The Effects of Corporate Governance on Earnings Quality: Evidence from Iran

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Abstract

This paper seeks to examine the association between corporate governance mechanisms and the quality of accounting earnings. We intend to highlight the impact of a strong, religious-based, central government where certain attributes influence corporate governance. Specifically, the study empirically investigates whether the association of corporate governance mechanisms with earnings quality (in particular, accrual quality, earnings persistence, and earnings predictive ability) in Iran is different from what has been established in accounting literature for other countries. Among many corporate governance components, four (4) variables of board size, extent of independent directors, board leadership, and the frequency of the board meetings are considered in this paper. We test our hypothesis using a sample of six hundred (600) firm-year observations of the Tehran Stock Exchange from 2005 to 2008. The general findings are: a larger board size yields a weaker earnings quality; and an increase in the number of independent directors and frequency of the board meetings, strengthen the firm's earnings quality in terms of earnings persistency and earnings predictability, however, they do not strengthen the accruals earnings. We, however, find no significant relationship between leadership structure and Iranian firms' earnings quality.

Keywords: Accruals Quality, Boards of Directors, Corporate Governance, Earnings Persistence, Earnings Predictability, Earnings Quality, Leadership Structure

JEL Classifications: G34, G38

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1.   Introduction

The quality of reported earnings is important for the efficient allocation of resources in capital markets. Investors, analysts, institutional owners and regulators rely on the quality of earnings to make investment and valuation decisions about public firms. They often use earnings as a summary measure of firms' performance in their valuation. For example, earnings are used in valuation models to price securities, evaluate possible outcomes, and to predict future performances.

Due to separation between ownership and control, and because of asymmetric information and moral hazard problems, firms' owners always have concerns that the management who controls the owners' wealth could waste or misallocate firm assets (Jensen & Meckling, 1976).[1] Corporate governance mechanisms have been found useful in mitigating issues of moral hazard and asymmetric information relative to managers' operating and investing choices (Fama & Jensen, 1983; Antle & Fellingham, 1997; Lambert, 2001). Consequently, one of the most important functions of corporate governance is to ensure the quality of the financial reporting. It bonds a firm to a greater level of transparency, which should reduce the potential for earnings management (Coffee, 1999).

The Accounting Conceptual Framework (FASB, 2008) in the United States (U.S.) emphasises that the reliability of accounting information is a primary element useful for rational decision-making. Representational faithfulness and neutrality are two (2) major component parts of reliability. In other words, a financial report has quality when numbers and descriptions represent what really existed or happened in the firm. Factual, truthful and unbiased information must override any other consideration. The quality of financial reporting is highly associated with the quality of corporate governance. Therefore, the underlying argument of new rules in corporate governance (such as *Sarbanes-Oxley Act of 2002* in the U.S.) and the listing requirements of the major stock market exchanges, such as New York Stock Exchange (NYSE), National Association of Securities Dealers Automated Quotations (NASDAQ), and American Stock Exchange (AMEX), is that better governance mechanisms result in better monitoring which, in turn results in higher earnings quality (BRC, 1999; Klein, 2002).

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[1]Given the separation of ownership and control, there are two (2) classic types of agency problems: asymmetric information and moral hazard. Asymmetric information exists because managers operate with information, which is not available to shareholders. Moral hazard occurs when managers have an objective that is not always compatible with that of the shareholders, which is wealth maximisation.

This suggests a positive association between earnings quality and the corporate governance structure.

In 2009, a revised form of *Iranian Code of Corporate Governance* was issued and some governance requirements were added to the listing requirements of the Tehran Stock Exchange (TSE). Therefore, it is predicted that these improvements would have a positive impact on the association between corporate governance and the Iranian firms' financial reporting process. This paper examines the effect of corporate governance on the quality of the financial reporting process by linking corporate governance attributes to the quality of accounting earnings. The focus on earnings is proper since it is a summary performance measure that is frequently quoted, analysed and discussed in the literature and financial community (Niu, 2006). In this study, earnings attributes such as earnings persistency, earnings predictability and accruals quality, applied by Dechow and Dichev (2002), are used to measure earnings quality.

Theories concerning boards of directors (e.g. agency theory) and various recommendations (e.g. the Blue Ribbon Panel[2] recommendation) suggest that some characteristics of the board influence the quality of financial reports. Previous studies investigate the governing role of the board of directors in controlling and monitoring the corporate managers. The findings of these studies, however, are mixed (Mashayekhi & Bazaz, 2008; Hashim & Devi, 2008). The correlation between corporate governance and earnings quality in various environments is not yet clearly established. Yet, the purpose of a board of directors to monitor the performance of the firm and its financial reporting so that the interest of the shareholders is protected, is often an admirable goal. One prediction is that if the board performs its duties effectively, the accounting data will be more reliable, the value of the firm is likely to increase, and the wealth of the shareholders will improve accordingly. The reviewed literature indicates a need to determine the specific characteristics of the board of directors which ensure its monitoring of success remains.

The existing literature on corporate governance and the informativeness of firm's earnings is based mainly upon the US and European data and therefore, reflects corporate behaviour purely within

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[2]"Blue-ribbon panel" is an informal term generally used to describe a group of exceptional persons appointed to investigate or study a given question. The term generally connotes a degree of independence from political influence or other authority, and such panels usually have no direct authority of their own. Their value comes from their ability to use their expertise to issue findings or recommendations which can then be used by those with decision-making power to act.

these markets. Thus, very little is known about the relationship between corporate board characteristics and earnings quality, particularly in the smaller markets outside of the U.S., Europe, and certain emerging economies such as Malaysia (Ali, Saleh, & Hassan, 2008). One reason for this inference is the lack of available data and poor access to appropriate databases. In this research, we analyse whether such board characteristics have the same impact in Iran.

The remainder of this paper is divided into six (6) sections. Section 2 presents the literature review. The Iranian Corporate Governance and the motivation for doing this study in Iran are presented in section 3. Section 4 is devoted to hypothesis development. Section 5 describes the research design. Section 6 provides our empirical results. Finally, a summary of our results and an overview of our conclusions are presented in section 7.

2.   Literature review

Corporate governance is a widely researched topic in the accounting and finance literature. Corporate boards are the heart of corporate governance in which shareholders give authority to the board to monitor and control activities and decisions made by management (Fama & Jensen, 1983). There are two (2) opposite classes of thoughts for the structure of the board to be effective in an organisation. One class believes that the purpose of the board is to minimise agency costs (Fama, 1980; Fama & Jensen, 1983). According to this group, the board should be able to approve and monitor management's behaviour and harmonise managers' interest towards owners' interest. The second class argues that the board should be structured in a way to maximise managerial control of the firm (Mace, 1971). In other words, managers having more inside information should be able to control the board to provide better performance for the firm. Evidently, these are two (2) opposite extremes of corporate governance viewpoints for managerial control and outside director monitoring.

To protect the interests of firms' shareholders, many researchers have suggested various degrees of corporate governance structures between these two (2) extreme points. Findings of research studies in accounting literature, however, are not homogeneous rather, they are inconclusive (Petra, 2007). Using data from the U.S., Xie, Davidson, and DaDalt (2003) examine the role of the board of directors, the audit committee and the executive committee in preventing earnings management. They find that a firm's board, audit committee and their respective members' financial sophistication are important factors in constraining the propensity of

managers to engage in earnings management. Due to the lack of reliability of data, Larcker, Richardson, and Tuna (2007) suspect mixed results in the previous corporate governance literature. As a result, they include virtually all variables from prior research that have been shown to be associated with each of their dependent variables. They develop fourteen (14) multiple-indicator indices from thirty nine (39) individual governance indicators, but find that their governance indices are related to future operating performance and excess stock returns. However, almost no relation with accounting restatements, and a very modest and mixed association between their indices and abnormal accruals, are discovered. Park and Shin (2004) analyse the Canadian data to determine the effect of board composition on earnings management. They find that earnings are managed upwards to avoid reporting losses and earnings decline. While outside directors, as a whole, do not affect abnormal accruals, directors from institutional shareholders reduce earnings management. Moreover, earnings management does not decrease with the average tenure of outside directors as board members of the firm. Brown and Caylor (2006) develop a measure of corporate governance called "Gov-Score" using fifty one (51) factors encompassing eight (8) corporate governance categories. They aim to examine which of the eight (8) categories underlying "Gov-Score" is most highly associated with firm performance. They conclude that public firms with independent boards of directors have higher returns on equity, higher profit margins, larger dividend yields, and larger stock repurchases.

For developing countries, Shen and Chih (2007) test the impact of corporate governance on earnings management using firm-level governance data taken from nine (9) Asian countries. The results indicate that firms with good corporate governance tend to have less earnings management. In addition, they conclude that there is a size effect for earnings smoothing, (that is, large size firms are prone to carrying out earnings smoothing, but good corporate governance, on average, can mitigate the effect). Shen and Chih (2007) also claim that when the governance index is large, the leverage effect exists. Al-Abbas (2009) also seeks to examine the association between corporate governance mechanisms, including board composition, board independence, separation between the responsibilities of the Chief Executive Officer (CEO) and the Chairperson, the composition and independence of audit committees, and earnings management in the Saudi business environment. His results provide no evidence that corporate governance factors mitigate earnings management in Saudi Arabia. Al-Abbas (2009), however, highlights the need to enhance the legitimacy of corporate governance in developing countries.

3.   Iranian corporate governance and research motivation

The correlation between the dynamics of the corporate economy in developing countries is different from developed countries such as the U.S. and the UK Basic legal systems, political stability, corporate ownership, smaller market size, and nature of financial systems are examples of differential factors between developed and developing countries.

In this study, we examine Iran, a developing nation with characteristics different from other countries, including emerging markets like China and Malaysia (Liu, 2006; Chang & Leng, 2004). Numerous factors motivate us to select Iran for this study. Iran is located in the Middle East, a politically troubled and unstable region of the world. Iran is an Islamic country; whereby its social and business activities are based on a strict interpretation of Syariah (religious laws). The Iranian Revolution has altered its people's vision of social values and business concepts. For instance, collectivism (as defined by Hofstede, 1980) and the welfare of society are more important than individual needs and satisfaction. Both the Islamic faith and the revolution have changed the culture of business objectives in Iran (Mashayekhi & Bazaz, 2008). Corporate governance in Iran appears to optimise the interests of a broader group of stakeholders rather than just maximising the interests of shareholders. Unlike the U.S. and UK, but similar to Germany, France and Japan, however in a stronger form, Iran's main objective of the corporation does not appear to be creating wealth for the shareholders (Allen, 2005). Thus, Iran is a good testing ground to examine whether corporate governance influences firm's earnings quality in a market where a religious-based central government has a significant role.

The stock exchange in Iran was established in early 1961. The process of instituting and controlling firms was mentioned in the Trade Law, particularly in the amendment of April 1968. In early 2000, a modern conception of the corporate governance issue was addressed for the first time (Mashayekhi & Mashayekh, 2008). In 2005, Iran improved its corporate governance procedures through the *Iranian Code of Corporate Governance* and the revised *Securities Market Law*. In the beginning of 2005, the corporate governance committee under the supervision of the Tehran Stock Exchange (TSE) conducted a study on the previous version of *Iranian Code of Corporate Governance* and improve this Code, after taking into consideration the emerging issues in capital market and *Securities Market Law*. In this process, the committee studied various existing international corporate governance models and adopted the principles that it believed would fit into the Iranian

economy and culture. However, in 2008, the corporate governance committee of the Tehran Stock Exchange Limited Company, started to improve this Code again and the revised *Iranian Code of Corporate Governance* is under investigation thus far.

The *Iranian Code of Corporate Governance* is voluntary; however, according to the new *Securities Market Law* and TSE listing requirements, the listed firms are required to indicate their degree of compliance with several provisions of the *Code of Corporate Governance*. Furthermore, many of the provisions that improve the reliability and transparency of financial reporting have been made legally enforceable through amendments to the new *Securities Market Law*. These amendments have been designed to change managers' behaviour to improve the quality of information in annual reports. These new rules have some important characteristics. They have better defined the structure and functions of the board of directors and the board committees (e.g. audit committee or nominating committee); they have established guidelines for the protection of minority shareholders; and they have improved the quality and accuracy of financial reporting by rules related to the independence of both external and internal auditors.

According to the above discussions, we would expect the *Iranian Code of Corporate Governance* to improve financial reporting quality and consequently, earnings quality. This is because of recent research on corporate governance, which represents improvement of earnings quality in the US firms after the *Sarbanes-Oxley Act* (Cohen, Dey, & Lys, 2008; Bedard, 2006). However, some special characteristics of Iran's capital structure, legal framework and regulation could prevent the *Iranian Code of Corporate Governance* from improving earnings quality. In fact, most large Iranian firms are government-controlled with governmental members in key management positions and occupying important seats on the board of directors. In addition, the *Iranian Trade Law* is very old and it allows firms to ignore many requirements in the *Iranian Code of Corporate Governance*. According to this law, it is very difficult for minority shareholders to impose their rights against management, directors or controlling shareholders. This possibly facilitates opportunistic earnings management and lower earnings quality (Leuz, Dhananjay, & Wysocki, 2003; Siegel, 2005).

According to the above uniqueness of the Iranian capital market and structure, there is doubt in Iran by prominent business leaders if improved corporate governance rules actually work. According to Leuz et al. (2003), in emerging countries like Iran, in which investors protection rights are not well established or legally enforced, and in which securities markets are not huge with concentrated ownership, financial reporting tends to be

of lower quality. The main purpose of this study is to investigate empirically the association of existing corporate governance mechanisms and the earnings quality in Iran.

4.   Hypothesis development

The Asian financial crisis (1997-1998) has significantly changed the landscape of corporate governance in the affected countries, including Iran. One critical element of corporate governance that has undergone reform is the board of directors' structure. The primary objective of a board of directors is to protect the interests of a firm's shareholders. Thus, the board is responsible for setting the firm's goals. These specific goals are defined as realising long-term shareholder value and evaluating the appropriateness of the approaches taken by management in pursuing corporate goals. To ensure effective implementation of corporate strategies, the board will closely monitor management's performance and will offer rewards or assign punishment. The board's success in discharging its fiduciary duties and in working closely with the management is predicted to increase the wealth of its shareholders.

Numerous studies have examined corporate governance for the US and the UK firms. Studies of corporate governance in other industrialised countries and emerging economies are not rare (i.e., Allen, 2005; Chang & Leng, 2004; Mitton, 2002; Baek, Kang, & Park, 2004; Berkman, Cole, & Fu, 2009; and Liu, 2006). Their findings, however, are often contradictory (Bhagat & Black, 2002; Berkman et al., 2009). Few studies exist on the relationship between corporate governance and earnings quality in developing countries, especially for countries like Iran with the unique characteristics as described in the previous section. In addition, Iranian firms place a significant emphasis on the officers' faith and acceptance of traditional Islamic customs when selecting or promoting high-ranking officers and board members. This is different from many other countries where specialisation, education level or political affiliation guide the board selection process (Mashayekhi & Bazaz, 2008). In addition to the role of religion, the origin of Iranian civil law also influences corporate governance. Iranian civil law is a synthesis of French and Belgian civil laws that provide relatively weak legal protections for shareholders and creditors and that are characterised by dispersed firm ownership, increased corruption and less financial statement transparency (LaPorta et al. (1998).

In the next section, we develop the hypotheses that identify and link specific elements of governance, such as board size, board independence,

board leadership and board meetings to earnings quality proxies, such as accrual quality (AQ), earnings persistence (PERS) and earnings predictability (PRED).

4.1 Board size and earnings quality

A smaller board is less bureaucratic and may provide better financial reporting supervision. Empirically, there are findings to support that a larger board size is less effective in monitoring and that smaller boards are related to better firm performance (Yermack, 1996; Eisenberg, Sundgren, & Wells, 1998; Mashayekhi & Bazaz, 2008). However, Boone, Field, Karpoff, and Raheja (2007) document a significantly positive relationship between board size and financial performance. They argue that a larger board size brings more resources to firms and therefore, might improve their performance.

In terms of board monitoring, Xie et al. (2003) argue that larger boards are superior in terms of diversity and experience mix, and are more likely to have independent directors with financial expertise to prevent agency costs that result in earnings management through accruals. Mashayekhi (2008) argues that when the board size is larger, monitoring the managers will be less efficient as board members may find efficient communication more difficult. Similarly, a smaller board may be less encumbered with routine problems and may provide better firm performance. Consequently, we can expect that less efficient monitoring will have a negative impact on financial reporting and hence, earnings quality. Therefore, our first hypothesis is:

> **Hypothesis 1:** *There is a significant negative relationship between board size and earnings quality.*

4.2 Board independence and earnings quality

Independent directors have incentives to be effective monitors to preserve the value of their reputational human capital (Peasnell, Pope, & Young, 2005). Empirical findings provide evidence that outside directors provide more effective monitoring (Singh & Davidson, 2003). The findings indicate that independent directors may significantly reduce agency costs and add value to firms (Xie et al., 2003). Mashayekhi (2008) suggests that increasing the number of non-executive directors on the board of an Iranian firm may improve governance practices and be beneficial 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 non-

executive directors on the board. Therefore, it is expected that when the independence of the board is improved, agency costs will tend to be reduced such that manipulation of earnings through increasing accruals is less likely and therefore, earnings quality is enhanced. Consequently, increased board independence is expected to reduce total accruals and increase earnings quality. Therefore, our second hypothesis in this paper is:

Hypothesis 2: *There is significant positive relationship between the proportion of independent[3] outside directors on the board and earnings quality.*

4.3 Board leadership (CEO Duality) and earnings quality

The board chair serves to monitor the CEO (Jensen, 1993). Jensen (1993) claims that CEOs who also hold the board chair position (duality) exert undue board influence, compromising the strength of the board's governance. In fact, there is likely to be a lack of independence between the management and the board if the CEO is also the board chair. The issue of separation of the top two (2) posts has been addressed in the Cadbury Report (1992), which recommends that the roles of the board chairman and the CEO be separated. The *Iranian Code of Corporate Governance* (2005) also advises a similar board structure. When both the monitoring role (i.e. the board chairperson) and the implementation role (i.e. the CEO) are vested in a single person, the board's monitoring role will be severely impaired. This board independence impairment could affect its incentive to ensure that management pursues value-increasing activities.

Though the literature seems to consistently argue that separation of CEO and chairman posts leads to better corporate governance, the real issue is whether this leads the board to be a better monitor and thus, leads to improved financial reporting quality and consequently, earnings quality. In this study, we consider CEO duality an indicator of weak firm performance. Therefore, we hypothesise that:

Hypothesis 3: *There is a significant negative relationship between the CEO duality structure and earnings quality.*

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[3]The meaning of the word 'independence', in this paper, is being independent of employment. In this paper, we consider those directors as independent on the condition that they are not employed and paid by the firm. In fact, the non-executive directors (outside directors) are perceived as independent, whereas the executive managers (inside directors) are dependent directors who are employed by the firm and are paid by the firm.

4.4 Number of meetings and earnings quality

Vafeas (1999) finds that, as the number of board meetings increases, the operating performance of firms improves. This suggests that the frequency of meetings is an important aspect of an effective board. A board that meets frequently should be able to assign more time to issues such as financial reporting quality.

According to clause 9 of the *Iranian Code of Corporate Governance*, board meetings should be held at least once per month. It is expected that an increase in the number of board meetings will provide more effective monitoring and probably improve financial reporting and earnings quality in Iranian firms. As a result, we hypothesise that:

> **Hypothesis 4:** *There is a significant positive relationship between the number of the board meetings and earnings quality.*

5. Research design

In this section, we discuss issues relating to the sample selection, the measurement of our main variables of corporate governance quality and earnings quality, and the model we use for testing our hypotheses.

5.1 Sample selection

This study's sample is comprised of firms listed in the Tehran Stock Exchange (TSE) for the years 2005 to 2008. We exclude all holding financial and insurance firms (including banks) because this industry is regulated and is likely to have fundamentally different cash flow and accrual processes. We also eliminated firms with insufficient data to estimate dependant and independent variables. After adjusting for outliers, the total number in our sample is one hundred and fifty (150) firms, which comprises six hundred (600) firm-years observations (see Table 1). We collected corporate governance data directly from annual reports or from firm handbooks. We obtained the financial and accounting data needed to compute earnings quality from TSE reports made available on Compact Discs (CDs) and the web.

Table 1: Sample selection procedure

Selection procedure	
310	Total number of listed firms in TSE
	Less
20	Holding, financial, and insurance firms
290	Total number of industrial and commercial firms
	Less
140	Firms for which there was not enough information about financial position and corporate governance
150	Total number of firms in sample used in main analysis
<u>600</u>	Number of firm-year observations used in main analysis

5.2 *Variable measurements*

5.2.1 Earnings quality measure

The notion of "earnings quality" evolved in the context of increasing evidence of earnings management documented by researchers. Therefore, intuitively, earnings quality is high when earnings are unmanaged (Monem & Farshadfar, 2007). Consistent with the focus on decision usefulness adopted by the FASB and academic researchers, earnings quality and, more generally, financial reporting quality are of interest to those who use financial reports for contracting purposes and investment decision making. In addition, standard setters view the quality of financial reports as an indirect indicator of the quality of financial reporting standards (FASB, 2008).

Schipper and Vincent (2003) consider earnings quality constructs derived from the time-series properties of earnings; selected qualitative characteristics in the FASB's Conceptual Framework; the relations among income, cash and accruals; and implementation decisions. Among these constructs, one construct typically used in financial accounting research to examine earnings quality is related to the time series properties of earnings (e.g. Sloan, 1996). Time-series constructs associated with earnings quality include persistence, predictive ability and variability. Persistence captures the extent to which a given innovation remains in future realisations; predictive ability is a function of the distribution (especially the variance)

of the innovation series; and variability measures the time-series variance of innovations directly (Schipper & Vincent, 2003). In this paper, we use earnings persistence, earnings predictability, and accrual quality proxies for measuring earnings quality.

5.2.2 Earnings persistence

Earnings persistence refers to the likelihood that an earnings number or a component of it will be frequent in the future. Accordingly, persistence refers to the permanent component of earnings. Kormendi and Lipe (1987) develop a measure of earnings persistence where current-year earnings are regressed on previous year's earnings, both scaled by beginning of the year total assets. Earnings persistence is measured by the estimated slope-coefficient from this regression.

Therefore, we employ the following equation according to Kormendi and Lipe (1987):

$$\frac{EARN_{i,t}}{TA_{i,t-1}} = \lambda_0 + \lambda_1 \frac{EARN_{i,t-1}}{TA_{i,t-1}} + \varepsilon_{i,t} \qquad \text{Model (1)}$$

Where, *EARN* is a firm's net income before extraordinary items in year t divided by beginning of the year total assets (*TA*) and $\varepsilon_{i,t}$ is Firm *i*'s error term in year *t*.

We perform Ordinary Least Square (*OLS*) estimates on Model 1 for each firm by each year. Values of estimated *λ1* (hereafter PERS) close to or greater than one (1) indicate high persistence of earnings while values close to zero (0) reflect highly transitory earnings. Persistent earnings are better than transitory earnings because persistent earnings are more stable and predictable in the future. Thus, the lower values of PERS indicate poor earnings quality.

5.2.3 Earnings predictability

Lipe (1990) introduces a measure of earnings predictability based on the variance of earnings in that high variances in earnings lead to lower predictability. Following Lipe (1990), Francis, LaFond, Olsson, and Schipper (2004) measure earnings predictability using the square root of the estimated error-variance from the earnings-persistence model. In this paper, following Francis et al. (2004), we measure earnings predictability using the square root of the error variance from Model 1. Thus, earnings predictability is:

$$PRED_{i,t} = \sqrt{\sigma^2(\hat{\varepsilon}_{i,t})} \qquad \text{Model (2)}$$

Where, $\sigma^2(\hat{\varepsilon}_{i,t})$ is the estimated error variance of firm i in year t, calculated from Model 1.

Large values of *PRED* indicate less predictable earnings and consequently, lower earnings quality.

5.2.4 Accruals quality

According to Dechow and Dichev (2002), we develop the accrual quality from the model regressing current accruals (change in working capital, as defined by Dechow and Dichev, 2002, p.40) to past, current and future cash flows from operations. Model 3 uses the following equation to measure earnings quality:

$$\Delta WC_t/TA_t = \beta_0[1/TA_t] + \beta_1[CFO_{t-1}/TA_t] + \qquad \text{Model (3)}$$
$$\beta_2[CFO_t/TA_t] + \beta_3[CFO_{t+1}/TA_t] + \varepsilon_t$$

where:

ΔWC_t = change in accounts receivable plus the change in inventory, minus the change in accounts payable, minus the change in taxes payable plus the change in other current assets (net) at time t;

CFO_{t-1} = cash flows from operations for the prior period;

CFO_t = cash flows from operations for the current period;

CFO_{t+1} = cash flows from operations for the next period;

TA_t = average total assets for a firm in the current period.

Model 3 captures the extent to which accruals map into cash flow realisations, measuring any estimation errors using the error term (ε_t). We scale all variables by average total assets (TA_t) to account for differences in firm size. The intercept (β_0) is included to measure positive working capital accruals related to firm growth (Pergola, Joseph, & Jenzarli, 2006).

We estimate the model cross-sectionally, using a 3-year period to derive CFO_{t-1}, CFO_t, and CFO_{t+1}. We used Model 3 for t = 2005 because wide-scale accumulation of governance data is not available prior to 2005 and it was the year when the *Iranian Code of Corporate Governance* was enacted. Following Dechow and Dichev (2002), we run the regression in Model 3 for all sample firms in a 2-digit SIC code. We define the standard deviation of a firm estimated residuals as the inverse of accrual quality, AQ= $\sigma(\varepsilon_{it})$.

Large values of AQ represent poor accrual quality. Therefore, the higher values of AQ and PRED and lower values of PERS indicate poor earnings quality.

5.2.5 The corporate governance indices

In this paper, we consider four (4) characteristics for the board of directors as the representatives for corporate governance quality. These characteristics are: (1) Board size, i.e. the number of directors on the board; (2) Board independence, i.e. the proportion of independent directors on the board; (3) Board leadership (CEO-chaired), i.e. CEO is also board chair; and (4) Board meeting frequency, i.e. the number of board meetings.

5.2.6 Other control variables

While we examine how corporate governance index can influence the earnings quality, other firm factors bear influence. We control for firm size (SIZE), firm capital structure (LEV), and the extent of firm growth (MTB). We consider these variables because they are identified in prior literature as being associated with the extent of earnings management and earnings quality. Burgstahler and Dichev (1997) indicate that medium and large firms exhibit more earnings management. Thus, we expect the coefficient of SIZE to be negative for PERS and positive for PRED and AQ, and this implies low earnings quality or more earnings management as firm size increases. Hodgson and Stevenson-Clarke (2000) find that the likelihood of earnings management increases as the proximity to debt covenants increases. Therefore, we expect the coefficient of LEV to be negative for PERS and positive for PRED and AQ, which indicates low earnings quality or high earnings management as LEV increases. Lee, Li, and Yue (2006) state growth firms have low earnings quality. So, we expect MTB's coefficient to be negative for PERS and positive for PRED and AQ, which indicates low earnings quality. We use the natural logarithm function of total assets as the indicator of firm size and firm capital structure as total liabilities divided by total assets. Also, the firm growth (MTB) is calculated as market value of equity over its book value. In addition, we initially tested for industry effect, but because we did not find any significant correlation with firm performance, we eliminated this controlling variable from our model.

5.3 Model specification

A Multiple Regression Analysis (MRA) is applied to test our hypotheses. Following Hair, Anderson, Tatham, and Black (1992), and Weir (1997), we use MRA to identify the relationships that exist between the dependent and independent variables. A correlation matrix is used to ensure that multicollinearity does not exist among independent variables. Chiang (2005) also uses this model for testing the effect of board independence on performance across different strategies. Therefore, we use the following MRA models to test the association between explanatory variables and earnings quality, measured by earnings persistence, earnings predictability and accrual quality:

$$MODEL\ 4 : PERS_{i,t} = \alpha_0 + \alpha_1 BSIZE_{i,t} + \alpha_2 BOUT_{i,t} + \alpha_3 BMEET_{i,t} + \alpha_4 DUAL_{i,t} + \alpha_5 SIZE_{i,t} + \alpha_6 LEV_{i,t} + \alpha_7 MTB_{i,t} + \varepsilon_{i,t}$$

$$MODEL\ 5 : PRED_{i,t} = \alpha_0 + \alpha_1 BSIZE_{i,t} + \alpha_2 BOUT_{i,t} + \alpha_3 BMEET_{i,t} + \alpha_4 DUAL_{i,t} + \alpha_5 SIZE_{i,t} + \alpha_6 LEV_{i,t} + \alpha_7 MTB_{i,t} + \varepsilon_{i,t}$$

$$MODEL\ 6 : AQ_{i,t} = \alpha_0 + \alpha_1 BSIZE_{i,t} + \alpha_2 BOUT_{i,t} + \alpha_3 BMEET_{i,t} + \alpha_4 DUAL_{i,t} + \alpha_5 SIZE_{i,t} + \alpha_6 LEV_{i,t} + \alpha_7 MTB_{i,t} + \varepsilon_{i,t}$$

Where:

PERS = the values of estimated λ_1 in Model 1 as earnings persistence;

PRED = the square root of the estimated error variance of firm i in year t in Model 1 as earning predictability;

AQ = the standard deviation of firm i's estimated residuals in Model 3 as the inverse of accrual quality;

BSIZE = the number of directors on the board;

BOUT = the proportion of independent directors on the board;

DUAL = 1 if CEO is also board chair and 0 otherwise;

BMEET = the number of board meetings;

LEV = total debt / total assets;

SIZE = the natural logarithm (Ln) total assets; and

MTB = the firm growth which is calculated as market value of equity over its book value.

The predicted signs for these variables in Model 4 are presented in Table 2.

Table 2: The expected signs for the variables in Models 4, 5 and 6

Variables	Dependant variable (EQ)		
	PERS	PRED	AQ
Intercept	?	?	?
Board size (BSIZE)	?	?	?
Board independence (BOUT)	+	–	–
Board meeting (BMEET)	+	–	–
Duality (DUAL)	–	+	+
Firm size (SIZE)	–	+	+
Debt structure (LEV)	–	+	+
Firm growth (MTB)	–	+	+

6.   Empirical results

Table 3 presents the descriptive statistics on the variables used in this study. The firms' average PERS (the values of estimated λ_1 in Model 1) is 0.340, PRED (the square root of the estimated error variance of firm i in year t in Model 1) is 1.142, and AQ (the standard deviation of firm i's estimated residuals for year t in Model 3) is 0.033.

On average, there are 6.12 persons on board and 50 per cent of them are non-executive managers or are independent. In 45 per cent of the cases, the CEO is also the board chair. The board meetings are held, on average, eleven (11) times per year.

The firms' average size (as measured by a natural logarithmic function of the firms' total assets) is 6.596. Firms in Iran rely heavily on debt, with an average debt ratio of 56 per cent; this implies that their default risk is high (Mashayekhi & Bazaz, 2008). Further, the average firm growth is 1.54 in our sample.

Except for board size (BSIZE) and earnings predictability index (PRED), all other variables have medians larger than their corresponding means. This implies that the sample is slightly skewed to the left. The standard deviations of all the variables, however, are generally small. The fact that the regression analyses still generate significant results suggests that our findings are robust.

Table 3: Descriptive statistics

	Mean	Median	Minimum	Maximum	Standard Deviation
CFO	0.13639	0.13450	-0.203	0.610	0.154079
ΔWC	0.05152	0.07421	-0.428	0.472	0.135491
EARN	0.18789	0.22787	-0.263	0.747	0.179455
PERS	0.340	0.350	0.490	0.190	0.099
PRED	1.142	0.990	0.550	1.800	0.450
AQ	0.033	0.036	0.010	0.050	0.013
BSIZE	6.118	6.000	3.000	11.000	2.237
BOUT	0.504	0.550	0.400	0.75	0.120
DUAL	0.45	0	0	1	0.490
BMEET	10.73	10.95	7	18	0.520
SIZE	6.596	6.873	5.080	8.500	1.228
LEV	0.560	0.640	0.240	0.720	0.155
MTB	1.54	1.61	0.78	2.014	0.025

Note: CFO is cash flows from operations divided by average total assets for a firm in the current period; ΔWC is changes in working capitals divided by average total assets for a firm in the current period; EARN is a firm's net income before extraordinary items divided by average total assets for the firm in the current period; PERS is the values of estimated λ_1 in Model 1 as earnings persistence; PRED is the square root of the estimated error variance of firm i in year t in Model 1 as earnings predictability; AQ is the standard deviation of firm i's estimated residuals in Model 3 as accruals quality; BSIZE is the number of directors on the board; BOUT is the proportion of independent directors on the board; DUAL is an indicator of whether or not a firm's CEO is also the chair of the board of director (DUAL is equal to 1 if the CEO is also the chair of the board and 0 otherwise); BMEET is the number of board meetings; SIZE is the size of the firm as measured by a natural logarithmic function of the firm's total assets; LEV is the total liabilities divided by total assets; and MTB is the firm growth which is calculated as market value of equity over its book value.

Table 4 shows the Pearson's correlation for the dependent and explanatory variables in this study. The three (3) earnings quality variables (PERS, PRED and AQ) are not significantly correlated. Niu (2006) argues that firms performing well in one governance category tend to perform well in other categories. As indicated in Table 4, there are strong correlations among some attributes of corporate governance including board size, board independence, and board leadership at the 1 per cent level ($r_{BSIZE, BOUT}$=0.861, $p<0.001$; $r_{BSIZE, DUAL}$=-0.780, $p<0.001$; and $r_{BOUT, DUAL}$=-0.891, $p<0.001$).

The firm size is positively associated with leverage ($r_{LEV, SIZE}$=0.69, $p<0.001$), suggesting that larger firms have higher leverage constriction levels. The larger firms are likely to have a higher number of executive directors on their board and a more significant duality problem ($r_{BOUT, SIZE}$ = -0.514, $p<0.05$; and $r_{DUAL, SIZE}$=0.807, $p<0.001$). A similar problem exists for the firms with high leverage. That is, the high leverage firms are more

Table 4: Correlation matrix of the major variables

	PERS	PRED	AQ	BSIZE	BOUT	DUAL	BMEET	SIZE	LEV	MTB
PERS	1	0.163 (0.470)	-0.136 (0.546)	-0.491 (0.020)**	-0.447 (0.037)**	0.698 (0.000)***	0.436 (0.043)**	0.758 (0.000)***	0.316 (0.151)	-0.046 (0.840)
PRED		1	0.182 (0.418)	0.012 (0.959)	-0.256 (0.249)	0.129 (0.566)	-0.197 (0.380)	-0.131 (0.562)	0.004 (0.985)	-0.213 (0.341)
AQ			1	0.143 (0.526)	0.337 (0.125)	-0.354 (0.106)	0.041 (0.856)	-0.470 (0.027)**	-0.302 (0.173)	-0.018 (0.938)
BSIZE				1	0.861 (0.000)***	-0.780 (0.000)***	0.201 (0.370)	-0.430 (0.046)**	-0.387 (0.076)*	0.837 (0.000)***
BOUT					1	-0.891 (0.000)***	0.303 (0.170)	-0.514 (0.014)**	-0.495 (0.019)**	0.741 (0.000)***
DUAL						1	0.138 (0.542)	0.807 (0.000)***	0.628 (0.002)***	-0.442 (0.039)**
BMEET							1	0.552 (0.008)***	0.312 (0.157)	0.580 (0.005)***
SIZE								1	0.692 (0.000)***	0.056 (0.806)
LEV									1	-0.176 (0.434)
MTB										1

Notes: (1) Sig. (2-tailed); *** Correlation is significant at the 0.01 level (2-tailed); ** Correlation is significant at the 0.05 level (2-tailed); * Correlation is significant at the 0.10 level (2-tailed).
(2) PERS is the values of estimated λ_1 in Model 1 as earnings persistence; PRED is the square root of the estimated error variance of firm i in year t in Model 1 as earning predictability; AQ is the standard deviation of firm i's estimated residuals in Model 3 as accruals quality; BSIZE is the number of directors on the board; BOUT is the proportion of independent directors on the board; DUAL is an indicator of whether or not a firm's CEO is also the chair of the board of director (DUAL is equal to 1 if the CEO is also the chair of the board and 0 otherwise); BMEET is the number of board meetings; SIZE is the size of the firm as measured by a natural logarithmic function of the firm's total assets; LEV is the total liabilities divided by total assets; and MTB is the firm growth which is calculated as market value of equity over its book value.

likely to have more executive directors on their board and a more significant duality problem $(r_{BOUT, LEV}=-0.495, p<0.05;$ and $r_{DUAL, LEV}=0.628, p<0.001)$. However, the number of board meetings increases as the size of firms increases $(r_{BMEET, SIZE}=0.552, p<0.001)$. The correlation between SIZE and LEV is significantly positive. This indicates that on average, larger firms have a higher debt to asset ratio. On the other hand, larger firms with higher degree of leverage do not necessarily have larger board size.

The results are different for high growth firms. Firms having larger Market-to-Book ratio (MTB) are ranked higher in terms of board size, board independence and frequency of board meetings, but lower in terms of board leadership (duality). The growth (MTB), however, is not associated with firms' size.

A multitude of factors are likely to have an impact on the association between earnings quality and corporate governance. In this section, we perform a multivariate analysis to control for the effects of some of these factors in investigating the influence of the corporate governance on earnings quality. Specifically, as shown in Models 4, 5 and 6, we control for the impact of firm size (SIZE), firm capital structure (LEV), and the extent of firm growth (MTB). Table 5 provides ordinary least squares (OLS) regression results for each of PERS, PRED and AQ on the independent variables. These variables explain about 58 per cent, 47 per cent and 22 per cent of the cross sectional variation in PERS, PRED and AQ respectively. However, except for the AQ model, the other models are significantly different from zero (0) at the 95 per cent confidence interval.

For Model 4, Table 5 indicates a significant negative relationship between PERS and BSIZE. This implies that as board size increases, earnings persistency decreases, and hence, earnings quality decreases. Moreover, there is a significant positive relationship between PRED and BSIZE, which implies that as board size increases, the estimated error variance also increases. This translates into a decrease of earnings predictability and hence, a decrease of earnings quality. Therefore, our first hypothesis for Models 4 and 5 is accepted (t $_{PERS, BSIZE}$=-2.501, t $_{PRED, BSIZE}$ =2.113). This result is consistent with Jensen (1993), Beasley (1996), and Ho (2009) who opine that a larger board size generally reflects weaker controls and therefore, weaker performance. This, however, contradicts Dallas (2003) who argues that a larger board size brings more resources to firms, and therefore will increase the value of the firm. The results, presented in Table 5, however, do not document any significant relationship between board size and earnings quality, which is measured by accruals quality (AQ).

Table 5 shows that the second null hypothesis, H_2, for both Models 4 and 5 is also accepted as the percentage of independent directors on the board (BOUT) has a significant positive correlation with the firm's earnings quality (t $_{PERS, BOUT}$=2.141, t $_{PRED, BOUT}$ =-1.181). These results suggest that the expectation of the agency theory on a positive relationship between outside (independent) directors and financial reporting quality, and hence earnings quality, are applicable in the Iran's business environment as well. This result is similar to that of Niu (2006) who suggests that a high percentage of outside directors has a negative association with earnings management as a proxy for high earnings quality. Contrary to H_3, which predicts that separate individuals for the post of CEO and the chairman of the board lead to a better corporate governance system and increased earnings quality, the presence of duality in Iranian firms has not had a

Table 5: Multivariate analysis of earnings quality

Dependent variables		PERS (Model 4)	PRED (Model 5)	AQ (Model 6)
Intercept	β	-4.077	-3.571	-9.488
	(τ)	(-2.168)**	(-1.841)*	(-0.126)
BSIZE	β	-0.158	0.147	0.325
	(τ)	(-2.501)**	(2.113)*	(-0.129)
BOUT	β	5.923	-5.815	21.372
	(τ)	(2.141)*	(-1.81)*	(0.193)
DUAL	β	-0.523	0.622	-1.045
	(τ)	(-2.061)*	(1.754)	(-0.103)
BMEET	β	0.139	-0.249	0.533
	(τ)	(2.235)**	(-1.900)*	(0.214).
SIZE	β	0.263	0.173	-0.239
	(τ)	(2.131)*	(1.803)*	(-0.0738)
LEV	β	0.547	0.377	-0.352
	(τ)	(-2.519)**	(2.139)*	(-0.059)
MTB	β	-0.939	0.938	-2.576
	(τ)	(-2.344)**	(1.982)*	(-0.161)
F		5.186	4.283	1.817
		(0.004)**	(0.040)**	(1.816)
Adjusted R^2		0.583	0.466	0.222

Notes: (1)*Correlation is significant at the 0.1 level (2-tailed); **Correlation is significant at the 0.05 level (2-tailed); *** Correlation is significant at the 0.01 level (2-tailed).

(2) PERS is the values of estimated λ_1 in Model 1 as earnings persistence; PRED is the square root of the estimated error variance of firm i in year t in Model 1 as earning predictability; AQ is the standard deviation of firm i's estimated residuals in Model 3 as accruals quality; BSIZE is the number of directors on the board; BOUT is the proportion of independent directors on the board; DUAL is an indicator of whether or not a firm's CEO is also the chair of the board of director (DUAL is equal to 1 if the CEO is also the chair of the board and 0 otherwise); BMEET is the number of board meetings; SIZE is the size of the firm as measured by a natural logarithmic function of the firm's total assets; LEV is the total liabilities divided by total assets; and MTB is the firm growth which is calculated as market value of equity over its book value.

significant negative impact on the earnings quality. Therefore, except for earnings persistence (Model 4), which is negatively influenced by the presence of duality, our third hypothesis is rejected. This result is dissimilar to the general findings of previous studies such as Berg and Smith (1978), Chaganti and Mahajan (1985), and Rechner and Dalton (1991). However, this association is not strong and it is significant at 10 per cent level (t $_{PERS, DUAL}$=-2.061).

Table 5 also shows that hypothesis 4, H_4, for both Models 4 and 5 is also accepted. The frequency of board meetings (BMEET) has a significant positive correlation with the firm's earnings quality (t $_{PERS, BMEET}$=2.235, t $_{PRED, BMEET}$ =-1.900). Similar to Lin and Hwang's (2010) indications, these results suggest that increasing the number of board meetings and

deliberations among the directors will improve the financial reporting quality and hence, earnings quality in the Iranian environment. Our results, however, do not show any significant relationship between the number of board meetings and earnings quality, which is measured by accruals quality (AQ).

Table 5 also shows that, except for earnings predictability (PRED), firm size (SIZE) does not have a negative impact on earnings quality, which is inconsistent with the assumption that the larger firms exhibit more earnings management and show low quality earnings (Burgstahler & Dichev, 1997). According to Models 4 and 5, the leverage ratio of the firm has a statistically significant (but conflicting) effect on earnings quality (t $_{PERS, LEV}$=-2.519, t $_{PRED, LEV}$ =2.139). Only the coefficient of PRED (β $_{PRED, LEV}$ = 0.377) is in the expected direction which indicates that higher leverage is positively associated with higher standard error of (less predictable) earnings. This result is similar to Hodgson and Stevenson-Clarke (2000) who find that the possibility of earnings management increases (and consequently earnings quality decreases) as the proximity to debt covenants increases. Our results, however, do not indicate any significant relationship between the leverage ratio and earnings quality, which is measured by accruals quality (AQ) (Model 6).

Similar to Lee et al. (2006), our results indicate that growth firms have low earnings quality (t $_{PERS, MTB}$=-2.344, t $_{PRED, MTB}$ =1.982). However, our results do not indicate any meaningful relationship between the leverage ratio and earnings persistency or accrual quality. This might be due to the fact that a significant portion of Iranian firms' financing is provided directly or indirectly by the Iranian government.

6.1   Robustness tests

To provide further evidence for the relationship between corporate governance mechanisms and earnings quality, we examine whether firms with strong governance structure have a higher quality of reported earnings than the firms with weak governance structure. For evaluating corporate governance quality at this stage, we use a governance index that is calculated according to indicators introduced by institutional shareholder services (ISS, 2003). For calculating the governance index (GI), ISS considers sixty one (61) different variables encompassing eight (8) corporate governance categories: board of directors, audit, charter/bylaws, director education, executive and director compensation, ownership, progressive practices, and state of incorporation. We applied thirty nine (39) of the total sixty one (61) provisions for each firm, because the remainder of provisions

is not relevant to the Iranian capital market and regulations. We assign one (1) to any of our sample firms if each of these minimum thirty nine (39) criteria is met and zero (0) if otherwise. The total index is calculated for each firm with a possible maximum score of thirty nine (39). The computed index is used as a measure of governance effectiveness, where a higher point is considered more effective than a lower point.

The data regarding corporate governance index is collected directly from the firms' financial statements. For more investigation, we dichotomised our sample into two (2) groups, namely, strong governance firms, and weak governance firms. We define a firm as having strong/weak corporate governance in a specific year if its GI is larger/smaller than the full sample's median score. Table 6 characterises sub-samples consisting of strong and weak governance firms.

Table 6: The comparison of strong and weak governance

| | Mean | | t-stats | P-value |
	Strong Governance	Weak Governance	t-stats	P-value
PERS	0.365	0.323	5.142	0.000
PRED	1.084	1.255	4.584	0.000
AQ	0.026	0.043	20.691	0.000
SIZE	7.000	5.990	-0.775	0.548
LEV	0.480	0.430	-2.009	0.013
MTB	1.29	1.97	1.027	0.126

Note: PERS is the values of estimated λ_1 in Model 1 as earnings persistence; PRED is the square root of the estimated error variance of firm i in year t in Model 1 as earnings predictability; AQ is the standard deviation of firm i's estimated residuals in Model 3 as accruals quality; SIZE is the size of the firm as measured by a natural logarithmic function of the firm's total assets; LEV is the total liabilities divided by total assets; and MTB is the firm growth which is calculated as market value of equity over its book value.

These two (2) groups have distinctly different characteristics. By design, strong governance firms have higher earnings quality (higher mean value of PERS and smaller mean value of PRED and AQ) than weak governance firms. Therefore, we can document a positive association between corporate governance and earnings quality, which is consistent to our previous results, except for accruals quality (AQ).

We also note that weak governance firms are larger in size (SIZE) and market-to-book ratio (MTB) than strong governance firms; however, the differences in values of these variables are not statistically significant. Nevertheless, the leverage (LEV) in weak governance firms is significantly larger than in strong governance firms.

7.   Implications and conclusion

Corporate governance mechanisms encompass a variety of aspects such as the contracting and monitoring function of the independent external auditors to authenticate financial reports and monitor the presence of large institutional shareholders. A measure of the quality of these mechanisms is how effective they are in reducing the agency conflicts between owners and directors. Corporate governance quality is defined along with multidimensional aspects of managerial control. Low quality corporate governance provides managers with unconstrained power, which enables them to exercise discretion in investment decisions and compensation plan, independently. On the other hand, high quality corporate governance keeps managers from exercising unlimited discretion. Therefore, investment and compensation decisions reflect shareholders' interests.

Capital market regulatory bodies in Iran have reacted to corporate collapses and disclosures of fraudulent reporting by improving corporate governance. Such a reaction assumes that corporate governance and earnings quality are broadly related. The main purpose of this study is to test whether such a relationship exists. In this paper, we provide evidence for the existence of the link between firm's earnings quality and corporate governance. Specifically, we investigate whether corporate governance affects earnings persistence, earnings predictability and accruals quality.

Using Iranian data, the study shows that as board size increases, both earnings persistence and earnings predictability decrease, thus resulting in lower earnings. However, the findings do not show any significant relationship between size of the board and earnings quality, which is measured by accruals quality. The results suggest that based on a positive relationship between independent directors and earnings quality, the theoretical predictions of agency theory are also applicable to the Iranian capital market. However, these results are based on the significant relationship of earnings persistency and earnings predictability with the percentage of outside directors, not based on relationship between the percentage of outside directors and accruals quality. The findings do not verify that a separate individual for the post of CEO and chairman leads to

a better corporate governance system and increased earnings quality. In fact, the presence of duality in Iranian firms has not had a significant negative impact on the earnings quality. The frequency of the board meetings has a significant positive relationship with the firm's earnings quality, which is measured by earnings persistency and earnings predictability. These results suggest that increasing the board meetings, which may lead to more effective discussion between directors on the board, will improve the financial reporting quality and hence earnings quality in the Iranian capital market. The evidence, however, shows no significant relationship between the number of board meetings and earnings quality, which is measured by accruals quality.

In brief, the findings of this study imply that there is no significant relationship between corporate governance and accruals quality for Iranian firms; however, corporate governance can affect earnings persistence and earnings predictability. This study provides some helpful evidence that is consistent with Iranian regulators' initiatives that stronger corporate governance mechanisms may be important factors in advancing the integrity of financial reporting for Iranian firms. The result of this study may also help Iranian policy makers and firms' stakeholders to further improve corporate governance along with current transfer of firms' ownership from government to the public based on Article #44 of the Iranian Constitution.

Similar to most prior work, the focus of this study is limited to only four (4) corporate governance measurements. This limitation is due to the lack of online availability of necessary data in Iran. It would be beneficial to include additional corporate governance variables such as institutional investors, compensation mix, audit committee and market control variables in future studies. The role of audit committees in Iran for monitoring reporting quality, the characteristics of directors and whether they are financial expert, and board members ownership structure are further research points of interest within the context of Iran. The issue of reverse causality is also an interesting topic in this area. Future researchers may focus on the question of whether good corporate governance leads to better earnings quality or firms with higher quality earnings have better corporate governance. Findings of this study warrant further investigations on the role played by the Iranian government ownership structure in determining the earnings quality in Iran.

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