

FILTERING OF TIME PRACTICES AND QUALITY OF INDEPENDENT AUDIT: EVIDENCE FROM THE UAE

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Abstract

The ongoing socio-economic transformation of the United Arab Emirates (UAE), economic diversification, and integration into the world market is predicated, in large part, on attracting foreign direct investment (FDI) by multi-national conglomerates. The key to attracting ongoing both direct and indirect foreign investments in support of this transformation lies in a high-quality independent audit that can provide assurances regarding the integrity of financial statements. To better understand auditors' behavior in this transformational context, this study investigates auditors' reaction to time budget pressure in the UAE, identifies areas susceptible to auditors' dysfunctional behavior, and ascertains effective approaches to minimize auditors' misconduct. Due to sensitive nature of the study, anonymous surveys were used to collect the data and the findings indicated that time budget pressure resulted in substandard audit work, particularly in relation to the evaluation of systems of internal controls. The findings also revealed deemphasizing meeting time budget in auditors' performance evaluations as the most effective approach to minimizing dysfunctional behavior. Due to across-the-board similarities among the GCC including cultural, social, economic, political and business practices, the results of this study could be generalizable to all the GCC countries and other nations in the region that share common characteristics.

Keywords: Audit quality, time budget pressure, filtering of time, developing countries

INTRODUCTION

Time budgets are integral parts of any audit engagement and inability to meet them induces auditors to engage in what the literature calls 'dysfunctional behavior' or 'filtering of time' -- terms that are often used interchangeably. According to Otley and Pierce (1996), auditors' dysfunctional behavior is also referred to as Reduced Audit Quality Practices (RAQPs). In general, RAQPs cover a variety of actions including signing-off audit programs prematurely, curtailing critical procedures, taking shortcuts, reducing the scope of work, and underreporting of time spent on auditing assignments. Other less tangible RAQPs include an overreliance on auditee's representations, failing to adequately investigate questionable items and/or contentious issues, failing to follow-up on audit adjustments, and conducting superficial reviews of documents.

The literature covering adverse consequences of auditors' dysfunctional behavior under time budget pressure is prolific, though virtually all the prior studies were carried out within the contexts of North America, the West, and other developed countries. An examination of this literature (e.g., Rhode, 1978; Alderman and Deitrick, 1982; McNamara and Liyanarachchi, 2008); Kelley and Margheim, 1990) supports the following conclusions:

1. Unattainable time budgets result in auditors' dysfunctional behavior,
2. Time-budget pressures result in substandard audit quality, and
3. Linking unattainable time budgets to auditors' performance evaluations result in dysfunctional behavior.

In spite of agreement on the above conclusions, not all studies agree on the theories explaining auditors' RAQPs. While some explain engaging in RAQPs within the framework of the occupational stress model (e.g., McNamara and Liyanarachchi, 2008), others attribute auditors' dysfunctional behavior to motivational theories and view resorting to RAQPs as a response driven by auditors' self-interest to preserve career progression and professional advancement (e.g., Gundry and Liyanarachchi, 2007; DeZoort and Lord 1997).

This study for the first time examined the impact of time-budget pressure in the UAE mostly known for being an economic hub of the Middle East, and a prominent member of the GCC countries. The choice of the UAE as the geographical area for the study was due to the following:

1. Attracting the highest FDI level among the GCC countries and the region,
2. Playing a significant role in the regional and global economy,
3. Being well known for its free trade, strategic development of infrastructure, and ambitious economic diversification away from the reliance on oil revenue,

4. Leading other GCC countries in infrastructure development and diversification away from an oil-based economy (Hvidt, 2013), and
5. Sharing many cultural and business similarities with other GCC countries, thus paving the way for generalizability of the results.

With this introduction, the rest of this article is organized by first explaining the significance of the study followed by presenting an overview of the literature. A description of the study, conceptual framework, research methodology, analysis of results, findings of the study and recommendations are presented in the subsequent sections, in that order. The article concludes with a presentation of the limitations of the study and summary.

Significance of Study

Over the past decades, a series of studies have investigated different dimensions of auditor behavior under time budget pressure in the context of developed countries. The findings of these studies have consistently demonstrated that using unattainable time budget regime in an audit setting induces auditors' dysfunctional conduct, leads to violation of auditing standards, and results in substandard audit quality. An example of these findings is the evidence obtained by Rhode (1978) which identified time budget pressure as the primary motivating factor underlying non-performance of audit procedures. Rhode's findings have been corroborated by other studies exploring the same issue (e.g., Alderman and Deitrick, 1982; Kelley and Margheim, 1990; McNamara and Liyanarachchi, 2008; and Utary, 2014).

The significance of this study, aside from being the first of its kind in this part of the world, lies in the important role that auditing plays in the economic transformation of the UAE which is characterized by rapid growth, diversification from an oil-based economy (Hvidt, 2013), integration into global market via attracting FDI, accountability in corporate governance, geopolitical economic forces and factors, among others (Ramady, 2012). Accordingly, it can be a foregone conclusion that the ongoing economic transformation of the UAE demands a high-quality audit and engaging in RAQPs delivers the opposite. Engaging in RAQPs compromises the integrity of the audit process, and ultimately undermines the confidence of both domestic and international stakeholders.

The findings of this study should be of interest to local, regional, and international auditing firms (CPA firms) as well as international conglomerates that have substantial FDI in the UAE. Others that can equally be interested in the study's findings include auditors (CPAs), the UAE's regulatory bodies, national stock exchanges, national companies listed on international stock exchanges, and authorities in other GCC nations that share far-reaching

similarities in virtually all facets of life with the UAE (e.g., economic, socio-cultural, environmental, and business practices).

AN OVERVIEW OF LITERATURE

Prior research on the influence of time budget pressure on auditors' behavior has found, in general, that auditors react to time budget pressure in a variety of dysfunctional ways (e.g. Otley & Pierce, 1996; Pierce & Sweeney, 2004). In a 1996 study, Otley and Pierce examined the importance of auditors' perceptions of the attainability of time budgets and found a positive correlation between the auditors' dysfunctional behavior and the perceived tightness of time budget. The same study found that both the aspiration to reach the time budget and the dysfunctional behavior declined when auditors increasingly perceived the time budget as unattainable (Otley and Pierce, 1996).

The study by McNamara and Liyanarachchi (2008) examined different aspects of time budget pressure (and their antecedents) in New Zealand. This study employed organizational theory's occupational stress model and concluded that auditors' dysfunctional behavior significantly increased when achievement of time budget played a key element in better performance evaluations. This study also concluded that in cases of inability to meet the time budget, auditors' curtailment of the audit programs were inevitable. Further, the study concluded that compared to staff auditors and seniors, audit managers had a lower propensity to engage in dysfunctional behavior (McNamara and Liyanarachchi, 2008).

Along the same line, Tervo, et al. (2014) used the ethical "tone at the top" perspective to study the issue of auditors' behavior leading to RAQPs. The study concluded that the attitude of the audit managers influenced the choice of actions when non-managerial auditors faced time budget pressure. The study's findings demonstrated that staff auditors followed the direction suggested by their seniors/supervisors and/or audit managers, irrespective of the consequences of the action on the quality of audit (Tervo, et al. 2014). In another study, Margheim, et al. (2005) used a stress theory model to examine auditors' behavior. This study used a case method and compared the effect of stress induced by time budget pressure and the stress induced by the pressure of meeting time deadlines. The results of this study indicated that increases in either of the two types of pressures elevated both auditors and supervisor stress levels, and under such conditions, both resorted to premature sign-offs and underreporting of time (Margheim, et al. 2005) – a conclusion shared by other studies (e.g., Alderman and Deitrick 1982; Cook and Kelley 1991; and Houston 1999).

In a related line of research, Al Kautsar (2016) borrowed from the expectancy theory of motivation, and while acknowledging the necessity of time budget for variety of purposes (e.g.,

costing an audit, establishing audit fees, measuring audit efficiency, and assessing the effectiveness of auditors' performance), the study made the following key conclusions (Al Kautsar, 2016):

- Time budget pressure caused dysfunctional behavior when auditors perceived an imbalance between the allotted time and the time required for completing the audit, and
- An increase in time budget pressure escalated auditors' tendency to engage in more widespread RAQPs.

Herda and Kasey (2016) contributed to the literature by investigating the impact of professional commitment and work experience on auditors' propensity to engage in a dysfunctional behavior. The results of their study concluded that both variables had no influence on reducing auditors' RAQPs. The study also concluded that less experienced auditors were more prone to underreporting of time in anticipation of receiving favorable performance evaluations (Herda and Kasey, 2016). A similar study carried out by Huang, et al. (2015) examined the influence of auditors' specialization and size of the client on perceived time budget pressure. The results of their experiment demonstrated that while industry specialization significantly reduced the perceived level of time pressure (i.e., time pressure depended on whether the auditors were industry-specialized or not), no significant relationship existed between the size of the client and time budget pressure. In a Swedish context, Broberg's et al. (2016) study concluded that in addition to time budget pressure, audit quality was equally influenced by other factors such as gender, position title, experience, number of clients, type of auditing firm (small, medium, and large) and the size of the CPA office (Broberg et al., 2016).

Outside the context of developed countries, where virtually all prior studies have been undertaken, Soobaroyen and Chengabroyan (2006) investigated the dysfunctional behavior of auditors in Mauritius -- one of the developing countries. The study's findings indicated the existence of a less intense time pressure in developing countries compared to developed countries. However, where time budget pressure is significant, auditors in developing countries engaged in dysfunctional behavior similar to peers in developed countries. In addition, the study found no evidence to support any relationship between antecedent variables (e.g., audit programs, client fees, and leadership style) and either of the perceived level of budget tightness or the extent of dysfunctional behavior (Soobaroyen and Chengabroyan, 2006). Andreas (2016) also investigated the relationship between auditors' dysfunctional behavior and time budget pressure in another developing country (i.e., Indonesia). According to the findings of Andreas' study, environmental factors, personality traits, and the auditors' predispositions to engage in

RAQPs were contributory factors to filtering of time and other negative behaviors (Andreas, 2016).

RESEARCH METHODOLOGY

The Study

The current study addressed the following three areas related to time budget pressure and auditors' dysfunctional behavior:

- Determined the extent to which auditors engaged in premature sign-off, curtailed audit program by taking shortcuts, and underreported time spent on assignments.
- Identified, for the first time ever, audit areas most susceptible to filtering of time.
- Ascertained effective approaches to minimize RAQPs.

Due to the sensitive nature of the study, using anonymous surveys were deemed optimal as they preserved the anonymity of respondents in a region largely skeptical of answering sensitive questions or reluctant to respond to questions perceived as self-incriminating. Likewise, the use of anonymous survey was deemed superior to alternative methods that required face-to-face interaction with the participants - a condition that could have either caused respondents' unwillingness to participate or produce inaccurate responses to sensitive questions (Otley and Pierce, 1996; McNamara and Liyanarachchi, 2008; Otley and Pierce, 1996). Lastly, the use of survey questionnaire had perceived advantages as it produced data comparable to prior similar studies facilitating valid comparisons of the results of this study with those carried out in developed countries (Rhode, 1978; Cook and Kelley, 1991; and Coram and Woodliff, 2004).

Data Collection

The study used a five-point Likert-type scale survey to collect data from 292 staff, senior, and audit managers working at various CPA firms providing auditing services in the UAE (the list of the CPA firms were compiled from the UAE's Accountants Business Directory and screened to exclude those that did not provide auditing services). The anonymity of target participants was assured and to improve the overall response rate, no survey instrument was coded to enable tracing back the responses to any respondent (Raghunathan, 1991). In view of the assured anonymity of the respondents and maintaining the confidentiality of information, the study generated a 43 percent response rate (127 sets of usable responses out of 292). The questionnaire solicited the level of agreement of practicing auditors to 15 items on the questionnaire (Table 1). The instrument also solicited information related to the other two research objectives as well as demographics. SPSS version 20.0 was used for analysis.

Table 1. Statements in the Time Budget Pressure Questionnaire*

1	My firm uses time budget as a part of the audit program.
2	In my opinion, some auditors skip doing procedures as outlined in the audit program without noting the omission (premature signoff).
3	In my opinion, some auditors circumvent/deviate from the audit program by taking shortcuts.
4	In my opinion, some perform audit tasks at the personal time (e.g., taking work home) without reporting the time spent (underreporting of time).
5	The time budget is a necessary management tool in the performance evaluation of auditors.
6	Time budgets have become tighter in recent years.
7	Unattainable time budgets increase the incidence of filtering of time.
8	There is a natural conflict between the concept of time budget and gathering of sufficient competent evidence.
9	Inadequate review procedures increase the incidence of circumventing audit programs.
10	Inadequate training increases incidences of circumventing audit programs.
11	Circumventing audit programs adversely influences the quality of the audit.
12	High performance evaluation would lead to promotion.
13	Some audit procedures are insignificant or unnecessary.
14	High overall performance evaluation would lead to job advancement.
15	Time budget pressure is a major contributing factor to auditors' turnover.

* A Likert-type scale was used to solicit the degree of agreements of the target respondents with the 15 statements.

The response options ranged from strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5).

Conceptual Framework and Model Specification

The study proposed a conceptual framework (Figure 1) which was used to formulate the research hypotheses. The same conceptual framework was also used as the basis of the following mathematical expression using linear regression (Poole and O'Farrell 1971; Johnston and DiNardo 1973):

$$Y' = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + u$$

Where:

Y' = Dependent variable

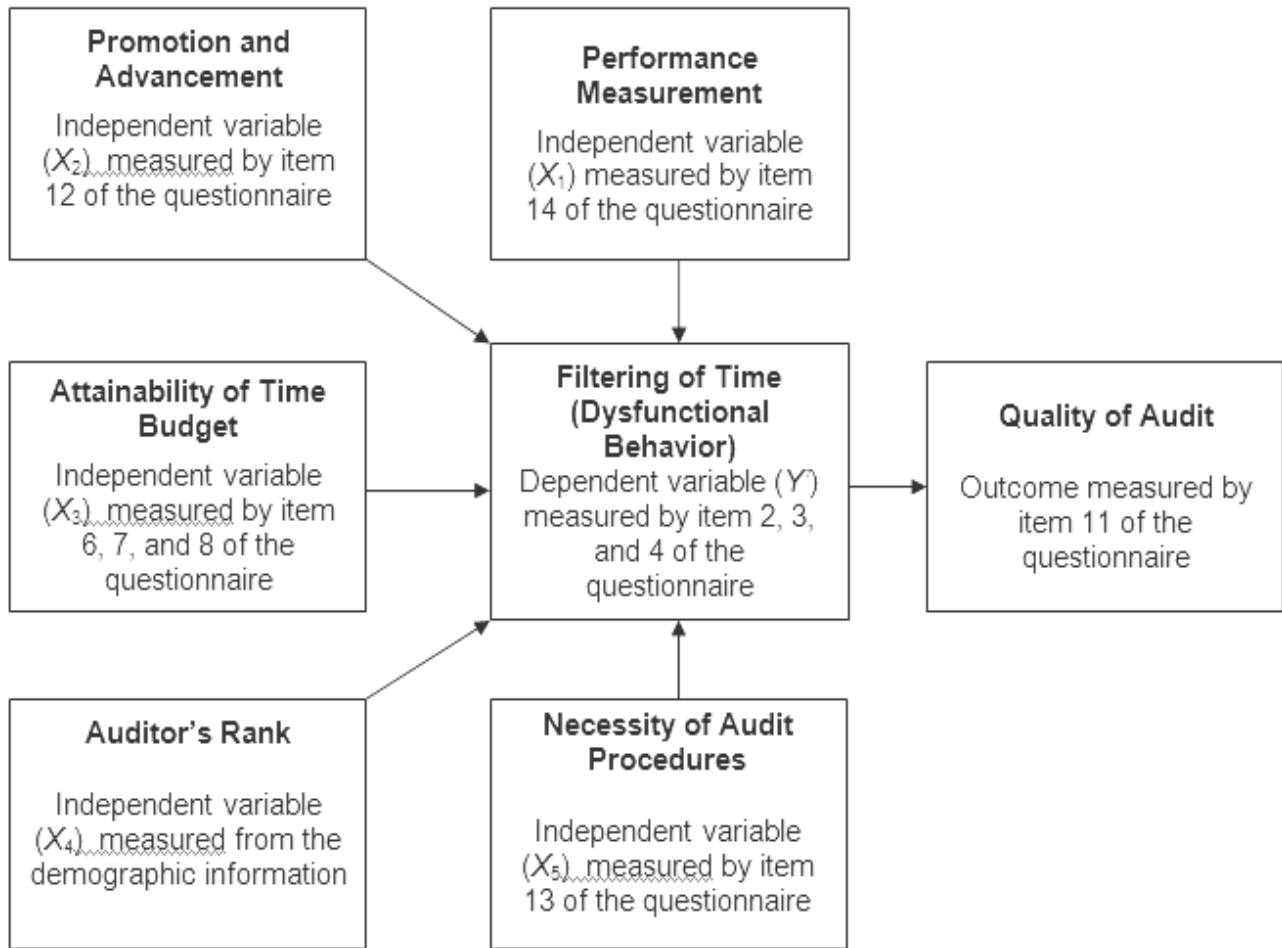
X1 through X5 = Independent variables

α = Intercept

b_1 through b_5 = Coefficients measuring the effect of independent variables on the dependent variable

u = Stochastic error measuring the impact of other probable explanatory factors

Figure 1. Proposed analytical framework



ANALYSIS

Factor Analysis: This statistical method was used to identify and measure any groups of items in the subscales that would load onto separate factors (Table 2). The items in the questionnaire had a Kaiser-Meyer-Olkin (KMO) value equal to 0.703 and p -value for Bartlett's Test of Sphericity of less than 0.001. Furthermore, six factors were found to have values greater than one. Questions 2 through 4 in the survey which directly addressed auditors' dysfunctional behavior loaded onto their own factor with a value of 0.45 or more.

Table 2. KMO, Bartlett's Test, Total Variance Explained by the Factor Analysis*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.703							
Bartlett's Test of Sphericity		Approximate Chi-Square			273.068				
		df			105				
		Sig.			0.000				
Survey's Item No.	Initial Eigenvalues **			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	Variance %	Cumulative %	Total	Variance %	Cumulative %
1	3.105	20.697	20.697	1.652	11.015	11.015	2.144	14.295	14.295
2	1.515	10.098	30.795	1.018	6.786	17.801	1.139	7.593	21.888
3	1.363	9.088	39.882	1.623	10.823	28.624	1.078	7.184	29.072
4	1.206	8.041	47.923	.861	5.741	34.365	.748	4.984	34.056
5	1.103	7.354	55.277	.755	5.032	39.397	.629	4.196	38.252
6	1.039	6.927	62.204	.393	2.618	42.015	.564	3.763	42.015

* Extraction Method: Maximum Likelihood.

** The variables loaded only into six factors and the values of Extraction Sums of Squared Loadings and Rotation Sums of Squared Loadings are only provided for six factors with the value of greater than 1.

Correlation Analysis: The Pearson Product Moment Correlation was used to examine the possibility of correlation and interaction among the research variables. The results (Table 3) reveal significant correlations among the research variables (e.g., negative correlations between the filtering of time and auditors' rank as well as the perceived necessity of audit procedures). The results also reveal a significant positive correlation between the filtering of time and the unattainability of time budget.

Table 3. Inter-Correlations of Dependent and Independent Variables

Survey's Item No.	Description	Filtering of Time	Performance Measurement	Promotion & Advancement	Attainability of Time Budgets	Auditors' Rank	Necessity of Audit Procedures	Audit Quality
2, 3, and 4	Filtering of Time***	1						
		127						
14	Performance Measurement	-0.074	1					
		0.413						
		126	126					

12	Promotion and Advancement	-0.136	0.154	1				Table 3...	
		0.129	0.086						
		127	126	127					
6, 7, and 8	Attainability of Time Budgets	0.234**	0.037	0.064	1				
		0.008	0.681	0.475					
		127	126	127	127				
****	Auditors' Rank	-0.586**	-0.012	0.001	-0.343**	1			
		0.000	0.894	0.990	0.000				
		127	126	127	127	127			
13	Necessity of Audit Procedures	-0.429**	-0.136	-0.129	0.249*	0.560**	1		
		0.000	0.128	0.148	0.005	0.000			
		127	126	127	127	127	127		
11	Quality of Audit	-0.031	0.028	-0.058	-0.109	0.210*	-0.103	1	
		0.728	0.756	0.519	0.225	0.018	0.250		
		126	125	126	126	126	126	126	

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

*** A composite dependent variable

**** Demographic information

Regression Analysis: Derived from the conceptual framework shown in Figure 1, the study formulated the following six hypotheses covering the relationship between filtering of time (dependent variable) and five independent variables.

H₁: Auditors' dysfunctional behavior is less likely when the time budget is tied to performance measurement.

H₂: Auditors' dysfunctional behavior is less likely when the time budget is tied to promotion/advancement.

H₃: Unattainable time budgets increase auditors' dysfunctional behavior.

H₄: Auditors' dysfunctional behavior is more likely for auditors holding more junior-rank positions.

H₅: Auditors' dysfunctional behavior is more likely when audit procedures are perceived as either unnecessary or insignificant.

H₆: Auditors' dysfunctional behavior positively influences the quality of audit.

Multiple regression analysis was used to test the hypotheses and the results are shown in the Table 4. A summary description of the results outlined below affirm the consistency of this study's findings with the conclusions of prior research in developed countries (e.g., Kelley and Margheim, 1990; and Alderman and Deitrick, 1982) as well as the motivational theories

explaining the impact of time budget on human behavior (e.g., Gundry and Liyanarachchi, 2007).

- Performance measurement tied to time budget will more likely result in auditors' dysfunctional behavior.
- Promotion and advancements tied to time budget will more likely result in auditors' dysfunctional behavior.
- Unattainable time budgets will more likely increase auditors' dysfunctional behavior.
- Junior-rank auditors will more likely engage in the dysfunctional behavior.
- Perceived lack of necessity or insignificance of audit procedures will more likely increase auditors' dysfunctional behavior.
- Auditors' dysfunctional behavior will more likely reduce the quality of the audit.

Table 4. Multiple Regression Analysis Results

Hypothesis	Variable Name	Item	N	Mean	SD	Estimated			Accept	Reject
						Coefficient	t-value	p-value		
H1	Performance Measurement	Q14	126	3.468	1.063	-0.074	-0.821	0.413		✓
H2	Promotion/ Advancement	Q12	127	4.134	0.622	-0.136	-1.530	0.129		✓
H3	Attainability of Time Budgets	Q6	127	3.89	1.025	0.234	2.695	0.008	✓	
		Q7	127	3.827	0.918					
		Q8	127	3.181	1.211					
H4	Auditor's Rank	Demographic	127	1.937	0.784	-0.586	-8.077	0.000	✓	
H5	Necessity of Audit Procedures	Q13	127	2.78	1.161	0.429	5.306	0.000	✓	
H6	Quality of Audit	Q11	126	2.571	1.169	-0.031	-0.348	0.728		✓
* The research hypotheses were tested at 95% confidence level.										
R-square			0.380							
Adjusted R-square			0.349							
Explain Variance by Chance = $0.380 - 0.349 = 0.031$ (the difference between the R-square and adjusted R-square) $0.380 - 0.349 = 0.031$										
Multiple Correlation Coefficient R			0.617							
The Standard Error of the Estimate			1.82226							
F (6, 124)			12.069							

Analysis of Variance: One seemingly “unsettled” area of auditors’ dysfunctional behavior is the reaction of audit managers to time budget pressure (i.e., the possible role that position title of auditors plays in resorting to RAQPs). While some studies have concluded that engaging in RAQPs cuts across-the-board, few other studies have asserted that audit managers are less likely to engage in dysfunctional behavior (Herda and Kasey, 2016). To address this issue, ANOVA was used to detect any differences that might exist between the responses of audit managers and non-managerial auditors (staff auditors and supervisors).

Table 5. ANOVA for the Correlation Between Variables

Survey's Item No.	Description		Sum of Squares	df	Mean Square	F	P-value
14	Performance Measurement	Between Groups	2.420	2	1.210	1.071	.346
		Within Groups	138.953	123	1.130		
		Total	141.373	125			
12	Promotion and Advancement	Between Groups	.011	2	.005	.013	.987
		Within Groups	48.714	124	.393		
		Total	48.724	126			
6, 7, and 8	Attainability of Time Budgets	Between Groups	68.768	2	34.384	10.478	.000
		Within Groups	406.902	124	3.281		
		Total	475.669	126			
13	Necessity of Audit Procedures	Between Groups	72.074	2	36.037	45.713	.000
		Within Groups	97.753	124	.788		
		Total	169.827	126			
11	Quality of Audit	Between Groups	7.543	2	3.771	2.840	.062
		Within Groups	163.314	123	1.328		
		Total	170.857	125			
2, 3 and 4	Filtering of Time/ Dysfunctional Behavior*	Between Groups	256.797	2	128.399	42.050	.000
		Within Groups	378.636	124	3.054		
		Total	635.433	126			

* A composite dependent variable.

The results of ANOVA shown in Table 5 indicate the existence of statistically significant differences among the responses of staff auditors, seniors, and managers to three variables of the attainability of time budgets, the necessity of audit procedures, and filtering of time. No statistically significant differences were detected for the remaining three variables. On the same issue, and as shown in Table 6, the side-by-side comparison of the mean values of the responses to many of the questions showed significant differences between the responses of

audit managers and those of non-managerial auditors. The exception to this pattern was item 4 of the questionnaire where the staff auditors differed in their responses from those of seniors and audit managers. An examination of the results presented in Tables 5 and 6 leads to the following two observations:

1. Audit managers, similar to non-managerial staff, have vested interests for in career progression through promotion and advancement. Thus, they are not immune to resorting to RAQPs when faced with career-threatening scenarios stemming from an inability to meet time budgets.
2. The practice of under-reporting time by performing audit tasks in one's personal time is more prevalent in staff auditors compared with seniors and audit managers – a practice that might explain the inevitable consequence of chronic job dissatisfaction leading to high turnover of those new to the profession.

Table 6. Descriptive Statistics Based on Auditor's Rank

Survey's Item No.	Auditor's Rank Description	Junior			Senior			Manager			Description of Responses
		N	Mean	SD	N	Mean	SD	N	Mean	SD	
2.	In my opinion, some auditors skip doing procedures as outlined in the audit program without noting the omission.	43	3.67	1.11	49	3.90	0.80	35	2.31	1.02	*
3	In my opinion, some auditors circumvent/ deviate from the audit program by taking shortcuts.	43	4.05	0.92	49	3.80	1.04	35	2.40	1.09	*
4	In my opinion, some auditors audit tasks at the personal time (e.g., taking work home) without reporting the time spent.	43	3.21	1.04	49	2.65	0.88	35	2.77	0.97	**
5	The time budget is a necessary management tool in the performance evaluation of auditors.	43	2.74	1.16	48	2.90	1.08	35	4.23	0.77	*
7	Unattainable time budgets increase the incidence of underreporting of time spent on audit tasks.	43	4.00	0.85	49	3.96	0.82	35	3.43	1.04	*

8	There is a natural conflict between the concept of time budget and gathering of sufficient competent evidence.	43	3.70	1.04	49	3.37	1.15	35	2.29	1.02	*
9	Inadequate review procedures increase the incidence of circumventing audit programs.	42	4.55	0.77	48	4.33	0.97	35	2.06	0.73	*
13	Some audit procedures are insignificant or unnecessary.	43	3.72	0.85	49	3.65	1.01	35	2.00	0.73	*
15	Time budget pressure is a major contributing factor to auditors' turnover.	43	3.37	0.82	49	3.22	1.21	35	2.26	0.92	*

* The responses of the managers differed from the non-managerial auditors (seniors and staff auditors).

** The response of the staff auditors differed from audit managers and senior auditor.

Audit Areas Susceptible to Filtering of Time

Another objective of this study was to identify audit areas most susceptible to filtering of time. This area, which has not been researched previously anywhere, is of significant importance as it can affect the totality of conducting of an audit and threaten the integrity of the results. For this objective, the survey respondents were provided with a list of 10 audit areas and asked to rank them according to their perceived susceptibility to filtering of time. Table 7 depicts that the respondents perceived the evaluation of the clients' system of internal controls as the single most susceptible area to filtering of time. Since the auditors' evaluation of the system of internal controls is the underlying consideration for deciding on the quantity/sufficiency of evidence, the nature/quality of evidence, and the timing of performing test of details (substantive tests), this finding could have a most damaging effect on the quality of independent audits of financial statements and invalidate the integrity of the entire audit process.

The other three highly-ranked susceptible areas to filtering of time were audits of miscellaneous accounts, follow-up on audit findings/adjustments/recommendations, and audits of bank reconciliation. Any of these areas poses substantial audit risk, as explained below:

- Taking shortcuts or otherwise circumventing procedures in the audit of miscellaneous accounts may invariably result in issuing unwarranted audit opinions since this account is often used as a "hiding place" for suspicious transactions,
- Failing to follow up on audit findings to ensure necessary adjustments are made can result in issuing misleading financial statements, and

- Filtering of time in the audits of bank reconciliations could fail to detect accurate accounting of cash – the most vulnerable of all assets – that has a pervasive corresponding effect on all other transactions.

Table 7. Ranking of Audit Areas Susceptible to Filtering of time

Item	Audit Area	Frequency	Percent (%)
1	Evaluation of internal control	28	22
2	Audit of miscellaneous accounts	21	16
3	Follow-up on audit findings/adjustments/recommendation	19	13
4	Audit of bank reconciliation	14	11
5	Audit of accounts receivable	10	08
6	Audit of accounts payable	8	07
7	Audit of long-term debts	7	06
8	Audit of payroll	6	06
9	Audit of inventory	5	04
10	Audit of fixed assets	5	04
11	Others	4	03
Totals		127	100%

Means to Reduce Filtering of Time

The last objective of the study was to identify the ways CPA firms could minimize the dysfunctional behavior of auditors. To achieve this objective, the respondents were asked to rank the effectiveness of six conceivable approaches. The top-ranked item among alternatives was found to be deemphasizing the linkage between achievement of time budget and auditors' performance evaluations (Table 8). The second top-ranked approach was to allow flexibility in deviating from the audit program based on the professional judgment of the auditors. Tighter supervision of auditors was perceived as the distant third effective approach to curtailing dysfunctional behavior.

Table 8. Means to Reduce the Incidents of Filtering of Time

No.	Description	Frequency	Percent (%)
1	Deemphasizing meeting time budget in performance evaluation.	51	40
2	Allowing flexibility to deviate from the audit based on professional judgment.	45	35
3	Tightening of supervision	21	16

4	Increasing variety of task assignments.	4	3	Table 8...
5	Improving communication within the audit team.	4	3	
6	Providing additional professional training	2	3	
7	Others	--	--	
Total		127		

Demographic Information

Demographic information of the respondents covered various areas including the length of experience, level of education, position title, professional certification, and gender. As shown in Table 9, respondents were well-dispersed in terms of years of experience and position title, dispelling the notion of any systematic bias in the results. Additionally, the respondents were well educated with a majority holding professional certifications such as CPA, CIA, or CFA. Finally, and as for the gender, this variable was skewed in favor of male by a wide margin. While such a degree of disparity is considered an anomaly in developed countries, it represents the proportion of the two genders working in public accounting in the UAE and the GCC countries.

Table 9. Demographics

Years of Audit Experience		Number	%
a.	Less than 3 years	37	29
b.	More than 3 but less than 5 years	32	25
c.	More than 5 but less than 10 years	36	28
d.	More than 10 years	22	18
Total		127	100%
Level of Education		Number	%
a.	Less than 4-year undergraduate degree	14	11
b.	4-year undergraduate degree	74	58
c.	Master degree	37	29
d.	Ph.D.	2	02
e.	Others, please identify	0	--
Total		127	100%
Position Title		Number	%
a.	Staff Auditor	43	34
b.	Supervisor/Senior	49	38
c.	Manager	35	28
Total		127	100%

Professional Certification		Number	%
a.	CPA (or equivalent)	32	25
b.	CMA (or equivalent)	15	12
c.	CIA (or equivalent)	27	21
d.	CFA (or equivalent)	5	04
e.	Others	0	--
f.	None	48	38
Total		127	100%
Gender		Number	%
a.	Male	94	77
b.	Female	33	23
Total		127	100%

SUMMARY OF FINDINGS

Over the past few decades, many studies in developed countries have investigated the adverse impact of time budget pressure on the behavior of external auditors. In the recent past, a small number of studies have extended this investigation to developing countries. The current study was the first of its kind carried out in the UAE, a developing country and one of the strategic economic players among the GCC nations and the region.

The primary objective of this study was to assess the extent and type of auditors' dysfunctional behavior under time budget pressure. The study also had two other objectives of identifying the audit areas most susceptible to filtering of time and ascertaining effective ways to minimize auditors' RAQPs. To achieve the primary objective, six hypotheses were derived from the conceptual research model and various statistical tools were used to analyze the data.

The tests of hypotheses confirmed that respondents, for the most part, engaged in RAQPs when the time budget was unattainable and its achievement was an important consideration in auditors' performance evaluations. Other findings of the study revealed that the audit areas most susceptible to RAQPs were the evaluation of the system of internal control, the audit of miscellaneous accounts, follow-up on audit findings, and the audits of bank reconciliations. The findings of the study also revealed that the top two effective approaches to minimize auditors' dysfunctional behavior were deemphasizing the linkage between meeting time budget and performance evaluation as well as allowing flexibility to deviate from the audit program based on professional judgment of the auditors. Finally, and due to across-the-board similarities among the GCC nations including cultural, social, economic, political and business

practices, the results of this study could be generalizable to all nations in the GCC and other countries in the region that share common characteristics.

RECOMMENDATIONS

The most important finding of this study was the presence of auditors' dysfunctional behavior under time budget pressure – a dysfunctional behavior with profound adverse impact on audit quality. Other noteworthy detrimental effects related to this finding were the negative consequences of RAQPs on audit planning as well as the corresponding adverse impact in performance evaluations. As for the latter, the undue emphasis placed on meeting time budgets in the performance evaluation would lead to auditors' filtering of time and rewarding negative behavior. This, in turn, would cause the predictable outcome of perpetuating RAQPs and the widening dimensions of unethical conduct. The following recommendations are based on the findings of this study and are consistent with the findings of other prior research:

- Base performance evaluations on merit rather than placing undue emphasis on the attainment of time budget,
- Establish attainable time budgets in the form of a range rather than a specific number of hours,
- Assign auditors to engagements based on their specializations,
- Enforce quality control policies and procedures,
- Tighten supervision, especially for junior staff,
- Set the ethical tone at the top,
- Improve auditors' technical competence through training and continuing education,
- Enforce compliance with professional standards,
- Publicize positive aspects of time budgets rather than its constraints,
- Widen the variety of work assignments, and
- Improve communication within the audit team.

In addition to the above recommendations, there may be other actions that are more suitable to the specific needs of a given CPA firm. Notwithstanding the chosen path to address RAQPs, the success of any approach would require pragmatic leadership and unconditional support from the top management of CPA firms.

LIMITATIONS OF STUDY

Like other designs, survey research suffers from certain limitations that are well-documented in the literature, including non-response bias. This study is no exception and suffers from the same

limitations. On the positive side, however, GCC nations' overwhelming similarities (e.g., cultural, social, economic, and business practices) with the UAE could pave the way for generalizability of these results to the GCC and other countries in the region that share common characteristics.

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