Auditor Rotation Policies and Perceived Auditor Attributes in Texas School Districts

Amanda M. Grossman Murray State University

Marshall K. Pitman University of Texas at San Antonio

Lawrence Murphy Smith Texas A&M University-Corpus Christi

> Wayne Tervo Murray State University

We surveyed Texas school districts in an attempt to ascertain their perceptions on auditor rotation, auditor changes and satisfaction with their current auditors. We find the overwhelming majority of district representatives report no audit firm rotation policy, satisfaction with their current auditor's performance, retaining the same auditor for at least five years, and no audit committee. Additionally, representatives report that the district was not likely to change auditors, found the current auditors technically competent, and believed the audit benefits outweigh costs. Relevant to the decision-making process of many school districts, it appears that auditor rotation is not favored.

Keywords: Auditing, Auditor Rotation, Auditor Satisfaction

INTRODUCTION

There has been considerable research performed on auditor rotation and perceived attributes of auditor quality in recent years (e.g., Arel, Brody, & Pany, 2006; Kaplan & Mauldin, 2008; Bleibtreu, & Stefani, 2018); however, very little of this research has extended into the realm of governmental accounting (Lowensohn, Johnson, Elder, & Davies, 2007), and more specifically school districts (Simmons, Costigan, & Lovata, 2009). We extend the literature by soliciting perceptions from leadership at Texas School Districts as to their perceptions on auditor rotation, auditor change, and satisfaction with their current auditors.

Currently, the Texas Education Agency (TEA) does not require, or suggest, that districts rotate their auditors. According to the Agency's Financial Accountability System Resource Guide (the authoritative document regarding the state board of education rules through Title 19, Texas Administrative Code, Section 109), audit tenure is addressed only in that prospective auditors should describe staff rotation

plans if the engagement is to be for multiple years. The purpose of this study is to determine if a lack of auditor rotation adversely affects perceived audit quality. Generally, audit quality and client satisfaction are correlated (Garcia-Blandon & Argiles-Bosch, 2017; Kamuruchi, 2016; Wally-Dima, Mbekomize, & Tobedza, 2016). By extension, would a district's satisfaction with its audit correlate with certain policies, such as instituting a rotation policy?

We mailed a survey consisting of numerous statements/questions designed to have Texas school district representatives evaluate the performance and satisfaction with their auditors while also obtaining information about the governance of their district relating to their auditors, including auditor rotation policies. We discovered that those districts incorporating or discussing audit firm rotation have the largest enrollments, indicate the least satisfaction with their current auditors, and currently pay the most for their audits. We also found that industry experience (i.e., prior school district audits) does not seem to influence auditor choice.

Summarizing responses by auditor fees and auditor tenure, we examined participants' perceptions of several auditor attributes. We found that district representatives were very satisfied with the performance of their auditors, did not have a formal auditor rotation policy, had not changed auditors in the past five years, and did not have an audit committee. We also found that the districts were not likely to change auditors in the future, believed their auditors were technically competent, and they believed the benefits of the audit were greater than the costs.

Our research contributes to the extant literature by providing an understanding of the audit rotation policies and perceived satisfaction levels of a governmental agency, more specifically, Texas school districts. Many respondents completing the survey asked to be provided the results, indicating the timeliness and importance of the research. Based on qualitative comments provided by a number of respondents, we also provide suggestions, comments and concerns gained from the results. Our findings are important to practitioners, regulators, academicians, and government administrative decision-makers as many of the concerns of public company audit regulation and satisfaction can be applied to governmental agencies (Lowensohn et al., 2007; George, 2014).

The remainder of this paper is organized as follows. First, we discuss the importance of and the prior research on auditor rotation and perceived attributes of auditors in governmental entities. After presenting the research questions, the remaining sections document the research method and development of the research instrument, followed by results and conclusions and implications. Finally, limitations and possible future research endeavors are presented.

BACKGROUND ON AUDIT FIRM ROTATION AND AUDITOR ATTRIBUTES

The concept of audit firm rotation has become a hotly contested topic in recent decades, exacerbated by the passage of the Sarbanes-Oxley Act in 2002 (SOX). In 2003, the Government Accountability Office (GAO) conducted an investigation into the merits of requiring mandatory auditor rotation, and concluded, based upon the opinions of auditors and other financial professionals, that mandatory audit firm rotation was not favored. Holding public institutions accountable for performance is an ongoing issue in the U.S. (Norton & Smith, 2008) and around the world (Abdullahi, Baba, & Musa, 2016), and the most effective avenue to do so remains unclear. Further studies undertaken in the wake of the passage of SOX present mixed results regarding audit firm rotation and associated audit firm attributes.

A handful of study results advocate benefits of audit firm rotation. For example, Arel et al. (2006) use an experimental setting to demonstrate that auditors who are scheduled to rotate off a client engagement are more likely to modify the audit report to reflect a material departure from GAAP as opposed to auditors who are continuing with the client. In their study, Elder, Lowensohn & Reck (2015) find that audit firm rotation may be indirectly associated with higher audit quality, as a mandatory rotation policy predisposes municipalities to hire auditors that specialize in governmental audits.

As an extension of perceived audit quality, Mayse (2018) finds that loan officers are more likely to perceive nonpublic companies' financial statements as more reliable when the companies employ either partner or firm rotation, as opposed to those companies who employ neither. Yet other study results serve

as deterrents for mandatory audit firm rotation implementation. Whereas the effects of mandatory audit rotation may be best examined in jurisdictions compelled to do so, such as the European Union (Bleibtreu & Stefani, 2018), a plethora of audit studies substitutes audit tenure as a proxy for the potential effects of enacting mandatory auditor rotation.

Many study results tout the benefits of longer audit tenure (e.g., Ghosh & Moon, 2005). In their study, Johnson, Khurana and Reynolds (2002) find that, for Big Six clients, two to three-year audit tenure terms are regarded as providing lower quality audits as compared to firms with longer audit tenure. Myers, Myers, & Omer (2003) discovered that longer audit tenure, for both Big versus non-Big firm clients, produce higher earnings quality. Carcello and Nagy (2004) find the most likely time horizon for fraudulent financial reporting lies in the first three years an auditor provides services, implying that longer audit tenure is advantageous to more accurate reporting. Auditor-client familiarity, along with longer audit tenure has been shown to positively affect trust, and in turn generate a greater propensity for client employees to report fraudulent activity (Wilson, McNellis, & Latham, 2018).

While the preponderance of academic evidence seems not to support mandatory audit firm rotation, continuing violations of auditing standards propel enforcement agencies, such as the Public Company Accounting Oversight Board (PCAOB), to re-examine their position on mandatory auditor rotation as an additional deterrent. For example, KPMG was recently sanctioned by the Securities and Exchange Commission (SEC) for violating independence rules by loaning audit personnel to complete consulting work on audit client affiliates (Rapoport, 2014). In 2011, the PCAOB issued Rulemaking Docket Matter No. 37, entitled "Concept Release on Auditor Independence and Audit Firm Rotation."

The PCAOB reached out to the members of the business community to share their perceptions of improved professional skepticism, independence, and objectivity that may be achieved through mandatory audit firm rotation. Members suggested that, as evidenced by academic research, the auditor's loss of institutional knowledge and possible disincentives to establish a meaningful relationship with an audit client may correlate with higher audit costs and audit failures (Jones, et al. 2012). In the members' opinion, the SOX requirement of audit partner engagement rotation after a five-year tenure most likely achieves the same perception of independence as would audit firm rotation.

For instance, the research of Kaplan and Mauldin (2008) demonstrates that although non-professional investors realized the value of a strong audit committee with respect to maintaining external auditor independence, the investors did not consider the appearance of independence enhanced between audit firms that practiced audit firm rotation as opposed to partner rotation. Similarly, Kwon and Yi (2018) find that social ties between the CEO and the engagement partner may elicit higher quality audit practices, given both a high-quality auditor and corporate governance structure of the audited entity.

In the governmental sector, the Government Auditing Standards (also known as "Yellow Book") require auditors of state agencies to maintain independence with respect to their clients. While these standards differ in some respects with those of the SEC, governmental auditors are not immune to arguments favoring increased measures to protect audit quality. Prior research involving the Texas Independent School Districts produced interesting results regarding the relationship among auditor changes and several factors such as audit fees or audit quality. For example, a study by Roberts et al. (1990) examined the influence audit fees, noncompliance, and internal control weaknesses may have on audit firm rotation.

Findings by Roberts et al. (1990) show that an external auditor's report mentioning violations of nepotism, internal control policies, or bidding laws were significant drivers of a school district's subsequent auditor change. Additionally, subsequent auditor fees were more likely to be below the fees charged by the previous auditors. They postulated that the price differential between the successor and predecessor auditor may be due to the current auditor purposefully underbidding to secure the audit, or the district's decision to accept either a more efficient or lower-quality auditor. A subsequent study by Deis and Giroux (1996) discovered initial audit engagement fees among Texas school districts were indeed less than continuing auditor fees, but that audit quality, as measured by hours of audit work, did not suffer. Such results, in their opinion, supported the notion that the successor auditors offer lower initial fees in an attempt to gain new clients.

The examination of different legislative mandates throughout other states supplies a more robust understanding of auditor rotation and auditor attributes. In Illinois, state law requires that governmental agencies change their external auditors every six years. Simmons et al. (2009) discovered that such a mandate produced certain effects with regard to audit tenure and audit reporting, insofar as initial auditors reported a significantly higher number of issues as opposed to their end-of-tenure counterparts. Furthermore, these findings are irrespective of the size of the audit firm. The researchers were conscientious of ascribing audit quality to increased initial auditor issues raised; however, it does appear that a different perspective alters the inertia of the auditing process.

At the turn of the century in New York, the Roslyn school district fraud of \$11 million precipitated a legislative overhaul in which school districts must evaluate auditor bids every five years. Although the incumbent auditor may be reappointed, evidence demonstrates that auditor rotation in the aftermath of the new district mandates significantly increased, as well as the usage of industry specialists (Elder & Yebba, 2017). While these legislative measures enacted in New York to enhance audit quality are still being evaluated, further research suggests that greater attention be paid to specific internal control procedures (Blouin & Saccento, 2017) as well as the credentials and independence of audit committee members on a district's board of directors (Phillips & Dorata, 2013). Similarly, the Kentucky State Committee for School District Audits has recently recommended that a district change its auditor every five years as a best practice. If a district is disinclined to change auditors, it must indicate the reasons as to why a change was not implemented (George, 2014).

Lowensohn et al. (2007) conducted a study investigating the perception of audit quality in Florida local municipalities and special districts. They discovered that auditor specialization (measured by determining audit firm market share among governmental audits) is positively associated with audit quality (as perceived by audit clients). Additionally, although higher quality audits are delivered by auditors with enhanced expertise in the governmental sector, audit fees are insignificantly affected, except if a then Big 5 firm performed the audit. Under such circumstances, the client was charged a premium, ostensibly paying for a high-profile accounting firm. The then Big 5 firms who did not specialize in governmental audits were shown to produce lower quality audits. The results of this research suggest that local CPA firms, with governmental specialization, may in fact maintain an advantage over then Big 5 (now Big 4) auditors without such expertise. Another study by Vermeer, Raghunandan & Forgione (2009) supports the notion that Big 4 audit fees carry a premium for audite not-for-profit entities. Additionally, the existence of an audit committee or an internal audit department produced an increase in audit fees. In a contradictory finding, Garcia-Blandon and Argiles-Bosch (2017) find no significant relationship between industry specialization and audit quality, which may be defined as the ability of the auditor to identify and report material misstatements.

RESEARCH QUESTIONS

Based upon the findings of past research and the current legislative requirements, we expect that the majority of Texas school districts will 1) not have instituted a mandatory auditor rotation policy and will, therefore, not have changed auditors in the past five years, 2) find their auditor's fees reasonable, and 3) find the audit quality produced in their audits satisfactory. Furthermore, we investigate whether differences among school district policies present findings commensurate with the following three research questions:

R1: Does the requirement or discussion of auditor rotation produce an effect with respect to perceived auditor performance, audit fees, or other auditor attributes?

R2: Does a change in auditor over the past five years, or the intent to change auditors, produce an effect with respect to perceived auditor performance, audit fees, or other auditor attributes?

R3: Does any importance placed on whether the auditor has audited other school districts (i.e., industry experience) produce an effect on audit tenure, perceived auditor performance, audit fees, or other auditor attributes?

RESEARCH METHODOLOGY

Selection of Schools

At the time of data collection, the Texas Education Agency (TEA)'s website listed 1,025 school districts. The research instrument (a copy is presented in the Appendix) was mailed to a district representative and 262 (25.6 percent) completed instruments were returned. The district representative was the contact person for the district listed on the website. This individual should have been the person most closely involved with the external auditor.

Research Instrument

The instrument is divided into two sections. The first section consists of prompts designed to have participants provide a general performance evaluation of their auditor while also obtaining information about auditor rotation and the existence of an audit committee. After the participant provided the name of the school district and the audit firm conducting the current year fiscal audit, participants provided how many successive years the audit firm conducted the district's audits [TENURE]. Then, the participant is asked to rate the audit firm's current fiscal year performance [PERF] on a scale from 1 to 10 (1 = Completely Unsatisfactory, 5 = Neutral, 10 = Completely Satisfactory). Next, we asked the approximate total audit fee [FEES] for the current fiscal audit.

The remaining prompts in the first section of the instrument examine the external audit governance structure within the school district. We asked participants if the district has a mandatory auditor rotation policy (0=no, yes=1); if so, how often is the auditor required to rotate? If not, has there been discussion of auditor rotation (0=no, yes=1)? Next, we asked if the district had changed audit firms in the past 5 years (0=no, yes=1). If so, we asked for an explanation of why the district changed firms. Finally, we asked if the district has a formal Audit Committee (0=no, yes=1). If so, how many members are on the Committee and how often does it meet?

In the second section of the instrument, participants responded to prompts that gauge their perceptions of certain attributes of the district's current auditors. For each of the following six prompts, participants were asked to respond to each statement using a five-point Likert scale labeled as: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree:

- 1) Members of the auditing firm's engagement team are technically competent [TECHCOMP].
- 2) Members of the auditing firm engagement team are constantly changing [CONSCHG].
- 3) The cost of the audit exceed the benefits [COSTBEN].
- 4) Members of the auditing firm's engagement team are available for consultation only during the audit [AVAIL].
- 5) The auditing firm's engagement team partner actively participated in the audit [ACTPART].
- 6) We are likely to change (or have already changed) auditors for the next audit [CHGAUD].

Next, we asked participants to rank what they believed were the top four attributes of an auditing firm from a listing of the following options: technical competence, responsiveness to questions, number of other school district audits, continuity of engagement team, audit partner involvement, audit fees, and other (to be specified by the participant). Finally, participants were provided some space to provide free-form comments regarding the research.

RESULTS

Descriptive statistics of the responding school district representatives are presented in Table 1. Panel A provides a breakdown of participant responses by audit tenure and Panel B provides the breakdown by audit fees. Three categories of audit tenure (one to five years, six to thirteen years, and over fourteen

years) and auditor fees (less than \$13,000, between \$13,001 and \$20,000, and over \$20,000) are extracted to provide measures of comparability among the variables examined. Panel C provides the breakdown of responses by TEA's school district type classification system.

Table 2 presents a Pearson's correlation matrix amongst all of the study's scalar variables (designations provided in the previous section). With respect to the research questions posed, auditor tenure correlates only with the consideration to change auditors so that the longer the auditor's tenure, the less likely the district is to change. Perceived auditor performance is correlated with every variable save auditor fees and auditor tenure, and auditor fees does not correlate with any other variable. Correlations among the other variable combinations produce no unforeseen or anomalous effects.

TABLE 1DESCRIPTIVE STATISTICS

Panel A: Descriptive Stati	stics of Respondents	s by Auditor Tenur	e	
	0 to 5 years	6 to 13 years	> 14 years	Total
Firm Characteristics:	n, Mean (s.d.)	n, Mean (s.d.)	n, Mean (s.d.)	n, mean (s.d.)
Performance	98	83	73	254
PERF	8.88 (1.713)	9.10 (1.628)	9.36 (1.456)	9.09 (1.620)
Audit Fees FEES	96 36,143 (127,355)	82 21,967 (22,024)	72 18,486 (13,506)	250 26,408 (80,398)
Rotation Policy	99	86	73	258
[0=no,1=yes]	.10 (.303)	.02 (.152)	.00 (.000)	.05 (.211)
Change last 5 years?	99	86	73	258
[0=no,1=yes]	.82 (.388)	.01 (.108)	.03 (.164)	.33 (.470)
Audit Committee?	99	86	73	258
[0=no,1=yes]	.12 (.328)	.09 (.292)	.05 (.229)	.09 (.291)
If yes, # of members	12 4.83, (2.167)	8 4.38 (1.847)	4 4.50 (3.000)	24 4.63 (2.123)
Auditor Attribute Perceptions				
Technical competence	96	85	71	252
TECHCOMP	1.31 (.549)	1.36 (.508)	1.25 (.470)	1.31 (.514)
Constant change	96	85	72	253
CONSCHG	3.80 (1.111)	3.78 (1.117)	3.75 (1.286)	3.78 (1.161)
Cost > benefit	96	85	72	253
COSTBEN	3.95 (.956)	3.78 (.891)	4.11 (.987)	3.94 (.949)
Available for consultation	96	85	72	253
AVAIL	4.44 (.880)	4.24 (1.008)	4.60 (.867)	4.42 (.929)
Active partner	95	84	72	251

Journal of Accounting and Finance Vol. 19(9) 2019 69

ACTPART	1.71 (1.071)	1.63 (.833)	1.58 (.960)	1.65 (.962)
Likely to change auditors	96	85	72	253
CHGAUD	4.31 (1.145)	4.29 (.986)	4.67 (.872)	4.41 (1.029)

Panel B: Descriptive S	statistics of Respon	dents by Auditor Fe	ees	
		\$13,001 to		
	< \$13,000	\$20,000	> \$20,000	Totals
	n	n	n	n
Firm Characteristics	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)
Performance	99	79	73	251
PERF	9.39 (1.398)	8.81 (1.962)	8.90 (1.529)	9.07 (1.647)
Audit Fees	99	79	76	254
FEES	\$9.962 (\$2.283)	\$16 361 (\$2 219)	\$58 275 (\$141 224)	\$26 408(\$79 738)
I LLD	ψ ,	$(\psi_{2}, 21))$	ψ30,275 (ψ111,221)	φ20,100(φ79,750)
Rotation Policy	99	79	76	254
0=no,1=yes	.02 (.141)	.01 (.113)	.11 (.309)	.04 (.204)
Change last 5 years?	99	79	76	254
0=no.1=ves	.20 (.404)	42 (.496)	.39 (.492)	.33 (.470)
0 110,1 J 00				
Audit Committee?	99	79	76	254
0=no,1=yes	.03 (.172)	.04 (.192)	.24 (.428)	.09 (.293)
	2	2	10	24
If yes, # of members	3	3	18	24
	7.33 (2.082)	5.33 (3.215)	4.06 (1.626)	4.63 (2.123)
Auditor Attribute				
Perceptions				
Technical competence	97	78	73	248
TECHCOMP	1.26 (.506)	1.33 (.550)	1.37 (.514)	1.31 (.523)
Constant damas	07	70	7.4	240
Constant change	9/	/8	/4	249
CONSCHG	4.02 (1.155)	3.62 (1.230)	3.61 (1.120)	3.//(1.181)
Cost > benefit	96	78	74	248
COSTBEN	4.11 (1.014)	3.76 (.900)	3.97 (.875)	3.96 (.947)
Available for	97	78	74	249
consultation	4.52 (.843)	4.31 (1.073)	4.38 (.902)	4.41 (.938)
AVAIL	0.5	70	74	2.17
Active partner	95	/8	/4	247
ACTPART	1.47 (.810)	1./9(1.09/)	1.68 (.981)	1.64 (.965)
Likely to change	97	78	74	249
auditors	4.55 (0.902)	4.32 (1.075)	4.31 (1.134)	4.41 (1.032)
CHAUD	· · · ·	· /	. ,	· /

Panel C: Descriptiv	ve Statistics of	f Respondents	s by Texas So	chool District	t Type Classif	ications			
	A. Major	B. Major	C. Other	D. Other	Ë.	F. Non-	G. Non-	H. Rural	Total
	Urban	Suburban	Central City	Central City	Independent Town	Metro: Fast Growing	Metro: Stable		N = 262
				Suburban					
Firm	n,	n,	'n,	n,	'n,	n,	n,	n,	n,
Characteristics:	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)	mean (s.d.)
Performance	9	27	4	45	20	5	60	91	258,
	8.33 (2.251)	9.26 (1.023)	8.25	8.84	9.30(1.380)	9.40, (.894)	8.95	9.23 (1.578)	9.07 (1.631)
			(2.363)	(2.363)			(1.751)		
Audit Fees	9	27	4	44	20	5	61	87	254
	306K	45K (25K)	28K (5K)	20K (9K)	23K (12K)	18K (12K)	18K (9K)	12K (4K)	26K (80K)
	(463K)	~	~	~	~	~	~	~	~
Rotation Policy	, 9	27	4	46	21	5	61	92	262
	0 (.000)	.15 (.362)	0(000) 0	.02 (.147)	.14 (.359)	0 (.000)	.03 (.180)	.02 (.147)	.05 (.209)
Change last 5 years?	é 9	27	_4	46	$\tilde{21}$	Ś	61	92	262
)	.50 (.548)	.48 (.509)	0 (000) 0	.35 (.482)	.48 (.512)	.40 (.548)	.30 (.460)	.24 (.429)	.32 (.468)
Audit Committee?	9	27	4	46	21	, v	61	92	262
	.67 (.516)	.19 (.396)	0 (000) 0	.13 (.341)	.14 (.359)	0 (000) 0	.10(.300)	(000.)0	.09 (.289)
If yes, # of members	4	5	0	9	ŝ	0	9	0	24
	5.00 (2.828)	3.80 (1.095)	0 (.000) 0	4.17 (2.041)	4.67 (1.528)	0(0.00)	5.50(2.811)	(000.) 0	4.63 (2.123)
A nditon Attailanta									
Perceptions									
Technical	9	27	4	45	21	5	58	90	256
competence	1.33 (.516)	1.26 (.447)	2.00 (.816)	1.38 (.615)	1.19 .402)	1.00(.000)	1.40(.560)	1.28 (.450)	1.32 (.523)
Constant change	9	27	4	46	21	5	58	06	257
)	4.00(.894)	3.78 (1.013)	3.50 (.577)	3.39 (1.183)	3.57 (.978)	3.60(1.673)	3.76(1.288)	4.02 (1.141)	3.77 (1.168)
Cost > benefit	9	27	4	45	21	5	58	06	256
	4.00(.894)	4.00(1.038)	3.75 (.957)	3.93 (.915)	3.76 (1.136)	4.20 (.837)	3.97 (.917)	3.93 (.946)	3.94(.948)
Available for	9	27	4	46	21	5	58	89	257
consultation	4.33 (.816)	4.59 (.694)	4.00(1.155)	4.63 (.610)	4.05 (1.359)	4.80 (.447)	4.31 (1.111)	4.41 (.873)	4.42 (.928)
Active partner	9	27	4	46	21	5	57	89	255
	2.17 (.983)	1.96 (1.315)	2.00 (.816)	1.67(1.034)	1.38 (.921)	1.40(.894)	1.63 (.858)	1.56 (.865)	1.64(.961)

TABLE 1 (CONTINUED)

Journal of Accounting and Finance Vol. 19(9) 2019 71

TEARSON'S CORRELATIONS OF SCALAR STUD. PEARSON'S CORRELATIONS OF SCALAR STUD. TENURE TENURE TENURE TECHCOMP COSTIB TENURE Sig. (2-tailed) .056 .178 .247 .247 PERF N	PEARSON'S CORREL, TENURE PERF tion 1 .120	ATIONS OF	UE 2 F SCAT AD					
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	TENURE PERF tion 1 .120		L' DUALIAN	STUDY VA	ARIABLES			
TENURE Fearson Correlation 1 .120 .085 073 073 TENURE Sig (2-tailed)	ttion 1 .120	FEES TE	CHCOMP	COSTBEN	CONSCHG	AVAIL	ACTPART	CHGAUD
		085	073	.062	023	.054	049	.167**
N 258 254 250 252 PERF Sig. (2-tailed) .120 1 010 548° .32 PERF Sig. (2-tailed) .056 873 .000 548° .3 Pearson Correlation .085 .010 1 026 252 N 254 251 254 269 N 252 251 254 269 N 252 251 254 256 N 252 251 254 256 N 252 252 248 256 N 253 .000 .679 256 N 253 .000 .573 .248 256 N 253 .000 .573 .244 256 N 253 .000 .513 .000 .000 N 253 .248	.056	.178	.247	.323	.710	.395	.437	.008
PERF Pearson Correlation .120 1 .010 $548^{\circ\circ\circ}$ PERF Sig. (2-tailed) .056 253 251 252	258 254	250	252	253	253	253	251	253
PERF Sig. (2-tailed) .056 .873 .000 Pearson Correlation 254 258 251 252 Pearson Correlation .178 .873 .679 FEES Sig. (2-tailed) .178 .873 .679 N .178 .873 .679 .679 Pearson Correlation .073 .548" .026 1 N .251 .252 .248 .075 .679 N .272 .252 .248" .067 .144 N .252 .248" .000 .370 .000 N .252 .248" .057 .1404" N .252 .248 .057 .4404" N .253 .000 .370 .000 N .253 .252 .248 .255 CONSCHG Sig. (2-tailed) .323 .000 .370 N .253 .252 .248 .256 CONSCHG Sig. (2-tailed) .323 .026 .2 N .000 .370 .026 .2 CONSCHG Sig. (2-tailed) .253 .249 .236" N .2	tion .120 1	.010	548**	.321**	.146*	.235**	279**	.349**
N 254 258 251 252 Pearson Correlation 085 .010 1 026 FEES Sig. (2-tailed) .178 .873 .679 N 250 .251 254 248 N 252 .548* .026 1 N 252 .548* .026 1 N .252 .548* .036 1 N .252 .254 .256 1 N .252 .248 .256 .100 N .253 .000 .370 .000 N .253 .000 .370 .000 N .253 .146* .042 .307* N .253 .253 .249 .256 N .253 .249 .256 .266 N .253 .000 .513 .000 N .253 .249 .256 .266	.056	.873	000	000 [.]	.020	000 [.]	000 [.]	000 [.]
FEESPearson Correlation isg. (2-tailed)085.0101 026 FEESSig. (2-tailed).178.873.679.679N250251254248.679N252.248 026 1 24 Rearson Correlation 073 .548** 026 1N2522482561 24 N253.253.200.371.000N253.253.000.370.000N.253.000.370.000N.253.146*.042.237*CONSCHGSig. (2-tailed).710.020.513.000N.253.248.256.376N.253.253.249.256AVAILSig. (2-tailed).335.249.256N.253.253.000.568.000N.253.256AVAILSig. (2-tailed)NAVAILSig. (2-tailed)NAVAILSig. (2-tailed)NAVAILSig. (2-tailed)N	254 258	251	252	252	253	253	251	253
FEESSig. (2-tailed).178.873.679N 250 251 254 248 N 255 254 248 Pearson Correlation -073 548^{***} 026 1N 252 247 $.000$ $.679$ 256 N 252 252 248 256 N 252 252 248 256 N 253 $.000$ $.370$ $.000$ N 253 $.000$ $.370$ $.000$ N 253 $.252$ 248 255 CONSCHGSig. (2-tailed) $.710$ $.020$ $.513$ $.000$ N 253 $.253$ $.249$ 256 236^{**} 236^{**} CONSCHGSig. (2-tailed) 353 $.253$ $.000$ $.513$ $.000$ N 233 253 249 236^{**} 236^{**} 236^{**} AVAILSig. (2-tailed) 353 253 279^{**} 236^{**} 236^{**} AVAILSig. (2-tailed) 353 253 279^{**} 236^{**} 236^{**} AVAILSig. (2-tailed) 353 253 279^{**} 236^{**} 236^{**} AVAILSig. (2-tailed) 253 279^{**} 236^{**} 236^{**} 236^{**} AVAILSig. (2-tailed) 253 279^{**} 236^{**} 236^{**} ACTPARTSig. (2-tailed) 237^{**} <	tion085 .010	1	026	.057	.042	.036	.055	600 [.]
N 250 251 254 248 TECHCOMP Sig. (2-tailed) 073 548" 026 1 N	.178 .873		.679	.370	.513	.568	.386	.885
TECHCOMP Sig. (2-tailed) 073 548" 026 1 N .247 .000 .679 .578 .256 .556 N .252 .252 .248 .256 .556 Pearson Correlation .062 .321" .057 404" N .323 .000 .370 .000 N .323 .252 .248 .255 N .323 .252 .248 .255 N .325 .146" .042 .307" N .253 .146" .000 .513 .000 N .253 .253 .249 .256 .256 AVAL Sig. (2-tailed) .395 .000 .568 .000 N .253 .253 .249 .256 .256 AVAL Sig. (2-tailed) .395 .000 .568 .000 N .253 .253 .249 .256 .256 AVAL Sig. (2-tailed) .395 .236" .269	250 251	254	248	248	249	249	247	249
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	tion548**	026	1	404	307**	236	.428**	394**
N 252 252 254 256 Pearson Correlation .062 .321** .057 404** Pearson Correlation .062 .321** .057 404** N .323 .000 .370 .000 N .253 .252 .248 .255 Pearson Correlation .023 .146* .042 .307** CONSCHG Sig. (2-tailed) .710 .020 .513 .000 N .710 .023 .249 .256 .256 AVAIL Sig. (2-tailed) .395 .000 .568 .000 AVAIL Sig. (2-tailed) .253 <t< td=""><td>.247 .000</td><td>679.</td><td></td><td>000⁻</td><td>000[.]</td><td>000[.]</td><td>000[.]</td><td>000⁻</td></t<>	.247 .000	679.		000 ⁻	000 [.]	000 [.]	000 [.]	000 ⁻
Pearson Correlation .062 .321** .057 404** COSTBEN Sig. (2-tailed) .323 .000 .370 .000 N 253 253 252 248 255 Pearson Correlation 023 .146* .042 .307** .3 CONSCHG Sig. (2-tailed) .710 .020 .513 .000 N .710 .020 .513 .000 .376 .256 N .710 .020 .513 .000 .376 .256 .266 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .256 .26 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .256 .40 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .256 .42 AVAIL Sig. (2-tailed) .395 .000 .568 .000 N 253 .253 .249 .256 .428 .266 AVAIL Sig. (2-tailed) .437 .05	252 252	248	256	255	256	256	254	256
COSTBEN Sig. (2-tailed) .323 .000 .370 .000 N 253 252 248 255 Pearson Correlation 023 .146" .042 307 " .3 CONSCHG Sig. (2-tailed) .710 .020 .513 $.000$.3 N .710 .023 .53 253 253 .307" .3 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .568 .000 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .256 .4 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .256 .4 N 253 253 253 .253 .256 .4 .2 AVAIL Sig. (2-tailed) .353 .036 .236" .6 .6 AVAIL Sig. (2-tailed) .353 .259 .249 .256 .428" .2	tion .062 .321**	.057	404	1	.331**	.404	266	.288**
N 253 252 248 255 Pearson Correlation 023 .146* .042 307** .3 CONSCHG Sig. (2-tailed) .710 .020 .513 .000 .3 N .710 .020 .513 .000 .5 .000 .3 AVAIL Sig. (2-tailed) .710 .020 .513 .000 .568 000 6 AVAIL Sig. (2-tailed) .395 .000 .568 000 6	.323 .000	.370	000 [.]		000 [.]	000 [.]	000 [.]	000 ⁻
Pearson Correlation 023 .146° .042 307° .3 CONSCHG Sig. (2-tailed) .710 .020 .513 .000 .3 N 253 253 253 249 256 .4 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .4 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .256 .4 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .6 .4 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .6 .4 AVAIL Sig. (2-tailed) .37 .000 .568 .000 .4 .4 .4 ACTPART Sig. (2-tailed) .437 .000 .366 .000 .2 .4 .2 .2 .4 .4 .4 .2 .4 .2 .2 .4 .2 .2 .4 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .	253 252	248	255	256	256	256	254	256
CONSCHG Sig. (2-tailed) .710 .020 .513 .000 N 253 253 253 256 .256 Pearson Correlation .054 .235** .036 .236** .2 AVAIL Sig. (2-tailed) .395 .000 .568 .000 N .353 253 253 249 256 N .353 253 253 253 .000 ACTPART Sig. (2-tailed) .437 .000 .386 .000 ACTPART Sig. (2-tailed) .437 .000 .386 .000 Descent Correlation .67** .000 .366 .000	tion023 .146*	.042	307**	.331**	1	.161**	227**	$.201^{**}$
N 253 253 254 256 Pearson Correlation .054 .235** .036 236** .4 AVAIL Sig. (2-tailed) .395 .000 .568 .000 .6 N .353 253 253 253 .256 .000 AVAIL Sig. (2-tailed) .395 .000 .568 .000 ACTPART Sig. (2-tailed) .437 .000 .386 .000 ACTPART Sig. (2-tailed) .437 .000 .386 .000 ACTPART Sig. (2-tailed) .551 .279** .000 .386 .000 Descent Correlation .571 .000 .366 .000 .304** .264 .	.710 .020	.513	000	000 ⁻		.010	000 ⁻	.001
Pearson Correlation .054 .235** .036 236** .2 AVAIL Sig. (2-tailed) .395 .000 .568 .000 N 253 253 253 253 .000 Pearson Correlation 049 279** .055 .428** 2 ACTPART Sig. (2-tailed) .437 .000 .386 .000 ACTPART Sig. (2-tailed) .437 .000 .386 .000 Descent Correlation 1.67** 2.40*** 0.00 .304*** 254	253 253	249	256	256	257	257	255	257
AVAIL Sig. (2-tailed) .395 .000 .568 .000 N 253 253 253 256 Pearson Correlation 049 279** .055 .428** ACTPART Sig. (2-tailed) .437 .000 .386 .000 N 251 251 251 254 .264 Descent Correlation .677 .000 .386 .000	tion .054 .235**	.036	236	.404	.161**	1	144*	.228**
N 253 253 254 256 Pearson Correlation 049 279** .055 .428** 2 ACTPART Sig. (2-tailed) .437 .000 .386 .000 N 251 251 251 254 .000 .364 .000 Descent Correlation 1.67** 2.40** 0.00 .304** .000 .304** .000 .304** .000 .304** .000 .304** .000 .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304*** .304**** .304**** .304***	.395 .000	.568	000	000 ⁻	.010		.021	000 ⁻
Pearson Correlation 049 279** .055 .428** 2 ACTPART Sig. (2-tailed) .437 .000 .386 .000 N 251 251 251 254 254 Destron Correlation 167** 247 264** 264**	253 253	249	256	256	257	257	255	257
ACTPART Sig. (2-tailed) .437 .000 .386 .000 N 251 251 251 254 254 Destron Correlation 167** 340** 000 304** 304**	tion279**	.055	.428	266**	227**	144*	1	262**
N 251 251 247 254 Destron Correlation 167** 340** 000 340** 3	.437 .000	.386	000	000 ⁻	000 [.]	.021		000 [.]
Degree Correlation 167^{**} $3A0^{**}$ 000 $_20A^{**}$	251 251	247	254	254	255	255	255	255
	tion .167** .349**	600.	394**	.288**	.201**	.228**	262**	1
CHGAUD Sig. (2-tailed) .008 .000 .885 .000	000. 800.	.885	000 [.]	000 [.]	.001	000	000 [.]	
N 253 253 249 256	253 253	249	256	256	257	257	255	257

257 4.40 (1.027)

The Texas Education Agency (TEA) classifies Texas public school districts into community types using factors such as enrollment, growth in enrollment,

 6
 27
 4
 46
 21
 5
 58
 90

 3.83 (1.602)
 4.56 (.892)
 4.25 (.957)
 4.17 (1.322)
 4.52 (1.030)
 4.60 (.894)
 4.17 (1.142)
 4.63 (.694)

Likely to change auditors

^{**.} Correlation is significant at the 0.01 level (2-tailed).*. Correlation is significant at the 0.05 level (2-tailed).

⁷² Journal of Accounting and Finance Vol. 19(9) 2019

Research Questions

The first research question examines whether mandatory audit rotation or the discussion of audit rotation has an effect on auditor performance, fees, or other attributes. An independent t-test was performed between two groups: on one group of participants who indicated that the district engages in mandatory rotation or has had discussions regarding auditor rotation (coded as 1) and on another group that did not indicate rotation or discussion regarding rotation (coded as 0). Table 3 presents the results of the series of t-tests addressing each the research questions. No t-test produced significant results for the first research question, save that for student enrollment in the school district [ENROLL] (t(260) = -2.522, p = .006 (one-tailed)). The effect suggests that those districts having or discussion rotation policy have larger enrollments (N = 84, m = 13,783) than those districts not discussing rotation policy (N = 178, m = 3,642).

For the second research question, another independent t-test was conducted with one group of participants who indicated that their district changed auditors within the last five years, or are considering changing (coded as 1) and another group of participants who indicated that no change persists (coded as 0). In this instance, two t-test bore significant results, one on perceived auditor performance (t(256) = 2.317, p = .011 (one-tailed)) and the other on auditor fees (t(252) = -1.855, p = .033 (one-tailed)). Results reveal that those districts changing or considering changing are less satisfied with their auditors (N = 83, m = 8.73) than those districts not considering changing auditors (N = 175, m = 9.23). In the same vein, districts changing or considering auditors report higher audit fees (N = 171, m = \$39,665) than their counterparts (N = 83, m = \$19,973).

A final dichotomous variable was constructed with one group of participants that consider an auditor's experience with other school district audits as an important attribute (coded as 1) and another group that did not consider prior school district audits as an important attribute (coded as 0). Importance was determined by whether or not the participant chose to rank "number of other Independent School District audits" as one of the top four attributes of an audit firm. Interestingly, no significant t-test was produced, suggesting that, for this sample of district representatives, industry experience may not have a significant bearing on decisions related to the external auditor. The following section presents discussion on the study variable data trends.

Data Trends

The average number of years (not tabulated) that the current audit firm had audited the district is 9.51 years (median of 8 years). While some will consider an average of 9.51 years to be high, it is not surprising given that auditor rotation is not required in Texas. As Table 1, Panel C demonstrates, many of the respondents are from small, rural areas (i.e., about 68% are from independent or non-metro designated areas) and there are not many audit firm options available to them.

Performance of the Audit Firm [PERF]

Most respondents were completely satisfied with their auditors (average of 9.09, median of 10). Only 14 (5.4%) perceived their auditor's performance as neutral or lower with 156 (60.5%) perceiving their auditor's performance as completely satisfactory (10). In terms of auditor tenure (see Table 1 Panel A), the respondents most satisfied with their auditor's performance were those with a relationship greater than 14 years (average of 9.36). Those least satisfied with their auditor's performance were those with a relationship five or less years (average of 8.88). In terms of auditor fees (see Table 1 Panel B), the respondents most (least) satisfied with their auditor's performance were those with less than \$13,000 in fees with an average of 9.39 (\$13,001 to \$20,000 with an average of 8.81). This level of satisfaction, along with the potential of auditor options in rural districts, might contribute to the apparent lack of auditor rotation policy at the district level.

	R1: Rota	tion Policy	R2: Chang	ing Auditors	R3: Industry	Experience
				Changed/		
		Required or		Going to		a
DEDE	None $N = 174$	Discussed	No change $N = 175$	change	Not considered $N = 172$	Considered
PEKF	N = 1/4 m = 9.12	N = 84 m = 8.98	N = 1/5 m = 9.23	N = 83 m = 8.73	N = 1/2 m = 8.99	m = 9.24
	SD = 1.701	SD = 1.481	SD = 1.511	SD = 1.822	SD = 1.724	SD = 1.422
	t =	.666	t = 2	2.317	t = -1	.189
	df =	= 256 = 253	df = n =	= 256 011*	df = p =	256 118
FEES	N = 171	N = 83	N = 171	N = 83	N = 169	N = 85
	m = 25K	m = 29K	m = 19K	m = 39K	m = 29K	m = 22K
	SD = 96K	SD = 25K	SD = 18K	SD = 14K	SD = 97K	SD = 18K
	t =	331	t = -	1.855	t = .	657
	df	= 252	df=	= 252	df=	252
ENDOLI	p =	= .371	p =	.033*	p = .	256
ENROLL	N = 1/8 m = 4K	N = 84 $m = 14K$	N = 1/8 $m = 6K$	N = 84 m = 8K	N = 1/5 $m = 5K$	N = 8/m = 10K
	SD = 14K	SD = 50K	SD = 34K	SD = 21K	SD = 16K	SD = 48K
	t = -	-2.522	t = -	360	t = -	1.056
	dI = p =	006**	dI = p =	360	dI = p =	146
TECHCOMP	N = 174	N = 82	N = 174	N = 82	N = 170	N = 86
	m = 1.33	m = 1.30	m = 1.30	m = 1.37	m = 1.34	m = 1.29
	SD = .517	SD = .537	SD = .495	SD = .578	SD = .554	SD = .457
	t =	.324	t = -	956	t = .	644
	df	= 254	df=	= 254	df=	254
COSTDEN	p =	= .373	p =	.170	p = .	$\frac{260}{N-86}$
COSIDEN	m = 4.00	m = 3.80	m = 3.97	m = 3.87	m = 3.93	m = 3.95
	SD = .893	SD = 1.048	SD = .946	SD = .953	SD = .978	SD = .893
		1 5 4 1		020		100
	t = 1.541 df = 254		t = .830 df = 254		t =	192 254
	p =	.062	p=	dI = 254 $dI = 2p = .204$ $p = .4$		424
AVAIL	N = 175	N = 82	N = 175	N = 82	N = 171	N = 86
	m = 4.42	m = 4.41	m = 4.45	m = 4.34	m = 4.42	m = 4.44
	SD930	SD910	SD901	SD984	SD900	SD970
	t =	.020	t =	.885	t =	028
	df	= 255	df=	= 255	df=	255
Δ.Ο.ΤΡΑΡΤ	p = N = 173	= .492 N = 82	p = N = 174	$\frac{.189}{N = 81}$	p = .	$\frac{489}{N = 85}$
nemmer	m = 1.66	m = 1.61	m = 1.61	m = 1.72	m = 1.59	m = 1.75
	SD = .979	SD = .926	SD = .911	SD = 1.063	SD = .901	SD = 1.068
	+	381	+	- 826	f - 1	202
	df:	= 253	df =	= 253	df =	253
	p =	352	p =	.205	p = .	099

TABLE 3INDEPENDENT T-TESTS ON STUDY RESEARCH QUESTIONS

Audit Fee for the Current Fiscal Audit [FEES]

The average audit fee paid by the 250 district respondents was \$26,408 (median of \$15,000). Ninetysix districts had auditors tenured for less than 6 years (averaging \$36,143), 82 districts had auditors tenured from 6 to 13 years (averaging \$21,967), and 72 districts had auditors tenured greater than 13 years (averaging \$18,486). If the fee for Dallas Independent School District (\$1,250,000) is removed, the total average drops to \$21,572. Ninety-nine (39%) of the respondents reported having paid less than \$13,000 (average of \$9,962), 79 (31%) paid between \$13,001 and \$20,000 (average of \$16,361), and 76 (30%) Districts paid more than \$20,000 (average of \$58,275).

A series of independent ANOVAs was performed utilizing the eight TEA classifications, and no statistically significant differences were found among the groups in relation to the following variables: audit tenure, audit performance, technical competence, cost vs. benefit of audit, considering changing auditors, availability of the audit team, active engagement partner, and the likelihood of the district to change auditors. The only variable producing a significant difference (F(7, 246) = 16.166, p = .000) among the groups is auditor fees. Table 1 Panel C shows that the relatively few respondents from major urban areas skew the distribution of audit fees as very high relative to the other districts.

Mandatory Auditor Rotation Policy

Only 12 (4.6%) of the 262 district respondents stated that they had a mandatory auditor rotation policy. Of those with such a policy, seven respondents indicated that the policy for auditor rotation is 5 years, one responded that the policy was 3 years, and four did not disclose the number of years. Of the districts that did not have a mandatory rotation policy (250 or 95.4%), only 72 (28.8% of those without a rotation policy) stated that there had been discussion of auditor rotation. These results show that auditor rotation is not a high priority in Texas school districts. While some firms put the audit up for bid, there was not a policy to rotate out of the current auditors at the district level.

Changed Audit Firms in the Past Five Years (and Why Changed)

Of the 262 district respondents, 84 (32%) stated that they had changed audit firms within the last 5 years. In terms of auditor fees, those firms with fees greater than \$20,000 changed firms most often in the past 5 years with 33 changes (39% of respondents), firms with fees between \$13,001 and \$20,000 changed firms 32 times (42%), followed by firms with fees less than \$13,000 changing 19 times (20%). These results reaffirm that the districts that have a greater audit fee are more apt to have changed firms in the past five years. The most common reply regarding change of auditor was school district decision, followed by CPA Firm decision, dissatisfaction with auditor, and then cost. Table 4 provides an analysis of participant written comments (some respondents listed more than one reason).

Formal Audit Committee

Only 9% (24 of 262) of the districts responding had a formal audit committee. The number of committee members ranged from 3 to 9 (average of 4.6 members, median of 3.5) with the number of meetings per year ranging from 1 to 12 (average of 3.61 with a median of 2). Districts that had changed firms within the past five years were more apt to have an audit committee (12, 13%) than those districts not changing firms from 6 to 13 years (8, 9%) or greater than 14 years (4, 6%). Districts that paid audit fees greater than \$20,000 were more apt to have an audit committee (18, 24%) than those districts with fees between \$13,001 and \$20,000 (3, 4%) and those with fees less than \$13,000 (3, 3%). Of the districts with an audit committee, only 3 of them had a policy for auditor rotation.

Importance of Auditor Attributes

Participants were asked to respond to six statements (in italics below) using a five-point Likert scale labeled as: 1 =Strongly Agree, 2 =Agree, 3 =Neutral, 4 =Disagree, 5 =Strongly Disagree. Ascertaining the district representative's perception of the current auditor is important since many districts feel that there are limited options for auditor change and few districts have a rotation policy. Results are presented in Table 1.

TABLE 4 ANALYSIS OF WRITTEN COMMENTS

# comments	Reason(s) Provided:
30	School District Decision - Board Policy, Same firm for many years, Good idea
22	CPA Firm Decision – No longer performing district audits, Retired, Firm closed or merged
14	Dissatisfaction with auditor or competence
12	Cost
4	Change in district administration
1	Change in key personnel at firm
1	Partner became a board member
1	Independence in appearance and fact
1	Bond Policy Requirement
1	CPA Firm received bad publicity

Panel A: Why did the school district change auditing firms?

Panel B: Selected comments given by respondents

Firm usually has 2 college students. Last year, partner did not actively participate in audit.

I feel that the firms have too many audits and each year do less for the more (rapidly).

I think the competence and number of other ISDs (audited) go hand in hand.

The world of school auditing is getting worse each year. Decisions on what audits should be and should do are made with no regard on the impact they will have on school districts.

Our district goes out for bids every 5 years per GFOA guidelines.

Auditing Texas ISDs is a difficult business. It is hard to find quality audit firms.

The cost of the audit is reasonable, however, Districts are making major cuts to expenses and this is not one we can cut. But, I would rather cut the audit than $\frac{1}{2}$ of a teacher.

I feel that the *minimum* you should look to change auditors is 5 years.

Our auditor is independent, alone, no team.

The other audit firm in our region that may be better known in the ISD community is not taking new ISD clients. At least not as rural as our district.

One concern regarding our auditors is their close relationship with some of our board members. They do the books for the Board members businesses as well.

Members of the auditing firm's engagement team are technically competent [TECHCOMP]. The overall response to this statement was 1.31, thus respondents perceived that their audit firm was technically competent. In terms of auditor fees, there was a slight increase in response mean (thus technical competence rated lower) going from those firms with less than \$13,000 in fees to those with

greater than \$13,000 in fees. Technical competence was rated highest by those firms with longer tenure (greater than 14 years) than those with shorter tenures.

Members of the auditing firm engagement team are constantly changing [CONSCHG]. The respondents reported that a constantly changing engagement team is not an issue to them. The overall average of 3.77 (with smaller districts whose audit fees are less than \$13,000 being the high response at 4.02) could be due to district specialization and that many of the auditing firms are smaller, with less turnover.

The cost of the audit exceed the benefits [COSTBEN]. Respondents tended to disagree with this statement (overall mean of 3.96), with those representatives in districts whose fees were between \$13,001 and \$20,000 showing the least agreement with a mean response of 3.76. Representatives in districts with under \$13,000 in fees may believe they are getting true value, whereas those representatives in districts paying greater than \$20,000 understand that there are fewer options available to them due to size. Also, the respondents from districts with auditor tenure over 14 years tend to believe they are receiving greater benefits than costs compared to districts with a shorter audit tenure.

Members of the auditing firm's engagement team are available for consultation only during the audit *[AVAIL]*. The responding school districts believed that audit firm members were available for consultation not only during the audit but at other times as well.

The auditing firm's engagement team partner actively participated in the audit [ACTPART]. All groups stated that they had active partner involvement in the audit, with all groups' responses falling between agree and strongly agree. There were numerous comments regarding satisfactory partner interaction.

We are likely to change (or have already changed) auditors [CHGAUD]. All groups stated that they do not plan to change auditors.

The results of these inquiries make it easier to understand the overall satisfaction level and lack of auditor change or rotation in Texas school districts.

Rankings of Auditor Attributes

Respondents were asked to rank the top four attributes of an auditing firm. A listing of attributes taken from prior literature (e.g., Siriwardane, Hu, & Low, 2014) and reviewed by other practitioners and academics was presented with the opportunity to add any attribute believed to be omitted. The attributes given were: 1) Technical competence of the engagement team members, 2) Responsiveness by the auditing firm to questions, 3) Number of other school districts audits, 4) Continuity of audit engagement team members, 5) Audit partner involvement, 6) Amount of audit fees, and; 7) Other (specify). Results of the attribute rankings are shown in Table 5.

n, %	Technical competence	Responsiveness to questions	Other school audits	Continuity of audit team	Audit partner involved	Audit fees
Ranked as 1	144	31	5	9	12	10
	68.6%	14.8%	2.4%	4.3%	5.7%	4.8%
Ranked as 2	29	87	17	28	16	32
	13.8%	41.4%	8.1%	13.3%	7.6%	15.2%
Ranked as 3	19	53	28	38	33	37
	9.0%	25.2%	13.3%	18.1%	15.7%	17.6%
Ranked as 4	15 7.1%	17 8.1%	37 17.6%	51 24.3%	33 15.7%	53 25.2%
Did not rank	3 1.4%	22 10.5%	123 58.6%	84 40.0%	116 55.2%	78 37.1%
Total	210 100%	210 100%	210 100%	210 100%	210 100%	210 100%

TABLE 5PERCEPTIONS ON TOP FOUR ATTRIBUTES OF AN AUDIT FIRM

Technical competence of the engagement team members. 68.6% believed that technical competence of the engagement team members is the most important attribute of an auditing firm, 13.8% believed it was the second most important attribute, 9.0% believed it was the third most important, and 7.1% believed it was the fourth most important attribute. Only 3 (1.4%) respondents did not list this attribute as one of the top four. These results demonstrate that the technical competence of the auditor is not only important to the district but is the most important attribute.

Responsiveness by the auditing firm to questions. Responsiveness was ranked as the second most important attribute of an auditing firm. It was ranked as most important by 14.8% of respondents, second most important by 41.4%, third most important by 25.2%, fourth most by 8.1% and not deemed as one of the top four attributes by 10.5% of respondents. This is logical as responsiveness dove-tails technical competence, which was previously discussed as the most important attribute to the school districts.

Number of other Independent School District audits. 2.4% of the respondents deemed the number of other district audits as being the most important attribute, 39% ranked the attribute as either 2nd, 3rd or 4th most important, with 58.6% not ranking it as important at all. With many of the districts being in small, rural areas (as indicated in Table 1 Panel C), and with many of these auditors performing few district audits, the number of districts audited appears low on the ranking of attributes.

Continuity of audit engagement team members. 4.3% of the respondents deemed the continuity of team members as being the most important attribute, 55.7% ranked the attribute as either 2nd, 3rd or 4th most important, with 40.0% not ranking it as important at all.

Audit partner involvement. 5.7% of the respondents deemed audit partner involvement as being the most important attribute, 39.0% ranked the attribute as either 2nd, 3rd or 4th most important, with 55.2% not ranking it as important at all.

Amount of audit fees. 4.8% of the respondents considered audit fees the most important attribute, 58.1% ranked the attribute as either 2nd, 3rd or 4th most important, with 37.1% not ranking it as important at all. After technical competence and responsiveness, audit fees had the least percentage of not being reported as a top attribute. Therefore, while audit fees were not the most important attribute, many respondents believed it was one of the top four.

Other. Some respondents added attributes that they believed to be important that were not listed in the instrument, such as trustworthiness, caring about the district, participation in TEA training, experience in same size districts, ability to explain the audit, and ability to communicate improvements.

CONCLUSION AND IMPLICATIONS

This study evaluates responses from Texas school district representatives with regard to their perceptions on audit firm rotation, auditor changes, current auditor performance and competence, and importance of certain auditor attributes. We expected and found that the vast majority of Texas school districts have not instituted a mandatory auditor rotation policy and will therefore not have changed auditors in the past five years, find their auditor's fees reasonable, and find the audit quality produced in their audits satisfactory.

Furthermore, we found that Texas school districts were very satisfied with the performance of their auditors and did not have an audit committee. We also found that the district representatives were not likely to change auditors in the future, believed their auditors were technically competent, and believed the benefits of the audit were greater than the costs. The minority of districts seeking to rotate auditors were those with the highest levels of student enrollment and the most dissatisfaction with their current auditor. The industry expertise of the auditor produced no effects in auditor tenure decision-making.

These findings are important to practitioners, regulators, academicians, and government administrative decision-makers as many concerns of public company audit regulation and satisfaction can be applied to governmental agencies. Texas school districts seem content with the status quo of their auditor-client relationship and do not appear eager to institute regulatory measures requiring rotation. Increased costs and oversight authority dictated by rotation regulations may not necessarily lead to higher audit quality in school districts; on the other hand, setting the stage to prevent negative repercussions, rather than reactive to them, might behoove regulators. While the study used a sample of government units (school districts) in only one country, the policy implications may prove relevant to any school district in any country.

LIMITATIONS AND FUTURE RESEARCH

Care should be taken in generalizing the results of this research. Since rules and regulations regarding auditor rotation vary among states, similar inquires may produce different conclusions. Also, the market for school district auditors could be different from state-to-state (or district-to-district), which is also be a factor that impacts satisfaction.

Future research could expand into other states (or districts) and/or incorporate other audit quality/satisfaction attributes. An experiment could be undertaken where a district hypothetically puts their audit out to bid (assuming a mandatory rotation policy) and then asking them to pick a new auditing firm and what attributes drove them to pick the new firm. Lastly, other governmental agencies could be subject of a similar discussion. School district responses may be different when compared to other governmental agency responses.

REFERENCES

- Abdullahi, D., Baba, Y. T., & Musa, A. (2016). Building innovative public institution. *International Journal of Public Policy*, 12(3-6), 276-296.
- Arel, B., Brody, R., & Pany, K. (2006). Findings on the effects of audit firm rotation on the audit process under varying strengths of corporate governance. *Advances in Auditing*, 22, 1-27.
- Bleibtreu, C., & Stefani, U. (2018). The effects of mandatory audit firm rotation on client importance and audit industry concentration. *The Accounting Review*, 93(1), 1-27.
- Blouin, M., & Saccento, M. (2017, April). Internal control deficiencies in local government: Evidence from school districts. *The CPA Journal*, 64-68.
- Carcello, J. V., & Nagy, A. L. (2004). Audit firm tenure and fraudulent financial reporting. *Auditing: A Journal of Practice & Theory*, 81(3), 653-676.
- Deis, R. D., & Giroux, G. (1996). The effect of auditor changes on audit fees, audit hours, and audit quality. *Journal of Accounting and Public Policy*, 15, 55–76.
- Elder, R. J., Lowensohn, S., & Reck, J. L. (2015). Audit firm rotation, auditor specialization, and audit quality in the municipal audit context. *Journal of Governmental & Nonprofit Accounting*, 4(1), 73-100.
- Elder, R. J., & Yebba, A. A. (2017). The Roslyn school district fraud: Improving school district internal control and financial oversight. *Issues in Accounting Education*, 32(4), 25-39.
- Garcia-Blandon, J., & Argiles-Bosch, J. (2017). Audit partner industry specialization and audit quality: Evidence from Spain. *International Journal of Auditing*, 22(1), 98-108.
- George, C. (2014). New Audit Firm Rotation Recommendation. The Kentucky CPA Journal, 2, 21.
- Ghosh, A., & Moon, D. (2005). Audit tenure and perceptions of audit quality. *The Accounting Review*, 80(2), 585-612.
- Johnson, V.E., Khurana, I. K., & Reynolds, J. K. (2002). Audit-firm tenure and the quality of financial reports. *Contemporary Accounting Research*, 19(2), 637-660.
- Jones, K., Aier, J. K., Brandon, D. M., Carpenter, T. D., Gaynor, L. M., Knechel, W. R., Pevzner, M. B., Reed, B. J., & Walker, P.L. (2012). Comments by the Auditing Standards Committee of the Auditing Section of the American Accounting Association on PCAOB Rulemaking Docket Matter No. 37: PCAOB Release No. 2011-006, Concept Release on Auditor Independence and Audit Firm Rotation. *Current Issues in Auditing*, 6(1), C15–C27.
- Kamuruchi, R. M. (2016). An assessment of the relationship between audit quality characteristics and client satisfaction perceptions in government parastatals in Kenya. Doctoral dissertation, Strathmore University.
- Kaplan, S. E., & Mauldin, E. G. (2008). Auditor rotation and the appearance of independence: Evidence from non-professional investors. *Journal of Accounting and Public Policy*, 27(2), 177–192.
- Kwon, S. Y., & Yi, H. S. (2018). Do social ties between CEOs and engagement audit partners affect audit quality and audit fees? *Auditing: A Journal of Practice & Theory*, 37(2), 139-161.
- Lowensohn, S., Johnson, L. E., Elder R. J., & Davies, S. P. (2007). Auditor specialization, perceived audit quality, and audit fees in the local government audit market. *Journal of Accounting and Public Policy*, 26(6), 705-732.
- Mayse, A. L. (2018). A cascading effect: How do audit rotation rules affect loan officers' perceptions and decisions for nonpublic companies? *Journal of Accounting and Finance*, 18(1), 167-181.
- Myers, J. N., Myers, L. A., & Omer, T. C. (2003). Exploring the term of the auditor-client relationship and the quality of earnings: A case for mandatory audit rotation? *The Accounting Review*, 78(3), 779-799.
- Norton, S., & Smith, L. M. (2008). Contrast and foundation of the public oversight roles of the US Government Accountability Office and the UK National Audit Office. *Public Administration Review*, 68(5), 921-931.
- Phillips, C. R., & Dorata, N. T. (2013). School district boards, audit committees, and budget oversight: Seeking a formula for good governance. *The CPA Journal*, 83(3), 19-23.

- Rapoport, M. (2014, January 24). KPMG to Pay \$8.2 Million to Settle SEC Charges. *The Wall Street Journal*. Retrieved from
 - http://online.wsj.com/news/articles/SB10001424052702303448204579340820706911040
- Roberts, R. W., Glezen, G. W., & Jones, T. W. (1990). Determinants of auditor change in the public sector. *Journal of Accounting Research*, 28(1), 220–228.
- Simmons, T. N., Costigan, L. M., & Lovata, L.M. (2009). Mandatory audit firm rotation: Evidence from Illinois state universities. *Academy of Accounting and Financial Studies Journal*, 13(3), 123–132.
- Siriwardane, H. P., Hu, B. K. H., & Low, K. Y. (2014). Skills, knowledge, and attributes important for present-day auditors. *International Journal of Auditing* 18(3): 193-205.
- Texas Education Agency. (2012). Financial Accountability System Resource Guide.
- United States General Accounting Office. (2003). Report to the Senate Committee on Banking, Housing, and Urban Affairs and the House Committee on Financial Services.
- Public Accounting Firms: Required Study on the Potential Effects of Mandatory Audit Firm Rotation. GAO-04-216, November.
- U.S. House of Representatives. (2002). The Sarbanes-Oxley Act of 2002. Public Law 107-20 [H. R. 3763]. Washington, D. C.: Government Printing Office.
- Vermeer, T. E., Raghunandan, K., & Forgione, D. A. (2009). Audit fees at U.S. non-profit organizations. *Auditing: A Journal of Practice and Theory*, 28(2), 289–303.
- Wally-Dima, L., Mbekomize, C. J., & Tobedza, G. (2016). Assessment of clients. Asian Journal of Business Management, 8(1), 1-11.
- Wilson A. B., McNellis, C., & Latham, C. K. (2018). Audit firm tenure, audit familiarity, and trust: Effect on auditee whistleblowing reporting intentions. *International Journal of Auditing*, 22(2), 113-130.

APPENDIX

SURVEY INSTRUMENT

Auditor Rotation Policies and Perceived Auditor Attributes in Texas School Districts

Name of your School District:
Name of the auditing firm conducting the District's current fiscal year audit:
How many successive years has the above firm conducted the District's audits? Years
On a scale from 1 to 10 (1 = Completely Unsatisfactory, $5 =$ Neutral, $10 =$ Completely Satisfactory), please rank the performance of the District's audit firm for the current fiscal year:
What was the approximate total audit fee for the current fiscal audit?
Does the District have a mandatory auditor rotation policy?NoYes
If Yes, how often is the auditor required to rotate? Every years
If No, has there been discussion of auditor rotation?NoYes
Has your District changed audit firms in the past 5 years?NoYes
If yes, why did the District change auditing firms?
Does the District have a formal Audit Committee?NoYes
If Yes: How many members are on the Audit Committee? members
Approx. how many times per year does the Audit Committee meet? times

(over)

Please indicate your level of agreement with each the following statements by circling the appropriate number. Use 1 for Strongly Agree, 2 for Agree, 3 for Neither Agree nor Disagree, 4 for Disagree and 5 for Strongly Disagree.

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Members of the auditing firm's engagement team are technically competent.	1	2	3	4	5
Members of the auditing firm engagement team are constantly changing.	1	2	3	4	5
The cost of the audit exceed the benefits.	1	2	3	4	5
Members of the auditing firm's engagement team are available for consultation only during the audit.	1	2	3	4	5
The auditing firm's engagement team partner actively participated in the audit.	1	2	3	4	5
We are likely to change (or have already changed) auditors for the next audit	1	2	3	4	5

On a scale from 1 to 4 (where 1 is the most important) rank the top 4 attributes of an auditing firm:

 Technical competence of the engagement team members

 Responsiveness by the auditing firm to questions

 Number of other Independent School Districts audits

 Continuity of audit engagement team members

 Audit partner involvement

 Amount of audit fees

 Other (specify)

Thank-You for assisting in our research - Please feel free to add any comments below: