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EFFECT OF CORPORATE GOVERNANCE ELEMENTS ON INNATE AND DISCRETIONARY ACCRUALS QUALITY

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ABSTRACT

In this paper we want to find the association between discretionary accruals quality as well as innate accruals quality and portion of independent directors on the board, having an audit committee in a company, the director manager and chairman of the board are the same, being parent companies, proportion of stock that the main stockholder has and engagement organization of audit in Tehran Stock Exchange. We derive measures of the discretionary and innate components of accruals quality and regress them against corporate governance characteristics. The survey selected 461 qualified stocks from Tehran stock exchange and we selected 85 companies that have our terms. For discretionary accruals, we find, higher proportion of independent directors on the board is the primary governance mechanisms associated with higher accruals quality. For innate accruals quality, we find higher quality is associated with an independent board of directors, a larger and more independent and use of an audit firm from audit organization. Our findings suggest a stronger relation between sound governance mechanisms and innate accruals quality than discretionary accruals quality.

Keywords: *Accruals Quality, Corporate Elements, Discretionary Accruals Quality, Innate Accruals Quality, Corporate Governance*

INTRODUCTION

The association between corporate governance mechanisms and the quality of reported earnings has been the subject of a substantial body of research. Prior earnings quality research has highlighted the important role played by corporate governance in reducing the likelihood of intentional earnings management resulting from manipulation of accruals (Dechow *et al.*, 1995; Klein, 2002; Davidson *et al.*, 2005; Koh *et al.*, 2007). However, intentional earnings management is not the only source of accruals estimation error. Environmental uncertainty experienced by those making accruals estimations has also been shown to be an important source of error (Francis *et al.*, 2005; Dechow and Dichev, 2002). Given that both sources of accruals estimation error have negative consequences on financial reporting quality, it is important to understand whether and how they can be mitigated by sound governance. Accordingly, the objective of this study is to assess the relation between governance mechanisms and accruals estimation error arising from the manipulation of discretionary accruals and from environmental uncertainty. The study makes several important contributions. A key contribution relates to the use of the accruals quality measurement technique devised by Dechow and Dichev (2002) (hereafter referred to as DD). The DD model measures accruals quality by examining the extent to which working capital accruals estimate realized operating cash flows. Our use of the DD model for determining accruals quality is a different approach to that used extensively in the prior literature. Previous studies have generally used the Jones (1991) model and its variants (Bartov *et al.*, 2000; Davidson *et al.*, 2005; Koh *et al.*, 2007). A criticism of the Jones model is that it measures accruals quality in an indirect manner (Francis *et al.*, 2005; Schipper and Vincent, 2003). The DD approach overcomes this problem by using an empirical model that more directly measures accruals quality. Aboody *et al.*, (2005) note that the DD measure ‘is a relatively more direct measure of a company’s information environment derived from fundamental accounting data contained in its financial statements.’ In this regard, our study provides a useful point of comparison for prior earnings management studies.

Use of the DD model to determine accruals quality also enables us to examine the association between governance controls and accruals estimation errors arising from manipulation of discretionary accruals

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and from environmental uncertainty. For this analysis we adopt the technique developed by Francis *et al.*, (2005) which separates the DD measure of accruals quality into its ‘discretionary’ and ‘innate’ components. The ‘discretionary’ component of accruals quality measures intentional manipulation of discretionary accruals. The ‘innate’ component measures unintentional estimation errors arising from the company’s operating environment and related environmental uncertainty. To our knowledge, no prior study has directly examined the association between governance controls and innate accruals quality. In this respect, the current study represents an important contribution to existing research.

A further contribution arises from use of Tehran stock exchange company data for our analysis. Prior research demonstrates the lack of accuracy in estimating operating cash flow and components of operating cash flow when using mechanical rules. The DD approach to determining accruals quality is problematic in this regard as it substitutes cash from operations (CFO) for the actual operating cash flows related to working capital accruals. CFO is therefore a potentially noisy measure of actual cash flows. Use of the CFO proxy is a consequence of data availability under the ‘indirect’ operating cash flow reporting regime which does not require reporting of disaggregated CFO.

The extant earnings management literature is drawn upon to identify relevant governance mechanisms for our analysis. Prior studies suggest that the board of directors, the audit committee, and the external audit function are associated with the reliability of reported earnings Davidson *et al.*, (2005). The literature also identifies observable characteristics of these mechanisms that reflect sound governance and provide controls that improve the reliability of accounting information. The key characteristics for the board of directors are the inclusion of independent directors and the separation of the roles of chief executive officer (CEO) and board chair Koh *et al.*, (2007). Important characteristics for the audit committee are size, independence, expertise and diligence (DeZoort *et al.*, 2002; Krishnan, 2005; Klein, 2002). An indication of sound governance for the external audit function is the engagement of a top tier audit firm Cohen *et al.*, (2002).

The results of our analysis show that sound governance is generally associated with both higher discretionary and innate accruals quality. We find a stronger and more robust association between sound governance and innate accruals quality than for discretionary accruals quality. Moreover, we find that the significance of variables differs across our regressions of governance mechanisms on the components of accruals quality. We find no significant association between board composition and discretionary accruals quality in our main analysis. In contrast, Both discretionary and innate accruals quality are positively associated with a more independent board. Innate accruals quality is positively associated with the engagement of audit organization.

The paper proceeds as follows. In the next section, we review the related literature and develop hypotheses that are tested by our empirical analysis. The third section explains our research design, including sample selection and measurement of variables. The fourth section reports and discusses the results of the study’s main analysis. This is followed by additional tests in section five. In the final section some conclusions are drawn.

Bauer *et al.*, (2008) investigated the level of disclosure ensured by corporate governance codes in force in European Union member states based on OECD rules and regulations. They performed a comparative study on different existing features of corporate governance in the literature by using econometric analysis based on different statistical tools such as descriptive analysis, mainly based on computing tools, and correlations to detect the relationship between their results and what other researchers achieved. The results of the performed analysis disclosed that their results were not consistent with prior research findings associated with disclosure as “primary theme” of corporate governance codes. By analyzing the results, they have reached to the same conclusion as other researchers did on the same topic. Finally, they reported that we could certify that the compliance of corporate governance codes with OECD principles was consistent with prior research results associated with disclosure considering codes’ issuer type and countries’ legal regime. Ștefănescu (2011) performed an investigation to find the level of disclosure ensured by corporate governance codes in force in European Union member states. She reported that common law regime could likely ensure the biggest level of transparency through corporate governance

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needs. They also asserted that the compliance of corporate governance codes with OECD principles was consistent with prior research achievement associated with disclosure considering codes' issuer type and countries' legal regime. Ammann *et al.*, (2011) studied the relationship between firm-level corporate governance and firm value based on a dataset from Governance Metrics International (GMI), which includes 6663 firm-year observations from 22 developed countries over the period of 2003-2007.

Based on a set of 64 individual governance attributes they built two alternative additives corporate governance indices with equal weights. The corporate governance attributed to the governance attributes and one index derived from a principal component analysis and they reported a strong and positive relation between firm-level corporate governance and firm valuation. Besides, they studied the value associated with governance attributes, which document the companies' social behavior. Their findings were robust against alternative calculation procedures for the corporate governance indices and to alternative estimation techniques.

Black *et al.*, (2012) first conducted a case study of Brazil, in which they studied Brazilian firms' Governance practices at year-end 2004, constructed a corporate governance index, and demonstrated that the index for ownership structure, board procedure, and minority shareholder rights, predicts higher lagged Tobin's q. Nelson (2005) investigated the link between firm performance, CEO characteristics and changes in corporate governance practices based on unbalanced panel of 1721 over the period of 1980-1995. The paper provided the stylized facts about corporate governance practices and explained how governance practices had evolved over time. They reported no relationship between CEO age, tenure or compensation and governance changes. Fama and Jensen (1983) performed a deep investigation on separation of ownership and control and finally Dechow and Dichev (2002) studied the quality of accruals and earnings by looking into the role of accruals estimation errors. Francis *et al.*, (2005) investigated different parameters influencing accruals quality including total assets, loss reported in financial statement, life cycle of inventory and receivable accounts and operating revenue divided by total assets based on a linear regression analysis and discussed the findings.

Hypotheses Development

Accruals Quality

The DD model for determining accruals quality is based on the observation that the recording of accruals serves to shift or adjust the recognition of cash flows over time. DD show that earnings quality can be directly estimated by a regression of the change in working capital on past, current and future cash flows. DD use working capital accruals because they are generally realized within one year. The regression residual provides the measure of accruals quality as it measures the portion of accruals that does not closely estimate actual cash flows. A larger residual signifies greater overall accruals estimation error and therefore lower accruals quality. DD suggest that the standard deviation of the residual is the appropriate measure of accruals quality for a series of accruals quality measures taken over time. Several recent studies have adopted the DD model to measure the quality of earnings information (Francis *et al.*, 2005; Biddle and Hilary, 2006; Ashbaugh-Skaife *et al.*, 2006; Chen *et al.*, 2007; Doyle *et al.*, 2007; Srinidhi and Gul, 2007).

Estimation of accruals is an inherently subjective process, which means that accruals are a noisy measure of the benefits or obligations they represent. Uncertainty about the amount of cash to be realised from accruals increases the range of accruals values that might be recorded. The result is an increased likelihood of accruals estimation error Richardson *et al.*, (2005). The extent of this estimation error has been associated with intentional earnings management in the form of accruals manipulation, and unintentional errors resulting from uncertainty associated with the company's innate operating environment.

A substantive body of research exists that has examined the relation between earnings management and accruals quality. Prior studies have shown the opportunistic management of company earnings by the systematic manipulation of discretionary accruals is negatively associated with the quality of reported earnings (Davidson *et al.*, 2005; Koh *et al.*, 2007). However, the relation between environmental uncertainty and the quality of accruals estimation has been the focus of only a few studies. Examples

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include DD and Francis *et al.*, (2005), both of whom report a positive relation between innate company characteristics that indicate a propensity for accruals estimation errors and the observed error.

Accruals Quality and Corporate Governance

A key aim of corporate governance is to provide controls that ensure compliance with reporting requirements so that financial statements present fairly the financial affairs of the company (Davidson *et al.*, 2005; Dechow *et al.*, 1995). Prior research suggests that the monitoring associated with sound governance restricts opportunities for the manipulation of discretionary accruals, thereby having a positive association with the quality of reported earnings (Klein, 2002; Davidson *et al.*, 2005; Koh *et al.*, 2007).

Corporate governance mechanisms are also likely to mitigate unintentional accruals estimation errors. Sound governance should ensure that necessary controls and sufficient expertise are at hand to ensure that accruals estimates are reliably determined. For example, sound governance should increase the probability that adequately trained and qualified personnel are involved in decision-making related to the provision of accounting information to management, or to ensure that sufficient controls are in place to detect reporting misstatements.

Prior empirical studies provide evidence of the importance of internal controls to mitigating the effects of environmental uncertainty on the quality of accruals estimation. Doyle *et al.*, (2007) report that fundamental problems with a company's internal control environment has a negative impact on accruals quality. Moreover, Ashbaugh-Skaife *et al.*, (2007) show that remediation of a disclosed material control weakness is associated with an improvement in accruals quality. Importantly, Ashbaugh-Skaife *et al.*, (2007) observe that internal control weaknesses are more likely to lead to unintentional accruals estimation errors than intentional accrual misstatements.

We posit, therefore, that the extent of accruals estimation errors varies according to the efficacy of corporate governance mechanisms in reducing the detrimental effects of earnings management and environmental uncertainty. In the following section, we develop hypotheses regarding the association between company characteristics that indicate sound governance and the quality of discretionary and innate components of accruals.

Hypotheses

Corporate boards comprise both executive (inside) directors and independent (outside) directors.

Inside and outside directors play different roles and have different types of expertise (Kiel and Nicholson, 2003; Nicholson and Kiel, 2007). Inside directors have more specific knowledge about the company through their role as internal managers, while outside directors are more able to exercise independent judgment Fama and Jensen (1983). Understanding the governance role of inside and outside directors is assisted by reference to agency and stewardship theories.

We suggest that agency theory arguments are relevant for discretionary accruals quality. According to agency theory, boards should have a majority of outside directors in order to provide adequate monitoring to protect shareholders from the opportunistic behaviour of managers, including accruals manipulation Kiel and Nicholson (2003). Consistent with the agency view, corporate governance guidelines generally recommend that a majority of directors should be independent. These directors are expected to act as arbiters in disagreements between internal managers, and to exercise independent judgment when conflicts of interest arise between managers and shareholders Fama and Jensen (1983). A key role of independent directors is to enhance the transparency and integrity of financial reporting NYSE and NASD (1999). They should therefore reduce the likelihood of earnings management resulting from the manipulation of discretionary accruals. Consistent with this proposition, Davidson *et al.*, (2005) and Koh *et al.*, (2007) report a significant negative relationship between board independence and earnings management in an Australian setting. Therefore, to the extent that outside directors have the knowledge, time and resources to effectively monitor management, we expect to observe a positive relation between board independence and discretionary accruals quality. Prior Iranian studies have not distinguished between discretionary and innate accruals in the same way as in our study. Given the above discussion, we test the following hypothesis:

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H1: discretionary accruals quality is associated with a proportion of independent directors on the board.

We suggest that stewardship theory arguments are more relevant to innate accruals quality. Stewardship theory posits that managers are trustworthy and effective stewards of company resources (Donaldson 1990, Donaldson and Davis 1991, Nicholson and Kiel 2007). From the stewardship perspective, the board's effective operation is reliant on an understanding of the company's business and quality of decision making rather than independent monitoring.

Where innate company characteristics make accruals estimation problematic, adequate stewardship is of greater importance than monitoring. Inside directors' superior knowledge of the company's business becomes increasingly important. Inside directors have access to specific information about the company and are expected to have greater knowledge than independent directors with respect to their company's innate characteristics Fama and Jensen (1983). According to stewardship theory, this superior knowledge leads to better decision making Donaldson and Davis (1991). It can be argued that this enhanced decision making ability extends to the more accurate estimation of accruals and their related future cash flows. This suggests that companies with more inside managers on the board are expected to have higher innate accruals quality. This leads to our second hypothesis:

H2: innate accruals quality is associated with a proportion of independent directors on the board.

Substantial prior research indicates the critical role that the audit committee plays in relation to the quality of financial reporting. The board of director's delegates financial reporting responsibilities to the audit committee and this committee is the monitoring mechanism most likely to provide shareholders with the greatest protection by maintaining the quality of a company's financial statements (Davidson *et al.*, 2005; Kent and Stewart, 2008; Rainsbury *et al.*, 2008). We expect that audit committees are committed to maintaining both discretionary and innate accruals quality. This is because they have an oversight function for high quality financial reporting, risk management and internal and external functions (Wolnizer, 1995; Rainsbury *et al.*, 2008).

Independence of the audit committee is one of the key characteristics for effective audit committee operation (Jiambalvo, 1996; McMullen and Raghunandan, 1996; Krishnan, 2005; Koh *et al.*, 2007). Davidson *et al.*, (2005) and Koh *et al.*, (2007) demonstrate that audit committee independence tends to moderate discretionary reporting behaviour for Australian companies.

Other characteristics of the audit committee shown to have assisted in ensuring high quality discretionary and innate accruals are expertise (DeZoort and Salterio, 2001; Knapp, 1987; Cohen *et al.*, 2002), diligence in discharging responsibilities (Farber, 2005; Collier, 1993; Hughes, 1999; McMullen and Raghunandan, 1996), and the number of members (size), which enhances the committee's authority (Kalbers and Fogarty, 1993; Karamanou and Vafeas, 2005). In relation to the audit committee, the following hypothesis is tested.

H3: discretionary accruals quality is associated with having an audit committee in a company.

H4: innate accruals quality is associated with having an audit committee in a company.

H5: discretionary accruals quality is associated with the same director manager and chairman of the board.

H6: innate accruals quality is associated with the same director manager and chairman of the board.

H7: discretionary accruals quality is associated with being Parent company.

H8: innate accruals quality is associated with being Parent company.

H9: discretionary accruals quality is associated with a proportion of stocks that the main stockholder has.

H10: innate accruals quality is associated with a proportion of stocks that the main stockholder has.

H11: discretionary accruals quality is associated with the engagement organization of audit.

H12: innate accruals quality is associated with the engagement organization of audit.

The audit firm size measure is generally based on whether a firm is one of the recognized top tier audit firms (now the 'audit organization'). Top tier audit firms have a greater ability to constrain 'aggressive, potentially opportunistic reporting of accruals' Francis *et al.*, (1999, p.18). Thus, we expect the use of an audit organization firms to be associated with higher innate accruals quality.

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Audit organization auditors are also expected to have higher financial accounting expertise and greater knowledge of accounting principles than other firms. This additional accounting expertise is expected to assist Audit organization auditors to more accurately estimate future cash flows, enabling them to identify potential misstatements arising from estimations associated with environmental uncertainty.

Research Design

The research design involves the development of ordinary least squares regression models to test the extent to which governance variables explain the variance in both innate and discretionary accruals quality for a sample of Tehran stock exchange companies.

Sample Selection

The sample consists of listed Tehran Stock Exchange Companies in 2006 with a 20 March balance date. A preliminary sample of 461 companies was identified from the Aspect DatAnalysis database. Financial data were collected for the years 2007 to 2012 from the Aspect FinAnalysis database, so that the accruals quality measures could be calculated for 2007 to 2012. Data for the governance variables were hand collected from published annual reports for the financial year ending 2010. Applying the requirement that sample companies have an audit committee and that data were available for the required years resulted in a sample of 85 companies in the governance regressions

Determining Accruals Quality

The benefit of reporting accruals-based earnings is that they better represent underlying economic performance than cash flows. Accruals require estimates to be made and are subject to discretion. Therefore, as DD observe, the benefit of using accruals comes at the cost of estimation errors being included in reported earnings. DD develop model 1 for working capital accruals to empirically determine accruals quality:

Model (1):

$$\Delta WC_t = \beta_0 + \beta_1 * CFO_{t-1} + \beta_2 * CFO_t + \beta_3 * CFO_{t+1} + \epsilon_t$$

ΔWC_t = Comprehensive measure of change in working capital accruals, including change in: accounts receivable, accounts payable, current inventory, current investments, current provisions, and other current assets and liabilities.

CFO_{t-1} = Cash flow from operations in t-1.

CFO_t = Cash flow from operations in t.

CFO_{t+1} = Cash flow from operations in t+1.

ϵ_t = residual.

Variables are scaled by average total assets. The regression residual provides a measure of accruals quality, it represents the portion of accruals that is not estimated by actual cash flows. DD suggest that, for a series of measures of accruals quality over time, the standard deviation of the residuals is the appropriate measure of overall accruals quality. A higher (lower) standard deviation signifies higher (lower) accruals estimation error and therefore lower (higher) accruals quality.

Model(2):

$$\Delta wc_t = \Delta (CA - C - L) = (CA - C - L)_t - (CA - C - L)_{t-1}$$

Where:

CA = Current Assets,

C = current cash

L = Current Liabilities

Therefore at the first we obtained our first variable(Δwc_t), then obtained the second variable (CFO).

All variables are scaled by average total assets.

In this model (Model 2) ΔWC_t is equal changes in non-cash working capital, that is obtained from the difference between the current property (except of current cash) and current liabilities from period t-1 to t. Regressions are conducted for each of five years from 2007 to 2012, thereby providing five measures of accruals quality for each company. The overall accruals quality measure is then determined by taking the standard deviation of the regression residuals for each company over the five years.

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Determining the Innate and Discretionary Components of Accruals Quality

Separating accruals quality into innate and discretionary accruals involves estimating a regression of the DD accruals quality measure on ‘innate’ company characteristics (Francis *et al.*, 2005). The selected innate characteristics follow DD and Francis (2005), and include measures of company size, incidence of negative earnings, length of operating cycle, and volatility of operating environment. To determine the components of accruals quality, the approximately. Regression shown in Model 3. The regression predicted values are the estimate of innate accruals quality (IAQ), and the residual values are the estimate of discretionary accruals quality (DAQ). Innate and discretionary accruals qualities are determined for AQ measures derived from the DD model variation.

Model (3):

$$AQ = \alpha + \beta_1 * SIZE + \beta_2 * LOSS + \beta_3 * OPCYC + \beta_4 * SDOR + \epsilon_t$$

Where:

AQ= Accruals quality (standard deviation of the regression residuals for 2008 to 2012).

SIZE = Natural log of total assets for 2010.

LOSS = Number of years in which a loss was recorded for 2008 to 2010.

OPCYC = Natural log of average age of inventory plus the average age of receivables (in days) 2009 and 2010 after wins rising at 365 days.

SDOR = Standard deviation of operating revenue divided by total assets for 2008 to 2012.

Measurement of Governance Variables

We measure board independence using two variables: the proportion of independent (inside) directors and a dummy variable indicating whether the roles of the chairperson and CEO are separate. Most companies specify whether directors are independent or non-executive, however, where no mention of independence is made we assume that the director is not independent. It is generally recognized that there is a lack of board independence when one person holds the positions of chairperson and CEO. We use the existence of dual chairperson and CEO as an indicator of weakness of independence and related board monitoring, but as an indicator of strength in regard to knowledge of company operations.

The proportion of stock that main stockholder has is another variable and we export that from note of financial statements. Audit committee independence is measured as the companies have audit committee or not. We determine a dummy variable that identifies companies with audit committees that approximate best practice Rainsbury *et al.*, (2008). Our audit firm variable is a dummy variable identifying companies that have utilised the audit services of one of the audit organization firms as one (1) and zero (0) otherwise. Parent company is measured as the companies are Parent or not. We determine a dummy variable that identifies companies that are Parent Company as one (1) and zero (0) otherwise.

Governance Regression Models

Our hypotheses regarding corporate governance mechanisms are tested by regressions of the selected governance variables on innate accruals quality (IAQ) and discretionary accruals quality (DAQ) determined according to Equation (3). The regression models calculated are shown in 4 and 5 models:

Model (4):

$$DAQ = \beta_0 + \beta_1 * PROIND + \beta_2 * DUAL + \beta_3 * AUDITOR + \beta_4 * AUDIC + \beta_5 * OWNER + \beta_6 * PARENT + \epsilon_t \quad (4)$$

Model (5):

$$IAQ = \beta_0 + \beta_1 * PROIND + \beta_2 * DUAL + \beta_3 * AUDITOR + \beta_4 * AUDIC + \beta_5 * OWNER + \beta_6 * PARENT + \epsilon_t \quad (5)$$

Where:

DAQ = Discretionary accruals quality.

IAQ = Innate accruals quality.

PROIND = Number of independent directors divided by the number of directors.

DUAL = Dummy, coded 1 if CEO is chair of board of directors, coded 0 otherwise.

AUDITOR = Dummy, coded 1 if appointed auditor is one of the organization of audit, coded 0 otherwise

PARENT = Dummy, coded 1 if the company ts mother, coded 0 otherwise.

OWNER = Proportion of stock that have main stockholder.

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AUDICT = Dummy, coded 1 if have a audit committee in a company, coded 0 otherwise.

RESULTS AND DISCUSSION

Results

Table 1: Regression Results – Discretionary Characteristics

Model 4	Unstandardized Coefficients		Standardized Coefficients		t Sig.
	B	Std. Error	Beta		
Constant	1056-3	605-3		1747-3	85-3
(PRONOID)	739-3	338-3	236-3	2186-3	32-3
DUAL(-298-3	305-3	-105-3	-978-3	331-3
AUDITOR	-222-3	222-3	-110-3	-11	321-3
PARENT	-515-3	304-3	-282-3	-1694-3	94-3
AUDICT	-233-3	201-3	-123-3	-1156-3	251-3
OWNER	-7-3	9-3	-121-3	-717-3	476-3

Table 2: Regression Results – Innate Characteristics

Model 5	Unstandardized Coefficients		Standardized Coefficients		Sig
	β	Std. Error	β	t	
(Constant)	4806 ⁻³	143 ⁻³		33640 ⁻³	0 ⁻³
PRONOID	185 ⁻³	80 ⁻³	243 ⁻³	2319 ⁻³	23 ⁻³
DUAL	-116 ⁻³	72 ⁻³	-168 ⁻³	-1613 ⁻³	111 ⁻³
AUDITOR	165 ⁻³	53 ⁻³	334 ⁻³	3144 ⁻³	2 ⁻³
PARENT	109 ⁻³	72 ⁻³	245 ⁻³	1520 ⁻³	133 ⁻³
AUDICT	58 ⁻³	47 ⁻³	126 ⁻³	1219 ⁻³	227 ⁻³
OWNER	3 ⁻³	2 ⁻³	197 ⁻³	1209 ⁻³	230 ⁻³

In Model 4, the proportion of independent directors on the board (PROIND) is significant ($p=32^{-3}$), with a greater proportion of independent directors associated with higher DAQ. Therefore, contrary to the expectations outlined in H1, we find that board independence is important to maintaining the accuracy of discretionary accruals estimation. This finding suggests that inside directors' superior knowledge of the company's business does not translate into higher discretionary accruals quality. Rather, it suggests that stronger internal controls required by outside directors lead to a lower level of unintentional accruals estimation errors (Ashbaugh and Skaife *et al.*, 2007).

In Model 5, the proportion of independent directors on the board (PROIND) is significant ($p=23^{-3}$), with a greater proportion of independent directors associated with higher IAQ. Therefore, contrary to the expectations outlined in H2, we find that board independence is important to maintaining the accuracy of innate accruals estimation. This finding suggests that inside directors' superior knowledge of the company's business does not translate into higher innate accruals quality of the audit committee variables, Model 4,5 show that audit committee (AUDICT) is significant ($p=251^{-3}$ Model 4, Model 5 $p=227^{-3}$). Consistent with expectations, audit committees, a greater is not associated with higher discretionary and innate accruals quality. These results reject the expectations outlined in H3&H4.

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In relation to board characteristics, existence of a CEO that is also the board chair (DUAL) is significant in model 4, ($p=331^{-3}$). Consistent with expectations, if CEO and director manager are the same, a greater is not associated with higher discretionary accruals quality. This result rejects the expectations outlined in H5.

In relation to board characteristics, existence of a CEO that is also the board chair (DUAL) is significant in model 4, ($p=111^{-3}$). Consistent with expectations, if CEO and director manager are the same, a greater is not associated with higher innate accruals quality. This result rejects the expectations outlined in H6.

In relation to Parent company (PARENT) is significant in model 4, ($p=94^{-3}$). Consistent with expectations, if the company is Parent company, a greater is not associated with higher discretionary accruals quality. This result rejects the expectations outlined in H7.

In relation to Parent company (PARENT) is significant in model 4, ($p=133^{-3}$). Consistent with expectations, if the company is Parent company, a greater is not associated with higher innate accruals quality. This result rejects the expectations outlined in H8.

Of the proportion of stock that main stockholder have variables, Model 4 shows that the proportion of stock (OWNER) is significant ($p=476^{-3}$). Consistent with expectations, proportion of stock that main stockholder has, a greater is not associated with higher discretionary accruals quality. This result rejects the expectations outlined in H9.

Of the proportion of stock that main stockholder have variables, Model 4 shows that the proportion of stock (OWNER) is significant ($p=230^{-3}$). Consistent with expectations, proportion of stock that main stockholder has, a greater is not associated with higher innate accruals quality. This result rejects the expectations outlined in H10.

Of the engagement with the organization of audit firm variables, Model 4 shows that the engagement with the organization of audit firm is significant ($p=321^{-3}$). Consistent with expectations, Engagement with the organization of audit firm a greater is not associated with higher discretionary accruals quality. This result rejects the expectations outlined in H11.

Of the engagement with the organization of audit firm variables, Model 4 shows that the engagement with the organization of audit firm is significant ($p=2^{-3}$). Consistent with expectations, engagement with the organization of audit firm a greater is associated with higher innate accruals quality. This result confirms the expectations outlined in H12.

Conclusion

This paper extends previous research on the association between corporate governance mechanisms and accruals quality. This study reviews the impact on quality of corporate governance factors and non-optional components accruals companies present at the Tehran Stock Exchange that the distance limit for years 2007 to 2012 was examined.

To measure accruals quality and assumptions used the method of analysis and research statistical inference about the regression and assumptions used and the percentage of companies models fitted results and correlation coefficients were tested. We derive measures of the discretionary and innate components of accruals quality and regress them against corporate governance characteristics. For this purpose we use of DD model.

For Innate accruals, we find use of an audit organization and larger independent directors as the primary governance mechanisms associated with higher accruals quality. For discretionary accruals quality, we find that higher quality is associated with an independent board of directors. Our findings suggest a stronger relation between sound governance mechanisms and innate accruals quality than discretionary accruals quality.

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