

## **An Investigation on Corporation Governance Mechanisms and the Quality of Financial Statements**

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(Received Feb. 2015 & Published online April. 2015 issue)

**Abstract:** This research aims to study the effect of corporation governance mechanisms on the quality of financial statements of companies listed on Tehran Stock Exchange. Two questions were raised and two hypotheses were developed to answer them. Hypotheses were tested by choosing 100 companies listed on Tehran Stock Exchange within five years from 2008 to 2012. This is a practical and descriptive correlational research study using regression and panel data to test hypotheses. Results revealed that there is a negative correlation between the capital owned by manager and the quality of financial statement and a positive correlation between independent directors in the board and the quality of financial statement.

**Keywords:** corporation governance; quality of financial statement; independent directors

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## 1. Introduction

Corporation governance was raised in early 21st century again as one of the most important subjects of business. Basic principles of corporation governance focus more on companies' guidelines and shareholders' equity. When newer approaches were offered, attentions turned to the equity of all beneficiaries and the society.

One important undertaking corporation governance can take on is to assure of the quality of financial reporting. In its report, Blue Ribbon (1999) asked its independent auditors to examine the acceptability of procedures used in financial reporting and negotiate with the auditing committee of the reporter companies on their quality.

In recent years, corporation governance has been one of the most important subjects of professional and academic research (e.g. Blue Ribbon report, 1999; Ramsay report, 2001; Sarbanes-Oxley Act, 2002; Cohen, 2004; Bechuck and Cohen, 2004; Hilb, 2005). A part of over-mentioned research relates to the collapse of major companies such as Enron Corporation, WorldCom and Parmalat by fraud in financial reporting (Loomis, 1999; Wo, 2002). And another part connects with overt distortion of companies' earnings by directors (Crockmen, 2002). Additionally, the academic studies have shown that there is a connection between poor corporation governance and the poor quality of financial reporting with earnings distortion, fraud in financial statements and poor internal control (Beasley et al., 1996; McMullen, 1996). Regarding results, to raise the effectiveness of auditing committee, improve the responsiveness of the board and companies directors to be assured of honest financial reporting, and develop research on this subject, more emphasis should be put on the improvement of the effect of corporation governance on financial reporting (Stock Exchange Commission. 2002). This research aims to study the corporation governance mechanisms and their effects on the quality of financial statements.

## 2. Literature Review

In recent years, corporation governance has been an effective approach in improving financial reporting. Recent scandals have marked the financial partnerships and the role of corporate governance

and especially outside auditors that are a guarantee for the validity of financial reporting. Various empirical research results disclose that a good corporate governance improve financial reporting. Undoubtedly, one important upheaval in eighteenth century was the emergence of joint-stock companies and the separation of ownership and management. Before that, trade and economic activities were in the context of individual ownerships and the separation of ownership and management was not a case. Shareholders tend to maximize companies' revenue and directors struggle to get the maximum reward. Here is the conflict of interest point. Corporation governance is a set of leading and controlling tools aiming to be responsive and place justice in the equity of beneficiaries by rules and regulations of cultures and policies. A major of part of capital stock is in the hands of directors, being able to use their right to vote for controlling (management stock). Directors have a sufficient power to secure their stands from what they do. This results in a reduction in the corporation volume and the reinforcement of asymmetry. The board of directors plays a vital role in the mechanism of corporation governance. The effectiveness of such mechanism relies on three major features: the board size, managing director duality, and proportion of independent directors.

Independent directors are those having no family relation with current powers of the company and do not hold none of the earnings they manage. These decisions are aligned with shareholders' interests. According to corporation governance press, independent directors are synonymous with the structure of powerful corporation governance. Most studies on the mechanisms of corporation governance emphasize on this that poor corporation governance connects with poor financial reporting, fraud in earnings and revenues, and poor and low level information transparency (Beasley et al., 2000, Carslo and Nill, 2000; Flu et al., 2001). Uncertainty of financial information released by companies is due to the weakness of corporation governance mechanisms and allows controlling shareholders to keep their interests and increase their wealth by a cost incurred to other shareholders.

In Malaysia, John et al (2007) concluded about the discretionary accruals of the audited companies that

major auditing institutes had more control and capacity than other auditing institutes.

Kamly at el (2008) concluded that companies audited by major auditing institutes had less accrual than other companies. This was because their brands were more reliable and credible.

In a research study in Brazil, Martinez (2010) studied this question that whether higher corporation governance and auditing comments by one out of four major auditing institutes related to the tendency to make more committed earnings management by accounting options or operational decisions. Evidence by a Brazilian company revealed that a list of new market, which was a part of São Paulo Stock Exchange and among other requirements required improved corporation governance, reduced auditing by a major auditing institute and earning management by accounting options and conditioned comments by auditors which were a scale of earning management(1).

Kapalos and lazary (2007) studied the effect of the ownership structure on companies' performance using the data of 175 Greek companies. Findings revealed that a more concentrated ownership structure positively and significantly correlated with productivity.

In a research study on the effect of corporation governance features on the performance of Chinese companies, Wang at el. (2009) used two approaches of corporation governance. They first studied the effect of each of corporation governance features and then all features on the performance of companies. Results showed that companies with better corporation governance had better and higher values. Also, a positive and significant correlation was observed between the ownership concentration of institutional investors and public ownership and market value.

Studying the effect of corporation governance on the quality of financial reporting, Mahd firooz (2009) concluded that public ownership had a positive effect on the quality of financial reporting and corporation governance.

In a research study titled uncommon return volatility and the information quality under the study of return volatility, Chen at el (2010) examined 28 management comments between 1978 and 2009. They concluded that such volatility had occurred as

a result of volatility in discretionary accruals and the correlation between earnings before management comments and the discretionary accruals reflecting the quality of information released by companies.

Rajcgopal and Vingchatlem (2011) tested the quality of financial reporting and return volatility within a 40-year period and concluded that poor quality financial reporting correlated with higher uncommon return volatility.

Mozly at el (2010) studied accrual qualities and the correlation between accrual qualities and the quality of disclosure. They showed that how these two variables could supplement each other to explain time series changes in portfolio return.

In a research study titled "uncommon return volatility and liquidity", Nayak (2012) sought to the effect of volatility and liquidity on the issue of companies' bonds. Results revealed that volatility and liquidity significantly affected the issue of companies' bonds.

Studying the corporation governance mechanisms and the quality of reported earnings of insurance companies, Inova (2013) showed that there was a negative and significance correlation between the board size, independent directors, and the size of auditing committee and earning management (quality). However, a positive correlation was observed between the independence of auditing committee and the independence of external auditing and discretionary accruals.

In case of corporation governance and the dynamism of capital structure, Ya-Kai Chang (2014) concluded that both companies with high and low financial leverage and with poor corporation governance mechanisms moved more slowly toward an optimal capital structure than those with better corporation governance.

About management ownership and discretionary accruals, Arifur and Mather concluded that there is a negative and significant correlation between management ownership and discretionary accruals(2).

Denis et al studied the effect of corporation governance on earning management. Results showed that better corporation governance less inclined to discretionally forecast earnings(3).

In a research study titled "an investigation on the correlation between institutional investors and the

volatility of the stock return of companies listed in the Tehran Stock Exchange”, Fakhari and Taheri (2010) sought to find some evidence about the role of institutional investors in the volatility of stock return.

Mehrani and Behbahnia (2010) conducted a research study titled “accruals and future stock return by emphasizing on the ownership of institutional shareholders and company size”. They concluded that the capacity of accruals for predicting return is independent of the percentage and the number of the ownership of institutional investors. It though negatively correlates with the company size. In companies with the majority of stocks owned by institutional owners, the presence of institutional shareholders creates a correct pricing mechanism in terms of the distinction between cash and accruals.

Ismaeilzede (2010) studied the effect of corporation governance on the quality of earning in Tehran Stock Exchange between 2004 and 2008. The studied corporation governance mechanisms include the ownership percentage of institutional shareholder, the number of major shareholder blocks, the percentage of outside directors (in the board), lack of managing director as a president or vice president, and the size of independent auditor. The research hypotheses were tested by panel analysis and using the data of 94 companies listed in Tehran Stock Exchange from 2004 to 2008 by combining time series and cross-sectional data. Research shows that there is a significant positive correlation between the ownership percentage of institutional shareholders, the number of major shareholder blocks, the percentage of outside directors (in the board), lack of managing director as a president or vice president, the size of independent auditor, and the quality of earnings.

In a research titled “an investigation over the relationship between interest and its components and return on stock emphasizing on the quality of interest in companies listed on Tehran Stock Exchange”, Janjani (2011) examined the correlation between interest and its components and return on stock emphasizing on the quality of interest in companies listed on Tehran Stock Exchange. To do this, a sample including 230 companies listed in Tehran Stock Exchange within a 7-years period between 2002 and 2008 was selected. Results

revealed that the interest components of both had informative content, but the cash component had more informative content than accrual component. According to findings, companies with higher quality earnings obtain positive return and those with lower quality earnings are incurred negative return. Companies with highest quality earnings could achieve 17% more earnings than companies with lowest quality earnings(4).

Setayesh et al (2011) found out that corporation governance mechanisms including ownership concentration, the percentage of outside members of the board and the independence of the board did not have a significant effect on the clerical leverage and the market leverage of studied companies.

According to Khodadai and Taker (2012), there is no significant correlation between ownership concentration and the public-ownership with companies’ performance and value.

Babakhani and Tahriri (2012) studied the market data on the fundamental factors of earning management. Their findings revealed that market knowledge consists of two fundamental factors including operating cash flow and royalty, having significant decreasing effect on the earning management.

Studying factors affecting the change of auditor according to corporation governance of companies listed on Tehran Stock Exchange, Amadinezhad (2013) concluded that changing a poor quality auditor help keeping interests obtained by unclear corporation governance.

Amiri (2014) conducted an empirical research study on the effect of corporate governance on voluntary disclosure of information of companies listed on Tehran Stock Exchange. He concluded that the mechanisms of corporate governance affected information disclosed by the company to shareholders and reduced the probability of complete disclosure of information. The improvement of disclosure reduces the information asymmetry(5).

Soleimani (2014) studied the effect of institutional shareholders and other corporation governance mechanisms on the relation between cash flows and holding cash and found a significant correlation between institutional shareholders and cash flows(6).

In his MA thesis, Vajihe (2014) reported the research results on the lack of correlation between corporation governance mechanisms and inefficiency of investment. According to findings, no significant correlation was observed between the mechanisms of ownership structure and the investment inefficiency. In this research, the effects of operational cash flow variables and the company size were considered as control variables(7).

Borhani (2014) studied the heads' views in Medical Sciences and Health Services University in Semnan, and the quality of presented financial reports. According to research questions, he found out that with the confidence level of 95%, the financial reports are predictable, approvable, honest, understandable, comparable, and relevant and can be examined(8).

### 3. Materials and Methods

#### Research Purposes

1. Identifying the effect of independent directors on the quality of financial statements
2. Identifying the effect of shares hold by directors on the quality of financial statements

#### Research Questions

1. Is there any correlation between the shares hold by directors and the quality of financial statements?
2. Is there any correlation between the independent directors of the board and the quality of financial statements?

#### Research Hypothesis

To respond above questions, the following hypotheses are developed. In this case, two hypotheses are considered as follows:

1. There is a significant negative correlation between shares held by directors and the quality of financial statements.
2. There is a significant negative correlation between the independent directors of the board and the quality of financial statements.

#### Research Method

This is a practical research study, as can be used by Stock Exchange, financial analysts, brokers, financial managers, universities, high education centers, researchers and auditing institutes. This is a descriptive analytic research study in terms of deduction and of expose-facto kind. Information is gathered by financial statements of companies listed on Tehran Stock Exchange and the information of Exchange Market. According the library method was used in order to gather the required information.

#### Sample Selection and Data

The statistical population includes companies listed on Tehran Stock Exchange. The statistical sample selected by systematic elimination. Among the statistical society, those were selected with the following conditions as the statistical sample:

1. No change in the financial period
2. The financial year ends in late March
3. The sample companies should not be of investment or dealer companies
4. Companies listed on Stock Exchange until 1 April, 2008 and the name of the company should not be eliminated from the listed companies

**Table 1.** Statistical Society and Sample

Total Number of Listed Companies		454
Limitations	Qualified Companies	remaining
Companies listed after 2008	118	336
Investment companies and financial and insurance brokers	43	293
Different financial year	86	207

Companies lack of required information	107	100
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**Hypothesis Test Method**

To test hypotheses, the following regression model is used:

$$DA_{it} = \alpha_0 + \alpha_1 MAN_{it} + \alpha_2 IND\_DIR_{it} + \alpha_3 SIZE_{it} + LEV_{it} + \varepsilon_{it}$$

In the above model:

The dependent variable is quality of financial Statements.

Companies face the problem of choosing the quality level of financial reporting. They choose the quality of their financial information, assess the level of information disclosure, expected interests obtained by the disclosure of high quality information, and make decision. Providing high quality financial information reduces the information asymmetry between management and investors and representative cost. Companies are though expected to select the highest quality financial information in the absence of any disclosure cost(9).

The quality of financial reporting is the directors' honesty in providing decision-makers with fair and true information (Rajkupal and Vinkjchalem, 2011). In other words, as long as directors act fairly and objectively in presenting the items of financial statements, we can confirm the quality of financial reporting (Brandet, 2003). To calculate the quality of financial statement, Kutari's discretionary accrual model (2005) is used:

$$\frac{TA}{Asset_{t-1}} = \alpha + \beta_1 \left( \frac{1}{Asset_{t-1}} \right) + \beta_2 \frac{\Delta Salses_t - \Delta Rec_t}{Asset_{t-1}} + \beta_3 \frac{PPE_t}{Asset_{t-1}} + \beta_4 (ROA + e_t)$$

TA: total accruals in year t

Asset<sub>t-1</sub>: total assets in the beginning of the period

ΔSalses<sub>t</sub>: changes in sale revenues comparing with the previous year

ΔRec<sub>t</sub>: changes in account receivables comparing with the previous year

PPE<sub>t</sub>: net properties of machinery and equipment in late financial year

ROA: return on asset

**Independent Variables**

Here, the corporation governance is the independent variable measured by the proportion of independent directors and stocks held by directors:

Independent Directors (IND): this is calculated by dividing the number of outside members by the total number of the board members (Namazi et al, 2009; Nasrollahi et al, 2011).

Stock held by directors (MAN): this is calculated by dividing the total number of stocks held by directors by the total number of issued stocks (Moradzadehfard et al., 2009, 2012).

**Control Variables**

Here, debt proportion and size are the controlling variables.

**Debt Ratio (LEV):** is a financial ratio that indicates the percentage of a company's assets that are provided via debt. It is the ratio of total debt (the sum of current liabilities and long-term liabilities) and total assets (the sum of current assets, fix assets, and other assets such as 'goodwill'). In other words, debt ratio shows the fix financial costs including fix loan interests (Abde Tabrizie, Hanifi, 2007: 24). The debt ratio is calculated as follows:

$$LEV = TD / TA$$

Where, LEV is the debt ratio, TD is the total debt and TA is the total assets.

**Size:** various indices have been used in different research studies to find the company size. Kruz and Maniks (2014) used sale logarithm, Abor (2008) employed asset logarithm, and Nakur et al. (2006) practiced market asset value log. Norush et al. (2009) used sale logarithm, Setayesh et al. (2008) employed the natural logarithm of total assets, and Namazi and Khajavi (2004) exercised market asset value log. In spite of Iran inflation conditions and irrelevance of asset items based on

historical values, we used the natural logarithm of sale to find the company size.

Regarding the type of data and analysis methods, combined data method is used. Statistical hypotheses were tested using multiple linear regression by Ordinary least squares (OLS). Data were statistically analyzed by Excel v. 2010 and E-views v. 7.

When using regression model by combined data, it should be determined that among combined data model, which of panel data model with fix effects and panel data model with random effects can explain the relation between independent and dependent variables. To see which model is appropriate for data, both combined data and panel data models were tested by Chow test (conditional F) as follows:

$H_0$ : Combined model: all y-intercepts are equal.

$H_1$ : Panel model: at least one y-intercept is different from others.

If null hypothesis is confirmed, the combined model is preferred and used for fitting the

research model. If the null hypothesis is rejected, the panel model will be preferred. It should be tested against the model of fix or random effects using Hausman test and adjustment of the following hypotheses:

$H_0$ : Panel model – random effects

$H_1$ : Panel model – fix effects

If the null hypothesis is confirmed, the panel data – random effects will be a good model to estimate the research model, otherwise the panel data – fix effects will be used for fitting the research model (Aflatuni and Nikbakht, 2010).

F statistic was used to examine the significance of the whole model and t statistic was employed to examine the significance of independent variables. Decisions on the acceptance and rejection of hypotheses are made at the confidence level of 95%.

#### 4. Results and discussion

Regarding the below table, the maximum mean relating to the company size and the minimum mean relate to stock held by directors.

**Table 2.** descriptive statistics of research variables

Variables	Number	Minimum	Maximum	Mean	Standard Deviation
Quality of financial statements	500	-0.065	0.210	0.042	0.040
Stocks held by directors	500	0.000	0.540	0.121	0.102
Independent directors ratio	500	0.000	1.000	0.491	0.283
Company size	500	10.815	18.454	13.700	1.311
Financial leverage	500	0.096	0.952	0.605	0.159

The standard deviation of data shows data dispersal. A small standard deviation indicates the small dispersal of data from mean and a large standard deviation indicate a large dispersal of data from mean. The accounting quality has the least and the company size has the most dispersal.

#### Normality of Variables Distribution

The normality of variables distribution was examined by Kolmogorov–Smirnov test. Results have been presented in table 3.

**Table 3.** Kolmogorov–Smirnov test results of the dependent variable

Description	Kolmogorov–Smirnov statistic	Sig
Quality of financial statements	1.975	0.421

As the significance level of Kolmogorov–Smirnov statistic for the dependent variable is greater than 0.05,  $H_0$  is confirmed based on the normality of

the dependent variable distribution at the confidence level of 95%. This shows that the dependent variable is normally distributed.

is used to study their correlation. Table 4 presents the Pearson's correlation test results.

### Testing Variables Correlation

If the variables are with ratio and continuous scale, Pearson's correlation coefficient

**Table 4.** Pearson's correlation test results of independent variables

Variables	Stocks Held by Directors	Independent Directors Ratio
Stocks Held by Directors	1	-0.043 (0.166)
Independent Directors Ratio	-0.043 (0.166)	1

Value in parentheses shows the level of significance.

As observed in the above table, the correlation coefficient of independent variables does not show their correlation. As a result, it can be said that there is no linearity between the independent variables.

To see if panel data is efficient for estimation, Chow test was used, and to find which method (fix or random effects) is more appropriate for estimation, Hausman test was employed. Results presented in the following table.

**Table 5.** Results of choosing model

Test Type	Statistic Value	Sig	Result
Chow test	3.85	0.001	Panel Method
Hausman Test	90.11	0.271	Efficiency of random effects

Regarding the Chow test results, as significance level is smaller than 0.05 (0.001), the heterogeneous of y-intercepts was not confirmed. As the significance level of this test is greater than 0.05 (0.271), random effects are confirmed and should be estimated by random effects.

To examine the significance of the whole model, as significance level (sig) of F statistic is smaller than 0.05 (0.000), the significance of models is confirmed by the confidence level of 95%.

**Table 6.** Hypotheses Testing Results

Dependent Variable: quality of financial statements Observations: 500			
Variables	Coefficient	T statistic Student	Sig
intercept	0.376	9.495	0.000
Stocks held by directors	-0.129	-3.660	0.000
Independent directors	0.034	2.673	0.008
Company size	0.004	1.441	0.150
Financial leverage	-0.485	-20.882	0.000
Adjusted R <sup>2</sup>		0.492	
F-statistic		119.772	
Sig (F-statistic)		0.000	
Durbin-Watson		1.802	

The determination coefficient shows that 49.2% of any change in the quality of financial

statements is explained by entered variables. Additionally, since the Durbin-Watson statistic is

between 1.5 and 2.5 (1.802), the independence of the remaining model is also confirmed.

The significance level (sig) of the t statistic, relating to the stock hold by directors, is smaller than 0.05 (0.000) with negative coefficient (-0.129), it can be said that there is a negative correlation between the capital owned by directors and the quality of financial statements. Thus, the second hypothesis is confirmed by the confidence level of 95%.

In case of the control variable, it can be said that regarding results, the company size does not have any correlation, but financial leverage has a reverse and significant correlation with the quality of financial statements.

## 5. Conclusion

### First Hypothesis Analysis

First hypothesis: there is significant negative correlation between stocks held by director and the quality of financial statements.

They hypothesis results are as follows:

- The applied model is significant.
- The determination coefficient is 0.492.
- The significance level (sig) of the t statistic, relating to the stock hold by directors, is smaller than 0.05 (0.000) with negative coefficient (-0.129), it can be said that there is a negative correlation between the capital owned by directors and the quality of financial statements. Thus, the first hypothesis is confirmed by the confidence level of 95%. This means that any growth in the capital owned by directors reduce the quality of financial statements.

The hypothesis results agree with what Eriforkhan (2014), Martinz (2010), Gall et al. (2003) and Warfield and Ell (1995) found.

### Second Hypothesis Analysis

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first hypothesis is confirmed by the confidence level of 95%.

The significance level (sig) of the t statistic, relating to independent directors, is smaller than 0.05 (0.000) with positive coefficient (0.034), it can be said that there is a positive correlation between independent directors and the quality of financial statements. Thus, the

Second hypothesis: there is significant negative correlation between independent directors and the quality of financial statements.

They hypothesis results are as follows:

- The applied model is significant.
- The determination coefficient is 0.492.
- The significance level (sig) of the t statistic, relating to independent directors, is smaller than 0.05 (0.008) with positive coefficient (0.034), it can be said that there is a positive correlation between independent directors and the quality of financial statements. Thus, the second hypothesis is confirmed by the confidence level of 95%.

The hypothesis results agree with what Eriforkhan (2014), Martinz (2010), Gall et al. (2003) and Warfield and Ell (1995) found.

## Suggestions for Future Research

1. Research based on other criteria of corporation governance such as ownership structure, board size, etc.
2. Research on the effect of corporation governance on companies' value and performance.

## Acknowledgement

This paper has been compiled from a thesis under the support of Islamic Azad University, Bushehr Branch.

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