

The Study of the Effect of Corporate Governance on Profit Management of the Accepted Companies in Tehran Stock Exchange

Masoud Taherinia¹ & Ehsan Zeynivand²

¹ Assistant professor, Department of management, Lorestan University, Khorramabad, Iran

² Master of Accounting, Islamic Azad University of Khorramabad, Iran

Correspondence: Masoud Taherinia, Department of management, Lorestan University, Khorramabad, Iran.
E-mail: esfehni.mohamad3@gmail.com

Received: June 2, 2016

Accepted: June 18, 2016

Online Published: July 11, 2016

doi:10.5539/mas.v10n12p48

URL: <http://dx.doi.org/10.5539/mas.v10n12p48>

Abstract

We studied the effect of corporate governance discipline on profit management of the accepted companies in the Stock Exchange of Tehran. The required data has been collected from a sample including 120 companies accepted in the Stock Exchange of Tehran in the period of 2008 to 2013. In this research, based on data types and statistical analysis methods, we have used combined data method and pooled regression analysis along with panel data. The results showed that there is a significant negative relation between characteristics of corporate governance discipline and profit management.

Keywords: corporate governance, profit management, TSE

1. Introduction

Accounting profit is one of the basic criteria of economic decision-making, but the variability of estimates and methods in accounting distorts validity and reliability of this profit. Besides these, there are some prerequisites such as conflict of interests between managers and owners of companies that increase the doubts about the reliability of profit.

Corporate governance that includes some mechanisms to direct the affairs of the company monitors activities in addition to run the company's affairs and thus minimizes the possibility of exerting personal demands of managers. Hence, it is expected that by implementing and strengthening the mechanisms of corporate governance, financial reporting quality and profit of company is increased (Salehi & Ziaii, 2010).

Profit management is a form of profit manipulation with the possibility of reducing profit reliability. When profit management is controlled by supervisory systems, the accounting profit will be more reliable and contain more useful information. Corporate governance reduces managers' capacity to manage profit and has the ability to improve their liability of accounting profit and thus improves usefully informing feature of accounting profit (Aghaiiet al., 2009). So, considering the importance of the issue, the present research attempts to study the effect of corporate governance discipline on profit management of the accepted companies in Stock Exchange of Tehran.

2. Theoretical Principles and Background of Research

2.1 Theoretical Principles of Research

In 1994, Accounting International Federation defined corporate governance discipline as follows: "Governance discipline of commercial unit is a set of responsibilities and the methods used by the board of directors and bound managers aiming at clarifying a strategic way that guarantees achieving at objectives, controlling risks and responsibly using resources."

Several different theoretical frameworks for describing and analyzing corporate governance have been proposed that each has addressed the topic using different words in a different way as a result of particular scientific fields looking at corporate governance discipline. For example, financial theory from financial and economic point of view, transaction cost theory from economic, legal and organizational point of view, and Stakeholders theory from social point of view address the corporate governance discipline.

Traditional economic theories recognize all economic agents' rational and increase business profits as primary target; On the contrary, transaction cost theory considers human behavior more realistically. In this model, managers and othereconomic agents apply limitedlogic. Simon (1957) defines limited logic as a behavior that is reasonable but managers doing this behavior limitedly.

Transaction cost theory

In this theory, company is not only a public economic unit (llp), but also an organization including people with different views and goals. Transaction costtheory is based on the fact that companies have become so big that replace market in resource allocation. In fact, companies are so big and complex that price fluctuations in market direct production and balance transaction market. Within company, some transactions are eliminated and manager coordinates production.

Stakeholder Theory

Stakeholder theory began to develop since 1970s. One of the first explanations of this theory in the field of management was presented by Friedman in 1984. He raised the company general theory and suggested accountability of company to a wider group of stakeholders. The base of Stakeholder theory is that companies have become very big and their effect on society is so deep that they should pay attention to more parts of society in addition to shareholders and be responsible for them and raise beneficiaries instead of shareholders. Beneficiaries include Shareholders, employees, vendors, customers, creditors, other companies and the public. The most extreme advocates of the stakeholder theory believe that the environment, animal species and the next generations should also be included in the group of beneficiaries (Hassas yeganeh, 2005).

The concept of profit management has been investigated in respect of various aspects and different related definitions have been provided. George et al. define profit management as an artificial gain of profit by management to achieve the expected level of profit for some specific decisions. In their opinion, actually the primary motivation of profit management is managing investors' perception of the commercial unit. Scott has defined profit management as informed attempts taken by the management on how to report a profit to achieve specific objectives according to the accounting principles.

2.2 Research Background

Table 1. Research Background Summary

Authors	Title	Result
Setayesh and Ebrahimi (2013)	Effect of corporate governance mechanisms on profit informational content	Profit informational content has a positive significant relation with ownership focus and institutional ownership.
Rahimian and colleagues (2012)	Relation between profit quality and informational asymmetry	There is a significant relation between profit quality rate and informational asymmetry, and reduction of profit quality results in increase informational asymmetry.
Mashayekhi and Mohammad abadi (2011)	Relation of corporate governance mechanisms and accounting profit quality	Increased number of the boars' meeting and non-bound managers' attendance in them increase accounting profit quality.
Izadinia and Rasaiian (2011)	Relation between profit quality criteria and	There is a negative relation between profit quality and percent of non-bound members of the board, and a positive

	corporate governance mechanisms	relation between profit quality and percent of institutional investors.
Ho and Taylor (2013)	corporate governance and different types of voluntary disclosing	Strong corporate governance structure affects on voluntary disclosing information related to strategic and big companies for manager and top manager, financial markets and capital and social responsibility of companies.
'Ebad (2013)	corporate governance and investors perception of profit quality	Investors in companies having strong corporate governance have a better perception of profit quality.
Siagian and colleagues	corporate governance, Reporting quality and company value	Companies having powerful corporate governance are more valuable. Also, reporting quality has a reverse relation with company validity.
Luntiys and DimitrovPulus (2012)	Role of corporate governance in profit management	Banks have less profit management by efficient corporate governance.

3. Research Method

In respect of classifying based on objective, this study is an applied research and based on the nature and research methods, belongs to correlation researches. In this study, according to the type of data and methods of statistical analysis, the combined data method and pooled regression analysis along with panel data will be used. To have significant hypotheses, we will use T-student test. Statistic F will be used for regression equation test. Tests such as Chow test, Hausman and LM tests are used to determine the used model for the combined data. To identify self-correlation and or being self-correlated of disturbing sentences, Durbin- Watson test and Tobin Q-test will be used

3.1 Research Hypotheses

The main hypothesis is:

There is a significant relation between the structure of corporate governance discipline and profit management.

The sub hypotheses are:

1. There is a significant relation between the size of the board and profit management.
2. There is a significant relation between the percent of board members' not-being bound and profit management.
3. There is a significant relation between quality of financial information and profit management.

3.2 Statistical Sample and Population

The research population includes all companies accepted in Stock Exchange of Tehran. After applying the limitations, 120 companies have had all requirements of presence in the sample.

3.3 Methods and Data Collecting Tools

In this research, the necessary data are collected from primary and secondary resources as books, prominent related articles, prominent related studies, the website of Stock Exchange of Tehran, the website of Islamic studies, and also software "Tadbir pardaz", Internet sites such as SSRN, Springer, Science Direct, SID etc.

3.4 Research Patterns

The research model is a general case of a multi variety regression model with combined data as follows:

$$U = \alpha + b_1X + b_2Y + b_3Z + b_4E + b_5S + \varepsilon_0$$

$B_1, b_2 \dots, b_K$: coefficients of the independent variables

a: constant

U: Profit management as the dependent variable

X: The size of the board of directors (independent variable)

Y: not-being bound of the board of directors (independent variable)

Z: Quality financial information (independent variable)

E: Leverage (auxiliary variable)

S: Company size (auxiliary variable)

In this study, the modified Jones model is used to measure profit management:

In the modified Jones model, discretionary accruals are used as an indicator for profit management.

Discretionary accruals: This section of accruals is usually the result of reducing non-discretionary accruals from the total accruals.

A) The starting point of the above model is finding the accruals sum via the following equation:

$$TA_t = \frac{\Delta CA_t - \Delta CL_t - \Delta cash_t + \Delta STD_t - Dep_t}{A_{t-1}}$$

TA_t= Total accruals of year t.

ΔCA_t=Change of current assets in the year

ΔCL_t=Change of current debts in year t

Δcash_t=Change of cash and cash equivalent in year t

ΔSTD_t=Change of current share of payable facilities in year t

Dep_t= depreciation expense in year t

A_{t-1}=Total assets of year t-1

B) The next step is calculating the non-discretionary accruals using the following formula:

$$NDA_t = \alpha_1 \left(\frac{1}{A_{t-1}} \right) + \alpha_2 \left[\frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right] + \alpha_3 \left(\frac{PPE_t}{A_{t-1}} \right)$$

NDA_t= non-discretionary accruals in year t

A_{t-1}= total assets of year t -1

ΔREV_t= change of net of income of company in year t relative to year t-1

ΔREC_t=change of net of accounts and commercial receivable documents in year t relative to year t-1

PPE_t=..... of estate, machinery and equipments in year t

To estimate α₁, α₂ and α₃ , the following model is used:

$$TA_t = \alpha_1 \left(\frac{1}{A_{t-1}} \right) + \alpha_2 \left[\frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right] + \alpha_3 \left(\frac{PPE_t}{A_{t-1}} \right) + \epsilon_t$$

Coefficients α₁, α₂ and α₃ are specific parameters of company that are estimated; TA is sum of accruals . Finally, discretionary accruals are resulted by reducing non-discretionary accruals from the sum of accruals (Bozorgmehr and Shayestehmand, 2011).

Model 2:
$$DA_t = TA_t - NDA_t$$

5.3 Research Variables

Hypotheses	Independent variable	relation	Dependent variable
main	Corporate governance discipline	>	Profit management
Sub ₁	Board size	>	Profit management
Sub ₂	Percent of not-being bound of the board's members	>	Profit management
Sub ₃	Quality of financial information	>	Profit management

4. Analysis

4.1 Descriptive statistics

4.1.1 Research descriptive statistics

Table 1. Results of research descriptive statistic

	Size	Qa	Bind	Bsiz	Da	Leve
Mean	5.81	0.27	0.44	5.09	0.11	0.62
Median	5.76	0.26	0.6	5	0.06	0.65
Maximum	8.6	0.82	0.85	9	0.28	0.79
Minimum	2.89	0.00	0.00	3	0.01	0.00
Standard deviation	0.63	0.19	0.32	0.50	0.08	0.14
Skewness	0.54	0.25	-0.45	0.07	0.57	-1.46
Observation	720					

Reference: Researcher's calculations

4.1.2 Correlation Coefficients Test

Table 2. Results of Pierson correlation coefficients among research variables

Covariance Analysis: Spearman rank-order						
Date: 04/23/15 Time: 22:23						
Sample: 2008- 2013						
Included observations: 720						
Correlation						
LEVE	SIZE	QA	BIND	BSIZE	DA	Probability
					1	Da
					-----	P.V
				1	-0.07	Bsize
				-----	0.03	P.V
			1	0.19	-0.03	Bind
			-----	0.00	0.00	P.V
		1	0.068	-0.06	-0.19	Qa
		-----	0.032	0.029	0.000	P.V
	1	0.17	0.050	-0.00	0.15	Size
	-----	0.000	0.017	0.00	0.00	P.V
1	0.10	-0.04	-0.11	0.02	0.033	Leve
-----	0.00	0.0000	0.0014	0.04	0.00	P.V

Reference: Researcher's calculations

4.1.3 Research reliability test

4.1.3.1 Unit root test

Reliability of research variables should be examined before analyzing and testing hypotheses. The reliability of the research variables means that the mean and variance of variables has been constant during different years. As a result using these variables in the model doesn't cause False-regression. Unit root test has been conducted using test methods of Levin, Lin and Chu (2002), the generalized Dickey Fuller, Fisher's unit root test and unit root test of Fisher, Philips, Peru (2001). Results of variable reliability test show that p.v of all variables is less than 5% and the research variables are reliable; therefore, the null hypothesis of having unit roots is rejected.

Table 3. Unit root test for variables

variables	Levin, Lin and Choe		Generalized Fisher, Dickey Fuller		Fisher, philips/Peru	
	Statistic	p.v	statistic	p.v	Statistic	p.v
DA	8,22-	0,000	145,7	0,00	277,01	0,04
bsize	2,90-	0,000	211,7	0,00	139,4	0,00
bind	10,66-	0,000	194,4	0,000	107,08	0,000
qa	15,6-	0,000	212,4	0,000	268,3	0,000

Reference: Researcher's calculations

4.1.4 Steps of Estimating Model by Combined Data

To test the hypotheses, the combined data method is used. To select the appropriate method for estimating the models in different time periods of combined data, bound F test (Chow) was used. If statistic F is larger than the critical value, constant effect model is accepted and otherwise, and if the research data is appropriate, the method of pooled or integrated data is used to test the hypotheses. As shown in table (4-4), the results of Chaw test has strongly confirmed H₀, i.e. similarity of (intercept) in all periods, for the research model (error level is more than 5 percent). So, "pooled data estimating method" is more appropriate to estimate test models of research hypotheses. According to this method, all data are combined with each other and estimated by ordinary least squares regression (OLS).

Table 4. Results of Chaw test (bound F) in studying research hypotheses

Chaw test	Statistic F	Critical Quantity	p-value	Results of Chaw test	Test type
H ₀ : The Sam eness 1,11of (intercept)	5,70	0,23	H ₀ is notrejected	Pooled data	

Reference: Researcher's calculations

4.2 Inferential Statistics

4.2.1 Analyzing Hypotheses Using Combined Data

In practice, there are two criteria for acceptance or rejection of research hypotheses:

1. The rate of test significance (p- value or sig) is less than 0.05.
2. The absolute value of statistic T-student at confidence level 95% is greater than 2.

In each case, the resulted value of test statistic rejects H₀ (null hypothesis) and thus confirmed H₁ (hypothesis 1).

We use statistic T-student to test H₀. Accordingly if the resulted significance coefficient is less than 0/05, H₀ is rejected and its opposite hypothesis is accepted. Accepting the opposite hypothesis means that there is a significant linear relationship between independent variables and the dependent variable tested in the model designed for the research hypotheses.

Research Statistical hypotheses are formulated as follows:

H₀: There is no correlation between the independent variables and profit management.

H₁: There is correlation between the independent variables and profit management.

Therefore if sig (P-Value) <0/05, then H₀ is rejected and H₁ is accepted. According to the multivariate Model, if the coefficient of each independent variable (i.e. β_s) is positive, the mentioned independent variables have a direct relation with dependent variable (i.e. profit management), and if the coefficient is negative, the relation will be reversed. To examine the significance of the model generally and the relation of each independent variable with the dependent variable, statistics F and t are used respectively. Also, Durbin- Watson test is used to examine self-correlation among residuals of regression error. If statistic of this test is close to the number 2, there's a lack of correlation among residuals.

4.2.2 Result of Research Model Test

Table 5. Results of research model test at the level of combined data

Description	coefficient	p-value	T-student	F – statistic	Durbin-Watson
.....	0,30	6,830,00		7,82	2,07
Bsize	0,01-	2,67-0,00		0,000	
bind	0,042,44-	0,00			
qa	0,06-	3,99- 0,00			
Size	0,03,060,00				
Level	0,023,26	0,00			
Determination coefficient	0,59				
Modified determination coefficient (R2)	0,45				

As indicated in the table (5), statistic F with a confidence level of 99% is significant. Therefore, the research model has been significant totally and the control and independent variables are able to explain the dependent variable. In addition, the modified determination coefficient resulted from testing the model has been 0.45. This figure shows that approximately 0.45% of the changes of the dependent variable (i.e. profit management) of accruals are caused by the control and independent variables in the model, and 0/55% by other factors. Also, considering statistic values of Durbin- Watson test proves that there isn't self-correlation among disturbing parts of the model, because these values are from 1/5 to 2/5.

4.2.3 The First Hypothesis

"There is a significant relation between the size of the board of directors and profit management."

In this hypothesis, the profit management is dependent variable and the size of the board is independent variable. According to the results of figure (2), the correlation between profit management and the board size has been 0.07-. The correlation coefficient is the rate of variability of the dependent variable which can be explained by the regression.

According to the results of table (6), statistic t related to the independent variable of the board size (BSIZE) and its significance level (p-value) are the 2.67- and 0.00, respectively. Given that the considered error level for this research is 0/05, the board size variable has a significant effect on profit management and the first hypothesis of the research is confirmed at level 95%. The variable coefficient (BSIZE) is negative, i.e. when the board size increases, profit management decreases. This result means that according to the supervisory role of the board members, the more the number of these people, the less exerting profit management due to conflict of stakeholders and members' interests.

Table 6. Results of coefficients significance test in the first hypothesis

Time period	2008-2013
Statistic t	2,67-
(p-value)	0,00
Coefficient	0,01-
Number of observations	720
Result of hypothesis	confirmed
Relation type	reversed

Reference: Researcher's calculations

4.2.4 The Second Hypothesis

"There is a significant relation between not-being bound of the board's members and profit management."

In this hypothesis, the profit management is dependent variable and the not-being bound of the board members is independent variable. According to the results of figure number (2), the correlation between profit management

and not-being bound of the board's members has been 0.03-.

According to the results of table (7), statistic related to the independent variable of not-being bound of the board's members (bind) and its significance level (p-value) has been 2.44- and 0.00, respectively. Given that the considered error level for this research is 0.05, the variable of not-being bound of the board's members has a significant effect on profit management and the second hypothesis is confirmed at the confidence level 95%. The variable coefficient (bind) is negative. As a result, the relation between not-being bound of the board's members and profit management is reverse and negative. In other words, by increasing the number of non-bound members of the board, profit management decreases.

Table 7. Results of coefficients significance test in the second hypothesis

Time period	2008-2013
Statistic t	2,44-
(p-value)	0,00
Coefficient	0,04-
Number of observations	720
Result of hypothesis	confirmed
Relation type	reversed

Reference: Researcher's calculations

This result means that the role of non-bound directors in Iran is according to the agency theory and the ability of this regulatory tool to reduce profit management is strong. According to the agency theory, the presence of independent non-bound directors in the board of company and their regulatory function as independent people help reduce the available conflicts of interests between shareholders and managers.

4.2.5 The third hypothesis

"There is a significant relation between the quality of financial information and profit management."

In this hypothesis, the profit management is dependent variable, and the quality of financial information is independent variable. According to the results of figure (2), the correlation between profit management and the quality of financial information has been 0.19-. According to the results of table (8), statistic t related to the independent variable quality of financial information (qa) and its significance level (p-value) has been 3.99- and 0.00, respectively. Given that the error level considered for this study is 0.05, the variable of financial information quality has a significant effect on profit management and the third hypothesis of the research is also confirmed at the confidence level 95%. Variable coefficient (QA) is negative. As a result, the relationship between the quality of financial information and profit management is reverse and negative. In other words, by increasing the quality of financial information, profit management decreases.

Table 8. Results of coefficients significance test in the third hypothesis

Time period	2008-2013
Statistic t	3,99-
(p-value)	0,00
Coefficient	0,06-
Number of observations	720
Result of hypothesis	confirmed
Relation type	reversed

Reference: Researcher's calculations

5. Conclusion

In this research, we investigated the relation between the structure of corporate governance discipline and profit management of accruals. Based on the combined data, results showed that there is a significant negative relationship between the structure of corporate governance discipline (include size of the board, not-being bound of the board, the quality of financial information profit) and management and as a result, the main hypothesis was confirmed at the confidence level 95%. The results of this hypothesis are consistent with the

results of researches of Mustafa Suleiman and Ahmed Rajab (2013) and Zahri and Shabwa (2013).

References

- AbuiiMehrizi, A. (2011). The study of relationship among corporate disclosure quality, profit quality and capital (cost) of the accepted companies in Stock Exchange of Tehran, M.A. thesis, Islamic azad university of yazd.
- ASX. Corporate governance council (2007). Corporate governance principles and recommendations with 2010 Amendments , ISBN 1875262423.
- Baradarane, H. R., Taghizadeh, H., Rezaii, A. S. (2011). Studying the effect of combining stakeholders on informational content of accounting profit of the accepted companies in Stock Exchange of Tehran. *Journal Of Financial Accounting Researches*, 3(8), 107 – 124.
- Chang, J., Sun, H. (2010). Does the disclosure of corporate governance structures affect firms earnings quality? *Review of accounting and finance*, 9(3), 212 – 243.
- Dechow, P., & Dichev, I. (2002). The quality of accruals and earnings : the role of accrual estimation errors. *The Accounting Review*, 77, 35-59.
- Dehghan, F. W. (2011). *The effect of corporate governance structure on quality of disclosing information of the accepted companies in Stock Exchange of Tehran, M.A. thesis.* Yazd Azad University.
- Demirbas , D., Yukhanae, A. (2011). Independence of board of directors, employee relation and harmonization of corporate governance. *Employee Relations*, 33, 444-471. Emerald group publishing limited 0142-5455.
- EbrahimiKordlou, A., & Arabi, M. (2010). The focus of ownership and profit quality in the accepted companies in Stock Exchange of Tehran. *Journal of Financial Accounting Researches*, 2(2), 95 – 110.
- Firth, M., Fung, P., & Oliver, M. (2007). Ownership , two –tier board structure and the in formativeness of earnings –evidence from china. *Journal of Accounting and Public Policy*, 26, 463-496.
- Izadinia, N., & Rasaiian, A. (1390). Mechanism of corporate governance discipline and profit quality. *Experimental Researches Quarterly of Financial Accounting*, 1(1).
- Mashayekhi, B., & Mohammadabani, M. (2011). Relation of corporate governance mechanism with profit quality. *Journal of Financial Accounting Researches*, 3(2), 17 – 32.
- Mehrani, K., & Safarzadeh, M. W. (2011). Explaining relationship between corporate governance and profit quality by local approach. *Journal of Accounting Knowledge*, 2(7),69-98.
- Mehrani, S., Karami, Q. H., Moradi, M., & Eskandar, H. (2010). Studying relation between institutional investors and financial reporting quality. *Journal of Accounting Advancements of Shiraz University*, 2(1), 249 – 227.
- Nikoomaram, H., Mohammadzadehsalet, H. (2010). Providing a pattern to explain the relation between corporate governance and profit quality. *Journal of Management Accounting*, 3(4).
- Setayesh, M., & Ebrahimi, F. B. (2012). Studying the effect of corporate governance mechanisms on profit informational content of the accepted companies in Stock Exchange of Tehran. *Journal of Accounting knowledge*, 3(8), 31-45.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/3.0/>).