Studying the relationship between audit committee and earnings manipulation in Tehran Stock Exchange

Ahmad Abdollahi
Golestan Institute of Higher Education, Gorgan, Iran
e-mail: ahmabdollahi@gmail.com
Mojtaba Samiey
Islamic Azad University, Aliabad Katoul, Iran
Seyed Aliakbar Nosrati
Islamic Azad University, Aliabad Katoul, Iran

Abstract.
The aim of this paper is studying the relationship between audit committee and earnings manipulation in Tehran Stock Exchange. Corporate governance controls are vital for monitoring managers' behavior and providing transparent and reliable financial information to stakeholders. One of important controls in companies is audit committee that its characteristics has been reviewed in this study. This paper extends research on the corporate governance practices of transitional economies by examining whether the ability of the audit committee to constrain earnings manipulation is associated with the presence of government officials on the audit committee. Thus, research data from 2012 and 2014 are used for listed companies that have established an audit committee. This study find that the expertise and independence from characteristics of the audit committee are associated with lower abnormal accruals, our measure of earnings manipulation. Furthermore, we find a significant relationship between audit committee independence and experience and earnings manipulation when there are government officials on the audit committee.

Keywords: audit committee, earnings manipulation, governance, Tehran Stock Exchange

1. Introduction.

Iran is one of the growing economies in the world, even though its legal and financial system is not well developed (Firth et al. 2013; He et al. 2013). Over the last decade, the Tehran Stock Exchange (TSE) published a number of regulations and recommendations on corporate governance for Iranian listed firms. Following the regulations and recommendations issued by TSE, there is some evidence showing that Iranian firms are actively moving towards improving corporate governance practices, such as establishing independent boards and audit committees (Li et al. 2006; Cheung et al. 2008). Iran has made considerable attempts to improve accountability and transparency, moving from a rules-based and prescriptive accounting regime to the introduction of principles-based Iranian Accounting Standards.

Several studies have examined the effectiveness of audit committees in limiting earnings manipulation primarily in the world (Abbott et al. 2004; Be´dard et al. 2004; Klein 2002; Xie et al. 2003; Yang and Krishnan 2005). Researches also find that audit committees play a significant role in constraining earnings manipulation of Hong Kong firms (Jaggi and Leung 2007). Although the role of the board (Firth et al. 2007; Lai and Tam 2007; Liu and Lu 2007) and ownership concentration (Liu and Lu 2007; Ding et al. 2007; Firth et al. 2007) are identified as important determinants of earnings manipulation in Iranian listed firms, there is currently considerable debate about the effectiveness of the audit committee in constraining earnings manipulation (Lin et al. 2008).

Floating companies on a developed overseas market allows the government to generate higher privatization income. Before the 2008 global financial crisis, listing newly privatized shares on the HKEX was a common practice to raise capital. Further, the listing and governance rules of the foreign exchange may discipline management, motivating them to improve the quality of financial reporting. Conversely, this choice entails political and economic trade-offs. State ownership is diluted and voting power is decentralized as ownership becomes more diverse. By selling firms overseas, the State risks losing a powerful tool for profit redistribution, especially as the cross-listed firms are the pillars of corporate Iran. Therefore, in many cases, government officials are placed on boards or committees for some political reason, even though government officials are claimed to be independent.

Another fiscal reform is the quota system of 1993–2000, which gave government officials considerable control rights and incentivised3 them to report favourable economic performance of firms in their region (Pistor and Xu 2005). Although the quota system has been formally abandoned, the practice has contributed to the incentive for politically connected managers (former government officials) to restrict the flow of negative information about their firms (Piotroski et al. 2011). The classification of government officials as independent directors is controversial due to their political connections to the controlling shareholders (the State). When the State is the major stockholder it may impose its socioeconomic objectives on the firm (Firth et al. 2012). Such preferences may cause government officials to sanction earnings management, even in the presence of cross-listing, because the marginal benefits of control are perceived by the government to exceed the marginal benefits of cross-listing. Placing a government official on the audit committee provides the opportunity for the government official to confer with the interests of the State rather than minority shareholders, which in turn can encourage earnings manipulation. Consequently, a government official on the audit committee has both the incentive and the opportunity to endorse earnings manipulation.

2. Literature review and hypothesis development.

The predictions of agency theory apply in public corporations when owners assign the daily operating power to managers, giving rise to concerns that managers may not act in the best interests of the owners. The underlying assumption of the principal-agent perspective is that all principals are homogenous in their aim of maximizing returns on investments. Such an assumption holds in the institutional setting of developed economics, where the institutional and minority investors have a primary goal for profit maximization. Once their goals diverge, the assumptions of the theory change. The aim of principals is different and the controlling principal may expropriate minority shareholders' funds due to the lack of legal protection. Many controlling shareholders directly participate in management and appoint their representatives to the board (Claessens et al. 2002).

Government officials may lack the necessary financial, accounting, and industry experience to monitor managers (Fan et al. 2007). They may have a successful political career and know how to deal with complicated relationships among different groups, but they may not have the related business background. As the government official's alliance is with the State or the controlling shareholders, these firms experience greater information asymmetry. The addition of government officials onto the audit committee to monitor earnings management will be compromised if the State places government officials on boards and committees to counteract the loss of control from cross-listing and privatization. Consequently, government officials on the audit committee have the incentive and opportunity to portray the earnings according to the State's political objectives. Therefore, we expect a change in the efficacy of the audit committee in monitoring earnings management when there is a government official on the audit committee. Consequently, the following hypothesis is developed:

Hypothesis: The negative association between audit committee efficacy and abnormal accruals is moderated by the presence of government officials on the audit committee.

3. Research method.

Research data from 2012 and 2014 are used for listed companies that have established an audit committee. The audit committee data is hand collected from the firm's annual financial reports while the financial data is collected from the Codal website for the firms listed in Tehran Stock Exchange.

Abnormal accruals can be manipulated by management by using professional judgment in their accounting choices. Therefore, abnormal accruals models are often used as a proxy for earnings management in the literature and we use the modified Jones model (Jones 1991) from Butler et al. (2004) as a proxy for earnings management. We also use variations of this model in testing the robustness of our results.

$$TA_{it} / AT_{it} = \alpha_0 + \alpha_1(DRev_{it} / AT_{it}) + \alpha_2(PPE_{it}/AT_{it}) + \varepsilon$$

where:

TA_{it} is total accruals calculated by adding earnings before extraordinary items and discontinued operations minus operating cash flows from continuing operations and then dividing by total assets at the beginning of the year.

AT_{it} is the total assets for firm i in the year t.

$DRev_{it}$ is the change in revenue firm i in the year

t. PPE_{it} is net property, plant and equipment firm i in year t.

Total accruals are separated into expected accruals and abnormal accruals. To determine committee member characteristics we analyze their biography in the firm's financial reports or searched for their curriculum vitae (CV) on the internet. Each audit committee member voluntarily provides a CV to the shareholders following their nomination from the board. If a member has past experience working in a government department serving as a public servant, they are classified as a government official. In many cases, the government officials are either retired or not incumbent when they commence their position on the committee. We also use this method to determine committee members' independence, expertise and work experience.

Recommendation for establishment of independent director system in Iranian listed firm's government officials met the requirements for an independent director. There is a theoretical argument that an audit committee with government officials will provide a company with a high level of access to various resources, particularly through their political connections. However, the independence role of government officials is controversial as they may act in the interests of the government, or may lack the necessary financial, accounting, and industry experience to monitor managers (Fan et al. 2007). They can have a successful political career and know how to deal with complicated relationships among different groups, but they may not have the related business background to detect earnings management. Therefore, we expect that the efficacy of the audit committee will be compromised in firms when there are government officials on the audit committee. We predict the coefficient for the interaction of AC efficacy and earnings management is positive in the presence of government officials on the AC. This result is expected due to the audit committee following the State's interests rather than minority shareholders' interests.

An effective audit committee fulfills its oversight role when it is independent of management, has a level of financial and industry experience to carry out its duties, and actively monitors internal controls and financial reporting (Carcello et al. 2006). Subsequently, this paper evaluates audit committee effectiveness from the perspective of the non-negotiable characteristic of independence and the experience that independent members bring to the committee.

Agency theory posits that outside members facilitate effective monitoring because they are independent of management and have reputational incentives to signal to the labor market that they are experts in decision control (Fama and Jensen 1983). Firms may voluntarily establish an audit committee with a majority of independent directors. The rules require firms to have an audit committee that consists of at least five independent non-executive directors. The rationale is that independent audit committee members are more likely to be free from management's influence, which ensures that financial information is conveyed to shareholders in an objective way. Thus there is less opportunity for earnings management.

Following preliminary analysis, we use principal component factor analysis to comprise a factor score for audit committee directors' experience. A factor score of independent audit committee members' accounting, financial and industry experience is created by using principal components' factor analysis. The three components collected from the information provided in the firm's annual reports are: the number of independent audit committee directors with accounting experience divided by the number of directors on the audit committee; the number of independent audit committee directors with financial experience divided by the number of directors on the audit committee; the number of independent audit committee directors with industry experience divided by the number of directors on the audit committee. Typically, research has only used one of these variables to measure expertise (e.g., Carcello et al. 2006; Dhaliwal et al. 2006; Lin et al. 2006). Subsequently, we used a factor score of these measures to test the combined influence of independent audit committee directors' experience.

Following model tests whether the association between audit committee efficacy and abnormal accruals is moderated by government officials on the audit committee. Dummy variables were used to test the interactions.

$$\begin{aligned} ABAC = {} & \alpha_0 + \alpha_1 GOV + \alpha_2 ACIND + \alpha_3 ACEXP + \alpha_4 GOV\_ACIND + \alpha_5 GOV \\ & \_ACEXP + \alpha_6 MILLS + \alpha_7 STATE + \alpha_9 LEV + \alpha_{10} ROEDUM \\ & + \alpha_{11} MBVA + \alpha_{12} LNAT + \alpha_{13} YEAR + \alpha_{14} INDUSTRY + e \end{aligned}$$

where:

ABAC Abnormal accruals are the residuals from running the regression of Eq.

GOV Dummy variable 1 if an audit committee includes government officials as independent members; 0: otherwise

ACIND Number of independent directors divided by total number of directors on the audit committee

ACEXP A factor score of independent audit committee members' accounting, financial and industry experience is created by using principal components' factor analysis and scaled by audit committee size

STATE Dummy variable 1 if the proportion of State shareholdings to total issued shares is greater than or equal to the median; 0 otherwise

LEV Leverage is (long-term debt? debt in current liabilities)/total assets

ROEDUM Dummy variable 1 for ROE less than zero; 0 otherwise

MBVA Book to market value is calculated as market capitalization divided by the book value of assets

LNAT Firm size is measured as total assets in million RMB. A natural logarithmic transformation is performed to normalize data

YEAR Dummy variable for each year 2012, 2013, and 2014

INDUSTRIAL Dummy variable 1 if firms in industrial sector; 0 otherwise

4. Experimental result

Table 1 presents descriptive statistics for the dependent and independent variables in the study.

Table 1. Descriptive statistics

	Mean	Median	SD	Min	Max

Valid Data	76	76	76	76	76
ABAC	0.263	0.133	0.362	0.004	0.582
ACIND	0.544	0.754	0.289	-0.303	1.000
ACEXP	0.414	0.412	0.187	0000	1.000
STATE	0.327	0.512	0.302	0.000	0.826
LEV	8.8	2.24	8.12	-12.03	71.2
LNAT	0.52	8.37	0.784	4.4	11.3
GOV	0.21	0.73	0.433	0.000	1.000

The results of the regression analysis for the main hypotheses are reported in Table 2. This table reports the results of testing hypothesis; whether the association between the audit committee and abnormal accruals is moderated by the role of government officials.

Table 2. Testing impact of government officials on audit committee effectiveness

Variable	Panel
ABAC	0.143
GOV	0.042
ACIND	-0.201
ACEXP	-0.181
STATE	2.512
LEV	-0.079
LNAT	0.129
STATE	0.173
Year	Included
Adjusted R^2	0.071
F	3.211

We test the association between government officials on the audit committee of Iranian firms. We find a significant and positive association between a government official on the audit committee and abnormal accruals.

5. Conclusion.

The aim of this paper is studying the relationship between audit committee and earnings manipulation in Tehran Stock Exchange. Corporate governance controls are vital for monitoring managers' behavior and providing transparent and reliable financial information to stakeholders. One of important controls in companies is audit committee that its characteristics have been reviewed in this study. This paper extends research on the corporate governance practices of transitional economies by examining whether the ability of the audit committee to constrain earnings manipulation is associated with the presence of government officials on the audit committee.

Iran has outperformed other transition economies in terms of liquidity and ability to raise funds. This could be due to many factors. In this study we consider one factor, titled the influence of government officials. Although the Tehran Stock Exchange has initiated regulatory governance reforms for Iranian listed firms aimed at improving the quality of financial reports, our results suggest that the reforms have not been entirely successful. We find that initiatives that encourage cross-listing of Chinese firms are successful in improving financial reporting as we find that the independence and experience of audit committee members is negatively associated with abnormal accruals. In contrast, we find a marginally positive association between audit committee independence and earnings management for Iranian firms.

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