



# Auditor Choice in a Non-Big Market: Evidence on the Role of Ownership Structure

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## ABSTRACT

The operation of both state and private auditors following audit privatization in the Iranian audit market has provided a unique laboratory to investigate auditor choice, whereas prior research studied such issues by comparing Big versus non-Big audit firms. This paper provides empirical evidence concerning the effect of ownership structure (non-state ownership versus state ownership) on auditor choice (private audit firms) based on data from firms listed on the Tehran Stock Exchange between 2002 and 2007. This study finds that compared with state owned enterprises, non-state owned firms are more likely to choose private audit firms. Such a pattern of auditor choice can be explained by the 'auditor-client alignment' argument and the lack of 'collusion incentive'.

**KEYWORDS:** Auditor choice, private and state auditors, ownership structure, Iran

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## 1. INTRODUCTION

This study examines how ownership structure, non-state ownership versus state ownership, affects the auditor choice decisions by firms listed on the Tehran Stock Exchange (TSE). The Iranian audit market is studied because both state and private auditors provide audit services for both state owned enterprises (SOEs) and non-state owned firms (hereafter non-state firm), creating a unique laboratory to examine firm-level auditor choice decisions. The growing body of studies that investigate the role of ownership structure (state vs. non-state) on auditor choice decision (e.g., Wang et al., 2008; Guedhami et al., 2009; Lin and Liu, 2009) has motivated this study to examine such a relationship in the unique audit market of Iran.

Prior to the Islamic Revolution in 1979, both national and international audit firms operated in the Iranian audit market. Following the revolution, the demand for audit services of national and international audit firms dramatically decreased due to the nationalization programme. Hence, three semi-state audit firms<sup>1</sup> were established to offer audit services for the newly nationalized firms. However, due to the lack of comparability between the audited financial reports of the three semi-state audit firms, the Iranian Audit Organization (IAO), as a state agency, was established in 1987 by merging the three semi-state audit firms, based on the law ratified by the Iranian Parliament in 1983. Following the end of the war between Iran and Iraq in 1988, Iran adopted privatization policies to promote its economic growth. Therefore, the IAO was faced with a significant audit workload due to the new demands raised from the private sector. To respond to this need and in light of the privatization policies, the Iranian Parliament ratified the "Using Services of Certified Public Accountants" Act in 1993. However, the Act was only operationalized in late 2001 by the establishment of the Iranian Association of Certified Accountants (IACPA) (Mashayekhi and Mashayekh, 2008; Azizkhani, 2011). Thus, the IAO dominated the Iranian audit market until 2001 (see, Bagherpour et al., 2008). Although a large number of private audit firms were established as the members of IACPA to offer audit services in the Iranian audit market, the IAO, as the state audit agency, still dominates one-third of the Iranian audit market (Esaee-khosh, 2011).

This study attempts to address the following questions. What is the role of ownership structure (state vs. non-state) in choosing private audit firms? More fundamentally, how do firms listed on the TSE choose auditors? Two arguments are utilized to hypothesize how the ownership structure affects the auditor choice decision. The first argument concerns the 'auditor-client alignment' incentive. The argument highlights that private audit firms are best suited for the auditing of non-state firms, and the state audit firm, the IAO, is best suited for SOEs because it has proper knowledge and experience regarding the government accounting framework. The second argument is regarding the 'collusion incentive'. In light of this argument, not only might SOEs have a strong incentive to collude with their auditors, but also a proper opportunity exists for such behaviour. In other words, when both the auditee and the auditor are state controlled entities, the likelihood of auditor and client collusion (auditor independence comporting) is high. Using a sample of firms listed on the TSE from 2002 to 2007, the present study finds that compared with SOEs, non-state firms are more likely to choose private audit firms.

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<sup>1</sup>The Nationalized Industries and Plan Organization Audit Firm (1980), the Mostazafan Foundation Audit Firm (1981) and the Shahed Audit Firm (1983).

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This study contributes to the auditing literature in several ways. First, given the absence of the operation of Big audit firms in Iran following the Islamic Revolution in 1979, by studying the auditor choice decision regarding private audit firms in a comparative fashion with the state audit firm, this paper extends the auditor choice research that principally investigated such issues by comparing Big versus non-Big auditors (Francis and Wilson, 1988; DeFond, 1992; Guedhami et al., 2006 and 2009; Houqe et al., 2012). Compared with the findings of prior studies, especially in developed countries, the determinants of auditor choice are likely to be different in the Iranian context, where there is no proper demand for high quality audit services; litigation risks are no deterrent; and state auditor operates in the audit market; particularly, as the demand for audit services by external auditors is mainly driven by the legal requirement. Hence, clients in such an environment may desire to choose the auditor who offers low audit fees irrespective of audit quality. To the best of our knowledge, this study investigates, for the first time, the effective factors concerning the selection of private audit firms in Iran. Banimahd and Vafaei (2011) study the determinants of auditor choice decision concerning the state audit firm. However, our study is different from the research of Banimahd and Vafaei in several ways. First, the present study examines the effect of ownership structure on choosing private audit firms, whereas Banimahd and Vafaei studied the effective factors for choosing the state audit firm. Second, we capture the effect of some new control variables that results in greater explanation power of the research model. Third, this study investigates the auditor choice by using a large sample. Finally, we include industry and year fixed effect to capture the potential variation within sample firms over the research period.

The present study is also complementary to a number of recent studies concerning the effects of political and economic institutions on auditor choice. In other words, this study, in line with the findings of Wang et al. (2008), suggests that auditor-client alignment and collusion incentive can affect auditor choice decision. This study provides some suggestions for both policymakers and researchers.

The remainder of this study proceeds as follows. The Iranian audit market is briefly surveyed and the research hypothesis is developed in Section 2. Section 3 presents the sampling design, model specification and control variables. The findings of the descriptive analysis, univariate analysis and multivariate analysis are presented in Section 4. The conclusion and final remarks form Section 5.

## 2. Background and Hypotheses Development

In this section, the history and circumstances of the Iranian audit market are briefly surveyed. Later, research hypothesis is developed based upon arguments regarding auditor-client alignment and collusion incentive.

### 2.1 Iran's audit market

Both national and international audit firms operated in the Iranian audit market prior to the Islamic Revolution in 1979. Following the revolution, the demand for the services of private audit firms suddenly decreased because of the nationalization policies. Three semi-state audit firms were founded in an effort to audit newly nationalized firms, including the Nationalized Industries and Plan Organization Audit Firm (1980), Mostazafan Foundation Audit Firm (1981), and Shahed Audit Firm (1983). In the absence of accounting and auditing standards, there was no proper comparability between the audited financial statements by the three aforementioned semi-state audit firms. To deal with the problem the Iranian Parliament ratified the Act for the establishment of the Iranian Audit Organization (IAO) by merging the three aforementioned semi-state audit firms. The IAO, as the state entity, was established in 1987 and the auditing of state and semi state firms as well as the development of a set of national auditing and accounting standards was assigned to the state entity (Mashayekhi and Mashayekh, 2008; Roudaki, 2008). Following the end of the war between Iran and Iraq in 1988, the Iranian government adopted privatization policies to promote the growth of the country's economy. As a result, the IAO, was faced with a heavy audit workload due to the auditing of state and semi-state firms as well as the firms in the newly emerging private sector. To deal with the problem and in light of the privatization policies, the Iranian Parliament ratified the "Using Services of Certified Public Accountants" Act (USCPAA) in 1993, which permits private audit firms to offer audit services in the Iranian audit market (Azizkhani, 2011).

The Act was operationalized in late 2001 by the establishment of the IACPA; this phenomenon is referred to as 'audit privatization' in Iran. Hence, the IAO, the state audit firm, dominated the Iranian audit market from 1987 to 2001. However, following audit privatization, a large number of private audit firms were established and operated as members of the IACPA (Bagherpour et al., 2008). Every year some new audit firms are established as members of the IACPA and are added to the already established private audit firms. By April 2013, 253 private audit firms were listed as members of IACPA.<sup>2</sup> Competition dramatically increased in the Iranian audit market as a result of the rapid increase in the number of private audit firms. While Bagherpour et al. (2008) find that auditor switching from the IAO to private audit firms dramatically increased in early years following audit privatization, Deilampour (2012) argues that private audit firms, as members of the IACPA, have faced an audit work shortfall. Although Note 5 of the USCPAA provides permission for the private firms

<sup>2</sup> www.iacpa.ir

as members of the IACPA to carry out the audit work of SOEs, the argument of Hoshi (2012) indicates that SOEs mainly choose the IAO as the state audit firm.

## *2.2 Hypothesis development*

The demand for audit services is mainly attributable to the aim to decrease the agency problems emerging from the separation of ownership and management. External audits performed by professionals play a considerable role in financial reporting and information credibility. The auditor plays a substantial role in determining the level of quality of disclosure (e.g., Datar et al., 1991; Ferguson et al., 2004).

Auditor choice has recently attracted the attention of many researchers (e.g., Wang et al., 2008; Knechel et al., 2008; Broye and Weill, 2008; Hope et al., 2008; Guedhami et al., 2009; Lin and Liu, 2009; Banimahd and Vafaei, 2011; Houqe et al., 2012). The prior studies provide evidence that numerous factors affect the audit selection decision, such as ownership structure, complexity and the financial structure of the client firm. Wang et al. (2008) find that compared with non-state firms, Chinese SOEs are more likely to choose small local auditors. The authors suggest that such an auditor choice pattern is likely to be attributable to the absence of demand of SOEs for the services of non-local and large auditors, the superior local knowledge of small local auditors, and the collusion incentives of SOEs. Hence, this study utilizes the auditor-client alignment (auditor suitability) view and collusion view to explain and hypothesize the effect of ownership structure (non-state vs. state) on auditor choice in the context of Iran.

### *2.2.1 Auditor-client alignment*

Client firms have a propensity to choose auditors that meet the client's needs (Shockley, 1981; Beattie and Fearnley, 1998). Auditor-client alignment exists when a SOE chooses a public sector auditor or a privately owned firm chooses a private sector auditor (Bagherpour et al., 2008). In this line, Lopez and Peters (2010) point out that "anecdotal and empirical evidence indicates that governmental auditors provide better audit quality than do CPA firms, reportedly because of the unique challenges and incentive mechanisms associated with GNP audits that are not present in typical external financial statement audits" (p. 483). Wang et al. (2008) argue that the local audit firms have specialized knowledge regarding the local or central SOEs that operate in the same region. This specialized knowledge is likely to motivate local or central SOEs to choose the local auditors. In contrast, specialized knowledge of local government by the local auditors is less likely to motivate non-state firms to choose the local auditors, because the likelihood of local government intervention in the operation of the non-state firms is low, and thus they need less "specialized knowledge of the government in their audits" (Wang et al., 2008, p. 115).

Consistent with the arguments of Wang et al. (2008), and Lopez and Peters (2010), Moulkaraei (2005) argues that the IAO is more likely to suit the auditing of SOEs due to its proper knowledge and experience regarding the government accounting framework. SOEs listed on the TSE are more likely to choose the IAO because they know that the IAO is best suited for the public sector, where financial reporting is principally affected by the regulations of the government. Additionally, private audit firms are more likely to be specialized in the auditing of non-state firms. If a newly privatized firm has a public sector auditor (IAO), the firm is more likely to switch to private auditors because the IAO may be less suitable for non-state firms. Briefly, the incentive of auditor-client alignment is likely to affect the auditor choice decision by clients.

### *2.2.2 Collusion incentive*

SOEs tend to collude with auditors, and collusion costs are low for government owners of local SOEs because local governments have political power and economic power over local auditors. Although audit firms were disaffiliated from local governments in 1998, the local governments still have significant influence on local auditors (Wang et al., 2008). The state, as the owner of SOEs, may also be motivated to choose acquiescent auditors in an effort to pursue private benefits (Shleifer and Vishny, 1994), or to pursue political or social aims including infrastructure development and mitigating of unemployment challenges (Lin et al., 1996). To achieve such objectives government bureaucrats retain their control on the boards of SOEs and set the corporate structures that provide an opportunity for easy and direct intervention (Fan et al., 2007). This argument indicates that local auditors are more likely to be the best choice for the local governments to achieve their opportunistic incentives.

Considerable doubt exists concerning the independence of auditors because the Chinese government has significant control and influence on the country's audit profession (Yang et al., 2001). DeFond et al. (2000) point out that "the government ownership of both audit firms and listed companies they audit" (p. 274) is one of the significant impediments to auditor independence in China. Consistent with this argument, Yang et al. (2001) point out that a potential conflict of interests exists when it is required that state controlled audit firms carry out the audit work of joint ventures between foreign investors and SOEs. Briefly, when both the auditee and the auditor are state controlled entities, considerable concern exists regarding auditor independence.

Compared with manager/owner of non-state firms in Iran, the managers of SOEs have greater incentive to receive unqualified audit reports, and collusion with auditor. The governmental economy of Iran has been criticized by citizens, especially following the detection of massive corruption in SOEs. In such a scenario,

unqualified audit reports of SOEs may legitimate the control of the state of the SOEs and country's economy. In other words, an unqualified audit report is perceived as a proof of the absence of corruption in SOEs. At the firm level, the managers of SOEs, in a manner similar to the state, perceive an unqualified audit report as proof concerning the lack of asset expropriation and corruption in SOEs. Additionally, a qualified audit report provides an incentive to change the managers of SOEs. However, in privately owned firms (non-state firms) the tendency to receive unqualified audit reports seems to be low because the board of directors and CEO position are occupied by concentrated shareholders (Mohammadrezaei et al., 2012). Managers/owners have less concern receiving qualified audit reports due to their considerable voting rights in the annual general meeting. Consequently, compared with the managers of SOEs, the managers/owners of non-state firms may have less incentive to receive an unqualified audit report.

The managers and directors of SOEs are aware that the IAO cannot resist the pressure of the state when disagreements exist between the managers of the SOEs and the auditor. Consistent with the arguments of prior studies, Iranian SOEs are more likely to choose the IAO, as the state auditing agency, because the incentive for collusion with the auditor is greater in SOEs, as well as the likelihood of collusion.

### 2.2.3 Hypothesis

Based on these two arguments of how auditor-client alignment incentive and collusion incentive in Iran affect the auditor choice decisions of firms, it is expected that non-state firms have more tendency to choose private audit firms, whereas SOEs have a stronger propensity to choose the IAO, the state audit firm. Hence, the research hypothesis is as follows:

**Hypothesis:** Compared with the SOEs, non-state firms are more likely to choose the private audit firms.

## 3. RESEARCH DESIGN

Information regarding the sample selection process is presented in this section. Then, the research model is utilized to examine the hypothesis developed. Finally, the control variables that are captured by the present study are addressed.

### 3.1 Sampling design

Data were collected regarding auditor type (private and state), client firms' ownership, and other characteristics of client firms from the annual reports of firms listed on the TSE between 2002 and 2007. The annual reports are available on the website of the Research, Development and Islamic Studies (RDIS)<sup>3</sup> of the SEO. Given that audit privatization occurred in late 2001 the period between 2002 and 2007 is chosen. The financial institutions were excluded from the research sample. The final sample consists of 1,593 firm-year observations between 2002 and 2007. The final sample of this study contains 70 per cent of all firms listed on the TSE during the research period.

### 3.2 Model specification

The hypothesis is tested by applying multivariate regression analysis. The regression model is as follows:

$$\begin{aligned} Audpvt_{it} = & \alpha + \beta_1 Non-State_{it} + \beta_2 Lag-Audopn_{it} + \beta_3 Logfee_{it} + \beta_4 Size_{it} + \beta_5 Lev_{it} \\ & + \beta_6 InvRec_{it} + \beta_7 Loss_{it} + \beta_8 Salegrowth_{it} + \beta_9 OCF_{it} + \sum \beta_i IndustryDum \\ & + \beta_k YearDum + \varepsilon_{it} \end{aligned} \quad (1)$$

Where

*Audpvt* = 1 if auditor is private audit firm, 0 if otherwise;

*Non-State* = 1 if less than 50 per cent of a firm's shares are owned by the state, 0 if otherwise;

*Lag-Audopn* = 1 if audit opinion is qualified and 0 for unqualified audit opinion in the last fiscal year;<sup>4</sup>

*Logfee* = natural logarithm of total audit fees;

*Size* = is the natural log of the total assets for a firm;

*Lev* = total debt divided by the book value of the total assets;

*InvRec* = proportion of inventory and receivables to total assets;

*Loss* = 1 if a firm incurred a loss, 0 if otherwise;

*Salegrowth* = one-year growth rate in sales;

*OCF* = is cash flows from operations scaled by lagged total assets;

*IndustryDum* = the dummies for 16 industry groups;

*YearDum* = the dummies for fiscal years:

<sup>3</sup> <http://www.rdis.ir/CMPAnnouncements.asp>

<sup>4</sup> Auditing standards in Iran are principally developed in light of International Auditing and Assurance Standards Boards (IAASB) standards (Roudaki, 2008). *Opinion* is defined as 1 if the audit opinion is qualified and 0 for an unqualified audit opinion because of the lack of cross-sectional variation among sample firms concerning other types of audit opinions, such as adverse and disclaimers.

$\varepsilon$  = error term.

The principal coefficient of interest is  $\beta_1$  in model (1) and it is expected that the coefficient will be positive.

3.3 Control variables

Based on extant literature (e.g., Wang et al., 2008; Knechel et al., 2008; Guedhami et al., 2009; Lin and Liu, 2009; Banimahd and Vafaei, 2011; Houqe et al., 2012), a number of client characteristics are included as control variables in model (1). Chan et al. (2010) find a significant relationship between the auditor's selection and issuing qualified reports. Hence, the qualified audit report in last fiscal year (*Lag-Audopn*) is included in the research model. Audit fees (*Logfee*) are more likely to be included in the auditor choice decision of client firms. *Size* and *InvRec* are included to control the client complexity, which might be associated with auditor choice (e.g., Francis and Wang, 2008; Houqe et al., 2012). *Lev* and *Loss* are included to control client potential financial disaster, which is likely to affect auditor choice (Hribar et al., 2010). Following prior studies (e.g., Guedhami et al., 2009), the possible effect of sales growth (*Salegrowth*) is controlled by this study. *OCF* is included as it controls a firm's need for cash, which has been shown to be a determinant of auditor choice (Francis and Wang, 2008).

4. RESULTS

This section presents descriptive statistics and univariate analysis. In addition, the main findings are reported in the sub-section of multivariate analysis.

4.1 Descriptive statistics

The descriptive statistics of the research variables are presented in Panels A, B and C of Table 1. Panel A presents descriptive statistics of the dichotomous variables. The trend of *Audpvt* indicates that the market share of private audit firms increased over the research period. The trend of *Non-State* reveals that the number of non-state firms increased over the research period. This descriptive finding seems to be correct because of the privatization policy adopted by the Iranian government (Azizkhani, 2011). The trends of *Audpvt* and *Non-State* indicate that the market share of private audit firms increases as non-state firms increase. This finding is consistent with the research hypothesis.

Table 1. Descriptive statistics

Panel A: Dichotomous variables					
Year	Observations	<i>Audpvt</i>	<i>Non-State</i>	<i>Lag-Audopn</i>	<i>Loss</i>
2002	262	126	166	225	21
2003	264	169	172	212	20
2004	268	193	186	202	23
2005	266	199	190	192	34
2006	267	206	189	188	32
2007	266	206	189	182	38
Panel B: Continuous variables					
	Mean	Median	SD	Maximum	Minimum
<i>Variables</i>					
<i>Logfee</i>	5.13	5.09	0.65	6.95	3.47
<i>Audit fees (\$)</i>	30'211	23'286	23'857	149'286	4'857
<i>Size</i>	12.52	12.41	1.26	16.14	9.82
<i>Total assets (000\$)</i>	99'854	35'107	218'263	1'566'391	2'707
<i>Lev</i>	0.72	0.71	0.24	1.74	0.24
<i>InvRec</i>	0.50	0.51	0.20	0.85	0.07
<i>Salegrowth</i>	0.22	0.18	0.36	1.65	-0.53
<i>OCF</i>	0.12	0.11	0.15	0.54	-0.26
Panel C: Univariate analysis					
	Non-state	SOEs	Test of difference		
<i>Variables</i>					
<i>Audpvt</i>	0.86	0.33	22.32***		
<i>Lag-Audopn</i>	0.82	0.61	8.37***		
<i>Logfee</i>	5.02	5.38	-7.32***		
<i>Size</i>	12.40	12.77	-5.11***		
<i>Lev</i>	0.72	0.73	-1.10		
<i>InvRec</i>	0.49	0.51	-1.76*		
<i>Loss</i>	0.10	0.11	-0.38		
<i>Salegrowth</i>	0.21	0.24	-1.55		
<i>OCF</i>	0.12	0.12	0.36		

Note: \*, \*\*, \*\*\* Significant at the, 0.1, 0.05, 0.01 levels, respectively.

Panel B of Table 1 presents descriptive statistics of continuous variables of the present study. The mean of leverage (*Lev*) is 72 per cent, which indicates a high level of external financing by Iranian firms. This is consistent with Moayed and Aminfard (2012), and Mohammadrezaei et al. (2013), who find that the financing system in Iran is close to the ‘credit-insider’ system.<sup>5</sup>

Panel C of Table 1 presents the univariate analysis of difference in the choosing of private audit firms (*Audpvt*) between non-state firms and SOEs. The table indicates that the mean of *Audpvt* is considerably high for non-state firms. This finding is consistent with the research hypothesis. Additionally, the mean of qualified audit opinion in last fiscal year (*Lag-Audopn*) is higher for non-state firms. This finding may be attributable to the collusion incentives of SOEs in the preceding sections.

The mean of audit fee (*Logfee*) reveals that SOEs paid higher audit fees. This finding is in keeping with the argument of Deilampour (2012) that when both the auditee and the auditor are state controlled entities, the clients are less likely to bargain with the auditor regarding audit fees; because the audit fee is typically seen as money transferring from one pocket of the state to another. Panel C of Table 1 also shows that the SOEs are larger than non-state firms. The proportion of inventory and receivables to total assets (*InvRec*) is higher for SOEs. Such a statistic seems to be correct because *InvRec* is more likely to be higher for large firms.

Table 2 presents the Spearman correlation coefficient of the variables. In line with the research hypothesis, non-state firms principally choose private audit firms (0.53). Additionally, clients with qualified audit opinions in the last fiscal year are more likely to choose private audit firms (0.18). Furthermore, small firms, firms with low inventories and receivables, and firms with low OCF are more likely to choose private audit firms.

**Table 2.** Spearman correlation matrix

	<i>Audpvt</i>	<i>Non-State</i>	<i>Lag-Audopn</i>	<i>Size</i>	<i>Lev</i>	<i>InvRec</i>	<i>Loss</i>	<i>Salegrowth</i>	<i>OCF</i>
<i>Audpvt</i>	1								
<i>Non-State</i>	0.53***	1							
<i>Lag-Audopn</i>	0.18***	0.22***	1						
<i>Size</i>	-0.17***	-0.13***	-0.10***	1					
<i>Lev</i>	-0.01	0.00	0.20***	-0.02	1				
<i>InvRec</i>	-0.05**	-0.05**	0.10***	-0.19***	0.25***	1			
<i>Loss</i>	0.04	-0.01	0.17***	-0.12***	0.41***	0.13***	1		
<i>Salegrowth</i>	-0.03	-0.04***	-0.03	0.08***	-0.07***	-0.04	-0.24***	1	
<i>OCF</i>	-0.05*	0.01	-0.15***	0.03	-0.33***	-0.33***	-0.25***	0.12***	1

Note: \*, \*\*, \*\*\* Significant at the, 0.1, 0.05, 0.01 levels, respectively.

The highest correlation (0.41) is between *Lev* and *Loss*. This positive correlation can be explained by the fact that financial costs increase as leverage increases, which has a negative impact on net profit. Additionally, firms with weak performance are more likely to need external financing because of low cash flow operation. The correlation of *Lev* and *OCF* is - 0.33. Consistent with the preceding argument, firms with higher cash flow from operations need less external financing. All other correlations are lower than 0.30. Thus, Table 2 indicates that the pairwise correlations of research variables do not surpass the controversy threshold of 0.80 (see, Gujarati, 1995; 335). In other words, multicollinearity problems are not intense.

4.2 Multivariate analysis

Table 3 presents the results of the multivariate analyses of the effective factors on auditor choice. Consistent with the research hypothesis, *Non-State* is negatively associated with *Audpvt*. This finding indicates that non-state firms are more likely to choose private audit firms. Such a finding is consistent with the arguments regarding ‘auditor-client alignment’ (e.g.,Moulkarai, 2005;Wang et al., 2008; Bagherpour et al., 2008; Lopez and Peters, 2010), and ‘collusion incentive’ (e.g., DeFond et al., 2000; Wang et al., 2008).

**Table 3.** Coefficient estimate for the auditor choice model.

Variables	Full sample analysis- Model (2)		Observations with audit fees data- Model (1)	
	Coefficient	Z-Stat	Coefficient	Z-Stat
<i>Intercept</i>	7.97***	6.31	15.20***	5.42
<i>Non-State</i>	2.62***	16.44	3.34***	9.20
<i>Lag-Audopn</i>	0.77***	4.47	0.98***	3.01
<i>Logfee</i>			-3.08***	-7.23
<i>Size</i>	-0.43***	-5.90	0.05	0.36
<i>Lev</i>	-0.12	-0.28	1.23*	1.68
<i>InvRec</i>	-1.33	-2.77	1.99***	2.61
<i>Loss</i>	-0.50	-1.63	-0.16	-0.31
<i>Salegrowth</i>	0.20	0.34	0.09	0.22

<sup>5</sup>In ‘credit insider’ system, financing is principally from banks and the state (Nobes, 1998).

<i>OCF</i>	-1.65***	-2.65	-1.60	-1.37
<i>IndustryDum</i>	Yes		Yes	
<i>YearDum</i>	Yes		Yes	
<i>Pseudo R<sup>2</sup></i>	0.38		0.56	
<i>Wald Chi2</i>	432.99***		211.24***	
<i>N</i>	1593		754	

Note: \*, \*\*, \*\*\* Significant at the, 0.1, 0.05, 0.01 levels, respectively. White's heteroscedasticity-corrected z statistics are depicted which assumes that the residuals of the estimated equation are serially uncorrelated.

$$Audpvt_{it} = \alpha + \beta_1 Non-State_{it} + \beta_2 Lag-Audopn_{it} + \beta_3 Logfee_{it} + \beta_4 Size_{it} + \beta_5 Lev_{it} + \beta_6 InvRec_{it} + \beta_7 Loss_{it} + \beta_8 Salegrowth_{it} + \beta_9 OCF_{it} + \sum \beta_j IndustryDum + \beta_k YearDum + \varepsilon_{it} \quad (1)$$

$$Audpvt_{it} = \alpha + \beta_1 Non-State_{it} + \beta_2 Lag-Audopn_{it} + \beta_4 Size_{it} + \beta_5 Lev_{it} + \beta_6 InvRec_{it} + \beta_7 Loss_{it} + \beta_8 Salegrowth_{it} + \beta_9 OCF_{it} + \sum \beta_j IndustryDum + \beta_k YearDum + \varepsilon_{it} \quad (2)$$

Given that the audit fee disclosure is not mandatory, the voluntary audit fee disclosure was available for 754 firm-year observations. Hence, to run audit choice regression for the full sample the audit fee was excluded from the regression, model (2). Then, the audit choice model (1) was run for a sub-sample of voluntary audit fee disclosure. In such manner, not only the effect of audit fees on auditor choice decision was controlled where there is no proper demand for high quality audit services, but also the rerunning of the auditor choice model by the sub-sample can substantiate the main findings of this study. By including audit fees in the auditor choice model the Pseudo R<sup>2</sup> increased, which indicates that audit fee is one of the most important factors in auditor choice decision making by Iranian firms. Additionally, the main findings regarding full sample are principally consistent with the results from the sub-sample analysis.

In respect of the control variables, the findings indicate that clients with qualified audit opinions in the last fiscal year choose private audit firms. In other words, clients with unqualified audit opinion have not switched to private audit firms even following audit privatization in late 2001. The findings also reveal that clients that desire to pay low audit fees choose private audit firms. Such a finding is consistent with the argument of Deilamipour (2012) that when both the auditee and the auditor are state controlled entities, the auditee is less likely to bargain with the auditor regarding audit fee. In other words, the auditee perceives the audit fee paid to the state auditor as typically money transferring from one pocket of the state to another. Additionally, we find that large firms are less likely to choose private audit firms. This finding seems to be correct because large firms and industries are controlled by the Iranian government (Banimahd and Vafaei, 2011).

### 5. CONCLUSION AND REMARKS

Auditor choice has attracted the attention of both researchers and regulators because the demand for audit services plays a significant role in the quality of audited financial reports. While prior studies have investigated many effective factors on auditor choice in developed and developing countries, the absence of empirical evidence concerning the effect of the unique characteristics of the Iranian audit market on auditor choice is obvious. This paper examines the effect of ownership structure (non-state firms versus SOEs) on auditor choice (private audit firms versus the IAO) in the emerging Iranian audit market.

This study finds that compared with SOEs, non-state firms are more likely to choose private audit firms. Indeed, based upon the 'auditor client alignment' argument, non-state firms are more likely to hire private audit firms, and SOEs are more likely to choose the state audit firm, the IAO. Other findings reveal that clients with qualified audit opinions in the last fiscal year are more likely to hire private audit firms. This finding implicitly indicates that, given that the IAO dominated the Iranian audit market prior to audit privatization in late 2001, clients that receive clean audit reports are less likely to switch from the IAO, the state audit firm, to private audit firms. Additionally, the findings show that clients that desire to pay low audit fees are more likely to choose private audit firms, which have a tendency to set audit fees lower than the IAO in an effort to enter the audit market and maximize their market share. Large firms are less likely to choose private audit firms, which can be attributed to the fact that large firms and industries are principally controlled by the Iranian government.

This paper provides some significant suggestions for both regulators and researchers. Given that prior studies (e.g., DeFond et al., 2000; Yang et al., 2001) find that auditor independence is more likely to be compromised when both the auditee and the auditor are state controlled entities, policymakers should be cautious regarding the hiring of the state audit firm by SOEs in Iran. Additionally, clients that desire to pay low audit fees can choose private audit firms. Since Big audit firms are known as high quality auditors, policymakers should provide the necessary legal basis to permit Big audit firms to operate within the Iranian audit market. Increased competition in the Iranian audit market, following the audit privatization in late 2001, has led to more options in auditor choice. Such a new environment can encourage researchers to study the effect of this phenomenon on auditor choice. Other researchers can investigate the effect of other factors on auditor choice,



such as the characteristics of board of directors. The collusion argument may encourage other researchers to perform further research in the context of Iran.

The findings of this study suffer from some limitations. While the potential effect of several control variables are captured by the research model, based on related theories and the environment of the Iranian audit market, it is expected that there are further effective factors that are not included in the model. Researchers and policymakers should cautiously use our finding regarding the effect of audit fees on auditor choice because the analysis was only based on data from sample firms with voluntary audit fee disclosure. In other words, the effect of audit fees on auditor choice may be different for a sample of non-disclosed firms.

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