

This is a repository copy of *The impact of time budget and time deadline pressures on audit behaviour: UK evidence.*

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/170678/

Version: Accepted Version

Article:

Nehme, R., Michael, A. and Haslam, J. (2022) The impact of time budget and time deadline pressures on audit behaviour: UK evidence. Meditari Accountancy Research, 30 (2). pp. 245-266. ISSN 2049-372X

https://doi.org/10.1108/MEDAR-09-2019-0550

This author accepted manuscript is deposited under a Creative Commons Attribution Non-commercial 4.0 International (http://creativecommons.org/licenses/by-nc/4.0/) licence. This means that anyone may distribute, adapt, and build upon the work for non-commercial purposes, subject to full attribution. If you wish to use this manuscript for commercial purposes, please contact permissions@emerald.com

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial (CC BY-NC) licence. This licence allows you to remix, tweak, and build upon this work non-commercially, and any new works must also acknowledge the authors and be non-commercial. You don't have to license any derivative works on the same terms. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.





This is a repository copy of *The Impact of Time Budget and Time Deadline Pressures on Audit Behaviour: UK Evidence*.

White Rose Research Online URL for this paper: http://eprints.whiterose.ac.uk/170678/

Version: Accepted Version

Article:

Nehme, R, Michael, A and Haslam, J (Accepted: 2021) The Impact of Time Budget and Time Deadline Pressures on Audit Behaviour: UK Evidence. Meditari Accountancy Research. ISSN 2049-372X (In Press)

https://doi.org/10.1108/MEDAR-09-2019-0550

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.





Meditari Accountancy Re

The Impact of Time Budget and Time Deadline Pressures on Audit Behaviour: UK Evidence

Journal:	Meditari Accountancy Research
Manuscript ID	MEDAR-09-2019-0550.R2
Manuscript Type:	Research Paper
Keywords:	Auditors' behaviour, Time pressures, Big Four

SCHOLARONE™ Manuscripts

The Impact of Time Budget and Time Deadline Pressures on Audit Behaviour: UK Evidence

Abstract

Purpose: A survey is here systematically conducted to analyse auditors' perceptions of Dysfunctional Auditing Behaviour (DAB). As a result of many accounting scandals and litigations faced by audit firms, we seek to assess whether factors leading to DAB are embedded in audit firms' practices.

Design/methodology/approach: The sample used in this study comprises auditors at all levels of employment with the Big Four audit firms in the United Kingdom (UK). DAB is analysed using two signals/indicators: premature sign-off and under-reporting of chargeable time. Time budget pressure and time deadline pressure are the factors considered here as potentially pushing auditors to exhibit DAB. A careful and considered analysis and interpretation is here articulated. Additionally, the sample individuals are divided into audit trainees and experienced auditors to assess any potential differences in the perception of DAB that reflect the experience factor.

Findings: Coordination with internal auditors, different perceptions between audit trainees and experienced auditors of dysfunctional behaviour, working during their personal time, and the boxticking exercise are among the findings that may help practitioners to understand the reasons behind dysfunctional behaviour and identify measures to mitigate it.

Originality/value: The study can aid concerned executives and audit partners to minimise DAB related to different time pressures by casting light on the key ethical issues. The study is conducted on a sample of the Big Four firms in the UK covering all organisational structure. It assesses if experience plays a role in the perception of DAB.

Key words: Big Four, Auditors' behaviour, Time pressures

Introduction

The accountancy profession continuously faces concerns about Dysfunctional Auditing Behaviour (DAB) in the audit practice. The challenging audit environment engenders a high turnover at audit firms, leading to a decline in audit quality (Paino *et al.*, 2012). Competition among audit firms imposes pressure on audit fees as firms decrease budgeted proposals to get and retain assignments; audit quality is thus affected (Houston, 1999). Fewer audit hours are unlikely to lead to the same audit output, and imposing time pressure on audit teams may lead to reduced audit quality (Paino *et al.*, 2010). On the other hand, audit firms should prepare attainable budgets to avoid DAB (Yuen *et al.*, 2013).

Concerns about auditors' behaviour have been explored and the results have debated over an extended time period. The quality of an audit (AQ) is a delicate issue for both field professionals and researchers partly because of the difficulties in measuring it (Broberg et al., 2016). The main objective of this research is to assess whether audit firms' common practices lead to DAB. Such practices can be, and not limited to, time budget and time deadline instructions, planning and staffing audit assignments, and coordination among team members. The role of auditors has been a controversial issue, especially after recent accounting failures (WorldCom, Enron, Parmalat SpA, Waste Management Inc., Xerox Corporation, and Société Générale) (Ball, 2009). In relation to these scandals and lawsuits, the question is frequently asked: "where were the auditors?" This survey's aim is to gain insights into the basic understanding of external auditors about chargeable time reporting. The survey includes statements aimed at assessing auditors' behaviour and their perception about Time Budget (TBP) and Time Deadline Pressure (TDP) factors and the resulting DAB. The Big Four audit firms in the UK represent almost 90 of the auditee market share (Beattie et al., 2003); thus, the British market is one of the leading markets in which a major impact of the

Big Four auditors' behaviour on different stakeholders is observed. Accordingly, the sample of this study covers only Big Four auditors working in the UK, unlike other studies related to DAB that cover small/medium audit firms (Paino *et al.*, 2010) and those studies that did not differentiate between Big Four and non-Big Four auditors (McNamara and Liyanarachchi, 2008). Having a sample for the UK market will not help to identify the most valid reasons behind DAB, since non-Big Four audit firms do not have a significant market share of the audit industry, bus also the sample has been stratified between experienced and audit trainees to identify any potential differences in DAB between these two groups of auditors. Factors pushing experienced auditors to engage in DAB might not be the same for audit trainees. Thus, this study helps to identify factors among different levels of auditors.

Our results highlight the factors that auditors believe are embedded in the context of the professional accountancy practice that pressure them to behave in a dysfunctional manner. Initially, it is noted from the sample characteristics that audit firms prefer qualified auditors rather than auditors with graduate degrees. Only 35% of auditors finished a graduate degree while 68% possessed a professional qualification. This gap between graduate degrees and professional qualifications could be due to the nature of the accountancy profession. Accountancy firms', especially the Big Four, most highly attributes for hiring is passing the CPA/ACCA examinations (Metrejean and Noland, 2019). It is interesting to note that, based on the survey, auditors knowingly, and not unintentionally, commit DAB. It is evidenced that auditors facing time budget and time deadline pressures tend to work significantly during their personal time. Among the most common audit problems, "box-ticking" or complying with the 'form' rather than the 'substance' of the provisions (Reddy, 2019), practices or audit methodology, are not exercised significantly as per the survey results. The audit methodology and the style of audit testing, whether risk-based

approach or the integrated audit approach, of the Big Four firms appear to have no significant impact on DAB. Comparing the responses of experienced auditors and audit trainees regarding who is responsible for DAB, the results show that experienced auditors have a tendency to blame junior auditors more for DAB. Experienced auditors perceive that deadlines are ethically met when managers and senior auditors coordinate while junior auditors have an opposite perception, which may reflect their minimal involvement in budget setting and preparation. In the conclusion, we reflect on the important implications of these findings.

The structure of the study is as follows: literature review and theoretical framework, research design, elaboration on descriptive statistics, results, and concluding comments.

Literature Review and Theoretical Framework

Time pressures and dysfunctional behaviour

Organisations, and not only audit firms, should break the wall of silence in relation to negative behaviour of their executives as well as their associates (Pope and Burnes, 2013). Dysfunctional behaviour is driven by many factors such as the type of training delivered to employees, existence of ethical culture, existence and implementation of code of ethics and compensation plans (Sadler and Barac, 2005; Fatima, 2019). Sweeney and Pierce (2006) discover that firms do engage in several defence mechanisms that are characterized each by a series of mixed messages and signals in order to avoid dealing with integral cost and quality conflicts. These mechanisms are implemented in the auditing process by having their elements embedded in the routine activities all throughout the different levels inside the firm. Regardless the mixed signals in relation to cost and quality, auditors should not accept light explanations from employees (Labuschagne and Els, 2006) just for the sake of meeting tight deadlines.

As for Dysfunctional Auditing Behaviour (DAB), Bowrin and King II (2009) investigate three drivers leading to DAB that are time pressure, task complexity and audit effectiveness. The results indicate a negative relationship among time pressure, task complexity and audit effectiveness. In other words, the less time pressure is imposed on auditors, the more audit quality can be obtained. And this applies on the assignment complexity as well. Margheim and Pany (1986) find that the Non-Big Eight auditors exercise more DAB than Big Eight auditors do. The perceived importance of the audit steps lead to a dysfunctional behaviour as well. DAB is exercised in less important audit steps. Coram et al. (2003) find that there is a high level of time-budget pressure exerted on auditors during their work, and occasionally this latter have lead to "reduced audit quality practices" which had serious implications on the quality of the auditing procedure and practice. One of many signalling factors of DAB is the Pre-mature sign-off that is highly associated with time budget pressure (Gundry and Liyanarachchi, 2007). When DAB is exercised, it is expected to have a reduced audit quality practices. Margheim and Pany (1986) indicate that audit steps that are considered to be of insignificance to the audit are more likely to be prematurely signed off than other necessary steps.

Ponemon (1992) argue that not only time pressures can lead to dysfunctional behaviour but also peer pressure have the most substantial impact on the act of underreporting of time. The study reveal another signalling proxy of DAB that is underreporting of time behavior is surely marked and observed when simulating normal auditing conditions. Svanberg and Ohman (2013) discover that underreporting of time is positively related to time budget pressure as auditors are keen to finish their assignments with the most efficient output. Sweeney and Pierce (2006) find that time record manipulation is not a solitary form of DAB but involves multiple kinds of dysfunctional behaviors.

Due to scarcity of resources, certain limitations arise in the auditing field causing time budget pressure. To overcome time budget pressure, auditors tend to under-report chargeable time by switching chargeable hours among assignments (Paino *et al.*, 2010). Pierce and Sweeny (2004) find that budgets are less important than is reported in previous studies because tight budgets can be implemented when there is overstaffing but not in conditions of employee shortage. TBP influences AQ, the results indicating that auditors facing higher TBP are more likely to engage in AQ-reducing behavior such as premature sign-offs and under-reporting of time.

Paino *et al.* (2019) conclude that the style leadership at audit firms and the audit review process are factors leading to DAB rather than meeting budgets. Agoglia *et al.* (2015) provides some evidence suggesting that under-reporting of time is not considered a signal of firm commitment but managers' encouragement for seniors' evaluations. Lightner *et al.* (1982) analyse auditor behaviour relating the consequences thereof to social, ethical and motivational factors. It was concluded that the feasibility of meeting time budgets is the most explanatory variable. This was due to accountants' unwillingness to be seen as incompetent, their efforts to maintain at least perceived good quality service to the client, and their efforts to maintain high assignment realisation. The feasibility of meeting the time budget was also linked to personal normative beliefs and the willingness of auditors to disapprove or approve under-reporting behaviour.

Coram *et al.* (2004) analysed Reduced Audit Quality (RAQ) against two factors: time budget pressure and the risk of misstatement. RAQ is measured in relation to accepting doubtful audit evidence and truncating audit sample size. The results show that accepting doubtful evidence is directly affected by time budget pressure. Auditors tend to minimise samples when there is a low risk of misstatement. What minimises DAB is the number of workshops, trainings and seminars (Svanstrom, 2016). For Herrbach (2001), the character of audit seniors plays a major role in

damaging the audit profession's image. Defining AQ reduction by audit seniors and elements of the psychological contract between auditors and audit firms, Herrbach (2001) concludes that all psychological elements, except that is integral to salary, are negatively related to an increase of DAB leading to AQ reduction. Soobaroyen and Chengabroyan (2006) conclude that as budget tightness increases so too does premature sign-off but only up to a certain threshold as premature sign-off decreases at very high levels of budget tightness

Junior auditors V/S experienced auditors

Gundry and Liyanarachchi (2007) notice that lower levels auditors engage more often in unethical practices than did their senior counterparts which may be explained by the difficulties they have when interpreting the acceptability of client explanations. Houston (1999) examine the joint effects of the fee pressure and the client risk on the planning judgments and decisions of audit seniors, since these variables are extremely important in planning audits and especially in a competitive audit environment. Houston (1999) find that, according to the budgeted audit hours and the inherent risk assessments of the seniors, these latter are less responsive to the increased risk in the presence of any fee pressure. Lee (2002) concludes that junior auditors are encouraged to practice professional scepticism in allocating chargeable audit hours.

Kelley and Margheim's (2002) results reveal an inconsistency between the perspectives of the senior and junior auditors. Staff auditors perceive TBP more when seniors are involved in budget setting. Senior auditors believe that there is less TBP on staff auditors when they are involved in budget planning. Otley and Pierce (1996) provide further evidence on time pressure. According to audit seniors surveyed, meeting deadlines is a significant factor in their performance evaluation. The findings of the study reveal that if seniors were not involved in AQ reduction behaviour and

URT, budgets would be attained far less frequently. Umar *et al.* (2017) conclude that time budget is considered a major factor leading to DAB.

Theoretical framework

The foundation behind company audits is often explained by the mobilization of agency theory (Arnold and de Lange, 2004). The latter is explained by the control and the asymmetry of the information between the two parties involved which are the principal, meaning the shareholders, and the agents, meaning the directors. The conflict existing between these parties is managed usually by multiple incentives, bonds and monitors. The auditors, in general, tend to behave honorably because any kind of dysfunctional behavior can alleviate their capital and their capacity to earn economic rents. Audit firms have insignificant public information, where their mode of work, contracts, composition and internal relationship are confidential (Werner, 2009). Auditing firms have been shown to control adjacent markets in order to sell consultancy services to their clients. All of this explains why the auditing model requires supervision where its success is measured by revenues, profits and market shares and not by the usual social goals and politics. However, the quality of audits is dependent on the organizational values and staff's processes, not only on individual technical skills (Rangone, 2019).

Accounting can only be performed with the existence of an 'accountant'; accordingly it is considered a human activity. The human nature of accounting is needed to be part of the accounting theories (Deegan and Unerman, 2011). The relationship between institutions and their external environment is explained by the stakeholders' theory (Freeman, 1984). Employees, bankers, creditors, political groups and many individuals or group of individuals are an example of potential stakeholders. Gray *et al.* (1996) defines stakeholder as any human agency that may have an interest or affect an organization. Wijnberg (2000) emphasizes that organizations should be liable to their

stakeholder only. Having said the latter, organizations are not liable only to their shareholders but also to their stakeholders.

Stakeholders' theory have been used in different types of research methodologies (Freeman, 1984). The stakeholder theory is used in our research to assess the relationship between the organization 'the audit firm' and one of the most significant stakeholders; 'their auditors'. How auditors behave when facing time pressures and how such behaviour leads to dysfunctional and unethical acts.

Based on the critical review of the literature, two research questions are developed in the research design section of the paper.

Research Design

Research questions

The main research questions of this study are:

RQ₁: Do audit common practices, imposed time budget and time deadline pressures, include factors leading to DAB?

RQ₂: Is there a change in the perception of DAB between audit trainees and experienced auditors?

Survey and sample

The survey constructed for this study consists of statements to measure auditors' DAB against time budget and time deadline pressures. Collection of the survey statements is done by attending training seminars of big four audit firms to arrange for on-site visits which help in avoiding delays in responses. Two accounting scholars, who have similar studies in DAB, have reviewed the survey then validated by an audit partner to assess its relevancy. In addition, a pilot study was conducted to assess its appropriateness to meet the study's objective (Mohamad *et al.*, 2019 and Green *et al.*, 2017)

The survey is conducted in collaboration with the Big Four accountancy firms in the UK, since they represent 90% of the auditee market share (Beattie *et al.*, 2003). The survey was sent to

external auditors at all levels ranging from junior auditor to partner level. Auditors employed at the Big Four are anticipated to be working on more complex clients and facing time related pressure in addition to other pressures due to the wide range of portfolio of clients and line of industries they audit (Kornberger *et al.*, 2011). The survey yielded 145 usable questionnaires out of 167 questionnaires sent out to auditors. Additionally, the sample is stratified into two groups: audit trainees and experienced auditors. Audit trainees are those who possess not more than two years of experience in accountancy and experienced auditors represent the remaining sample of the survey (senior accountants, managers/directors and partners).

Measurement tools

A five points Likert scale is used to measure the level of respondents' agreements with the mentioned statements where 1 stands for Strongly Agree, 2 stands for Agree, 3 stands for No Opinion, 4 stands for Disagree and 5 stands for Strongly Disagree. The Independent t- test is used to analyse any significant differences between the two groups. In addition to the Independent t-test, for robustness and generalization purposes, OLS regression is used to support the initial findings of the significant statements that are affected by the experience factor.

Descriptive Statistics

The results in Table I indicate that the overall response rate for the four audit firms is 87%, considered a very good response rate when compared to other studies exploring auditors' behaviour (Otley & Pierce 1996; Fisher 2001; Herrbach 2001; Kelley & Margheim, 2002; Coram *et al.*, 2004; Pierce and Sweeney 2004; see Table I). Table I also indicates that the survey response is evenly distributed across the four firms, aiding generalisation and avoiding the phenomenon whereby responses from a single firm dominate the whole sample.

Insert Table I around here

Table II clearly highlights the sample diversity with regard to individuals progressing to post-graduate degrees and to professional qualifications. Only 35% of auditors finished a graduate degree while 68% possessed a professional qualification. The difference between graduate degrees and professional qualifications is due to the nature of the accountancy profession. Accountancy firms care more for recruiting and retaining audit candidates with professional qualifications rather than those who possess post graduate degrees.

Insert Table II around here

The breakdown of the level of auditors comprising the sample of this empirical study is presented below.

Insert Table III around here

Results

Table IV presents the results for a set of statements related to time budget pressure.

Under-reporting of Chargeable Time When facing Time Budget Pressure-All Respondents

It can be noted that auditors believe that they should not engage in any kind of DAB including under-reporting of chargeable time (S1). Nevertheless, senior and junior auditors intentionally and knowingly commit under-reporting of chargeable time when they face time budget constraints (S2). This behaviour might reflect the absence of a proper system to deal with such issues. Some studies report that when auditors face time budget pressure, senior auditors expect junior auditors to resolve things themselves (McNair, 1991).

It is interesting to note that the act of under-reporting chargeable time is committed in a way that does not affect other audit engagements and assignments (S3 and S6). The manipulation of

chargeable hours, when facing time budget pressure, is done by recording chargeable hours as non-chargeable ones. In other words, if auditors are working on multiple audit assignments where budgets are flexible, they prefer to shift chargeable hours to a non-chargeable hours' category when facing time budget pressure rather than recording the chargeable hours on other assignments. It shows that auditors care more for assignment profitability than their utilisation rate: utilisation/recovery rate is understood as the amount of fees audit firms charge their clients over the standard hourly rate. This could be due to the auditors' unwillingness to be seen as incompetent. They put-in extra effort to maintain a good percentage of assignment realization and to finish audit assignments within budget frames. The feasibility of meeting the time budget is also linked to personal and ethical beliefs and auditors' willingness to disapprove or approve the under-reporting behaviour (Lightner *et al.*, 1982).

Further evidence of DB in terms of under-reporting of chargeable time can be found in response to statement 8. It is noted that auditors do not shift hours among different clients but tend to record chargeable hours as non-chargeable. The existence of time budget pressure pushes auditors to work chargeable hours from their personal time; also considered non-chargeable hours. Working in their personal time may affect auditors negatively in respect of other areas of activity in the accountancy profession (professional development, continuous learning or accomplishing higher academic degrees/professional qualifications) and consequently affect AQ.

Budget tightness is also one of the factors leading to DAB (S4). The experience factor does not appear to have a major impact on under-reporting of chargeable time when facing time budget pressure (S5). The mean and median responses to S5 were here very close. A senior auditor stated, for clarification:

"Logically with time and experience, yes, they learn how to do things faster, however they are simultaneously assuming new roles and responsibilities at a faster rate than they actually get time to master their previous roles. So in this case I don't know exactly what to answer because even though it would take them less time, there are other constraints especially in understaffed situations (which occur almost always)."

Auditors committing DAB are still concerned to resolve any unexpected audit findings implying misstatements during an audit assignment even if they are facing time budget pressure (S7). Auditors appear ready to work from their personal time (S8), avoid manipulating other assignments' chargeable hours (S6) and to solve unexpected issues regardless of time budget pressure. But one interesting comment was made by an audit trainee:

"If the other assignment has a flexible budget and the same manager is overseeing the project, then I can resolve outstanding matters even when time pressure exists".

In other words, auditors are willing to commit DAB but not at the expense of not covering all major risks they face during an audit assignment.

Pre-Mature Sign-Off When Facing Time Budget Pressure-All Respondents

The second set of statements (S9 to S16) assesses auditors' perceptions of DAB in relation to premature sign off. There is no clear opinion on whether auditors pre-maturely sign off an audit step without mentioning any omission in procedures required (S9). Also, responses did not show any clear indication as to whether auditors are willing to reduce the time required in certain audit procedures if they are facing time budget pressure (S11). A senior auditor stated:

"I believe it depends on the employee's character. However, usually when auditors check information/especially clients' documents and document their work they know they are held liable for it and generally do check this correctly unless (a) they do not have the experience and have been assigned a risky or technical section - which happens quite often - and therefore they miss important elements or (b) they do not care about their career in audit and are willing to take a risk on their reputation."

Coram *et al.* (2004) report that the accepting of doubtful evidence by auditors is directly affected by time budget pressure. Auditors tend to minimise sample sizes under pressure when there is a low risk of misstatement.

The same result applies in respect of communication with the clients and auditees' management (S12). The results show no clear indication as to whether auditors may or may not accept light and insufficient explanation from clients. Such behaviour may be exercised to avoid time budget constraints and to pre-maturely sign off an audit procedure. Again, this can be due to auditors not willing to appear incompetent (Lightner *et al.*, 1982). It is worth mentioning that auditors are required to communicate with corporations' management and with those charged with governance, in particular with those responsible for preparing the financial statements (ISA 260 and AU 380). It is interesting to note that the response in relation to box-ticking exercises shows no clear opinion (S16). Box ticking (as opposed to substantive audit work) is historically understood to be a common problem in audit practice (McNair, 1991).

Echoing the earlier findings with respect to those auditors willing to work from their personal time and not to harm other audit assignments when facing time budget pressure, the results show that auditors are not willing to perform superficial reviews of clients' documents even if they might be facing tight budgets constraints (S11). It is of note that external auditors are not willing either to insufficiently document a technical misstatement or to declare in their working papers that a certain audit step has been performed while in fact it was not even when facing time budget pressure (S14).

Despite that pressure, based on this survey, auditors are not willing to perform superficial reviews (S11) or to accept light evidence from clients (S12). It is noted that auditors are willing to work

and to perform substantive tests faster in order to meet deadlines to avoid pre-mature sign off of audit steps.

It is concluded from the above results that when time budget pressure exists, auditors are willing to commit DB. The results show that the majority of acts of DB, within the time budget context, do not significantly affect the technical side of the audit process. Under-reporting of chargeable time plays a significant role in adequate costing of audit assignments which will consequently affect client-pertfolio and AQ. Under-reporting of chargeable time may give a false indicator about budgeted fees, required number of hours for every auditor, the level of expertise required for every assignment. In other words, an audit assignment may show profitable figures at the clearance stage while in fact excessive hours have been spent without being recorded properly; and consequently will harm future assignment negotiations between audit firms and their clients.

Insert Table IV around here

Pre-Mature Sign-Off When Facing Time Deadline Pressure-All Respondents

Table V includes a set of statements related to time deadline pressure. It can be noted that auditors do not reduce the sample size, without documenting the reduction, for time deadline purposes (S1). When auditors are working in a low risk environment, they are encouraged to use their professional scepticism to manage an audit assignment. In a low risk environment, sample size and materiality thresholds can be adjusted so less work is performed (Elder *et al.*, 2010).

Auditors tend not to fictitiously declare in their working papers that they have accomplished a task that they have omitted to do due to meeting tight deadlines (S2). The response to S2 supports the response to S1 in that, based on the survey, auditors do not reduce the sample size or fictitiously document accomplished audit procedures.

Documentation of the audit methodology is not a major factor leading to time deadline pressure (S3). An experienced audit manager mentioned the following:

"A major section of an audit assignment budget is allocated to certain audit steps related to audit methodology. Sometimes the massive documentation in this section may push some junior auditors to prematurely sign off some steps to meet tight deadlines. I doubt we can find a solution for our massive documentation in the methodology section. We, as Big 4, are known for our methodology that helps us to understand the client and its business environment before we start auditing the accounts."

Meeting time deadlines leads to a lack of balance in the lives of auditors (S4). The response to S4 in table VI substantially echoes the reported responses in S8 (Table IV) related to time budget. It is clearly noted that time budget pressure and meeting time deadlines lead auditors to invest in their personal time. A senior auditor put things as follows:

"During the high season of audit, not only do we invest from our personal time, but also we may have no life besides continuous work to meet very tight deadlines."

Regardless of whether other members of the audit team are committing DAB, the results show no clear indication as to whether auditors are affected by other team members prematurely signing-off audit steps (S5).

When facing time deadlines, auditors might be asked by their superiors to do substantive tests faster (S6). Respondents did not definitively state whether instructions from superiors generated DAB or not. Responses to S6 can be usefully compared to the responses to S1. It is implied that auditors may reduce sample size only if they are instructed to do so by their superiors. Again, reducing sample size, if exercised according to auditing standards and audit methodology, is not considered DAB.

The length of time booked for audit assignments is not deemed adequate (S7). The time allocated, taking into consideration tight deadlines, is playing a role in pushing auditors to commit DB through pre-mature sign-off of audit steps. One response to S7 from a senior auditor is as follows:

"Definitely no. Audit assignments are booked quite often without a full detailed plan taking into consideration the level of expertise of the employee and it only focuses usually on fieldwork time. It does not usually include review time, coaching, team and client meetings and discussions, documenting and wrapping up the file. It also assumes that employees will face no challenges and that they are 100% effective and efficient."

Other studies conclude that tight deadlines and length of assignment play a significant role in audit efficiency. McDaniel (1990) states that listed companies, for example, need to finalise their accounts and issue their audited financial statements before a very tight date after the fiscal year-end. In the audit profession, time deadline is a continuous pressure factor imposed on auditors to finalise audit assignments in compliance with professional standards. It is also revealed that time deadline is considered to be a significant factor threatening quality behaviour (Pierce and Sweeney, 2004).

There is no clear opinion about the existence of a margin for insufficient documentation. Auditors are expected to have full sufficient technical documentation with no allowable space for insufficient documentation (S8). Other studies conclude that time pressure plays a positive role in reducing un-useful data (Glover, 1997). Results show that only the time pressure factor may affect auditors' judgments. In summary, when auditors are dealing with non-diagnostic information, the time pressure factor has a positive impact by pushing auditors to eliminate data that is not useful, leading to a reduction in judgmental bias. In the case of auditors dealing with diagnostic information only, the results supported previous studies that it significantly reduces but does not eliminate dilution.

Increased competition between audit firms is perceived to be a major factor in enhancing time deadline pressure (S9). The results show that external auditors perceive that tough competition among audit firms is playing a significant role in the setting and accepting of tight deadlines. It should be mentioned here that tight deadlines are imposed not only by the clients themselves due to reporting dates but also by audit firms themselves (Pierce and Sweeney, 2004). Audit firms might sign up for tight deadlines to push their staff to finish assignments as early as possible (increasing their reputation) and to allocate them to a maximum number of assignments to increase the firm's market share. A senior manager highlighted a related type of pressure:

"I actually think that it is the fee pressure that is driving increasing competition. The fee pressure is based on the state of the economy, which then results in some firms reassessing their strategy, considering whether to concentrate on increasing market share and 'buy' audits (performing them at a loss), or whether they seek to control their cost base, working on making the audits they have more efficient and profitable (e.g. leveraging work to lower grades when 'rising stars' have been identified that could do the work with appropriate supervision."

From responses to the survey, it can be noted clearly that time deadline pressure leads to behaviour that violates the code of conduct (S10). Auditors believe that clearing an audit assignment within the time allocated, with the presence of tight deadlines, is accomplished with a violation of code of conduct.

The relationship between internal and external auditors is not helping in minimising the effect of time deadline pressure. Responses to S11 suggest that external auditors are not relying on internal auditors' work. This can be the result of the rising role of the internal audit function at the expense of external audit work: for Holm and Laursen (2007), internal control mechanisms, as a result of promulgations, have extended the role of the internal auditors who have gained a supervisory role. International Standard of Auditing 610 (ISA 610) and Statement of Auditing Standards 500 (SAS 500) have allowed external auditors to rely more on internal audit work.

The responses to S12, regarding the tendency to focus on risky areas, indicate "agreement" that pre-mature sign-off occurs mainly in non-risky areas (see S13). Nevertheless, a senior manager commented in relation to S13:

"A point to note here is that audits are meant to be planned to be risk-focused, so that more work is performed in an area likely to result in a misstatement as opposed to focusing effort in a non-risky area. My answer is 'no opinion' since I think auditors tend to focus on risk areas as it's what they are supposed to do, and not to save time."

From the responses to S12 and S13, auditors may use different techniques when facing time deadline pressure. One of the techniques is applying the risk-based approach rather than auditing the full set of accounts with no consideration of the distinction between relatively risky/low risk areas. The final audit output will include terms such as 'reasonable assurance' and 'material misstatement', indicating that there is no audit with full coverage and assurance of every business cycle. It is implied that DAB is more likely in low risk areas where auditors believe they have least responsibility and liability. But this approach can be stretched producing weak audits. Corporate governance mechanisms may be relied upon to reduce audit work. Cohen et al. (2007) conclude that auditors tend to lower the level of testing where there is an effective corporate governance function, as in the case of the presence of other effective control systems and a low inherent risk level. The moral reasoning of external auditors can also impact here. Lord and DeZoort (2001) conclude that the level of tolerance of misstatement is higher when auditors have a lower level of professional and organisational commitment due to social influence. Coram et al. (2004) conclude that auditors tend to minimise sample sizes for testing when there is a low risk of misstatement. Lee (2002) explores the case of junior auditors, under a risk-based auditing approach, being given the freedom as professionals to decide on their time allocation in the context of the budget. The guidance from the centre was that time should be used efficiently to obtain the possible evidence that might reduce material misstatement. This gave junior auditors the ability to decide either to

limit or to expand their work in areas not material to the accounts. Junior auditors were found to show commitment in compliance with audit methodology on the one hand but to in effect reduce AQ (in the practice of irregular auditing) on the other - but only in areas not deemed material to the accounts.

External auditors perceive that time deadlines are becoming very tight and practically unattainable (S14 and S16). This could be due to the tough competition (S9). DAB here likely takes place if the time deadline has to be met (S10). Time deadline pressure is directly related to pre-mature sign-off where audit firms have been imposing pressure to complete and to start another assignment (Pierce and Sweeney, 2004). Also, Otley and Pierce (1996) found that time budgets were generally perceived as demanding.

Responses to statements 15 and 17 indicate a clear agreement on the unattainability of time deadlines when set without consultation. When senior auditors and audit managers coordinate work, time deadlines can be met ethically without committing DAB. These results highlight the issue of communication between auditors and their superiors in relation to managing audit assignments and minimising time deadline pressure.

Auditors perceive that meeting deadlines is becoming a demanding target and that these deadlines may be applicable when there is overstaffing but hardly in the context of staffing shortages (Pierce and Sweeney 2004). The shortage of auditors at audit firms can be due to the tough competition in the accountancy profession (S9). It is leading to high turn-over at the audit firms as a result of DAB (Paino *et al.*, 2012). There is a lack in the relationship between senior and junior auditors (Kelley and Margheim, 2002). Audit trainees perceive more time pressure when seniors are involved in budget setting, while senior auditors believe that there is less time pressure on junior

auditors when they are involved in budget planning and deadline setting. For audit structuring, there is a negative relation between junior auditor perception of time pressure and senior auditors' involvement in preparing different cycles to be audited. It is assumed that if there is less senior job structuring, there is a high junior auditors' perception of time pressure. It is due to auditors feeling that audit planning and deadlines have been set without consultation. Kelley and Margheim (2002) note that there is a big gap between senior and junior auditors. While seniors believe that if they participated in budget preparation the pressure will be less on junior auditors, the results suggest the opposite. Otley and Pierce (1996) find in this regard that if seniors are not involved in audit reduction behaviour and under-reporting of time, budgets would never be attained.

The level of agreement to S18 is consistent with S5. There is no clear opinion as to whether DAB arises when auditors are working fast. S18 highlights the assumption that DAB can result from an unintentional mistake when auditing procedures are performed quickly. It aligns with the response to S5 concerning whether auditors are affected by other auditors working fast to meet deadlines.

It can be concluded from the above analysis of different questions that the hypothesis set for the time deadline independent variable has been substantively supported. There is a positive significant relationship between time deadline pressure and auditors' DAB. The DAB is manifest more in certain audit cycles than in others.

Insert Table V around here

Under-reporting of Chargeable Time when facing Time Budget Pressure-Audit Trainee v/s Experienced Auditors

Table VI highlights significant difference between the two groups of auditors when facing time budget pressure. It can be noted that the responses to two questions varied significantly as between

the audit trainees and experienced auditors (S5 and S14). For S5, where the issue of underreporting chargeable time and experience is explored, responses varied significantly. Experienced auditors perceive that audit trainees have a greater tendency to under-report chargeable time.

The result of S5 goes along with the results of Gundry and Liyanarachchi (2007). They mention that lower levels auditors, compared with senior auditors, are expected to engage more in dysfunctional behaviour due to the complexity of transactions. Also, Houston (1999) find that, according to the budgeted audit hours and the inherent risk assessments of the seniors, senior auditors are less responsive to the increased risk in the presence of any fee pressure. It is expected that audit trainees, whom are considered new auditors, would avoid replying or declaring they are under-reporting chargeable time. The significant variance can be also a result of the knowledge and expertise of audit trainees in the audit profession. Some activities exercised might be DB but audit trainees themselves might not perceive these as DAB but with added experience they may do so.

The same argument applies in relation to the pre-mature sign-off scenario. There is a significant difference between audit trainees and experienced auditors concerning whether auditors declare in their working papers that they have performed a control procedure when in fact they have not done so. Lee (2002) concludes that junior auditors are encouraged to exercise professional scepticism in allocating chargeable audit hours whether it applies to control procedures or not. Audit time is allocated more to risky areas. This can be due to most of the field work and working paper documentation being performed and completed by audit trainees and junior auditors. Experienced auditors work less on working papers and focus more on managing the whole assignment, communication and meeting with management and their superiors, and managing other audit assignments. Experienced auditors have a tendency to believe that audit trainees pre-maturely sign-

off audit steps - they are continuously reviewing the work of audit trainees and apparently have found evidence of DAB or strong suspect it in this respect.

Insert Table VI around here

Under-reporting Chargeable Time facing Time Deadline Pressureof when Audit Trainee v/s Experienced Auditors

Table VII summarises the significant differences in responses between audit trainees and experienced auditors when facing time deadline pressure. It is interesting to identify a significant difference in the level of agreement when a statement is directed towards a specific group of auditors rather than to auditors on a pooled basis. Responses to S6 indicate significant differences between audit trainees and experienced auditors. It can be noticed that experienced auditors' responses indicate that they scarcely ask audit trainees to perform tasks faster to meet deadlines. On the other hand, audit trainees' responses indicate that experienced auditors do ask this of trainees. Since this question is related to the behaviour of senior (experienced) auditors only, audit trainees may reply with relative clarity as they are not the ones whose behaviour is in question. Within the same context, Kelley and Margheim's (2002) results reveal inconsistency between the perspectives of the senior and junior auditors. Junior auditors perceive time pressure more when seniors are involved in budget setting. Senior auditors believe that there is less TBP on junior auditors when they are involved in budget planning. Experienced auditors may believe that admitting to such instructions to other team members to work faster may harm their reputation. This kind of DB may expose experienced auditors to potential liability.

There is also a significant difference (p≤0.5) between audit trainees' and experienced auditors' responses when it comes to reliance on internal audit work (S11). Again, such variance is expected due to the nature of the statement. Experienced auditors tend to rely more on internal audit work compared to audit trainees. When external auditors decide to rely on the work of internal auditors, it is their responsibility to assess the competency of the internal audit team and the quality of their work (ISA 610). It is the experienced auditors' role, rather than that of audit trainees, to assess and set the level of reliance on internal audit work. As part of conducting scoping meetings with clients at the acceptance/continuation stage, experienced auditors assess the complexity of clients, volume of transactions and the competency of employees involved in the process of financial statement preparation. Based on this assessment, experienced auditors decide on whether or not to rely on internal auditors' work. An audit budget and plan is prepared taking into consideration the level of reliance on internal auditors so that some audit steps might be excluded from the activities of external auditors. This whole assessment and planning process is prepared by experienced auditors rather than audit trainees, which may explain the significant difference between the responses of the audit trainees and experienced auditors.

Insert Table VII around here

Tables VIII is presented to show the regression results between the identified correlated factors leading to DAB when facing TBP and TDP and the experience factor. Gender, type of audit firm amongst the Big Four, graduate degree (if the participant holds a graduate degree), and qualification (if the participant is holding a professional qualification) are added as control variables. The OLS regression supports the initial independent t-test results (S5 & S14 from Table VI) and (S6 & S11 from table TVII). The regression test has been conducted on all survey statements that might lead to a DAB. The above-mentioned statements show a significant relationship when comparing the mean value between audit trainees and experienced auditors (independent t-test value). The significant relationship between the experience factor and DAB statements is also supported under OLS testing.

Insert Table VIII around here

Concluding Comments: Discussion, Research Limitations and Implications

The survey results offer insights into the accountancy profession and how some practices lead to DAB. The initial findings of the survey indicate that audit firms prefer qualified auditors to auditors with graduate degrees. In this regard, only 35% of auditors participating in the study finished a graduate degree while 68% possessed a professional qualification. This gap between graduate degrees and professional qualifications could be due to the nature of the accountancy profession. Accountancy firms', especially the Big Four, most highly attributes for hiring is passing the CPA/ACCA examinations (Metrejean and Noland, 2019). It is also indicated that the more auditors accumulate experience, the less audit firms can retain this group of auditors. The findings suggest that auditors understand that DAB is evident in audit practice. Auditors' perceptions concerning DAB are analysed in relation to time budget and time deadline pressures.

Interestingly, the survey revealed that auditors knowingly commit DAB. The results indicate that auditors believe that they should not commit any under-reporting of chargeable time when facing time budget constraints. It is evidenced that respondents facing time budget and time deadline pressures tend to work significantly during their personal time. Conducting better training programs to improve the detection of any type of ethical deviations (Bowrin and King II, 2009) is considered one tool to prevent DAB. Box ticking or the fake completion of audit steps, is not exercised significantly, per the survey results. This may be due to the effective review process exercised by experienced auditors over the work of audit team members and the extensive training and workshops that audit firms are conducting to mitigate such acts.

It is perceived that working during personal time might help junior auditors to finish an audit assignment within the expected parameters. It is the responsibility of the audit firm to show justice and to behave in fairness. Accordingly, the employees will provide better services than their expected duties (Namazi and Rajabdorri, 2019) that will lead to more profits by the audit firm. Working during personal time can lead to indirect losses for the audit firm in the longer term, as firms will not be aware of the actual hours spent on every assignment. This act will negatively affect the work-life balance of auditors, potentially leading to a high turnover at audit firms and the loss of talented auditors. According to Coram *et al.* (2003), there is a need to place a suitable and correct value on the audit function in order to guarantee safe and adequate time budgets that might lead to a better work-life balance.

The responses to the survey indicate that the audit methodology and the style of conducting the audit, whether it is a risk-based approach or integrated audit, appears to have no significant impact on DB (mean and median around 3). Audit methodology is being transmitted to auditors via a massive number of training events, and these events could help auditors at all levels to minimise DB. Coordination between different levels of auditors in preparing budgets and allocating tasks is shown to have a negative relationship with DAB. The communication among auditors plays a vital role in minimising DAB. The communication by those charged with governance appears to have no significant impact on DAB. Respondents still prefer to perform the audit steps themselves with no heavy reliance on other parties, even if the latter is allowed within the auditing standards.

Audit partners continually prepare tight budgets, knowing that their staff members will do their best to finish the assigned tasks within set budgets. This fee pressure is transferred from the audit firms' senior partners to junior auditors. Such behaviour may initially increase or maintain market share, but it can impact audit quality negatively. External auditors worldwide have provided

evidence settling many high-profile lawsuits. Perhaps the best-known example is the collapse of Arthur Andersen after the famous Enron case (Aubin, 2013). There is an increasing business risk for audit firms worldwide. Claims and lawsuits are not limited to corporations only; regulators and liquidators are bringing lawsuits on behalf of investors, leading to big settlements (Aubin, 2013). Thus, although auditors tend to commit some aspects of DAB in order to avoid affecting the audit assignments' profitability or at the expense of audit quality, their behaviour has a severe indirect impact on audit quality. Working during personal time is considered a dysfunctional behaviour act, since auditors do not record the actual time spent on audit assignments. Such behaviour leads to less time availability for auditors to have some time to accomplish professional qualifications and to enhance their auditing skills by attending training workshops that will have a direct positive impact on audit quality.

The results of the Independent t-tests supported by the OLS regression test show significant differences in the mean value responses between audit trainees and experienced auditors, indicating that the experience factor significantly influences committing DAB in the context of TBP and TDP. Experienced auditors have a tendency to blame junior auditors for DAB. Survey responses suggest that, with added experience, auditors tend to perceive better the acts of DAB and they behave accordingly. With added experience, the perception of DAB is clearer to experienced auditors, thus leading to less DAB. Our results contradict those of Gundry and Liyanarachchi (2007), who state that lower-level auditors engage more often in unethical acts. The experience factor shows to have a significant impact on the level of actual completion of tests of controls, the senior auditors' instructions to junior auditors to operate faster to meet tight deadlines, and the reliance on internal auditors. Although it is allowed to rely on the work of the internal auditors (ISA 610), junior auditors rely less on the work of internal auditors. Not relying on the

internal auditors' work when facing time pressure can lead to DAB. Experienced auditors are aware of this risk, and accordingly, they do rely on the work of internal auditors.

Our research has focused on the behaviour of external auditors employed at the Big Four. Some studies argue that auditors at small firms exercise more DAB in comparison with Big Four auditors (Baldacchino et al., 2016). The results of this study highlight the factors embedded in the audit practice that lead to DAB. The findings can be used as a tool to aid audit practitioners and partners to illuminate the specific factors leading to DAB and therefore help their auditors avoid exercising similar acts. In addition, the study highlights the pressures faced by Big Four auditors. Respondents' quoted personal opinions are stated to help those charged with governance to introduce some mechanisms that may help external auditors build a better work-life balance and to manage different pressures effectively. Similar research could be conducted on auditors working at non-Big Four firms to assess if similar factors leading to DAB exist between the two group of auditors. Another approach would be conducting interviews that may give a clearer idea about factors leading to DAB. Interviews may unhide factors leading to DAB that might not be part of the survey's statements.

References

- Agoglia, C.P. and R.C. Hatfield, T.A. Lambert (2015), "Audit team time reporting: An agency theory perspective", *Accounting Organisation and Society*, Vol. 44 No.1, pp.1-14.
- Alderman, C.W. and Deitrick, J.W. (1982), "Auditors' perceptions of time budget pressures and premature sign-offs: A replication and extension", *Auditing: A Journal of Practice and Theory*, Vol. 1 No. 2, pp. 54-68.
- Arnold, B., and De Lange, P. (2004), "Enron: an examination of agency problems", *Critical Perspectives on Accounting*, Vol. 15 No. 6, pp. 751-765.
- Aubin, D (2013), "Analysis: Knives out for auditors as class actions go global", available at: http://www.reuters.com/article/2013/03/21/us-usa-accounting-lawsuits-idUSBRE92K0QB20130321/
- Ball, R. (2009), "Market and political/regulatory perspectives on the recent accounting scandals", *Journal of Accounting Research*, Vol. 47 No. (2), pp. 277-323.
- Baldacchino, P.J., Tabone, N., Agius, J. and Bezzina, F. (2016), "Organizational Culture, Personnel Characteristics and Dysfunctional Audit Behavior", *IUP Journal of Accounting Research & Audit Practices*, Vol. 15 No. 3, p. 34.
- Beattie, V., Goodacre. A., and Fearnley, S. (2003), "And then there were four: A study of UK audit market concentration-causes, consequences and the scope for market adjustment", Journal of Financial Regulation and Compliance, Vol. 11 No. 3, pp.250-265.
- Beekes, W., Otley, D. and Ururuka, V. (2014), "Factors influencing quality threatening behaviour in a big four accounting firm", SSRN 2462456.
- Bowrin, A.R. and King II, J. (2010), "Time pressure, task complexity and audit effectiveness", *Managerial Auditing Journal*, Vol. 25 No. 2, pp. 160-181.
- Broberg, P., Tagesson, T., Argento, D., Gyllengahm, N. and Mårtensson, O. (2016), "Explaining the influence of time budget pressure on audit quality in Sweden", *Journal of Management & Governance*, pp. 1-20.
- Cohen, J.R., Krishnamoorthy, G. and Wright, A.M. (2007), "The Impact of Roles of the Board on Auditors' Risk Assessments and Program Planning Decisions", *Auditing: A Journal of Practice and Theory*, Vol. 26 No. 1, pp. 91-112.
- Coram, P., Ng J., and Woodliff, D.R. (2004), "The Effect of Risk of Misstatement on the Propensity to Commit Reduced Audit Quality Acts under Time Budget Pressure", *Auditing: A Journal of Practice and Theory*, Vol. 23 No, 2, pp. 161-169.
- Coram, P., Ng, J. and Woodliff, D.R. (2003), "A survey of time budget pressure and reduced audit quality among Australian auditors", *Australian Accounting Review*, Vol. 13 No. 1, pp. 38-45.
- Coughlan, S. (2012), "University postgraduate system 'failing UK economy'. BBC News Education and Family
- Deegan, C., and J. Unerman. (2011), "Financial Accounting Theory", McGraw.Hill.
- DeZoort, F.T. and Lord, A.T. (1997), "A review and synthesis of pressure effects research in accounting", *Journal of Accounting Literature*, Vol. 16 No. 1, pp. 28-85.

- Elder, R.J., Beasley, M.S. and Arens, A.A. (2010), *Auditing and assurance services: An Integrated Approach*, Pearson Prentice Hall.
- Fatima, Z. (2020), "Exploring the organizational factors affecting salesforce ethical behavior: a review-based article", *Asian Journal of Business Ethics*, No. 1, pp. 1-17.
- Fisher, R.T. (2001), "Role Stress, the Type A Behavior Pattern, and External Auditor Job Satisfaction and Performance", *Behavioral Research in Accounting*, Vol. 13 No. 1, pp. 143-170.
- Freeman, R.E. (1984), "Strategic Management: A Stakeholder Approach", *Pitman, Boston, MA*.
- Glover, S.M. (1997), "The Influence of Time Pressure and Accountability on Auditors' Processing of Non-diagnostic Information", *Journal of Accounting Research*, Vol. 35 No. 2, pp. 213-226.
- Green, W., Taylor, S. and Wu, J. (2017), "Determinants of greenhouse gas assurance provider choice", *Meditari Accountancy Research*, Vol. 25 No. 1, pp. 114-135.
- Gundry, L.C. and Liyanarachchi, G.A. (2007), "Time budget pressure, auditors' personality type, and the incidence of reduced audit quality practices", *Pacific Accounting Review*, Vol. 19 No. 2, pp. 125-152.
- Herrbach, O. (2001), "Audit quality, auditor behaviour and the psychological contract", *European Accounting Review*, Vol. 10 No. 4, pp. 787-802.
- Holm, C., and Laursen, P. B. (2007), "Risk and Control Developments in Corporate Governance: changing the role of the external auditor?", *Corporate Governance: An International Review*, Vol. 15 No. 2, pp. 322-333.
- Houston, R.W. (1999), "The effects of fee pressure and client risk on audit seniors' time budget decisions", *Auditing: A Journal of Practice and Theory*, Vol. 18 No. 2, pp. 70-86.
- John, M. and C.E. Priebe (2007), "A data-adaptive methodology for finding an optimal weighted generalized Mann–Whitney–Wilcoxon statistic", *Computational Statistics and Data Analysis*, Vol. 51 No. 9, pp. 4337-4353.
- Kelley, T. and Margheim, L. (1990), "The impact of time budget pressure, personality and leadership variables on dysfunctional behavior", *Auditing: A Journal of Practice and Theory*, Vol. 9 No. 2, pp. 21-41.
- Kelley, T. and Margheim, L. (2002), "The Relationships Between Senior Auditor Budget Participation, Job Structuring, Job Consideration and Staff Auditor Time Budget Pressure", *Journal of Applied Business Research*, Vol. 18 No. 2, pp. 105-114.
- Kornberger, M., Justesen, L. and Mouritsen, J. (2011), "When you make manager, we put a big mountain in front of you: An ethnography of managers in a Big 4 accounting firm", *Accounting, Organizations and Society*, Vol. 36 No. 8, pp. 514-533.
- Labuschagne, H. and Els, G. (2006), "Corruption and fraud: any lessons for the auditor?", *Meditari Accountancy Research*, Vol. 14 No. 1, pp. 29-47.
- Lee, B. (2002), "Professional Socialisation, Commercial Pressures and Junior Staff's Time-Pressured Irregular Auditing A Contextual Interpretation", *The British Accounting Review*, Vol. 34 No. 4, pp. 315-333.

- Lightner, S.M., Adams, S.J. and Lightner, K.M. (1982), "The Influence of Situational, Ethical, and Expectancy Theory Variables on Accountants' Underreporting Behavior", *Auditing: A Journal of Practice and Theory*, Vol. 2 No. 1, pp. 1-12.
- López, D.M. and Peters, G.F. (2012), "The effect of workload compression on audit quality", *Auditing: A Journal of Practice and Theory*, Vol. 31 No. 4, pp. 139-165.
- Lord, A.T. and Todd DeZoort, F. (2001), "The impact of commitment and moral reasoning on auditors' responses to social influence pressure", *Accounting, Organizations and Society*, Vol. 26 No. 3, pp. 215-235.
- Margheim, L. and Pany, K. (1986), "Quality control, premature signoff and underreporting of time: Some empirical findings", *Auditing: A Journal of Practice and Theory*, Vol. 5 No. 2, pp. 50-63.
- Margheim, L., Kelley T. and Pattison, D. (2005), "An Empirical Analysis of the Effects of Auditor Time Budget Pressure and Time Deadline Pressure", *The Journal of Applied Business Research*, Vol. 21 No. 1, pp. 23-36.
- Matthews, D. (2006), "From ticking to clicking: Changes in auditing techniques in Britain from the 19th century to the present", *Accounting Historians Journal*, Vol. 33 No. (2), pp. 63-102.
- McNair, C.J. (1991), "Proper compromises: The management control dilemma in public accounting and its impact on auditor behaviour", *Accounting, Organizations and Society*, Vol. 16 No. 7, pp. 635-653.
- McNamara, S. M., & Liyanarachchi, G. A. (2008), "Time budget pressure and auditor dysfunctional behaviour within an occupational stress model", *Accountancy Business and the Public Interest*, Vol. 7 No. 1, pp.1-43.
- Metrejean, E., & Noland, T. G. (2011), "An analysis of CPA firm recruiters' perceptions of online masters of accounting degrees", *Journal of Education for Business*, Vol.86 No (1), pp. 25-30.
- Mohamed, M.K., Allini, A., Ferri, L. and Zampella, A. (2019), "Investors' perception on the usefulness of management report disclosures: Evidence from an emerging market", *Meditari Accountancy Research*, Vol. 27 No. 6, pp. 893-920
- Namazi, M., & Rajabdorri, H. (2019). "A mixed content analysis model of ethics in the accounting profession", *Meditari Accountancy Research*, Vol. 28 No. 1, pp. 117-138
- Otley, D.T. and Pierce, B.J. (1996), "Auditor time budget pressure: consequences and antecedents", *Accounting, Auditing & Accountability Journal*, Vol. 9 No. 1, pp. 31-58.
- Paino, H., Ismail, Z. and Smith, M. (2010), "Dysfunctional audit behaviour: an exploratory study in Malaysia", *Asian Review of Accounting*, Vol. 18 No. 2, pp. 162-173.
- Paino, H., Smith, M. and Ismail, Z. (2012), "Auditor acceptance of dysfunctional behaviour: An explanatory model using individual factors", *Journal of Applied Accounting Research*, Vol. 13 No. 1, pp. 37-55.
- Paino, H., Ismail, Z. and Smith, M. (2014), "Modelling dysfunctional behaviour: individual factors and ethical financial decision", *Procedia-Social and Behavioral Sciences*, Vol. 145 No. 3, pp. 116-128.

- Paino, H., Ismail, Z., Smith, M., & Omar, N. (2019), "Modelling Attitudes towards Dysfunctional Audit Behavior Using Firm Factors", *International Journal of Business & Management Science*, 9(2).
- Pierce, B. and Sweeney, B. (2004), "Cost-quality conflict in audit firms: an empirical investigation", *European Accounting Review*, Vol. 13 No. 3, pp. 415-441.
- Ponemon, L.A. (1992), "Auditor underreporting of time and moral reasoning: An experimental lab study", *Contemporary Accounting Research*, Vol. 9 No. 1, pp. 171-211.
- Pope, R., & Burnes, B. (2013), "A model of organisational dysfunction in the NHS", *Journal of Health, Organisation and Management*, Vol. 27 No.6, pp. 676-697.
- Rangone, A, (2019), "Managing Corporate Innovation: Determinants, Critical Issues and Success Factors", *Springer Nature*, p.52
- Reddy, B. V. (2019), "Thinking Outside the Box-Eliminating the Perniciousness of Box Ticking in the New Corporate Governance Code", *The Modern Law Review*, Vol. 82 No. (4), pp. 692-726.
- Sadler, E. and Barac, K. (2005), "A study of the ethical views of final year South African accounting students, using vignettes as examples", *Meditari Accountancy Research*, Vol. 13 No. 2, pp. 107-128
- Soobaroyen, T. and Chengabroyan, C. (2006), "Auditors' Perceptions of Time Budget Pressure, Premature Sign Offs and Under-Reporting of Chargeable Time: Evidence from a Developing Country", *International Journal of Auditing*, Vol. 10 No. 3, pp. 201-218.
- Svanberg, J. and Öhman, P. (2013), "Auditors' time pressure: Does ethical culture support audit quality?, *Managerial Auditing Journal*, Vol. 28 No. 7, pp. 572-591.
- Svanberg, J., and Öhman, P. (2016), "The effects of time budget pressure, organisational professional conflict, and organisational commitment on dysfunctional auditor behaviour", *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 12 No. 2, pp. 131-150.
- Svanström, T. (2016), "Time Pressure, Training Activities and Dysfunctional Auditor Behaviour: Evidence from Small Audit Firms", *International Journal of Auditing*, Vol. 1 No. 1, pp. 42-51.
- Sweeney, B. and Pierce, B. (2006), "Good hours, bad hours and auditors' defence mechanisms in audit firms", *Accounting, Auditing & Accountability Journal*, Vol. 19 No. 6, pp. 858-192.
- Umar, M., Sitorus, S. M., Surya, R. L., Shauki, E. R., & Diyanti, V. (2017), "Pressure, dysfunctional behavior, fraud detection and role of information technology in the audit process", *Australasian Accounting, Business and Finance Journal*, Vol. 11 No. (4), pp. 102-115.
- Werner, C.A., (2009), "Accountant Confidentiality", The CPA Journal, Vol. 79 No. 6, pp. 62-67
- Wijnberg, N.M. (2000), "Normative stakeholder theory and Aristotle: the link between ethics and politics", *Journal of Business Ethics*, Vol. 25 No. 4, pp. 329-342.
- Yuen, D. C., Law, P. K., Lu, C. and Qi Guan, J. (2013), "Dysfunctional auditing behaviour: empirical evidence on auditors' behaviour in Macau", *International Journal of Accounting & Information Management*, Vol. 21 No. 3, pp. 209-226.

Table I - Response rate and breakdown of responses

	Firm A	Firm B	Firm C	Firm D	Pooled
Total surveys sent out	39	48	35	45	167
Total surveys returned	36	44	32	43	155
Usable responses	35	41	30	39	145
Response rate	90%	85%	86%	87%	87%
Respondent's gender					
Male	27	27	21	22	97
Female	8	14	9	17	48

Table II - Academic and Professional Background

]	Pooled		
Highest Academic degree				
Bachelor degree	93	64%		
Master degree	50	35%		
PhD	2	1%		
	145			
Professional qualification(s)				
ACCA/CA/ACA	40	47%		
CPA (US)	28	33%		
CFA	4	4%		
CIMA	0	0%		
CIA	8	9%		
Other(s)	6	7%		
	86			

The OTHERS represent 1 auditor holding Certified Valuation Analyst (CVA);

3 auditors holding Certified Information System Audit (CISA); 1 auditor holding Certified Financial Services Auditor (CFSA);

1 auditor holding Certified Fraud Examiner (CFE)

Table III - Breakdown of Respondents' Level

	Poe	oled
Job title		
Audit trainee	53	37%
Senior auditor	26	18%
Manager/Director	60	41%
Partner	5	3%
Other	1	1%

Table IV - Time Budget Pressure *

Under-reporting of chargeable time	Mean (Median)
S1. Auditors should not employ the practice of under-reporting chargeable time, even in the face of tight time-budget constraints.	1.69 (2)
time, even in the race of right time-budget constraints.	(2)
S2. Senior and staff auditors knowingly under-report chargeable time.	2.40
	(2)
S3. When facing a tight budget, auditors shift chargeable time to non-	2.77
chargeable categories on their time report/time sheet.	(2)
S4. Sometimes auditors need to under-report chargeable time to meet	2.72
budget constraints.	(2)
S5. Sometimes new auditors need to under-report time but with added	3.12
experience, there is less of a need.	(3)
S6. When facing a tight hudget, auditors charge time to other clients that	3.33
S6. When facing a tight budget, auditors charge time to other clients that should have charged to this client.	3.33 (4)
	. ,
S7. Under a tight budget, auditors tend not to pursue an unexpected problem occurring during a mission.	3.30 (4)
problem occurring during a mission.	(4)
S8. When facing a tight budget, auditors under-report chargeable time by	2.01
performing chargeable work in their personal time.	(2)
Pre-mature sign-off	
S9. Under time-budget pressure, auditors prematurely sign-off a required	3.17
audit step, which is not covered at other stages of the audit, without completing the work or noting the omissions of procedures.	(3)
S10. Under time-budget pressure, auditors tend to reduce the amount of	3.03
work on a step beyond the normal.	(3)
S11. Auditors tend to perform superficial reviews of clients' documents to	3.35
comply with budgeted time allocated to the audit assignment.	(4)
S12. Under a tight budget, auditors may accept insufficient or light	3.01
explanations from the client.	(3)
S13. Under time budget pressure, auditors insufficiently document a	3.17
technical point needed for the execution of a step.	(4)
S14. Under a tight budget, auditors declare in their working papers that they have performed a control that they did not actually perform.	3.89 (4)
	(')
S15. Under a tight budget, auditors tend to handle substantive tests faster.	2.69
	(2)
S16. Under a tight budget, auditors tend to tick mark audit schedules after	3.27
an essentially superficial review of supporting client documents.	(3)

^{*} Adapted from Kelley and Margheim, (2002); Lord and DeZoort (2001); Herrbach (2001)

Table V - Time deadline pressure *

Pre-mature sign-off	Mean (Median)
S1. It is a common practice to reduce the sample size specified in the audit	3.67
programme without noting the reduction to meet tight deadlines.	(4)
S2. Auditors tend to declare in their papers that they have performed a	3.97
control that they did not actually do to meet a tight deadline.	(4)
S3. Auditors tend to believe that the nature of the audit methodology and	
the length of documentation of audit work is a factor determining pre-	3.01
mature sign off to meet tight deadlines.	(3)
S4. Completing work to meet time deadline typically means the auditor	2.28
does not have a break or have any personal life beyond work.	(2)
S5. Auditors tend to exercise pre-mature sign off for some audit steps if	3.17
everyone in the audit team is working too fast to meet the time deadline.	(3)
S6. Auditors are asked by their superiors to handle substantive tests and	2.32
generally operate faster to meet time deadlines.	(2)
S7. The length of time booked for audit assignment is adequate.	3.35
	(4)
S8. Auditors are given a margin of insufficient documentation on a	3.07
technical point needed for the execution of a step to meet a deadline.	(3)
S9. Time deadline pressure is the result of increased competition in the	2.57
audit market.	(2)
S10. Time deadline pressure interferes with the proper conduct of an	2.57
audit.	(2)
S11. Auditors tend to rely on internal auditors' work to save time.	3.30
	(4)
S12. Auditors tend to focus on risky areas to save time.	2.40
	(2)

Table V - Time deadline pressure (Continued)

S13. Pre-mature sign off usually occurs when auditing non risky cycles	2.58
rather than critical ones.	(2)
S14. Time deadlines have become tighter in recent years.	2.22
	(2)
S15. Time deadlines tend to be given without consultation.	2.41
	(2)
S16. Time deadlines are very tight, practically unattainable.	2.63
	(2)
S17. Normally, time deadlines are met ethically when the manager and	2.38
the senior coordinate things together in setting up the budget.	(2)
S18. There is a tendency for auditors to pre-maturely sign off audit steps	2.98
if auditors are working quickly to meet a time deadline.	(3)

^{*} Adapted from Kelley and Margheim, (2002); Soobaroyen and Chengavroyan (2006)

Table VI – Comparative Mean responses/Time Budget Pressure

Under-reporting of chargeable time	Audit Trainees	Experienced Auditors	Independent t-test t-value
S1. Auditors should not employ the practice of under-reporting chargeable time, even in the face of tight time-budget constraints.	1.698	1.684	0.091
S2. Senior and staff auditors knowingly under-report chargeable time.	2.283	2.467	-0.933
S3. When facing a tight budget, auditors shift chargeable time to non-chargeable categories on their time report/time sheet.	2.924	2.684	1.116
S4. Sometimes auditors need to under-report chargeable time to meet budget constraints.	2.679	2.750	-0.317
S5. Sometimes new auditors need to under-report time but with added experience, there is less of a need.	3.490	2.902	2.980*
S6. When facing a tight budget, auditors charge time to other clients that should have charged to this client.	3.471	3.250	1.064
S7. Under a tight budget, auditors tend not to pursue an unexpected problem occurring during a mission.	3.377	3.260	0.549
S8. When facing a tight budget, auditors under- report chargeable time by performing chargeable work in their personal time.	1.905	2.065	-0.802
Pre-mature sign-off			
S9. Under time-budget pressure, auditors prematurely sign-off a required audit step, which is not covered at other stages of the audit, without completing the work or noting the omissions of procedures.	3.320	3.076	1.218

Table VI – Comparative Mean responses/Time Budget Pressure (Continued)

S10. Under time-budget pressure, auditors tend to reduce the amount of work on a step beyond the normal.	3.000	3.054	-0.271
S11. Auditors tend to perform superficial reviews of clients' documents to comply with budgeted time allocated to the audit assignment.	3.471	3.282	0.988
S12. Under a tight budget, auditors may accept insufficient or light explanations from the client.	3.113	2.956	0.744
S13. Under time budget pressure, auditors insufficiently document a technical point needed for the execution of a step.	3.320	3.076	1.211
S14. Under a tight budget, auditors declare in their working papers that they have performed a control that they did not actually perform.	4.188	3.717	2.610*
S15. Under a tight budget, auditors tend to handle substantive tests faster.	2.471	2.815	-1.810
S16. Under a tight budget, auditors tend to tick mark audit schedules after an essentially superficial review of supporting client documents.	3.245	3.282	-0.185
* p\0.05 (Independent t- test value)		050	

^{*} p\0.05 (Independent t- test value)

Table VII – Comparative Mean responses/Time Deadline Pressure

Pre-mature sign-off	Audit Trainees	Experienced Auditors	Independent t-test
			t-value
S1. It is a common practice to reduce the sample size specified in the audit programme without noting the reduction to meet tight deadlines.	3.886	3.543	1.836
S2. Auditors tend to declare in their papers that they have performed a control that they did not actually do to meet a tight deadline.	4.132	3.880	1.520
S3. Auditors tend to believe that the nature of the audit methodology and the length of documentation of audit work is a factor determining pre-mature sign off to meet tight deadlines.	3.113	2.945	0.891
S4. Completing work to meet time deadline typically means the auditor does not have a break or have any personal life beyond work.	2.094	2.391	-1.393
S5. Auditors tend to exercise pre-mature sign off for some audit steps if everyone in the audit team is working too fast to meet the time deadline.	3.056	3.228	-0.915
S6. Auditors are asked by their superiors to handle			
substantive tests and generally operate faster to meet time deadlines.	2.075	2.456	-2.125*
S7. The length of time booked for audit assignment is adequate.	3.188	3.445	-1.363
S8. Auditors are given a margin of insufficient documentation on a technical point needed for the execution of a step to meet a deadline.	2.943	3.141	-1.098
S9. Time deadline pressure is the result of increased competition in the audit market.	2.566	2.576	-0.047

Table VII – Comparative Mean responses/Time Deadline Pressure (Continued)

S10. Time deadline pressure interferes with the proper conduct of an audit.	2.792	2.434	1.674
S11. Auditors tend to rely on internal auditors' work to save time.	3.566	3.152	1.976*
S12. Auditors tend to focus on risky areas to save time.	2.471	2.358	0.537
S13. Pre-mature sign off usually occurs when auditing non risky cycles rather than critical ones.	2.660	2.532	0.746
S14. Time deadlines have become tighter in recent years.	2.301	2.173	0.668
S15. Time deadlines tend to be given without consultation.	2.377	2.423	-0.233
S16. Time deadlines are very tight, practically unattainable.	2.584	2.663	-0.393
S17. Normally, time deadlines are met ethically when the manager and the senior coordinate things together in setting up the budget.	2.528	2.293	1.255
S18. There is a tendency for auditors to pre-maturely sign off audit steps if auditors are working quickly to meet a time deadline.	3.018	2.967	0.261
* p\0.05 (Independent t- test value)			

^{*} p\0.05 (Independent t- test value)

TABLE VIII: Investigates the impact of experience on auditors' behaviour