL AND RESEARCH HYPOTHESES

Figure 1: Conceptual model of variables



With regard to the conceptual model, the research hypotheses are as follows:

1. There is a significant relationship between institutional investors and stock return of listed companies in the Tehran Stock Exchange.
2. There is a significant relationship between ownership concentration and stock return of listed companies in the Tehran Stock Exchange.
3. There is a significant relationship between quality of financial information and stock return of listed companies in the Tehran Stock Exchange.
4. There is a significant relationship between structure of board of directors and stock return of listed companies in the Tehran Stock Exchange.

STATISTICAL POPULATION AND SAMPLE

Statistical population of this research includes listed companies in Tehran Stock Exchange during 2008-2012. Based on systematic elimination method, implementation of limitations, and available criteria, 60 companies of pharmaceutical industry, cement and gypsum industry, automobile industry, household appliances industry have been selected.

RESEARCH FINDINGS

Descriptive Statistics

In descriptive methods, the researcher tries to clarify the subject through tables, and descriptive statistics such as central and dispersion parameters.

Table 1
Descriptive Statistics

Statistical indexes *Variable*	*Number of observations*	*Minimum*	*Maximum*	*Mean*	*Standard deviation*
Stock returns	300	-0.90	0.92	0.1069	0.27984
Percent owned by institutional investors	300	2.01	98.00	53.6174	20.69975
Concentration of ownership	300	0.000	0.96	0.3754	0.21280
Discretionary accruals	300	00.00	4.03	0.1537	0.34374
Outside board members	300	16.60	100.00	60.0775	17.49420
Company size	300	10.82	17.21	13.7784	1.16890
Company leverage	300	0.02	35.72	1.8335	3.75460
The ratio of market value to book value	300	-1.34	7.72	1.8819	1.13565

With 300 observations, central and dispersion parameters (minimum, maximum, mean, and standard deviation) of all variables for 5 years have been calculated.

Coefficients significant difference test determines both significance of coefficients and the direction of impacts on dependent variables. At the significance level, the rate of institutional shareholders is 0.924, the rate of ownership concentration is 0.749, the rate of financial information quality is 0.840, and the rate of board structure is 0.814. Since the level of estimated error is 5 percent, all variables are

significant and the hypotheses are confirmed. According to beta coefficients, the impact are at the same direction. In terms of the most influences, variable are arranged in this order: the ratio of market value to book value, company size, and company leverage.

Fisher F test is used to identify the significance of model regression. The statistics should not be less than the calculated amount with F-test; in this regard, it confirms the significance of regression model. This statistics should be less than the considered error (5 percent).

Table 2
Results of regression significance test

Model	*Sum of squares*	*Degrees of freedom*	*Arithmetic mean*	*F statistics*	*Significance level*
Regression	2.501	7	0.357	4.989	0.00
Remainder	20.913	292	0.072	–	–
Total	23.415	299	–	_	_

According to Table 2, significance levels of all four variables are 0.00, which is less than 5 percent; thus, the significance of regression model is confirmed.

Multicolinearity is a state showing that an independent variable is a linear function of other independent variables. If multicolinearity in a regression equation is high, there is a high correlation among independent variables. For two outputs of 'Tolerance' and 'Variance Inflation (VIF)', there will be problems in using regression when tolerance is little and close to zero. Factor of variance inflation is the reverse of tolerance.

Table 3
Results of Multicolinearity test

Variables	*Tolerance*	*Variance inflation*
Ownership of institutional investors	0.099	1.081
Concentration of ownership	0.100	1.040
Discretionary accruals	0.993	1.007
Outside board members	0.934	1.070
Company size	0.898	1.114

Company leverage	0.900	1.111
The ratio of market value to book value	0.851	1.175

Since variables are continuous and the research method id correlational, Pearson's correlation coefficient, which has the least standard error less in comparison with other methods, is used. The following formula is used to calculate it (Hafez Nia, 2006).

$$r_p = \frac{\sum xy}{NS_xS_y}$$

Where:

$\mathbf{r_p}$: the correlation between variables x and y

N: the number of samples

$\mathbf{S_x}$: standard deviation of x

$\mathbf{S_y}$**:** standard deviation of y

$\sum^{xy}$: Sum of multiplying the difference of the variables out of their mean

The significance test of correlation between two variables is performed at the significance level of 95 percent (5 percent error) (Comparison of obtained t with t stated in the table based on n-2 degrees of freedom and 5 percent error). r_p is between -1 and +1. In correlation coefficient, if r_p is +1, multicolinearity is positive and complete; if r_p is -1, multicolinearity is negative and complete.

Pearson correlation test showed that variables of company size and the ratio of market value to book value have significant positive relationships to stock returns at the significance level of 5 percent.

Table 4
Partial correlation by controlling control variables

Control variables	*Type*	*Institutional investors*	*Ownership concentration*	*Discretionary accruals*	*Outside board members*
1-Company size	Correlation	0.037	0.041	-0.014	0.013
2-Company leverage	The level of significance	0.529	0.484	0.815	0.827
3- The ratio of market value to book value	Degrees of freedom	295	295	295	295

In this section, three control variables of company size, company leverage and the ratio of market value to book value have been controlled. The values at the control status are less than the values at correlation at Pearson status. Independence of errors (the difference between actual and predicted values by regression analysis) of each other is one of the assumptions that have been considered in the analysis. If the assumption of error independence is rejected and errors are correlated, we cannot use regression. Durbin-Watson test is used in this regard.

Table 5
Results of Durbin-Watson test

Durbin-Watson	*Predicted error*	*Adjusted R*	R^2	*R*	*Model*
1.689	0.26762	0.085	0.107	0.327	1

Statistics of this test are stated in table 5 and it equal to 1.689. As it is located in the range of 1.5 to 2.5, errors are independent and regression model can be used to test the hypotheses.

TESTING RESEARCH HYPOTHESES

In statistical methods, data normality, especially dependent variable, is very important. Kolmogorov-Smirnov test is used to check the normality of data. This is a simple nonparametric to determine the assimilation of the statistical distribution of empirical data. If the significance level is less than 5 percent, H_0 is rejected and if it is greater than 5 percent, H_0 is confirmed.

H_0: Data distribution is normal.

H_1: Data distribution is not normal.

As, the result of K-S for significance is 0.182, (more than 5 percent), H_0 is confirmed and data distribution is normal.

After checking the confidence in regression assumptions to investigating the relationship between certain corporate governance mechanisms and stock return, multivariate regression model is used that is as following:

$$R_{it} = \alpha_0 + \alpha_1 Attrib_{it} + \alpha_2 Size_{it} + \alpha_3 Lev_{it} + \alpha_4 MB_{it} + \varepsilon_{it}$$

Testing First Hypothesis

Statistical hypothesis in this regard is:

H_0: There is no relationship between institutional investors and stock return of companies.

H_1: There is a relationship between institutional investors and stock return of companies.

Table 6
The results of multivariate regression model (first hypothesis)

Variable	*Coefficient*		*t-statistics*	*Significance level*
	Standardized	*Non-standardized*		
Constant value		-0.450	-2.265	0.024
Institutional shareholders	0.036	0.000	0.631	0.529
Firm size	0.119	0.029	2.084	0.038
Firm leverage	0.031	0.002	0.532	0.595
The ratio of market value to book value	0.288	0.071	4.85	0.000
	F=8.736		Adjusted R^2= 0.094	R=0.326
	P value=0.000		Durbin-Watson= 1.686	R^2=0.106

Since the values of t-statistics for α_1 is 0.529 and greater than 5 percent, it is possible to say with 95 percent confidence level that there is no significant relationship between institutional investors and stock return of companies and H_0 is confirmed. Therefore, first hypothesis is rejected. In addition, control variables of firm size and the ratio of market value to book value have positive relationships to stock return. According to the values of R^2 (9 percent), which describes the value of dependent variables by independent variable, institutional shareholders explains 9 percent of changes of dependent variable.

Testing Second Hypothesis

Statistical hypothesis in this regard is:

H_0: There is no relationship between ownership concentration and stock return of companies.

H_1: There is a relationship between ownership concentration and stock return of companies.

Table 7
The results of multivariate regression model (second hypothesis)

Variable	*Coefficient*		*t-statistics*	*Significance level*
	Standardized	*Non-standardized*		
Constant value	---	-0.445	-2.303	0.022
Ownership concentration	0.040	0.053	0.701	0.484
Firm size	0.120	0.029	2.097	0.037
Firm leverage	0.030	0.002	0.526	0.599
The ratio of market value to book value	0.287	0.071	4.827	0.000
	F=8.789		Adjusted R^2= 0.094	R=0.326
	P value=0.000		Durbin-Watson= 1.684	R^2=0.106

Since the values of t-statistics for α_1 is 0.484 and greater than 5 percent, it is possible to say with 95 percent confidence level that there is no significant relationship between ownership concentration and stock return of companies and H_0 is confirmed. Therefore, second hypothesis is rejected. In addition, control variables of firm size and the ratio of market value to book value have positive relationships to stock return.

Testing Third Hypothesis

Statistical hypothesis in this regard is:

H_0: There is no relationship between quality of financial information and stock return of companies.

H_1: There is a relationship between quality of financial information and stock return of companies.

Table 8
The results of multivariate regression model (third hypothesis)

Variable	*Coefficient*		*t-statistics*	*Significance level*
	Standardized	*Non-standardized*		
Constant value	---	-0.397	-2.168	0.031
Quality of financial information	-0.013	-0.011	-0.235	0.815
Firm size	0.111	0.0027	1.983	0.048
Firm leverage	0.029	0.002	0.509	0.611
The ratio of market value to book value	0.293	0.072	5.009	0.000
F=8.667			Adjusted R^2= 0.093	R=0.324
P value=0.000			Durbin-Watson= 1.689	R^2=0.105

Since the values of t-statistics for α_1 is 0.815 and greater than 5 percent, it is possible to say with 95 percent confidence level that there is no significant relationship between quality of financial information and stock return of companies and H_0 is confirmed. Therefore, second hypothesis is rejected. In addition, control variables of firm size and the ratio of market value to book value have positive relationships to stock return. According to the values of R^2 (9 percent), which describes the value of dependent variables by independent variable, quality of financial information explains 9 percent of changes of dependent variable.

Testing Fourth Hypothesis

Statistical hypothesis in this regard is:

H_0: There is no relationship between structure of board of directors and stock return of companies.

H_1: There is a relationship between structure of board of directors and stock return of companies.

Table 9
The results of multivariate regression model (fourth hypothesis)

Variable	*Coefficient*		*t-statistics*	*Significance level*
	Standardized	*Non-standardized*		
Constant value	–	-0.405	-2.204	0.028
Structure of board of directors	0.012	0.000	0.219	0.827
Firm size	0.109	0.026	1.919	0.56
Firm leverage	0.030	0.002	0.523	0.601
The ratio of market value to book value	0.292	0.072	4.974	0.000
F=8.665			Adjusted R^2= 0.093	R=0.324
P value=0.000			Durbin-Watson= 1.700	R^2=0.105

Since the values of t-statistics for α_1 is 0.827 and greater than 5 percent, it is possible to say with 95 percent confidence level that there is no significant relationship between structure of board of directors and stock return of companies and H_0 is confirmed. Therefore, second hypothesis is rejected. In addition, control variables of firm size and the ratio of market value to book value have positive relationships to stock return.

After testing the hypotheses, the results of multivariate regression models (that test the relationship between cumulative indicators of corporate governance and stock returns) are presented as the following model:

$$R_{it}=\alpha_0+\alpha_1 lns_{it}+\alpha_2 OWN_{it}+\alpha_3 DA_{it}+\alpha_4 BRD_{it}+\alpha_5 Size_{it}+\alpha_6 Lev_{it}+\alpha_7 MB_{it}+\varepsilon_{it}$$

As seen in Table 10, none of the variables of corporate governance has relationship with stock returns. Two control variables of firm size and the ratio of market value to book value have relationships with stock returns. According to the values of R^2 (8 percent), which describes the value of dependent variables by independent variable, all variables explain 8 percent of changes of dependent variable.

Table 10
The results of cumulative multivariate regression model (fourth hypothesis)

Variable	*Coefficient*		*t-statistics*	*Significance level*
	Standardized	*Non-standardized*		
Constant value	---	-0.441	-2.155	0.032
Institutional investors	-0.017	0.000	-0.096	0.924
Ownership concentration	0.056	0.074	0.320	0.749
Discretionary accruals	-0.011	-0.009	-0.202	0.840
Outside board members	0.013	0.000	0.236	0.814
Firm size	0.116	0.028	1.996	0.047
Firm leverage	0.031	0.002	0.537	0.592
The ratio of market value to book value	0.285	0.070	4.758	0.000
F=4.989			Adjusted R^2= 0.085	R=0.327
P value=0.000			Durbin-Watson= 1.689	R^2=0.107

CONCLUSION

This article analyzes the relationship between certain mechanisms of corporate governance and stock returns in the companies listed in Tehran Stock Exchange during 2008-2012. Corporate ownership structure, board structure and quality of the financial information are considered as the mechanisms of corporate governance. Nor relationship was found between corporate ownership structure, structure of board of directors, and quality of financial information to stuck returns of companies. The results show that corporate ownership structure and composition of board members as well as the quality of financial information are not effective factors in determining stock returns in Iran. In addition, it can indicate lack of reaction of investors and creditors to corporate governance measures. It may be due to lack of investors and creditors's knowledge about corporate governance

measures. Consequently, there is no positive relationship between mechanisms of corporate governance and stock returns.

References

1. Ball, R, Kothari, S.P., Robin, A. (2000). "The effect of international institutional factors on properties of accounting earnings". *Journal of Accounting and Economics* 29:1-51.
2. Byrd, J.W., Hickman, K.A. (1992), "Do outside directors monitor managers? Evidence from Tender offer Bids", *Journal of financial Economics*, 32(2): 195-222.
3. Kumar, J. (2004). "Does ownership structure influence firm value? Evidence from India", India Gandhi Institute of Development research, India.
4. Jensen, Michael C. and William H. Meckling (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics*, 3(4): 305-360.
5. Roslinda, L. (2009) "The Relationship Between corporate Governance and Accounting Conservatism", The university of new south wales.
6. Tsaia, H., Gu, Z. (2007). "The Relationship Between Institutional Ownership and Casino Firm Performance." *Hospitality Management*. Vol. 26, pp. 517-530.
7. Eghdam, Y., Abbasi, M. (2008). "Corporate governance and its role in the accounting profession." Regional Seminar on accounting and auditing changes and requirements in recent years, Islamic Azad University, Marand.
8. Imani Barandagh, M., Jabar Zadeh Langar Loei, S. (2009). "The relationship between corporate governance mechanisms (corporate strategy) and stock returns in the listed companies in the Tehran Stock Exchange." Proceedings of the National Conference of accounting. Page 254.
9. Hafez Nia, M. (2006). Introduction to Research in the Humanities, the twelfth edition. Tehran: Organization for Research and Development of Textbooks of Humanities at University (SAMT).
10. Hasas Yeganeh, Y., Moayeri, M. (2008). "Corporate governance, accounting and audit committees." *Accountant Journal*, 200: 57.
11. Hasas Yeganeh, Y. (2006). "Corporate governance in Iran", *Journal of Analytical auditor*, No. 32, Eighth issue, p. 32.
12. Mahmood Zadeh Baghbani, S (2010). "The relationship between the mechanisms of corporate governance and return on equity in the firms listed in the Tehran Stock Exchange." National Conference of transparency of accounting information in solving the current financial crisis, Islamic Azad University of Khomein.
13. Nikoo Maram, H. Mohammad Zadeh, H. (2010). "The relationship between Corporate Governance and Earnings Quality." *Journal of Management Accounting Research,* Islamic Azad University of Tehran, Science and Research Branch, pp. 59-80.