International SAMANM Journal of Finance and Accounting
ISSN 2308-2356 April 2014, Vol. 2, No. 2

The Impact of Corporate Governance and Ownership Structure on Agency Cost in Listed Companies of Tehran Stock Exchange

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Abstract

This study examines the relationship between ownership and corporate governance to decrease agency costs in listed companies of Tehran Stock Exchange. To perform this study, data from 123 firms during the years of 2010-2012 is used. Multivariate regression index with constant effect is used to analyze data. In this study, agency cost is dependent variable that is estimated by the ratio of incomes (sales) to asset index, and independent variables include percentage of managers ownership, percentage of institutional investors ownership, percentage of other investors ownership (except managers ownership and institutional investors), number of board members, and CEO and chairperson of the board duality. The results of the study indicates that, there is a negative and significant relationship between agency cost with managers ownership, institutional investors ownership, and size of the board; On the other hand, there are not any significant relationship agency cost with other investors ownership, number of board members, and CEO and chairperson of the board duality.

Keywords: *Corporate governance, ownership structure, and agency cost*

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1. Introduction

Starting corporate governance through stock ownership had a significant effect on corporate control methods. Separation of ownership from management led to a popular organizational problem, called “agency problem”. Jensen et al. (1976) offered principles of agency theory, and described companies as an agents and shareholders as an employer. In their analysis, one shareholder is against managers. One of the main assumptions of agency theory is that employer and agents have opposite interests. In this situation, managers are induced to gain miscellaneous and short-term revenues that led to reduce in shareholders’ welfare and benefits value. Agency relationship includes a kind of contract under which one or more persons (owner/ owners) assigned other person (agent /manager) to perform an operation, and they delegate adoption of certain decisions (Jensen, 1986). Due to the conflicts between the parties, agency costs formed with the formation of agency relationship. Agency problems between managers and shareholders exist throughout the world, and government intervenes at surprising speed with providing political documents and corporate governance terms. Corporate governance mechanisms are those which support shareholders’ interests. Country economic growth will improve well with the help of good corporate governance. Ker et al (1999) believed that companies faced with agency’s cost problems when they have weak corporate governance, and despite of increasing in companies values, managers of these companies indulge in personal pursuits.

The main objective of corporate governance is “transparency and accountability” in capital market, but if the state doesn’t pay attention to the transparency and accountability or good governance issue isn’t considered basically, corporate governance regulation won’t work. Methods of governance in Iran as a growing economy might be different with developed economic systems. According to Carmelo et al (2002), prior literature about corporate governance shows that most studies have been conducted in more developed countries, but little has been done in developing countries such as Iran, because their corporate governance mechanisms are still being developed. The objective of this paper is to examine effectiveness of corporate governance mechanisms and ownership structure to decrease or control agency costs in listed companies of Tehran Stock Exchange during the years of 2010-2012. This study help to identify factors help to decrease agency problem and has an implications for corporate governance correction process in Iran.

2. Literature Review

2.1 Background Of Study

Ang et al. (2000) examined the relationship between agency costs and ownership structure in 1708 of small American companies. In their study, agency cost is calculated in two ways: Asset turnover ratio and operational expenses to the measured sales. They found that agency cost has an inverse relationship with internal ownership ratio.

Sing and Davidson (2003) investigated the relationship between ownership structure and agency costs using a sample 1528 listed companies in American Stock Exchange during the years of 1992-1994. They considered assets turnover ratio and operational expenses ratio to the sale for measuring agency costs. The results of their study indicated that using the assets turnover ratio as a measurement of agency costs, increase in the managers ownership leads to increasing alignment between managers/ owners' interests, and consequently, reduces agency costs. There was no significant relationship between external major shareholders' ownership and agency costs.

Truvang (2006) examined the relationship between board composition and ownership structure with agency costs of Australian companies. In his study, agency costs were measured by assets turnover ratio and operational expenses to the sale ratio. The results of 500- company sample evaluation during 2004 indicated that there is a positive and significant relationship between management ownership and assets turnover ratio. However, there is not any significant relationship between the numbers of major shareholders (ownership concentration), held shares percentage by major shareholders and board composition with agency costs.

Florakis (2008) studied the effects of corporate governance mechanism on agency costs. This study included 897 English companies during the years of 1999-2003. Agency costs were measured by assets turnover ratio and operational expenses ratio to the sale. The results of this study indicated that there is a significant relationship between management ownership, managers' bonus, and ownership concentration with agency costs.

Ferth et al. (2008) investigated the effects of corporate governance on agency costs. Their study sample included 1647 observations from 549 Chinese companies during the years of 1998-2000. Agency costs were calculated by two measures: Assets turnover ratio and operational expenses ratio to the sale. The results of their study indicated that existence of external shareholders in the structure of Chinese companies' owners cause rising in agency costs. However, concentration in ownership structure leads to decrease in agency costs. Also, results indicated that institutional ownership and state ownership have no significant effect on agency costs.

Mac night and Weir (2009) scrutinized the effects of corporate governance on agency costs. Their study sample included 534 observations of 128 large English companies during the years of 1996-2000. Regression analyses and Panel data approach are used in their study. Also, assets turnover ratio and interactions between growth opportunities and free cash flows, and the numbers of companies acquired by the company were considered as measurement for agency costs. The results of their study suggested that increase in manager ownership leads to decrease in agency costs. By using the interactions between growth opportunities and free cash flows as an index of agency costs, institutional ownership causes decrease in agency costs. Also, there is a negative and significant relationship between liabilities ratio and agency ratio by calculating agency costs as assets turnover ratio.

Mashayekh and Esmaeili (2006) explored the relationship between interest quality and some aspects of corporate governance including percentage of board members ownership and the number of non-duty managers in Tehran Stock Exchange. The results of the study indicated a nonlinear relationship between accruals and the percentage of board members ownership.

Hasas Yeganeh et al (2008) tested the relationship between institutional investors and firm value. Their study sample included 61 companies during the years of 1999-2004. Generally, the results of their study indicated a positive relationship between the percentage of institutional ownership and firm value, and confirmed the efficient monitoring hypothesis. However, there is not a significant relationship between institutional ownership concentration and firm value.

Valipoor and Khorram (2012) examined relationship between corporate governance mechanisms and agency costs of 51 listed companies of Tehran Stock Exchange during the years of 2001-2008, and used Panel analysis method for hypotheses test, and the results indicated that there is a negative and significant relationship between percentage of institutional ownership, manager ownership, board non-duty members, liabilities ratio to total debt and agency costs at 95% confidence level.

3. Theoretical Framework

3.1 Agency Costs

In this study, performance ratio is used to calculate agency cost: Performance ratio represents the performance index of firm’s managers that is extracted from firms’ financial statements, and it was used for the first time by Ang Kel and Lin to evaluate the measurement of agency’s costs. Assets turnover ratio to annual income or sales measures productivity condition and using firm assets by managers to create more sales. These two ratios as an inverse index are used for agency’s costs.

3.2 Percentage Of Manager Ownership

Agency costs will decrease with managers’ ownership increase; because, increase in managers’ ownership in a company leads to interest convergence among managers and shareholders’ profits. Sing and Davidson (2003) advocated the above prediction of agency theory. Anyway, he found the evidence that agency problem decrease with managers’ ownership increase in a company.

3.3 Percentage Of Institutional Investors’ Ownership

Institutional investor ownership, according to Daren Henry (2006), it is determined through total shares percentage of institutional shareholders. According to the existing literature of banks, insurance companies, pension funds, investment companies, etc. are parts of institutional investors. Institutional investors penetrate using voting right on decision makings and board structure, so it can be one the monitoring resource on firm management performance. According to Briky e, institutional investors are more likely to oppose to the managers’ proposal plans that seems it harms to the owners’ interests. Based on effective monitoring hypothesis, Pond suggested that institutional investors have high resources and proficiency and can control the management compared to other private and more unconscious investors with the costs of below-average. And also, Mac Kenen and Servas observed a positive relationship between company’s performance and institutional ownership levels and major outer owners.

3.4 Percentage Of Other Shareholders' Ownership

Another final variable of this study is percentage of other shareholders' ownership that is estimated as the sum of all shares except investors and managers' shares. Like institutional shareholders, other shareholders can increase point value with monitoring on company's performance that leads to maximize agency's costs. According to Henry (2006), there is a negative impact on dependent variable of asset utilization ratio, but it is insignificant apparently. Sing and Davidson (2003) found similar results in a study of American companies and concluded that external stock ownership doesn't have significant effect on agency's costs when it is measured in terms of discretionary costs ratio and asset utilization ratio. Maybe, the reasoning for insignificant relationship between descriptive variable of other ownership and indices of agency's costs is that these agency's variables don't completely achieve performance measurement systems evaluated by external shareholders when evaluating the company's performance.

3.5 The Number Of The Board Members

Small board compared with large board has less power and influence. Sing and Davidson (2003) also confirmed this result that suggested that there is a statistical positive and significant relationship between size of the board and assets utilization ratio. They concluded that agency's costs will decrease with asset utilization increase. Against, Florakis and Ozkan (2004) in a study about a sample of British public companies listed on Stock Exchange during the years of 1999-2003 indicated that size of the board has negative effect on assets turnover of agency's costs index, which means larger board size will create more agency's costs because of less effectiveness.

3.6 Duality Of CEO And Chairperson Of The Board

Literature indicated that separating the title of CEO and chairperson of the board will improve company's performance and helps to decrease agency's costs. According to Fama and Jensen (1983), agency theory shows that we cannot separate leadership structure to decrease agency's costs. Hence, our hypotheses based on the above discussion are as follows:

H 1: There is a negative and significant relationship between the percentage of manager ownership and income ratio (sale) to firm assets.

H 2: There is a negative and significant relationship between institutional ownership percentage and income ratio (sale) to firm assets

H3: There is a negative and significant relationship between the percentage of other shareholders' ownership and income ratio (sale) to firm assets.

H4: There is a negative and significant relationship between the board size and income ratio (sale) to firm assets.

H5: There is a negative and significant relationship between CEO duality and chairperson of the board with income ratio (sale) to firm assets.

H6: There is a negative and significant relationship between the percentages of non-duty managers to all board members of a firm with income ratio (sale) to firm assets.

4. Materials and Methods

We selected a sample of 123 listed firms of Tehran Stock Exchange during three years of 2010 until 2012. Data used in this study are extracted from audited financial statements and reports of firms' board listed in Tehran Stock Exchange. For this purpose, information is extracted from the website of research management center and Islamic studies of Tehran Stock Exchange (www.rdis.com).

Multivariate Regression is used with fixed effects to evaluate the relationship between governance, ownership structure and agency's costs index.

$$\textit{Agency cost}_{i,t} = \alpha_o + \beta_1 \textit{Director Ownership}_{i,t} + \beta_3 \textit{Institutional ownership}_{i,t} + \beta_3 \textit{External ownership}_{i,t} + \beta_4 \textit{Board size}_{i,t} + \beta_5 \textit{CEO- chair duality}_{i,t} + \beta_6 \textit{Nxratio}_{i,t} + \varepsilon_{i,t}$$

4.1 Variable Measurements

Agency cost that is a dependent variable will be estimated through income ratio (sale) index to the asset.
Manager ownership, according to Daren Henry (2006), we estimated it through percentage of total shares of the company that are available for all of the company managers.

Others ownership (except managers and institutional investors), according to the Daren Henry (2006), we described it as the total shares of shareholders (except managers and institutional investors).

Size of the board, according to Miro Nisat (2004), board size is estimated through the number of board members.

CEO and chairperson of the board duality, according to Mac Night Rovir (2004), doubling is included as a dummy variable that its value is equal to 1 if CEO was the chairperson of the board; otherwise it's equal to zero.

Non-duty managers' ratio to all members of the firm's board is part-time member of the board that did not have executive job and did not receive annually or monthly fixed salary. Information about the total number of board's all members and the number of non-duty members is gotten through announcements about the decisions of the firms' common, general assembly and other received information from Stock Exchange.

5. Results

5.1 Descriptive Statistics

Descriptive statistics is used to analyze collected data, since considered information and data are both quantitative. Different indices such as central indices and distribution indices are provided in descriptive statistics that these indices make less and sensible the analysis of hidden information in data and present an overview about study sample characteristic.

Year	***Std Deviation***	***Number***	***Mean***	***Minimum***	***Maximum***
1388	0.672	123	0.826	0.034	6.810
1389	0.580	123	0.839	0.032	4.990
1390	6.468	123	1.607	0.002	69.208

Table-1 Descriptive Statistics Of Dependent Variable

Table 2 presents a descriptive statistics related to independent variables and dependent variable during three since 2010 until 2012. As you can see, the mean of agency costs is 1.09 and its standard deviation is equal to 3.78, and for independent variables of institutional ownership, the mean and standard deviation are 77.35 and 14.45, respectively. Managers' ownership with mean and standard deviation are 67.73 and 23.09, respectively. The mean and standard deviation for others ownership are 21.23 and 14.36, respectively and the mean and standard deviation for size of the board are 5.04 and 0.48, respectively. The mean and standard deviation for CEO and chairperson of the board are 0.99 and 0.1, respectively. The mean and standard deviation for Non-duty managers' ratio are 66.55 and 18.11, respectively. Control variables of firm's size have the mean and standard deviation being 5.82 and 0.57, respectively. Firm's financial leverage has the mean and standard deviation being 1.08 and 7.77, respectively.

Variable	Mean	Std Deviation	Maximum	Minimum	Skewness	Peakedness
DOWN	67.73	23.09	0.00	100.00	-1.13	0.71
IOWN	77.35	14.45	20.00	100.00	-1.13	1.39
EOWN	21.23	14.36	0.00	91.65	1.25	2.36
Bsize	5.04	0.48	3.00	8.00	2.99	17.12
CEO	0.99	0.10	0.00	1.00	-9.49	88.47
Nratio	66.55	18.11	14.00	100.00	-0.40	-0.15
Lev	1.08	7.77	0.00	149.33	18.99	362.97
Size	5.82	0.57	3.98	7.99	0.77	2.05
ACost	1.09	3.78	0.00	69.21	16.38	290.59

Table-2 Descriptive Statistics Of Other Variables

5.2 Complementary Model Is As Follows

$$ACost_{it} = \alpha_0 + \alpha_1 Down_{it} + \alpha_2 Iown_{it} + \alpha_3 Eown_{it} + \alpha_4 Bsize_{it} + \alpha_5 CEO_{it} + \alpha_6 Nratio_{it} + \alpha_7 lev_{it} + \alpha_8 size_{it} + \varepsilon_{it}$$

Regression Statistics	
0.297	correlation coefficient
0.088	coefficient of determination
0.067	Adjusted coefficient of determination
4.086	F-value
0.000	Probability

Table 3: Regression Table

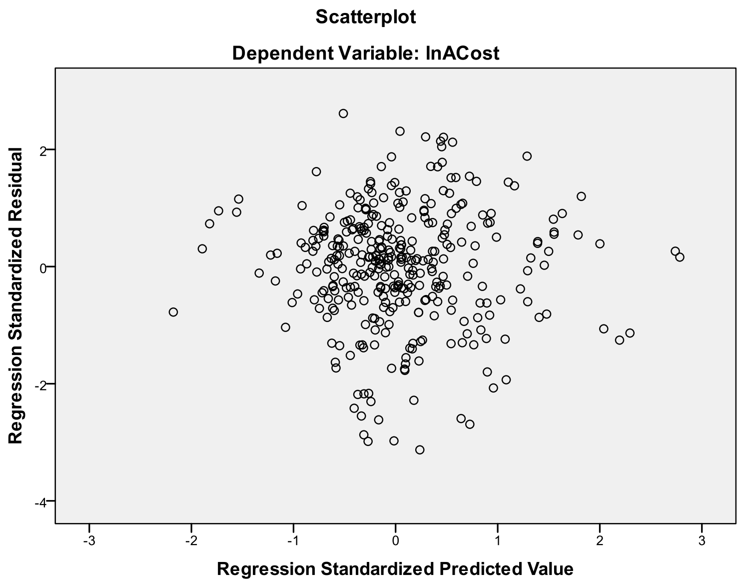
	Estimate	*Std Deviation*	*T_value*	*P_value*
(Constant)	0.838	0.625	1.342	0.180
DOWN	0.002-	0.001	2.273-	0.023
IOWN	0.001-	0.0004	2.061-	0.040
EOWN	0.913	0.110	0.004	0.000
Bsize	-0.182	0.058	-3.166	0.002
CEO	-0.215	0.247	-0.870	0.385
Nratio	-0.001	0.001	-0.346	0.729
Lev	-0.008	0.003	-2.322	0.021
Size	0.128	0.047	2.701	0.007

Table 4 : Parameter Estimation

A logarithmic conversion for “Acost” variable is used, due to un-establishment of the fundamental assumptions (normality and variance constancy and correlation of residuals). (ln($Acost_{it}$)+1) and also irrelevant values were omitted based on an initial regression.

5.3 Evaluation Of Model’s Congruence

Colmogrov-Smirinov test confirms comparative normality of residuals (K-S=1.018, P= 0.251) and the graph of being variance constancy is confirmed and Camera-Watson statistics (D-V=1.756) indicates residual’s lack of correlation, too.



The graph of estimation versus residuals for evaluating variances constancy

6. Conclusion and Discussions

Agency costs are arisen by conflict of interests between managers and owners and it has an inverse effect on the firm value. Corporate governance is one of the mechanisms to control agency costs. We evaluate some of these mechanisms' effect on agency costs in listed companies of Tehran Stock Exchange by using mechanisms of corporate governance and ownership structure. The results of this study indicated that corporate governance mechanisms are adequate to decrease agency costs and therefore, firm value increase. Finding suggested that there is a negative and significant relationship between managers' shares ownership with agency costs. In other words, increase in the percentage of managers' shares ownership will decrease agency costs; it means that with increasing managers' shares ownership, interests of the managers and shareholders will be more consistent together. Therefore, findings of the study are consistent with the results of researchers' study such as, Sing and Davidson (2003), Fleming et al (2005), Trovang (2006), Florakis (2008), Mac Night and Veir (2009). And also, there is a negative and significant relationship between the percentage of institutional investors' ownership with agency costs that represents effective and active influence of institutional investors on company managers' decision making and decreasing the conflict of benefits between managers and owners. Therefore, increase in percentage of institutional ownership will decrease agency's costs. These are consistent with the findings of the studied conducted by Woo (2004), Nouravesh et al (1388), Nouravesh and Ebrahimi Kordlor (1384), Hasas Yeganeh et al (1387), Hashem Valipoor and Ali khorram (1390). And also, there is a negative and significant relationship between firm size and agency costs which means that larger board size will increase agency costs because of less efficiency. Of course, researchers have found twofold results in this case: Sing and Davidson claimed that small board compared with the larger board has less effects and power, i.e. existence of positive and significant relationship. Contrary, Florakis and Ozkan (2004) indicated that larger board size will increase agency's costs because of less efficiency.

References

Hasas Yeganeh, Y. Moradi, M. Esakndar, H. (2008). Evaluation of the relationship between institutional investors and firm's value, *Review of Accounting and Auditing*, No. 52, PP 107-122.

Mashayekh, Sh. Esmaeili, M. (2006). Evaluation of the relationship between interest quality and some aspects of corporate governance in the firms listed in Tehran Stock Exchange, *Journal of Accounting and Auditing*, No.45, PP 25-44.

Qaemi, M. Shahriyari, M. (2009). Corporate governance and financial performance of the companies, *Advances in Accounting,* No. 1, PP 113-128.

Nouravesh, A. Ebrahimi Kordlor, A. (2005). Reviewing and explaining the relationship between shareholders combination with information asymmetry and the profitability of performance accounting measures, *Review of Accounting and Auditing,* No. 42, PP 97-124.

Nourosh, A. Karami, Q. Vafi Sani, J. (2009). Evaluation of the relationship between firm's governance mechanisms and agency's costs of the firms listed in Tehran Stock Exchange, *Accounting researches,* No. 1, PP 4-27.

Vali Pour, H. Khorram, A. (2011). Effectiveness of firm's governance mechanisms in order to decrease agency's costs, *Journal of Management Accounting*, No. 4, PP61-75.

Agrawal, A. and C.R. Knoeber, (1996). Firm performance and mechanisms to control agency problems between managers and shareholders, Journal of Financial and Quantitative Analysis. 31: 377-397.

Doukas, J.A., P.J. McKnight and C. Pantzalis, (2005). Security analysis, agency costs and UK firm characteristics, International Review of Financial Analysis. 14: 493-507.

Fleming, G., R. Heaney and R. McCosker (2005). Agency costs and ownership structure in Australia, Pacific-Basin Finance Journal. 13: 29-52.

Firth, M. Fung, P. M. Y. and Rui, O. M.(2008), Ownership, Governance ,Mechanisms, and Agency Costs in China's Listed Firms. Journal of Asset Management, Vol. 9, No 2, pp. 90-101.

Florackis, C., (2008), Agency Costs and Corporate Governance Mechanisms: Evidence for UK Firms,International Journal of Managerial Finance, Vol. 4 No. 1, pp. 37-59.

Henry, D., (2004). Corporate governance and ownership structure of target companies and the outcome of takeover bids', Pacific-Basin Finance Journal. 12: 419-444.

McKnight, P. J and Weir, C., (2009), Agency Costs, Corporate Governance ,Mechanisms and Ownership Structure in Large UK Publicly Quoted Companies: A Panel Data Analysis, The Quarterly Review of Economics and Finance, 49, pp. 139-158

Truong, T., (2006), Corporate Boards, Ownership and Agency Costs: Evidence from Australia, The Business Review, Cambridge; Summer, Vol. 5, Issue. 2, pp. 163-167.

Singh, M. and W.N. Davidson III, (2003). Agency costs, ownership structure and corporate governance mechanisms, Journal of Banking and Finance. 27: 793-816.

Brickley, J., Lease, R. C., & Smith, C. W. (1988). Ownership structure and voting on antitakeover amendments. Journal of Financial Economics. 20: 267–291.

Brickley, J. A., Coles, J. L., & Terry, R. L. (1994). Outside directors and the adoption of poison pills. Journal of Financial Economics. 34: 371–390.