

# The Effect of Board Composition and Ownership Concentration on Earnings Management: Evidence from IRAN

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**Abstract**—The role of corporate governance is to reduce the divergence of interests between shareholders and managers. The role of corporate governance is more useful when managers have an incentive to deviate from shareholders' interests. One example of management's deviation from shareholders' interests is the management of earnings through the use of accounting accruals. This paper examines the association between corporate governance internal mechanisms ownership concentration, board independence, the existence of CEO-Chairman duality and earnings management. Firm size and leverage are control variables. The population used in this study comprises firms listed on the Tehran Stock Exchange (TSE) between 2004 and 2008, the sample comprises 196 firms. Panel Data method is employed as technique to estimate the model. We find that there is negative significant association between ownership concentration and board independence manage earnings with earnings management, there is negative significant association between the existence of CEO-Chairman duality and earnings management. This study also found a positive significant association between control variable (firm size and leverage) and earnings management.

**Keywords**—Earnings management, board independence, ownership concentration, corporate governance.

## I. INTRODUCTION

THE role of corporate governance is to reduce the divergence of interests between shareholders and managers. The role of corporate governance is more useful when managers have an incentive to deviate from shareholders' interests. One example of management's deviation from shareholders' interests is the management of earnings through the use of accounting accruals. Corporate governance is likely to reduce the incidence of earnings management. Corporate governance is also likely to improve investors' perception of the reliability of a firm's performance, as measured by the earnings, in situations of earnings management. That is, corporate governance will be value relevant when earnings management exists.

Concerns about corporate governance in East Asian countries emerged as a result of the East Asian financial crisis in 1997/1998. The crisis exposed the consequences of weak governance and poor governance standards were blamed indirectly in part for the crisis that weakened foreign investors' confidence in the East Asian capital market, including Malaysia [1], [2]. Further, the tragic collapses and losses of giant companies such as Enron Corporation,

WorldCom and Tyco International in the United States (US), which is known to have the best regulated and most efficient capital market in the world, highlights the critical need to improve the corporate governance system in both developed and developing countries. These together with other scandals such as Parmalat in Italy, followed by revelations of misrepresentation of financial statements, have drawn attention to corporate governance reform around the world and the need to improve the quality of reported earnings as the capital market needs precise and unbiased financial reporting to value securities and encourage investors' confidence. In response to the risks posed by corporate governance breakdowns, many countries<sup>1</sup> have taken a proactive action to reform their code on corporate governance to improve and strengthen the corporate governance systems currently employed.

In the early 2000, the managers of Tehran Stock Exchange (TSE), Islamic Parliament Research Center, and a specialized committee in Economic and Finance Ministry, started to do some surveys about corporate governance in IRAN. Surveying the corporate governance characteristics in Iran shows the approximation of them to the internal control systems. The internal control corporate governance is a system in which all the listed companies in one country are owned and controlled by the minor and main shareholders. These shareholders can be divided into different groups. Some maybe the members of the foundation group, some maybe the creditor banks (which are a small group), some are the other companies or even the government. However, in the past few years the efforts which have been done to expand the capital market, shows that Iran is interested in changing this system to external control corporate governance. For instance, in the third & the fourth Economic Development Plan, privatization of governmental organizations comes into a great deal of importance. It seems in case of reaching this goal (to privatize the governmental organizations) and increasing the shareholders, corporate governance system in our country with regard to the other countries' experiences, has change its aim to making external control system.

<sup>1</sup> See e.g. Cadbury Report 1992, Greenbury Report 1995, Malaysian Code on Corporate Governance 2000, Singapore Code of Corporate Governance 2001, Thailand Code for Best Practice for Directors of Listed Companies 2002, Sarbanes-Oxley Act 2002, NYSE Corporate Governance Rules 2003, Bangladesh Code of Corporate Governance 2004, Hong Kong Corporate Governance Code 2004 at <http://www.micg.net/code.htm>

Nevertheless, observing the companies and stock market in Iran shows that nowadays there are some external control mechanisms. For example, I can point out legal the warden because of Trade Law (especially clauses 144-156), stock exchange laws, Audit Organization statute, and Iranian Official Accounting Society rules. In fact, the capital market in Iran is very new and somewhat inefficient. The major shareholder's supervision and motivating them, depends on some activities, such as buying controlling stock and the rule of institutional investors. Supervising of minor shareholders is not permitted. However, auditing the financial statements of registered companies in stock exchange is compulsory. In addition, there is no ranking institution in Iran. Unfortunately, there is not any proper supervision system for internal control mechanism. Despite of the board of directors' issue and some other issues related to executive management, such as dividing the responsibilities between executive managers, the role of non-executive managers is very weak and there is no care about supervising organizational morality. Fortunately, in the late 2004, TSE Research and Development Center published the first edition of Code of Corporate Governance in IRAN. This code was regulated in 22 clauses and contained some necessary definitions, management board and shareholders' responsibilities, financial disclosures, accountability and auditing concept. According to the ownership structure, the capital market situation, and the Trade Law, this code was edited in the next year (2005). The second edition of Code of Corporate Governance in IRAN was regulated in 5 chapters and 37 clauses. This code has been declared via media and has been implemented by many companies [3]. This paper is organized as follows. The next section followed by a discussion of past studies and development of hypotheses about the expected associations between some corporate governance characteristics and earnings management. Next, the research method and data collecting process are described, followed by a discussion of the empirical results. The paper ends with a conclusion.

## II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### *Ownership concentration*

Ownership concentration is a measure of the existence of large shareholders in a firm (Thomsen and Pedersen, 2000). Large shareholders have greater incentives to monitor management, because the costs associated with monitoring management are less than the expected benefits to their large equity holdings in the firm. Ramsey and Blair [5] suggest that increased ownership concentration provides large shareholders with sufficient incentives to monitor managers. Demsetz and Lehn [6] and Stiglitz [7] empirically support this view by finding that large equity holders have incentives to bear the fixed costs of collecting information and to engage in monitoring management. In contrast, dispersed ownership leads to weaker incentives to monitor management [8]. In situations where shareholders hold low stakes in the firm, shareholders have little or no incentive to monitor managers [5], [9] because monitoring costs will exceed the gains of monitoring managers. Contrary to the view discussed above,

other studies [10], [7] suggest that ownership concentration may negatively affect the value of the firm, because large shareholders have the capacity to abuse their position of dominant control at the expense of minority shareholders. [11] Argue that larger shareholders are recognized by minority shareholders as a signal of a better monitoring environment. Their argument is consistent with the view that ownership concentration is a monitoring attribute of corporate governance [12]. Building on the agency framework developed by Jensen and Meckling [13], the existence of large shareholders is expected to lower opportunistic earnings management.

The justification for this is that managers at publicly traded firms either lose their control to large shareholders or are constantly monitored by large shareholders. If higher ownership concentration increases monitoring over management [14], [7], higher ownership concentration should decrease management's capacity to alter accounting earnings and increase the reliability earnings. Dempsey et al. [6] finds that different categories of ownership concentration are related to different levels of opportunistic earnings management. Earnings management also reflects the strength of management's incentive to manage earnings. Once managers have no incentive to manage earnings opportunistically, they act according to the interest of shareholders, and thus ownership concentration should not have an impact on shareholders' perception of accounting earnings.

Given the impact of ownership concentration on earnings management and earnings reliability, highly concentrated ownership should affect shareholders' perception of earnings reliability and relevance after conditioning on earnings management. Thus, less reliable earnings associated with high ownership concentration are perceived by shareholders to be more value relevant than those associated with lower ownership concentration. Therefore, it is hypothesized that:

*H<sub>1</sub>: Highly ownership concentration are negatively related to earnings management*

### *Board Independence*

Independence can be achieved through the inclusion of disinterested parties, i.e. outside directors, to increase the boards' ability to be more efficient in monitoring the top management [15]. Outside directors have more incentive to effectively monitor management because of a strong need to develop their reputations as expert decision makers. However, the success of these mechanisms depends upon its independence from management. Beasley's [16] paper argues that the inclusion of grey directors who have affiliations with management may impair board independence. The independent directors must be solely outside directors who have no other relationship with the company except that of being on the board of directors.

A number of studies have reported a positive role of having a higher proportion of independent non-executive directors sit on the board and financial reporting quality. Beasley's [16] paper provides evidence of a strong relationship between the

independence of board members and the likelihood of fraud incidence. Larger proportions of outside members on the board of directors provide a better oversight of management to prevent financial statement fraud and effectively monitoring management activity. The results of Beasley's [16] study highlight the importance of examining the insight processes of how outside directors exercise control over board activities when evaluating the impact of these corporate governance mechanisms on financial reporting quality.

Other researchers after Beasley's [16] papers continue to address the link between board quality and financial reporting quality, focusing on the issue of earnings management. It is expected that the efficient monitoring from non-executive directors helps to effectively constrain earnings management activity. The study by Peasnell et al. [17] on the association between board composition and earnings management activity, between the pre- and post-Cadbury period, finds evidence of a significant negative relationship between earnings management and the proportion of non-executive board members in the post-Cadbury period. Their findings suggest that the higher proportion of non-executive directors helps constrain earnings management activity and appropriately structured boards following the issuance of the Cadbury Report have effectively increased the quality of financial reports in the UK. Klein [18] also reports similar findings for 692 large publicly-traded US firms for which she finds a negative association between board independence and abnormal accruals. Correspondingly, using a sample of 434 listed Australian firms; Davidson et al. [19] also find a significant negative relationship between earnings management and the presence of a majority of non-executive directors. Their findings support the agency theory claims that independence of the board members is an effective monitoring mechanism to protect shareholders' interest. Results from prior studies in developed countries, with a dispersed ownership structure, confirm the agency theory claims of effective monitoring mechanisms by the independent directors. A study by Kao and Chen [20] provides negative significant evidence between earnings management and a higher proportion of outside directors in the Taiwanese market. Similarly, Jaggi et al. [21] also reports similar findings for Hong Kong listed companies where family ownership and control is common. However, it is important to note that their paper provides further evidence that the monitoring effectiveness is reduced in family controlled firms. This is evidenced by an insignificant relationship between proportions for non-executive directors in high family-ownership samples. Park and Shin [22] however fail to find empirical support of the association between earnings management and board independence in Canada where the ownership structure is highly concentrated and a large block holder controls the public traded firms. Abdullah's [23] study finds evidence of a positive and significant role of board independence on earnings quality proxy by earnings response coefficient and provides support that independent directors are effective control mechanisms in a firms' financial reporting process. In addition, a study by Salleh et al. [24] also reports a significant finding between a higher proportion of independent directors and a higher audit quality proxy by audit fees. Their study

highlights the importance of a board's independence in relation to its monitoring role and strengthening of audit quality. A study by Abdullah [2], Vethanayagam et al. [25], however, did not find any empirical support of an association between board independence and performance. Additionally, a study by Abdullah and Mohd Nasir and Abdul Rahman and Mohamed Ali [24] also fails to find any significant evidence between independence of boards and earnings management. A more recent work by Hashim and Susela [26], using a more recent sample, provides evidence of a significant contrary sign between board independence and earnings management and brings issues of whether Malaysian companies' boards are effective and truly independent when performing their duties. Despite the conflicting results from prior studies, it is hypothesized that:

*H<sub>2</sub>: Highly independent boards are negatively related to earnings management*

#### *CEO dominance*

Most Corporate Practice recommendations strongly suggested the separation between the roles of board chairman and the CEO. Corporate governance regulators recognize that CEO dominance over the board as a source of excessive power [27]. The role of the board chair is to monitor the CEO [28]. Chairman of the board has the power to control the agenda and the running of the board meetings. There is likely to be a lack of independence between management and the board, if the CEO is also the board chair. CEO dominance becomes problematic if the interests of the CEO are different from interests of shareholders. Using data from the United States, Yermack [29] and Rechner and Dalton [30] show that firm with independent chairmen outperformed firms with CEO dominance. CEO dominance does not necessarily decrease performance; it is likely to influence the market's perception of the level of control exercised over managerial performance and the financial reporting process. Gul and Leung [31] find that CEO dominance is associated with lower voluntary corporate disclosure for Hong Kong companies. They argue that CEO dominance combines decision management and decision control, which could erode the board's ability to exercise effective control. Empirical evidence supports the view that CEO dominance is likely to lead to more opportunistic managerial behavior due to the reduction in effective board monitoring over executives [32]. Thus, it is justifiable to assume a positive association between CEO dominance and earnings management. In the United States, CEO dominance is the norm, while in Australia and the United Kingdom it is not. Therefore there may be cultural difference. Anderson et al. [33] find that the separation between CEO and board chair positions appear to positively influence the information content of accounting earnings. If [32] CEO dominance should decrease the reliability earnings. Unlike prior studies, this study defines CEO dominance in terms of the independence of the chairman rather than CEO duality. The reason it is defined differently from prior studies is that the chairman is less likely to hold the CEO accountable if the board chair is a person who is not independent of management (i.e. current or past executives). Given that CEO

dominance should influence earnings management and earnings reliability, CEO dominance is expected to affect shareholders' perception of earnings reliability and relevance after conditioning on earnings management. Thus, reliable earnings associated with CEO dominance are perceived by shareholders to be less value relevant than those associated with independent chairmen.

As shareholders perceive that reduction of monitoring caused by CEO dominance increases earnings management and reduces the reliability and relevance of accounting earnings, Therefore, it is hypothesized that:

*H<sub>3</sub>: CEO dominance is positively related to earnings management*

### III. METHODOLOGY

#### Sample Selection

The population used in this study comprises firms listed on the Tehran Stock Exchange (TSE) between 2004 and 2008. All financial firms (including banks) are excluded because this industry is regulated and is likely to have fundamentally different cash flow and accrual processes. Firms with insufficient data to compute discretionary accruals are also eliminated. After adjusting for outliers, the sample comprises 196 firms. Panel Data method is employed as technique to estimate the model. Financial and accounting data is collected directly either from annual reports or from company's handbooks.

#### Variable Definitions

##### Dependent Variable: Discretionary Accruals (DA)

There is no consensus on the definition of earnings management [35]. For example, Davidson et al., [19] cited in Schipper [36] defined earnings management as "the process of taking deliberate steps within the constraints of Generally Accepted Accounting Principles to bring about a desired level of reported income". Healy and Wahlen [37] state that "earnings management occurs when managers use judgment in financial reporting in structuring transactions to alter financial reports, to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting".

Earnings management occurs in three ways: (1) via the structuring of certain revenue and/or expense transactions; (2) via changes in accounting procedures; and/or (3) via accruals management [38], [36]. Of the above mentioned earnings management techniques, accruals management is the most damaging to the usefulness of accounting reports because investors are unaware of the extent of such accruals [39]. Accrual is defined as the difference between the earnings and cash flow from operating activities. Accruals can be further classified into non-discretionary accruals and discretionary accruals. While non-discretionary accruals are accounting adjustments to the firm's cash flows mandated by the accounting standard-setting bodies, discretionary accruals are adjustments to cash flows selected by the managers [40].

In this study, we use accounting accruals approach to measure earnings management. In general, accounting

accruals, which is the difference between earnings and cash flows from operating activities, have been used in different terms in the previous literature. While Healy [41] used total accruals to measure earnings management, subsequent studies attempt to separate them into components, discretionary and non discretionary accruals. Discretionary accruals are extensively used to demonstrate that managers transfer their accounting earnings from one period to another. Additionally, total accruals include non-discretionary accruals which reflect non-manipulated accounting accruals items because they are out of managers' control. Consistent with the previous literature on earnings management [42], [43] we used discretionary accruals to measure the extent of earnings management. Following recent literature [21], this study uses the cross sectional variation of the modified Jones model [42], [34] to obtain a proxy for discretionary accruals. Dechow et al., [34]; Guay et al., [44] among some others argue that the modified Jones model is the most powerful model for estimating discretionary accruals among the existing models. The dependent variable in our model, earnings management, is measured as discretionary accruals using a cross-sectional version of the modified Jones model [34] as follows:

First, total accruals (TACC) are defined in this study as the difference between net income before extraordinary items (NI) and cash flow from operating activities (OCF):

$$TACC = NI - OCF \quad (1)$$

Equation 2 below is estimated for each firm and fiscal year combination

$$TACC_{it} / A_{it-1} = \alpha_1 [1 / A_{it-1}] + \alpha_2 [\Delta REV_{it} - \Delta REC_{it}] / A_{it-1} + \alpha_3 [PPE_{it} / A_{it-1}] + \varepsilon_{it} \quad (2)$$

Where, TACC is the total accrual,  $\Delta REV$  is the change in operating revenues,  $\Delta REC$  is the change in net receivables, PPE is gross property, plant and equipment,  $t$  and  $t-1$  are time subscripts and  $i$  is the firm subscript. Changes in revenues is included to control for the economic circumstances of a firm; whilst gross property, plant and equipment are included to control for the portion of total accruals related to non-discretionary depreciation expenses [42]. Dechow et al., [34] modified the Jones [42] model by removing the discretionary components of revenues through changes in accounts receivable. Firms are considered to have engaged in income increasing (decreasing) discretionary accruals if they have positive (negative) estimated discretionary accruals. Earnings mean the reported earnings before interest and tax and before extraordinary items. Earnings target is the prior year earnings level [45]. Non-discretionary earnings (NDE) are earnings less discretionary accruals (DACC). To estimate the coefficient values, an Ordinary Least Squares (OLS) regression with no intercept is employed.

The Difference between total accruals and the non-discretionary components of accruals is considered as discretionary accruals (DACC) as stated below<sup>2</sup>:



$DA_{it} = \alpha + \beta_1 \frac{OWNCON}{A_{t-1}} + \beta_2 \frac{BRDIND}{A_{t-1}} + \beta_3 \frac{DUL}{A_{t-1}} + \beta_4 \frac{SIZE}{A_{t-1}} + \beta_5 \frac{LEV}{A_{t-1}} + e_{it}$  (3)  
 All variables are scaled by prior year total assets  $A_{t-1}$  to control for heteroscedasticity.

**Independent Variables**

Independent Variables argued in section1, are: Ownership concentration (OWNCON), Board Independence (BRDIND), CEO dominance (DUL).

**Control Variables**

**Firm size (SIZE)**

Additionally, firms' accruals management decisions are likely to be influenced by firms' size. The size hypothesis [46] posits that large firms are more politically visible and are more likely to manage earnings to reduce their political visibility [46] ,[48].However, Ashari et al., [49] has an opposite view and argues that more information is available about larger firms, which are closely scrutinized by analysts and investors. Smoothed income signals from larger firms add little value; accordingly, they have less incentive to smooth income [50] . Thus, there is no specific prediction on the association between firm size and discretionary accruals. This study uses the natural logarithm of total assets as a proxy for firm size (SIZE).

**Firm leverage (LEV)**

We also control for leverage. DeFond and Jiambalvo [51] and Sweeney [52] report that managers use discretionary accruals to satisfy debt covenant requirements. Because more highly leveraged firms have greater incentives to increase earnings. Trueman and Titman [53] argue that managing earnings enables managers to reduce estimates of various claimants of the firm about the volatility of its earnings process and so lowers their assessment of the probability of bankruptcy. Consequently, as discussed by Atik [50], this provides an opportunity to borrow at lower interest rates and decreases cost of capital. Consistent with this debt hypothesis, we expect that managers in more leveraged firms are more likely to adopt aggressive earnings management techniques to prevent violation of debt covenants [46]. Firm financial leverage, measured as the ratio of debt to assets, is included, as a proxy for risk, because managers are more likely to exercise their accounting discretion when they are closer to default on debt covenants [54].

**3.2.3. Common Effect Model**

To test the hypothesis common effect model in panel data analysis has been used:

$DA_{it} = \alpha + \beta_1 \frac{OWNCON}{A_{t-1}} + \beta_2 \frac{BRDIND}{A_{t-1}} + \beta_3 \frac{DUL}{A_{t-1}} + \beta_4 \frac{SIZE}{A_{t-1}} + \beta_5 \frac{LEV}{A_{t-1}} + e_{it}$

Where:

- DA = discretionary accruals
- OWNCON =percentage of shares owned by block holders (more of five percent)
- BRDIND = proportion of non-executive directors to total board composition

- DUAL = 1 if CEO is also board chair and 0 otherwise
- SIZE = log of total assets
- LEV = leverage (ratio of total liabilities to total assets)

**IV. RESULTS**

**Descriptivestatics**

**TABLE I  
 DESCRIPTIVE STATISTICS FOR DEPENDENT AND INDEPENDENT VARIABLES**

	DA	OWNCON	BRDIND	DUL	SIZE	LEV
Mean	1.61	76.7%	0.52	0.44	27.71	0.088
Median	0.349	80.5%	0.6	0.0	27.80	0.084
Maximum	81.9	99.8%	1	1.0	33.26	0.844
Minimum	0.0002	5.6%	0	0.0	20.94	0.010
Std. Deviation	7.79	18.29%	0.217	0.49	2.21	0.051

DA= discretionary accruals. OWNCON = percentage of shares owned by block holders (more of five percent). BRDIND = proportion of non-executive directors to total board composition. DUL = 1 if CEO is also board chair and 0 otherwise. SIZE= log of total assets. LEV= Leverage ratio calculated by total liabilities over total assets.

As reported in Table 1, the mean and median value of discretionary accruals is 1.61and 3.49 respectively. The mean and median value of percentage of block shareholders (OWNCON) is 76%and 80% respectively .The maximum and Minimum value and the standard deviations of OWNCON are 5.6%, 99.8%, 18.29% respectively. The mean and median value of BRDIND is 76%and 80% respectively the maximum and minimum value and the standard deviations of BRDIND are 2.6%, 99.8%, and 18.29% respectively. The mean and median value of SIZE is 27.7%and 27.8% respectively .The maximum and Minimum value and the standard deviations of INOWN are 33.2%, 20.9%, 2.2% respectively. The mean and median value of LEV is 8.8%and 8.4% respectively .The maximum and Minimum value and the standard deviations of LEV are 84%, 1%, 5% respectively.

**Common Effect Model Results**

**TABLE II  
 REGRESSION RESULTS**

	$DA_{it} = \alpha + \beta_1 \frac{OWNCON}{A_{t-1}} + \beta_2 \frac{BRDIND}{A_{t-1}} + \beta_3 \frac{DUL}{A_{t-1}} + \beta_4 \frac{SIZE}{A_{t-1}} + \beta_5 \frac{LEV}{A_{t-1}} + e_{it}$		
	Coefficient	t-Statistic	Prob.
(Constant)	-3.35	-5.808	0.000
BRDIND	-4.11	-3.401	0.000
DUAL	3.87	1.996	0.045
INOWN	1.14	2.474	0.013
LGSIZE	1.25	5.815	0.000
LEV	7.54	5.425	0.000
F-Statistics	580.55	Durbin-Watson stat	1.91
R-squared	0.888	Prob(F-statistic)	0.000
Adjusted R-squared	0.897	Prob (Effects Test F)	1.000

Note: significant at 95% level of confidence

Table 2 shows the results of common effect model applied to find out the impacts of ownership concentration (OWNCON), board independence (BRDIND) and CEO dominance (DUL) on earnings management, the dependent

variable (DA) is significant ( $p < 0.001$ ) and positively correlated with DUL, SIZE, LEV, and is significant ( $p < 0.001$ ) and negatively correlated with OWNCON, BRDIND. We found discretionary accruals as a proxy for earnings management is negatively related to ownership concentration. Our findings suggest that the presence of block holders could effectively monitor the management to avoid opportunistic behavior of the management including earnings management. This result is consistent with the findings of Demsetz and Lehn, [14] Stiglitz, [7]. My findings show that board independence is negatively related to earnings management. That is, adding outside directors to the board may improve in governance practices and they are helpful to the board in monitoring the firm's management of earnings. Consistent with the findings of Beasley's [16], Klein [18], Davidson et al. [19], Kao and Chen [20]. We find a positive and significant relation between CEO dominance and earnings management. Consistent with the findings of Dechow et al., [34], Finkelstein and D'Aveni [32] and Anderson et al. [33]. The coefficients and signs on the control variables shows a positive relation between firm size and earnings management. This result is consistent with the findings of Moses [47], Hsu and Koh [47]. We also find a positive significant relation between leverage and earnings management. This result is consistent with the findings of DeFond and Jiambalvo [51] and Sweeney [51].

## V. CONCLUSION

This paper examines the effect of corporate governance mechanisms on earnings management in IRAN. This study also extends prior research by focusing on the relationship between earnings management and corporate governance characteristics.

We found discretionary accruals as a proxy for earnings management is negatively related to ownership concentration. Our findings suggest that the presence of block holders could effectively monitor the management to avoid opportunistic behavior of the management including earnings management. In addition, we show that board independence is negatively related to earnings management. Our findings suggest that adding outside directors to the board may improve in governance practices and they are helpful to the board in monitoring the firm's management of earnings. In fact, Investors can rely on the information revealed in the financial statements when there are more outside directors in the board. According to our findings, duality is the other corporate governance index that is significantly related to the earnings management. That is, if the CEO is board chair, the likelihood of earnings management will increase. One probable reason is that, the CEO duality may reduce the effectiveness of the board and may create a conflict between management and board that may reduce earnings management. One probable reason is that, the CEO duality may reduce the effectiveness of the board and may create a conflict between management and board that may reduce earnings management (Zahra, 1990; Solomon, 2007). Another probable reason is that duality may have been imposed, rather than adopted in a usual

organization practices to consolidate CEOs power (Kang and Zardkoobi, 2005). It may have reduced the board's ability to exercise the governance function in the context of Iran. This finding captures the agency theory implying that the combined leadership structure does not enhance the firm economic performance in the context of Iran. It is noted that the existing board culture in IRAN allows both the executive and the non-executive directors to perform duties together in one organizational layer; therefore there are some incidences of CEO duality. It is suggested to separate the executive function of the board from the monitoring function by splitting the role of Chairperson and CEO, which is also recommended in the United Kingdom 'Cadbury Report 1992' and 'Higgs Report 2003'.

This study also found a positive significant association between firm size and leverage and earnings management. Our findings have important policy implications since they suggest the need to encourage applying corporate governance principles by institutions and individual block-holders to provide effective monitoring of earnings management in IRAN firms, especially those with a large size.

## REFERENCES

- [1] Leng, A.C.A., 2004, the impact of corporate governance practices on firm's financial performance: Evidence from Malaysian companies, *ASEAN Economic Bulletin*, 21(3), 308-318.
- [2] Abdullah, S.N., 2004, Board composition, CEO duality and performance among Malaysian listed companies, *Corporate Governance*, 4 (4), 47-61.
- [3] Mashayekhi, B., Noravesh, L., 2008, "Corporate governance and earnings management: evidence from Iran", *Asian Journal of Finance and Accounting*, Vol. 1, No.2 pp. 180 – 198.
- [4] Thomsen S., and T., Pedersen. 2000. "Ownership structure and economic performance in the largest European companies", *The Strategic Management Journal* 21: 689-705.
- [5] Ramsay, I., Blair, M., 1993, "Ownership Concentration, Institutional Investment and Corporate Governance: An Empirical Investigation of 100 Australian Companies", *Melbourne University Law Review*, Vol. 19, pp. 153-194.
- [6] Dempsey, J., Hunt, H., and N., Schroeder, "Earnings management and corporate ownership structure: An examination of extraordinary item reporting", *Journal of Business Finance & Accounting* 20: 479-500.
- [7] Stiglitz, J., 1985, "Credit Markets and the Control of Capital", *Journal of Money, Credit and Banking*, Vol. 17, pp. 131-144.
- [8] Maher, M., Andersson, T., 2000, "Corporate Governance: Effects on Firm Performance and Economic Growth", *OECD working paper*.
- [9] Hart, O., 1995, "Corporate Governance: Some theory and implications", *The Economic Journal*, Vol. 105, pp. 678-689.
- [10] Bebchuk, L., 1994, "Efficient and inefficient sales of corporate control", *Quarterly Journal of Economics*, Vol. 109, pp. 957-994.
- [11] Bennedsen, M., Wolfenzon, D., "The balance of power in closely held corporations *Journal of Financial Economics*, Vol. 58, 2000, pp. 113-139.
- [12] La Porta, R., Lopez De Silanes, F. and Shleifer, A., 1999, Corporate ownership around the world, *The Journal of Finance*, 54 (2), 471-517.
- [13] Jensen, M., Meckling, W., 1976, "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics*, pp. 3005-360.
- [14] Demsetz, H. 1983. The structure of ownership and the theory of the firm. *Journal of Law and Economics*, 26 (2): 375–390.
- [15] Fama, E., Jensen, M., 1983, "Separation of Ownership and Control", *Journal of Law and Economics*, Vol. 26, pp. 301-25.
- [16] Beasley, M.S., 1996, An empirical analysis of the relation between the board of director composition and financial statement fraud, *The Accounting Review*, 71 (4), 443-465.
- [17] Peasnell, K.V., P.F. Pope, and S. Young., 2000. 'Detecting earnings management using cross-sectional abnormal accruals models', *Accounting and Business Research*, 30(4): 313-326.

- [18] Klein, A., 2002. Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(3): 375-400.
- [19] Davidson, S., Stickney, C., 1987, Weil, R., "Accounting: The Language of Business", Seventh edition, Thomas Horton and Daughter, Arizona.
- [20] Kao, Lanfeng and Chen, Anlin 2004. The effects of board characteristics on earnings management, *Corporate Ownership & Control*, Volume 1, Issue 3, Spring .
- [21] Jaggi, B., S., Leung. 2007. "Impact of family dominance on monitoring of earnings management by audit committees: evidence from Hong Kong", *Journal of International Accounting, Auditing and Taxation* 16:27-50.
- [22] Park, Y. and H.Shin, 2004. Board Composition and Earnings Management in Canada. *Journal of corporate finance: contracting, governance, and organization*, 10 (3), 431-457.
- [23] Abdullah, S.N., 1999, The role of corporate governance and ownership structure on accounting earnings quality, Unpublished PhD Dissertation, Universiti Utara Malaysia.
- [24] Abdul Rahman, R. and Mohamed Ali, F.H., 2006, Board, audit committee, culture and earnings management: Malaysian evidence, *Managerial Auditing Journal*, 21(7), 783-804.
- [25] Salleh, Z., Stewart, J. and Manson, S., 2006, The impact of board composition and ethnicity on audit quality: Evidence from Malaysian companies, *Malaysian Accounting Review*, 5(2), 61-83.
- [26] Hashim, H.A., and Susela, D., 2006, The Impact of Board Characteristics on Earnings Quality: Evidence from Malaysian Listed Companies, Paper presented at Eighteenth Asian-Pacific Conference on International Accounting Issues, Maui, Hawaii.
- [27] Dedman, E., 2000, "An investigation into the determinants of UK board structure before and after Cadbury", *Corporate Governance*, Vol. 8, pp. 133-153.
- [28] Jensen, M., 1993, "Presidential Address: The modern industrial revolution, exit and the failure of internal control systems", *Journal of Finance*, Vol. 48, pp. 831-880.
- [29] Yermack, D., 1996, "Higher market valuation of companies with a small board of directors", *Journal of Financial Economics*, Vol. 40, Issue 2, pp. 185-211.
- [30] Rechner, P., Dalton, D., 1991, "CEO duality and organizational performance: a longitudinal analysis", Vol. 12, Issue 2, pp. 155-161.
- [31] Gul, F., Leung, S., 2004, "Board leadership, outside directors' expertise and voluntary corporate disclosure", *Journal of Accounting and Public Policy*, Vol. 23, pp. 351-379.
- [32] Finkelstein, S. and D'Aveni, R., 1994, "CEO Duality as a Double-edged Sword: How Boards of Directors Balance Entrenchment Avoidance and Unity of Command", *Academy of Management Journal*, Vol. 37, Issue 5, pp. 1079-1108.
- [33] Anderson, K., Deli, D., Gillan, S., 2003, "Boards of Directors, Audit Committees, and the Information Content of Earnings", SSRN Working Paper.
- [34] Dechow, P.M., R. G. Sloan, and A.P. Sweeney. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research* 13(1):1-36
- [35] Beneish, M., 2001. "Earnings Management: a perspective", *Managerial Finance* 27: 3-17.
- [36] Schipper, K., 1989, "Commentary on Earnings Management", *Accounting Horizons*, pp. 91-102.
- [37] Healy, P., Wahlen, J., 1999, "A Review of the Earnings Management Literature and its Implications for Standard Setting", *Accounting Horizons*, Vol. 13, Issue 4, pp. 365-384.
- [38] McNichols, M., Wilson, G., 1988, "Evidence of Earnings Management from the Provision for Bad Debts", *Journal of Accounting Research*, Vol. 26, No. 3, pp. 1-31.
- [39] Mitra, S., 2002. The impact of institutional stock ownership on a firm's earnings management practice: An empirical investigation. Ph.D Dissertation, Louisiana State University and Agricultural and Mechanical College.
- [40] Rao, N., and S., Dandale. 2008. "Earnings Management: A Study of Equity Rights Issues in India", *The Icfai Journal of Applied Finance*. 14: 20-34.
- [41] Healy, P., Palepu, K., 1995, "The challenges of investor communication", *Journal of Financial Economics*, Vol. 38, pp. 111-140.
- [42] Jones, J., 1991, "Earnings Management During Import Relief Investigations", *Journal of Accounting Research*, Vol. 29, No. 2pp. 193-223.
- [43] Subramanyam, K., 1996, "The Pricing of Discretionary Accruals", *Journal of Accounting and Economics*, pp. 249-281.
- [44] Guay, W., Kothari, S., Watts, R., 1996, "A Market-Based Evaluation of Discretionary Accrual Models", *Journal of Accounting Research*, Vol. 34, pp. 83-105.
- [45] DeGeorge, F., Patel, J., Zeckhauser, R., "Earnings management to exceed thresholds", *Journal of Business*, Vol. 72, January 1999.
- [46] Watts, R., Zimmerman, J., 1986, "Positive Accounting Theory", Englewood Cliffs, Prentice-Hall, Inc.,
- [47] Moses, O., 1987. "Income Smoothing and Incentives: Empirical Tests Using Accounting Changes," *Accounting Review* 62: 358-377.
- [48] Hsu, G., and P., Koh. 2005. "Does the presence of institutional investors influence accruals management? Evidence from Australia", *Corporate Governance* 13, 809-823.
- [49] Ashari, N., Koh, H., Tan, S., and W., Wong. 1994. "Factors affecting income smoothing among listed companies in Singapore", *Accounting and Business Research* 24 (96), 291-301.
- [50] Atik A., 2008. "Detecting income-smoothing behaviors of Turkish listed companies through empirical tests using discretionary accounting changes", *Crit. Perspect Account.* doi:10.1016/j.cpa.2008.01.003.
- [51] DeFond, M., Jiambalvo, J., 1994, "Debt Covenant Violation and Manipulation of Accruals", *Journal of Accounting and Economics*, Vol. 17, pp. 145-176.
- [52] Sweeney, A., May 1994, "Debt-Covenant Violations and Managers' Accounting Responses", *Journal of Accounting and Economics*, pp. 281-308.
- [53] Trueman, B., and S., Titman. 1988. "An explanation for accounting income smoothing", *Journal of Accounting Research* 26:127-139 (Supplement).
- [54] Press, E., Weintrop, J., 1990, "Accounting based constraints in public and private debt agreements: Their association with leverage and Impact on accounting choice", *Journal of Accounting and Economics*, Vol. 12, 65-95.

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