

The impact of corporate governance on earnings quality

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Abstract: The purpose of this study was to evaluate the impact of corporate governance mechanisms on the quality of earnings in the company is listed in Tehran Stock Exchange. Therefore, the use of sampling in the time domain FA 2007 to 2011, the Tehran Stock Exchange, and has been selected according to theoretical principles of corporate governance and the quality of earnings, to explain the model and the choice of variables is discussed. The results of the regression model shows that, among the three mechanisms of corporate governance in terms of research (of outside board members, board independence and ownership concentration), only between board independence and earnings quality in terms of content, the concentration of ownership, there is a significant relationship; however, none of these mechanisms benefit in terms of reduced quality of earnings management, no significant relationship. These results mean that the corporate governance mechanisms in the regulatory mechanisms are not effective in reducing the problem of representation; however, shareholders are considered important mechanisms and by taking them to react dividends.

Key words: Corporate governance; Earnings quality; Content; Management; Profit

1. Introduction

In today's economic climate, the company's privatization efforts, and valuation of companies is very important; and to rely on and trust the numbers they report such income is a measure of performance, documentation necessary to evaluate the quality of earnings appear (Etemadi et al., 2009). And the fact the value of the company, not only the quantity of interest, but the quality should also be noted, this figure is very important to pay attention to quality. Calculate the net profit of a firm subject to the procedures and accounting estimates management goals are not coordinating with stakeholders (agency theory), so it is possible to manipulate earnings. Since this behavior intervention may have on the quality of information disclosed and its usefulness to influence investment decisions should be made good quality mechanisms to protect the interests of investors and managers to provide opportunistic behavior. One of the mechanisms to reduce the problem of representation, the system of corporate governance which can be expected to reduce earnings management opportunities and thereby increase the earnings quality of the information provided (Ahmad and Jagy, 2004; Gonzalez et al., 2014). However, the possibility arises that while these mechanisms operate effectively. Thus affecting the quality of earnings due to the impact of corporate governance, and efforts such as corporate governance principles

and the draft Regulations adopted this regulation (by the board of the Stock Exchange on 11/8/86) to identify the nature and importance of the rule of leading companies in the business of monitoring has been done (Aghaee et al., 2009); the question arises whether the mechanisms of corporate governance in Iran, to act effectively or not? Another issue that it can assess the importance and effectiveness of corporate governance mechanisms of the market, partly explains the attitude towards these mechanism shareholders. In this study, the relationship between the three mechanisms of corporate governance ratio of non-duty members of the board, board independence and ownership concentration with two quality criteria for profit, to examine the impact of these mechanisms on the market reaction and loss of earnings management in the Tehran Stock Exchange. This article is organized as follows: Section 2 provides an overview of the research, Section 3 extends assumptions, Section 4 reports the research, Section 5 presents the empirical results and finally Section 6 concludes the article.

2. An overview of the research conducted

Klein (2002) and Pysnl (2000), show that the monitoring attributable to corporate governance reduces the capacity of managers to manage earnings. New research results, F New (2006), in Canada, confirmed the positive correlation indicates the impact of corporate governance on market efficiency (measure of earnings quality) based on

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profit - yielding negative relationship between corporate governance and abnormal accruals (earnings quality index) on is the modified Jones model. Azma and Nogotr (2007), the effectiveness of mechanisms to improve corporate governance (composition of the Board and the appointment of committees of the Board, Jude Law) in Spain looked at the earnings limit. The results show that the composition of the Board in determining the earnings to the importance of effective procedures, the independent directors does not play a major role in limiting such practices. Composition and Appointment Committee, the role of independent directors in limiting affect earnings. Ali Shah and colleagues (2009), to study corporate governance (board structure, ownership structure and independence of the audit committee) and management benefits paid and found that the quality of corporate governance is positively associated with earnings management. Scholars such as Gonzalez et al (2014) in America; Kang et al. (2013) in Australia; also concluded that the impact of corporate governance on earnings management. Gao et al. (2014), the relationship between corporate governance and earnings quality around the world have concluded the relationship between corporate governance and earnings quality alternative and result in the formation of this relationship is very relevant. This relationship is particularly evident in developed countries and is supported by strong investment. These findings are consistent with the view that poor accounting information may be companies to adopt corporate governance mechanisms, especially in environments where they are effective, force. Similarly, in such an environment, companies with a better quality of accounting information may be need to invest in corporate governance mechanisms is not expensive. Esmaili and Mashayekh and researchers as well as in Iran (2006), to investigate the relationship between earnings quality and corporate governance characteristics (number and percentage of ownership of outside directors and board members) paid and concluded that these mechanisms have an important role in improving the quality of earnings. Yazdani (2006), a measure of the impact of corporate governance is to reduce earnings management. The results show that the presence of institutional investors to reduce the impact of earnings management. Hosseini (2007), the relationship between corporate governance and shareholder returns is to explore the relationship between these two variables is not in range. Kharrazi Rahbari (2005) examines the state of corporate governance in the countries compared. The results indicate that shareholder rights are not respected in Iran.

3. Spread assumptions

Recently, the issue of corporate governance has attracted much attention at the international level (step 2007). Organization for Economic Co-operation

and Development (OECD), the corporate governance system knows which companies are directed and controlled by the distribution of rights and responsibilities among the various sectors of the company and the functions and procedures of the company's decision makes clear (Ebrahim, 2004). Today, companies have come to the conclusion that the correct implementation of corporate governance can help them in competition. So one of the most effective ways increase economic growth and prosperity of the capital market is the correct implementation of corporate governance. And check the status of corporate governance in the country can identify the strengths and weaknesses of this approach has already led and the ways to implement it correctly and effectively. According to the above description, it is necessary to check the status of corporate governance in Iran yet the impact of these mechanisms on the increased confidence in the company's management and control bias are examined. To assess the impact of corporate governance mechanisms on the decisions of shareholders and the market reaction, the following hypotheses were proposed:

1. The proportion of outside board members and content there is a benefit.
2. The independence of the board and there is a significant relationship between the information content of interest
3. There is interest between ownership concentration and content.

To assess the impact of corporate governance mechanisms to control the management side, the following hypotheses were proposed:

- The proportion of outside board members and management 4 there is a benefit.
5. There is the independence of the board and management benefits.
 6. There is the concentration of ownership and earnings management.

4. Research project

4.1. Sample selection and data source

The list of companies listed in Tehran Stock Exchange for the period 2007 to 2011 and then extracted sample was adjusted with the following assumptions:

1. The selected companies in the industries of financial intermediation, holding and banks, they do not
2. The end of the financial year 29/12 each year.
3. During the period of study has not changed its financial year and its financial statements in the period to fully and consistently available.

The FA sampling of companies that are required to access the data we were chosen as examples.

4.2. Dependent variables

3. To test the first hypothesis, the model used (the profit-efficiency), the dependent variable is the return on equity Vaidnr, 1998; Das and L'Oreal, 1994; Wilde, 1992; Easton and Zmisky, 1989; Kormandy and Leibniz, 1987). To test the second hypothesis 3, the dependent variable is discretionary accruals.

- Return on equity, return on equity firm
- Discretionary accruals: To calculate the index of the modified Jones model is used.

According to studies, some researchers (Dchv et al., 1995), the most powerful model to describe and predict earnings management model provides (Dianati crowbars and colleagues, 2012).

In this model, it is first necessary to calculate the accrual of the cause, in this study; total accruals are calculated as follows:

$$TA_{it} = E_{it} - OCF_{it}$$

Where: TA_{it} accruals total; E_{it} Net Income before Extraordinary Items; OCF_{it} operating cash

Then, parameters, and α_1, α_2 and α_3 to determine the non-discretionary accruals, can be estimated by the formula:

$$\frac{TA_{it}}{A_{i,t-1}} = \alpha_1 \left(\frac{1}{A_{i,t-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it}}{A_{i,t-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{A_{i,t-1}} \right) + \varepsilon_{it}$$

Where TA_{it} : total accruals, ΔREV_{it} changes in income, PPE_{it} sales, property, machinery and equipment, gross, $A_{i,t-1}$ total assets

Then the method of least squares (OLS), according to the following formula involuntary accruals are determined:

$$NDA_{it} = \alpha_1 \left(\frac{1}{A_{i,t-1}} \right) + \alpha_2 \left[\frac{(\Delta REV_{it} - \Delta REC_{it})}{A_{i,t-1}} \right] + \alpha_3 \left(\frac{PPE_{it}}{A_{i,t-1}} \right)$$

Where NDA_{it} : Accruals involuntary; ΔREC_{it} Change in accounts receivable

Finally discretionary accruals (DA), is calculated as follows:

$$DA_{it} = \frac{TA_{it}}{A_{i,t-1}} - NDA_{it}$$

4.3. Independent variables

Three mechanisms of corporate governance ratio of outside board members, board independence and ownership concentration are independent variables.

- proportion of outside board members, the composition of the board members who are responsible for administrative duties divided by the

total number of board members

- Independence of the Board: Chairman of the Managing Director is independent if the number of 1's and 0 otherwise zero.

- Concentration of ownership: the index "Herfindahl - Hirschman" is used as follows:

$$HHI = \sum \left(\frac{P_i}{P} \right)^2$$

Where P_i : Number of Shareholders; P : total number of shares; HHI : Herfindahl-Hirschman Index this index is calculated for the 5 major shareholder of the company. It should be noted; the study of corporate governance mechanisms on the information content of earnings, profit-yielding independent variables in the model, the interaction of price and earnings per share in the corporate governance mechanism is desired.

4.4. Control variables

Variable size, financial leverage and growth rates are included as control variables:

- Company size (size): logarithm of assets
- Financial Leverage⁽¹⁰⁰⁾: ratio of total liabilities to total assets (2)
- Growth rate (growth): the market value of equity to book value of equity

4.5. Regression models

Two regression models were used to test the following hypotheses:

$$R_{it} = \alpha_0 + \alpha_1 \frac{E_{i,t}}{P_{i,t-1}} + \alpha_2 \frac{E_i}{P_{i,t}} \quad (3) \quad ard_{it} +$$

$$\alpha_3 \frac{E_{i,t}}{P_{i,t-1}} * Boardindep_{i,t} + \alpha_4 \frac{E_{i,t}}{P_{i,t-1}} * share + \alpha_5 size_{i,t} + \alpha_6 lev_{i,t} + \alpha_7 growth_{i,t} + \varepsilon_{i,t}$$

$$DA_{it} = \delta_0 + \delta_1 \%Board_{it} + \delta_2 Boardindep_{it} + \delta_3 sh \quad (4) \quad \delta_4 size_{i,t} + \delta_5 lev_{i,t} + \delta_6 growth_{i,t} + \varepsilon_{i,t}$$

$\delta_4, \delta_5, \delta_6$; in this model are described in sections 2.4, 3.4, 4.4, has been expressed. Model (6), regression to examine the hypothesis is 1 to 3. The content is derived from profit-output relationship is. And model (7), in order to test hypotheses 4 and 6.

5. Experimental Results

5.1. Descriptive Statistics

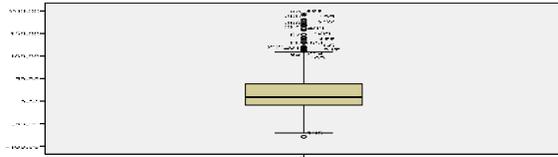
Table 1: Descriptive statistics for quantitative variables Research

Variable	Average	Standard deviation	Coefficient of skewness	Ness factor
The proportion of outside board members	0.65	0.179	0.029	-0.285
Concentration of ownership	3481.12	2818.47	2.471	10.703
Company Size	5.878	0.614	0.63	1.232
Financial Leverage	0.65	0.202	0.426	1.198
Growth	1.35	4.456	1.238	23.63
Returns	25.41	57.70	2.83	13.73
Discretionary accruals	1.048	4.60	-2.40	24.90

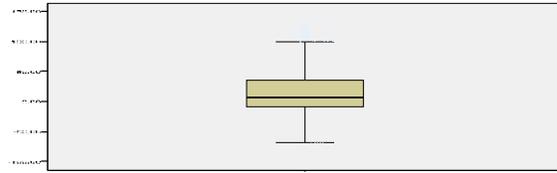
The results above show that the highest and lowest values for the variables to vary the concentration of ownership of outside board

members and our financial leverage; the nature of these variables is different. Thus, comparing them each other with particular result

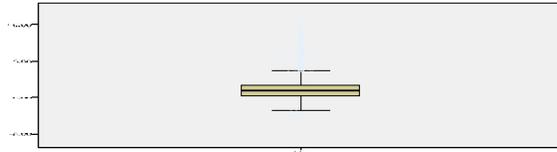
Herfindahl-Hirschman Index ownership concentration that can be measured to obtain the maximum amount of 10,000 while the proportion of outside board members actually one of the denominator is greater than ever; the result is a number between zero and the maximum amount one can consider. So the difference is normal and does not cause any comparison of results. Due to the effectiveness of these outlier observations and the results before running the regression models to evaluate the normality of the dependent variables. Figure 1 indicates the presence of outlier observations on variable rate after 3 phase monitoring observations; observations of these variables have been normalized.



A.1) box plot returns to identify companies that are out three times the standard deviation



B.1) box plots after removing outlier observations to return



A 2) Box diagram for discretionary accruals

Fig. 1: Check the normality of the dependent variables

5.2. Regression results

Table 2: Regression model 6

Variables	Symbol rate	Coefficients	Estimates standard deviation	T-statistics	Significance level	Tolerance test
Constant	α_0	41.935	20.715	2.024	0.44	
Interest expense	α_1	5.118	5.818	0.880	0.380	0.836
The interaction of benefit to cost ratio of outside board members	α_2	-7.059	9.595	-0.736	0.462	0.628
Interaction of profit at the expense of the independence of the board	α_3	-43.564	10.425	-4.179	0.000	0.965
The interaction between the price and the concentration of ownership interest	α_4	0.452	0.222	2.036	0/042	0.926
Company Size	α_5	0.992	3.341	0.297	0.767	0.967
Financial Leverage	α_6	61.673	40.312	2.053	0.027	0.972
Growth	α_7	0.327	0.280	-1.168	0.243	0.943
The overall results of the model	The coefficient of determination			0.171	F statistics	4.443
	Watson statistic camera			1/762	Significance level	0.001

Regression model:

$$R_{it} = 41.935 + 5.118 \frac{E_{it}}{P_{i,t-1}} - 7.059 \frac{E_{it}}{P_{i,t-1}} * \%Board_{i,t} - 43.564 \frac{E_{it}}{P_{i,t-1}} * Boardindep_{i,t} + 0.452 \frac{E_{it}}{P_{i,t-1}} * share + 0.992size_{i,t} + 61.673lev_{i,t} + 0.327growth_{i,t} + \epsilon_{i,t}$$

Due to the absolute value of the t-statistics calculated for profit at the expense of interaction the proportion of outside board criterion of t-statistics (1.96 = T) is less the result is a 95 percent probability that the impact of these factors on stock returns, we is significant.

Or in other words the proportion of outside board members and content, there was no benefit. Regression coefficient corresponding to profit at the expense of interaction and independence of the board -43.56; thus increasing the index will reduce the return on equity.

Since the absolute value of the coefficient corresponding test statistic is greater than the

corresponding student t- table (1.96 = t) is, with 95% of the results, the significant impact of these factors on stock returns and between it and the content there is profit. Regression coefficient corresponding to profit at the expense of interaction and ownership concentration are 0.452; thus increasing the index will increase the return on equity. Since the absolute value of the coefficient corresponding test statistic is greater than the corresponding student-t- table (1.96 = t) is, with 95% of the results, the impact of these factors on stock returns significant. Or in other words between ownership concentration and content there is a benefit. Among the control variables, only the effect of financial leverage on stock returns is significant at 0.95.

Table 3: Final results of the regression model 7

Variables	Symbol rate	Coefficients	Estimates standard deviation	T-statistics	Significance level	tolerance test
Constant	δ_0	2.343	0.918	2.552	0.011	
The proportion of outside board members	δ_1	-0.340	0.514	-0.662	0.508	0.956
The proportion of outside board members	δ_2	-0.365	0.661	-0.552	0.581	0.869
Concentration of ownership	δ_3	9.192	0.00	0.283	0.777	0.942
Company Size	δ_4	-0.118	0.149	-0.792	0.429	0.963
Financial Leverage	δ_5	-0.447	0.449	-0.995	0.320	0.906
Growth	δ_6	0.006	0.012	0.519	0.604	0.895
The overall results of the model	The coefficient of determination			0.005	F statistics	0.59
	Watson statistic camera			1.166	Significance level	0.670

$$\text{Regression model: } D_{it} = 2.343 - 0.340\%Board_{it} - 0.365Boardindep_{it} + 9.192e\ share - 0.118size_{it} - 0.447lev_{it} + 0.006growth_{it} + \varepsilon_{it}$$

The results above show that the Fisher statistic (0.59) is less than the corresponding statistics are presented in Table Fisher the fitted model was not significant, and the performance is not acceptable. Determining factor in the model show that only 0.5% of the variation of the independent variables of interest management and control model 7 is derived. In addition, the model is not significant, due to factors related to corporate governance mechanisms, it can be seen that none of the coefficients are not significant, and the mechanisms of corporate governance in terms of research and there is no significant relationship between earnings management.

6. Conclusion

This paper examines the relationship between corporate governance mechanisms, including 3 of outside board members, board independence and ownership concentration with two quality criteria profit (profit and return relationship discretionary accruals) were examined. Two criteria for the benefit of its quality aspects were considered the first criterion is that the relationship between earnings - returns relation to corporate governance mechanisms are examined with interest the information content and the questions to be answered whether these mechanisms in response to the Iranian company shareholders Earnings per share is effective or not. The second measure of earnings management in corporate governance mechanisms influence the impartial administration of the calculation and the benefits to be reviewed. The results in this paper show that the two mechanisms independent board there is an interest and focus on content, but the mechanism is no significant relationship was found with earnings management. Thus, according to the results of this study, it can be claimed that the Iranian companies to enhance corporate governance mechanisms neutrality tangible impact management and not

significant in the fact that these mechanisms are not effective but there are shareholders in companies active in the stock market's view of the perceived importance and by taking these mechanisms (board independence and ownership concentration) to react dividends.

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