Auditors’ Perceptions of Time Budget Pressure, Premature Sign Offs and Under-Reporting of Chargeable Time: Evidence from a Developing Country

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This study examines the existence and effects of auditors’ time budget pressure, premature sign-offs (PSO) and under-reporting of chargeable time (URT) in the context of a developing country, namely Mauritius. Several antecedent variables of budget pressure were also considered. Based on a mailed questionnaire survey, the perceived extent of time budget pressure (as measured by budget tightness) was found to be significantly lower than in other developed countries (United Kingdom, Ireland, New Zealand and United States). Significant cross-national differences were also observed for the levels of PSO and URT. Although budget tightness was significantly related to PSO, this was not the case for URT. This has led to the suggestion that URT may be less dependent on levels of budget tightness and may have become an ‘institutionalised’ practice within audit firms. Finally, none of the hypothesised antecedent variables were significantly related to budget tightness.

Key words: time budget pressure, budget tightness, premature sign offs, under-reporting of chargeable time, Mauritius

SUMMARY

One of the key operational and management control mechanisms in an audit assignment is the time budget. Auditors generally perceive that their performance evaluation and career advancement in an audit firm are strongly related to their ability to complete an audit assignment on time and within budget. At the same time, they are also expected to complete specific audit tasks and procedures to enable the formulation of a professional opinion in accordance with relevant auditing standards and guidelines. However, several environmental factors such as the increase in competition among audit firms, the resulting fall in audit fees, the restrictions on the ability to offer non-audit services to audit clients and the recent spate of accounting frauds have generated a growing conflict between

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performing a quality audit and achieving a profitable audit assignment. One area of audit research that focuses on this conflict is the study of time budget pressures and their consequences.

The existing literature has found that auditors in general react to such pressures in various ways – manipulating time records, superficially assessing clients’ evidence and documentation, signing off prematurely on some audit areas and under-reporting chargeable time. In addition, recent research (e.g. Otley & Pierce, 1996; Pierce & Sweeney, 2004) has also looked at additional factors that may create time budget pressures, namely last year’s budget, influence of client’s expectations on audit fees and the influence of the audit programme. This is of critical relevance for audit firms and managers as these results may help them establish policies to reduce time budget pressures or at least be aware of behaviours that potentially threaten quality. However, the research evidence has remained constrained to a few developed countries and it has been observed that the extent and consequences of time budget pressures can vary cross-nationally, particularly in light of the specific context of developing countries. This could be of particular interest to international accountancy firms who have agencies and representatives in many developed and developing countries.

Therefore, this study sought to extend the evidence on time budget pressures – as measured by budget tightness – and key dysfunctional behaviours, namely under-reporting of time (URT) and premature sign offs (PSO) in a developing country context, the selected example being Mauritius. It was argued that the local realities, characterised by the levels of competitive environment, the small size of the audit market and the lack of direct professional oversight, might have resulted in lower levels of budget tightness compared to other surveyed countries. The extent of PSO was significantly high for certain audit areas and appeared to be related to budget tightness levels. On the other hand, there was no significant evidence linking budget tightness and URT. In fact, it is argued that URT practices appear to have been ‘institutionalised’, thereby denying important information on the true extent of time budgets needed for audit assignments. Hence, there are clearly differences in the extent and impact of time budget pressures among auditors in less developed countries and these imply that different strategies and policies may be adopted by international firms when managing their local offices or representatives.

1. INTRODUCTION

Independent and external corporate auditing has traditionally been viewed as one of the cornerstones of the system of accountability and stewardship. It exists primarily to help shareholders reduce the risk of suffering agency losses (Otley & Pierce, 1996, p. 32). However, DeAngelo (1981) noted that the quality of the audit cannot be verified by the shareholders and other users of financial information so that any judgement regarding the value of the audit must therefore be based (at least partly) on the perceived reputation of the auditor.

Unfortunately, in recent years, this reputation has been significantly dented due to a series of high profile and highly publicized audit failures and corporate scandals. The most notable scandal is the Enron collapse in 2001 which led to the demise of Arthur Andersen, one of the ‘Big’ global accountancy and advisory firms, and the enactment of stricter regulations for audit practice in the United States – notably via the Sarbanes-Oxley Act 2002. Within the UK context, both Otley & Pierce (1996) and Citron (2000) have noted that similar audit failures have occurred and that such events seem to have coincided with an increasingly competitive environment among audit firms during the last decade. In turn, this increase in competition was linked to the relaxation of ethical guidelines regarding advertising of professional services, over-capacity in many audit firms, monitoring of audit fees by clients and ‘low-balling’ practices in audit tendering (Otley & Pierce, 1996, p. 32). The competitive situation does not seem to have been dampened, as reported by Belsey (2004).

Auditors are therefore confronted with this difficult dilemma: on the one hand, there is greater pressure on cost reduction and on time management to complete an audit assignment within the budgeted time, while, on the other hand, auditors are expected to uphold the highest professional standards and abide by an increasing number of regulations. For example, in the United States, this situation can be expected to become particularly challenging for the Big Four firms due to the implementation of the Sarbanes-Oxley rules and the curtailment of their non-audit services to
their audit clients (Grant, 2003). With the more pressing need for audit assignments to be commercially viable, one can reasonably expect that trade-offs have to be made, thereby affecting audit quality and reputation.

The effect of time budget pressure (more recently termed cost-quality conflict by Pierce & Sweeney, 2004) on audit quality has been a subject of interest in developed countries such as the United States, Ireland, New Zealand and the United Kingdom during the last 25 years. Dezoort & Lord (1997) defined time budget pressure as a chronic, pervasive form of pressure that arises from limitations on the resources given to perform tasks. Studies carried out within audit firms in the USA, UK, Ireland and New Zealand have identified specific types of auditors’ dysfunctional behaviour (such as under-reporting of chargeable time and premature sign-off) and suggested that these behaviours were strongly related to the control system in general and to audit time budgets in particular (Otley & Pierce, 1996). In addition, there have been investigations into possible antecedent variables which could be contributing to time budget pressure. However, some significant cross-national differences were noted. For example, and based on an Irish sample, Otley & Pierce (1996) did not observe the inverted U-shaped relationship between budget tightness and dysfunctional behaviours as found in the United States. In addition, a higher level of URT was reported in Ireland and reasons for cross-national differences were alluded to, such as differences in the work environment and extent of local regulation. The authors thus concluded (1996, p. 55) that the current economic and social environment in which auditors operate seemed to present a set of conditions that might enhance these behaviours. But, to our knowledge, international evidence on time budget pressure and its consequences is not widespread and there has not been any recent attempt at investigating time budget pressures in less developed and/or developing countries, where the economic, social and work environment might be different and where direct professional oversight and other local regulatory accounting/auditing frameworks might still be absent or at an early stage of development. In consideration of these contextual differences, this study selected the case of Mauritius as an illustration of the developing country context and as a setting for examining and analysing time budget pressures.

2. OBJECTIVES OF STUDY AND THE CASE OF MAURITIUS

In light of the above-mentioned comments, this paper therefore seeks to extend the evidence on the effects of time budget pressures on auditors’ performance and the implications of time budget pressures by considering potentially relevant factors specific to a developing country context. Specifically, the study sets out to examine whether there is any relationship between perceptions of budget tightness and dysfunctional behaviours among auditors in Mauritius.

In a bid to achieve some level of comparability with previous published research, this paper has applied, where relevant, the research approaches and instruments of studies carried out in developed countries whilst interpreting the results in light of the specific developing country context, in this case Mauritius. It is argued that such research has particular relevance for audit practitioners, especially for audit firms managing local offices or representatives in developing countries.

On a broader note, Mathews (2000) argued that research into management practices and procedures in developing countries is very limited. She attributed such absence to practical problems for researchers of access to company data and language difficulties. Nevertheless, she inferred that the convergence between developed and developing countries of management information and decision-making approaches might not be succeeding through business globalisation because of the constraints of a developing country’s socio-economic environment. On the other hand, those globalisation forces that are typified by the spread of international standards from developed to developing countries – such as auditing standards – should have led to a convergence of management practices. Indeed, Granlund & Lukka (1998) referred to the ‘global homogenization’ of management accounting practices. They identified various drivers, such as transnational trade agreements, the influence of multinationals on foreign subsidiaries and the internationalisation of accounting and consulting firms, as the drivers of such convergence. In this respect, it remains unclear whether the developing country effects would take a particular direction in influencing the way practices – such as time budget in audit assignments – would actually operate. In general, there have been few studies on the impact of
control systems such as time budgets in firms located in developing countries, the focus being on newly industrialised countries (NICs such as Singapore, Hong Kong and Thailand) and developed countries (e.g. United States, United Kingdom, Australia and New Zealand).

Mauritius, a former British colony and current Commonwealth member, has a population of approximately 1.2 million and covers 719 square miles (1,860 square kilometers). In 2005, the per capita income was US$5,260.¹ There are 44 companies (including one authorised mutual fund and three listed debentures) listed on the Official Market of the Stock Exchange of Mauritius with a total market capitalisation of about US$1.50bn. The financial institutions in the country consist of 10 commercial banks and 13 offshore banks, 23 insurance companies, 10 investment companies and 6 unit trusts (World Bank Report, 2003). The World Bank Report on the Observance of Standards and Codes (Rhaman et al., 2003) stated that the domination of a few families is predominant in the ownership structure of major companies in Mauritius and many family-owned companies listed their shares in response to tax and other incentives provided by the government. The Companies Act 2001 had required the application of international financial reporting and auditing (IFRS/IAS and ISA) for all listed and large public companies. According to the World Bank Report (Rhaman et al., 2003, p. 5), there are approximately 1,200 fully qualified accountants who are all members of foreign accountancy bodies and about 450 of them act as company auditors within accounting firms (including the Big Four local representative) or on their own.²

The local accounting profession had been under scrutiny recently due to various cases of fraud occurring in some high-profile public-listed companies, namely Air Mauritius (the national carrier), the Mauritius Commercial Bank (one of the country’s two largest commercial banks) and Rogers Group (the largest conglomerate on the island).³ Although the investigations into these cases focused mainly on director/manager misbehaviour, external auditors did not emerge unscathed from criticism and these scandals have since focused attention on the quality of financial statement audits.

Following a government-sanctioned review on the state of accounting and auditing practices in Mauritius, the World Bank ROSC report (Rhaman et al., 2003) identified a number of anecdotal findings including the following:

Partners of audit firms – both large and small firms – stated that the audit fee level is very low in the country; as such, in order to meet budget, there is pressure on the quality of audit work and also a temptation to accept the risk involved in issuing an audit report without carrying out the work thoroughly. (2003, p. 11)

In light of the World Bank report, the government came forward with significant regulatory oversight in late 2004, embodied in a Financial Reporting Act.⁴ This legislation covered the compulsory registration of auditors, the monitoring of audit practices and enforcement of auditing standards by a Financial Reporting Council (FRC). In addition, it would enact rules for limiting the extent of non-audit services. Hence, considering the recent accounting frauds and these major regulatory changes, there was interest and relevance in assessing the true extent and effects of time budget pressure within the local auditing profession. As mentioned earlier, the level of time budget pressure is known to fluctuate cross-nationally. In particular, one potential difference in the Mauritian context compared to other surveyed countries is the absence of a local registration and disciplinary body for accountants and auditors. Although this is now being addressed in the new legislation, Mauritius had always been a locally ‘unregulated’ environment for auditors. The World Bank (Rhaman et al., 2003, pp. 4–5) reported that the accountancy profession was not adequately organised, had only to follow the code of ethics of the relevant professional body abroad and their exposure to litigation risk was not significant. There had never been a court case involving auditors and shareholders or other stakeholders on issues of negligence or wrongdoing. As a result, it was argued that this loose regime of regulation and the absence of a local disciplinary body to investigate accountants and auditors’ actions (compared to those in the UK, USA, New Zealand and Ireland) could enhance perceptions and actions relating to the under-reporting of time and premature sign-offs.

3. LITERATURE REVIEW

As stated in Pierce & Sweeney (2004), the theoretical underpinnings for auditors’ time budget pressure studies are found in the
management control literature, particularly those related to managers’ behaviours in response to budgetary participation (reviewed in Shields & Shields, 1998), and reliance of accounting for performance measurement (RAPM) (reviewed in Hartmann, 2000). Although many of these studies have looked at the positive consequences of budget-related tools, there have also been studies which considered the negative consequences, sometimes referred to as dysfunctional behaviours, e.g. budgetary slack (Dunk, 1993), strategic manipulations and gaming (Jaworski & Young, 1992; Chow et al., 1996). Hence, one can consider this study as an investigation of management control practices and its possible dysfunctional consequences within the particular context of a statutory audit assignment. Some key elements of the relevant literature are now briefly reviewed.

3.1. **Time budget pressure or the cost-quality dilemma**

The US Commission on Auditors Responsibilities (1978) noted time pressure as one of the major concerns facing auditors in fulfilling their responsibilities. These concerns were raised in part due to a supporting study for the Committee that found 60% of survey respondents admitted to prematurely signing off on an audit due to time pressure (Rhode, 1978). Less than ten years later, a second commission investigating auditors’ detection of fraudulent financial reporting raised these issues. In the US, the Treadway Report (National Commission on Fraudulent Financial Reporting – NCFFR, 1987) noted that intense competition may lead to audit budget pressure, reduced scopes, use of lower quality audit evidence, and/or omission of specific audit procedures. In addition, McNair (1991) established that at the heart of an audit, there is a tension between cost and quality and time budget pressure has long been suspected of causing reductions in audit quality (Kelley & Margheim, 1990; Willet & Page, 1996; Otley & Pierce, 1996).

Dismith & Cowalski (1985) found that when competition for audit clients increased, there was a perceptible shift towards an emphasis on cost rather than quality of service and ‘a numbers orientation’ in audit communication and control structures. At the same time as pressure had grown to cut costs, pressure to improve audit quality had also intensified in the wake of heightened public criticism and scrutiny of audit (Mitchell et al., 1991; Chow et al., 1988) and an increasing incidence in the legal challenge of audit quality (Berton, 1989; Mednick & Peck, 1994). In such a context, auditors often resorted to work on selective parts of the audit programme as revealed in Margheim & Pany (1986).

More recent evidence seemed to confirm this selective process. Coram et al. (2001) suggested that there was a positive interaction effect between time budget pressure and the level of risk errors for the audit task. Whilst Houston (1999) found that under high time budget pressure auditors were likely to ignore low risk tasks when planning the audit, Coram et al. (2001) found that under time budget pressure auditors did consider the level of risk on the audit task while executing the audit. Hence, when the time budget pressure was high, the low risk audit task was subject to a higher level of reduced audit quality. It is worth noting at this stage that these studies were carried out in countries where there were existing and active professional bodies which may investigate audit practices and discipline auditors.

3.2. **Premature sign offs and time budget pressure**

A significant part of the literature on reduced audit quality has focused on premature sign-off (PSO) as one primary type of reduced audit quality behaviour (Rhode, 1978; Treadway, 1987; Alderman & Deitrick, 1982; Margheim & Pany, 1986; Otley & Pierce, 1996; Pierce & Sweeney, 2004). The most common aspects identified in the literature included rejecting awkward items from sample, accepting doubtful audit evidence, and not testing all of the items in a selected sample. Several of these studies also noted other time pressure induced problems such as reduced work on certain audit procedures, failure to research accounting principles, substitution of weaker evidence, acceptance of weak client explanations of exceptions, and/or superficial reviews of client documentation. However, while these studies documented several self-reported instances of occasional highly negative behaviour, little understanding had been gained regarding the systematic effect of time pressure on day-to-day audit decision making. Alderman & Deitrick (1982) also highlighted a high incidence of premature sign-offs of an audit step as having completed an audit assignment without actually carrying out any work. Since this type of behaviour directly
undermined the auditor’s control system, it constituted an immediate and serious threat to the quality of the audit.

Otley & Pierce (1996) explored the frequency of premature sign-offs in response to time budget tightness amongst Irish auditors and found a higher incidence of such behaviour than in reported US studies, i.e. 40% of the 260 respondents stated that they had never engaged in such activity compared to 70% in US studies (1996, p. 42). In addition, the authors sought to confirm the existence of an inverted U-shaped relationship between PSO and budget tightness. The inverted U-shaped relationship suggested that as budget pressure was increased, dysfunctional behaviour would also increase up to a point when the time budget would be considered as unattainable. At this point, auditors would give up trying to achieve it and the extent of dysfunctional behaviour would fall (1996, p. 36). However, the authors were unable to observe such relationship. This could be suggestive of cross-national differences due to differences in work environment and/or research design issues, i.e. the sensitivity of the questions may have been perceived differently. In the case of Pierce & Sweeney (2004), PSO was viewed as one of the ten dimensions of quality threatening behaviour (QTB) and was not investigated separately.

3.3. Under-reporting of time and time budget pressures

Another specific dysfunctional behaviour that posed a direct threat to the reliability of an audit process was under-reporting of time (URT). This occurred when auditors completed chargeable work on their own time, and this was usually motivated by a desire to avoid or minimise budget over-runs (Commission on Auditors’ Responsibilities Report, 1978; Lightner et al., 1982). This was usually referred to as ‘eating time’ in audit firm jargon. This was considered to have potentially undesirable consequences such as inaccurate staff evaluations, lost revenue for the firm, unrealistic future budgets and audit quality reduction behaviour on future audits.

As the ability to meet time budgets was considered a ‘very important’ factor affecting advancement and performance evaluation in the audit firms (Rhode, 1978; Lightner et al., 1982; Otley & Pierce, 1996; Pierce & Sweeney, 2004), under-reporting of time became a rather easy strategy. In a survey of AICPA members, Rhode (1978) found that 55% of the respondents admitted performing audit work without reporting all of their chargeable time. Kelley & Seiler (1982) reported that 33% of the surveyed audit seniors admitted to being sometimes under-reporting in response to budget pressures. Otley & Pierce (1996, p. 47) reported a 54% figure for Irish audit seniors and estimated that Irish audit seniors’ under-reported time to be 10.9% of their charged time. As in the case of PSO, the hypothesised U-shaped relationship did not materialise and the authors attributed the absence of such a relationship to the fact that the respondents in their study found time budgets more demanding than those in previous studies.

Since time budgets were often based on the number of hours reported on the previous year’s work (Kelley & Seiler, 1982), under-reporting might result in unrealistically low time budgets. In turn, time pressures from these unrealistic time budgets could lead to continued under-reporting, assignments not completed on a timely basis and shortage of available personnel. Hanlon (1994) argued that under-reported hours for the previous year’s audit then provided the benchmark for the next year’s audit and a vicious circle was set in motion. At the same time under-reporting could affect a firm’s ability to accurately assess employees’ performance.

3.4. Antecedents of time budget pressures

More recently, there has been renewed interest in variables that may contribute to budget pressures. Otley & Pierce (1996) initially proposed variables such as participation, influence of audit programmes and influence of client fees and found significant regression coefficients with budget attainability as a dependent variable. In addition, based on previous findings from the management control literature, Pierce & Sweeney (2004) explored a greater number of variables, namely leadership style, style of evaluation, and budgetary participation and their impact on QTB and URT. Although significant coefficients were confirmed for the budget attainability and time budget pressure variables, the new variables did not seem to have significant effects on QTB and URT. The fact that the two above-mentioned studies were both done in Ireland provided little evidence as to whether the impact of these variables can be
generalised to a wider context, such as to a developing or developed country.

4. MAURITIUS – INITIAL EXPECTATIONS AND HYPOTHESES

Anecdotal evidence in Mauritius suggested that time budget pressures were becoming an important element in the preparation of an audit assignment. There was indeed apparent competition amongst audit firms in Mauritius but the question was whether the degree of competition would be sufficient to cause the time budget pressure. There were instances of strong competition amongst the Big Four representatives and this was undoubtedly fuelled by the international competition that existed between these main firms. One particular area of harsh competition between Big Four representatives and some medium-size firms had been the Southern and East African market where Mauritian audit firms had a notable foothold in the audit market involving private companies and international organisations based in these countries (e.g. Kenya, Burundi, Mozambique, Botswana and Rwanda).

On the other hand, the smallness of the local market might have encouraged an implicit ‘sharing’ of audit assignments and tasks among big and small audit firms. For example, there is only a handful (ten) of commercial banks in Mauritius. The Central Bank of Mauritius has issued guidelines to ensure that an audit firm does not audit a significant number of banks, to avoid possible conflicts of interest. Whilst audit rotation had also been recommended by the Central Bank, there were not enough eligible audit firms to warrant a high degree of competition, resulting in an ‘everyone’s turn’ situation. Other economic sectors in Mauritius have a similarly restricted number of companies (e.g. sugar industry, hotel groups) but there are not any regulatory rules or guidelines for audits as in the case of the banking sector. There are also very strong potential conflicts of interest due to the ‘smallness’ of the business community in Mauritius. For example, a lead audit partner is the majority shareholder of a hotel complex whilst his firm is the external auditor for other hotel groups. In spite of the fact that the lead audit partner is not directly involved in the audit assignment, the potential for conflict of interest is very apparent and family relationships can be quite important in the selection of audit firms. Therefore, with respect to these factors inherent to a small developing economy, the degree of competition might not be as intense as it would be in a larger developed economy. Hence, in view of the possible different scenarios, it would be important to confirm the auditors’ perceptions and opinions on this current and ‘tightly-knit’ environment, in relation to time budgets.

Once the above assertions were ascertained, the focus of the study was on assessing the level of budget pressure – via the budget tightness dimension – and the negative effects of such budget pressures. As seen in the previous section, there is evidence that auditors engage in dysfunctional behaviours such as under-reporting of chargeable time and premature sign offs, although the extent of dysfunctional behaviours fluctuates across countries and over time. It was therefore hypothesised that these differences in the extent of dysfunctional behaviours could be linked to two factors specific to the Mauritian context.

First, a sizeable number of auditors and audit staff working for the Big Four firms were regularly exposed to practices and methodologies from developed countries’ counterparts. Training attachments and courses originated mainly from South Africa and the United Kingdom and it is important to note that most Mauritian accountants qualified as members of UK accountancy bodies and obtained qualifying experience in the UK. Hence, one could expect some degree of ‘practice spill-over’ to the local context. Second, certain dysfunctional behaviours, such as premature sign off, are clearly breaches of ethical rules of conduct and might therefore be subject to professional disciplinary actions. However, as reported by the World Bank Report (2003, p. 5), there had never been any reported disciplinary action against UK-qualified Mauritian accountants for breaches of professional conduct in Mauritius. In effect, there could be a perceived sense of ‘immunity’ when practising in Mauritius, which might have therefore resulted in a higher degree of dysfunctional behaviours compared to other countries under study. In addition, and consistent with Otley & Pierce’s (1996) previous findings, the U-shaped relationship does not appear to be confirmed in contexts other than the United States. Hence, the following hypotheses were generated:

H1: As budget tightness increases, the perceived extent of PSO behaviour will increase.

H2: As budget tightness increases, the perceived extent of URT will increase.
As observed in Otley & Pierce (1996), there might be antecedent variables which could influence the level of budget tightness and dysfunctional behaviours, namely influence of clients, influence of audit programme and participation. In particular, the level of participation in the time budget could lead to more realistic budgets and greater acceptance and commitment to the current budget as an attainable target. It was expected that as the level of participation increased, there would be a greater likelihood that budgets would be accepted as attainable targets. Hence,

**H3:** As the perceived level of participation in the time budget increases, budget tightness will decrease.

In addition, audit assignments were usually planned in detail for sections and tasks constituting the audit programme. Audit planning determined the extent of time taken to complete audit tasks. Accordingly, one could expect a reduced degree of time pressure as the auditor’s extent of influence in the audit programme is increased. This had been suggested in Cook & Kelley (1991) and Otley & Pierce (1996). Hence,

**H4:** As the perceived level of influence of the audit programme over time budgets increases, budget tightness will decrease.

Audit fees remain under constant scrutiny by the client as it perceives them to be imposed by regulatory forces (e.g. Companies Act, Stock Exchange Listing Rules, etc.) and part of compliance costs. Hence, companies perceive audit fees to be costs borne with no apparent financial benefit and hence pressure audit firms to lower or maintain fees. In several countries, the increased level of competition has forced fees down (e.g. MacErlean, 1983). In light of more recent restrictions on non-audit services to audit clients, audit firms would need to achieve profits on audit assignments whilst retaining clients. Therefore, by pressuring audit firms in lowering or maintaining fees, companies might have a stronger influence on the time budget. Hence,

**H5:** As the perceived influence of clients over audit time budget increases, budget tightness will increase.

One variable which was considered by Pierce & Sweeney (2004) was the perceived importance of budgets for performance evaluation purposes. This variable did have an impact on URT but not on QTB (2004, p. 433). Pierce & Sweeney (2004, p. 434) also reported that there seemed to be a decline in the importance of time budgets in performance evaluation compared to findings of earlier studies e.g. 10% of Pierce & Sweeney’s (2004) respondents found the budget important for performance evaluation compared to 37% in Otley & Pierce (1996). However, there was no evidence as to whether this pattern might be repeated in other countries. Intuitively, a higher perceived importance attached to the time budget would imply that the auditor would feel more pressure towards achieving the budget within the allotted time. Hence, the following hypothesis:

**H6:** There is a positive relationship between the perceived importance of time budget for evaluation purposes and budget tightness.

5. SAMPLE SELECTION AND DATA COLLECTION

5.1. Sample selection

The sampling frame was developed from the local 2003 Directory of Financial Institutions, which resulted in a list of 20 audit firms in Mauritius. As mentioned earlier, the approximate number of qualified audit staff, independent of their respective audit firms, amounted to 450. An initial request for participation in the study was sent to all the listed firms and this letter indicated the purpose of the survey instrument and the background of the individual(s) required to complete the survey. All contacted firms were willing to participate, in terms of circulating the questionnaire to five members of their staff. This resulted in a total of 100 potential respondents, thus accounting for 22% of the approximate population.

5.2. Questionnaire design and variable measurement

The questionnaire contained primarily closed-ended questions, with the use of Likert-type scales to reflect the respondent’s views and perceptions. The survey instrument comprised several questions on a five-point Likert scale with responses ranging from ‘strongly agree’ to ‘strongly disagree’.

One particular area of concern in devising the questionnaire was the danger of non-response bias.
and higher rates of non-responses due to the sensitive nature of the questions. In particular, the use of ‘I’ or more active tense (e.g. Have you ever signed off prematurely?) sentences could be viewed as threatening, especially if the questionnaire administration was partly handled by the audit firm. This was the main issue raised during the pilot-testing stage and there was a genuine concern about response rates, since this is one of the first times local audit firms and auditors were surveyed on their actual practices. The current context of local accounting scandals and government/World Bank reviews raised concerns on the level of responses if too direct questions were asked. In this respect, several questions used in earlier studies were re-drafted in a passive form and referred to auditors in general rather than to the respondent specifically. Although this posed some construct reliability and validity issues, these changes were made in a bid to obtain sufficient responses to make an informed analysis of the situation in Mauritius.

In light of the above, Sections A and B of the instrument provided a series of statements and/or questions:

(a) Questions 1 to 4 gathered general information on the auditors’ opinions and attitudes towards the state of time budget pressure and its likely overall effects, thereby confirming or not the extent of the problem in the Mauritian context. These were adapted from Azad (1994) and Cook & Kelley (1988).

(b) Question 5 and 6 sought to measure the extent of premature sign offs on an overall basis and with respect to various sub-areas such as the internal control systems, payroll, debtors, etc. Based on Azad’s (1994) study, it is expected that these two items would eventually factor into one variable ‘perceived extent of premature sign off’.

(c) Questions 7 and 9 attempted to measure the extent of URT. These were adapted from Cook & Kelley (1988) and Otley & Pierce (1996).

(d) Question 8 measured the perceived extent of budget tightness.

(e) Question 10 measured the perceived importance of time budget for performance evaluation purposes.

(f) Questions 11 (a) and (b) measured the perceived extent of two antecedent variables of interest – influence of audit programme and influence of client fee expectations. These were adapted from Otley & Pierce (1996). The responses were recorded on a scale of 1 – ‘Not at all’ to 5 – ‘Very great’.

(g) Question 12 measured the extent of participation in the time budget, with response (a) coded as highest participation compared to response (e) coded as lowest participation.

Finally, Section C sought demographic and profile information on the respondents (Questions 13 to 16), such as gender, age, experience and current status.

5.3. Pilot testing, follow-up and response rate

Before the final launch of the survey, the questionnaire was pilot tested by an audit partner and accounting lecturers at the Faculty of Law and Management, University of Mauritius. Except for the main issues discussed in Section 5.2, slight changes were made in terms of the order of the questions and correcting ambiguous statements/wording. As all contacted firms were keen to participate in the study, five questionnaires were disseminated to each audit firm. The respondents were invited to complete the questionnaire within a period of three weeks and to return them directly to the researchers via a stamped self-addressed envelope. A follow-up letter in the form of an initial and final reminder was sent at the end of the three-week period and a final deadline of one more week was given. This resulted into a total of 52 useable returned questionnaires out of a sample of 100, representing approximately 12% of the target population (450). In light of the survey methods adopted, one would have expected a higher number of responses. However, the focus had been on gathering views from the largest cross section of firms rather than just from one or two firms. In consideration of the context and sensitivity of the issue at that time and the fact that it was the first time that local auditors were being surveyed on their practices, it is believed that the number of responses was still sufficient to provide some exploratory insights on budget pressures and the related dysfunctional behaviours.

6. FINDINGS AND ANALYSIS

6.1. Profile of respondents

The profile of the 52 respondents is detailed in Table 1. There are two notable points from Table 1.
First, the respondents’ profile indicates a high percentage of newly and moderately experienced audit staff, namely 71% having five years’ experience or less. This was not surprising in the local context as there had always been a very high level of staff turnover amongst audit staff in all firms. Typically, audit firms were viewed as a good starting position but the majority of audit staff moved on to industry after accumulating experience. Second, in view of the relatively small numbers of respondents for the supervisor, manager and partner categories, these will be combined into one category, ‘supervisory/managerial’, accounting for 26% of the respondents, compared to 44% for senior staff and 30% for junior staff. In comparison, Pierce & Sweeney (2004) focused purely on audit juniors in their second and third years of training (2004, p. 424) whilst Otley & Pierce’s (1996) respondents had an average age of 25 and about 3 to 4 years’ experience (1996, Table 1, p. 39).

### 6.2. Views on time budget pressures in Mauritius

Table 2 provides summary statistics on the responses to Questions 1 to 4. The results indicate strong agreement for the notion that time budget pressure is important in the local context. The fact that 87% of respondents agreed that time budgets had become tighter is testimony to the changes in the work environment. However, it was noted that a slightly lower proportion of respondents attributed it to increased competition, therefore indicating that there could be other, but less critical, factors causing this perception of tighter time budgets. For example, this could be related to specific firm factors, such as need to control rising

<table>
<thead>
<tr>
<th>Table 1: Profile of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>20–25 years</td>
</tr>
<tr>
<td>26–30 years</td>
</tr>
<tr>
<td>31–45 years</td>
</tr>
<tr>
<td>Over 46 years</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
</tr>
<tr>
<td>1–5 years</td>
</tr>
<tr>
<td>6–10 years</td>
</tr>
<tr>
<td>11–15 years</td>
</tr>
<tr>
<td>16–20 years</td>
</tr>
<tr>
<td>More than 21 years</td>
</tr>
<tr>
<td><strong>Current Title</strong></td>
</tr>
<tr>
<td>Junior Auditor</td>
</tr>
<tr>
<td>Senior Auditor</td>
</tr>
<tr>
<td>Supervisor</td>
</tr>
<tr>
<td>Manager</td>
</tr>
<tr>
<td>Partner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 2: Existence and attitudes to time budget pressures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean (Standard deviation)</strong></td>
</tr>
<tr>
<td>1. Time budgets have become tighter in recent years.</td>
</tr>
<tr>
<td>2. Time budget pressure is the result of increased competition in the audit market.</td>
</tr>
<tr>
<td>3. Time budget pressure interferes with the proper conduct of an audit.</td>
</tr>
<tr>
<td>4. Time budget pressure causes reduction in audit quality.</td>
</tr>
</tbody>
</table>
operating and administration costs and/or demands for higher returns and profits. The gradual ‘divorce’ between audit and non-audit services could also influence the pressure on meeting time budgets as audit assignments were called upon to become more profitable on their own.

A one-way ANOVA test was carried out in relation to the job title categories and no significant differences were noted, except for Question 1. Indeed, the junior staff category was more inclined to disagree with this statement compared to the senior and supervisory/managerial staff groups. This could have been expected given the relatively lesser experience of junior staff with time budgets. Nevertheless, the gist of these results is that time budget pressure appears to be an element of interest and the next step is to consider the budget tightness variable, its dysfunctional consequences and possible antecedent factors.

### 6.3. Time budget tightness, dysfunctional and antecedent variables

**Budget tightness**

Table 3 indicates that nearly 52% of respondents considered their time budget to be attainable with considerable effort or practically unattainable.\(^\text{10}\) This was a significantly lower percentage compared to other studies and countries, namely Ireland (83% in 2004 and 75% in 1995\(^\text{11}\)) and the United States (70% in Cook & Kelley, 1991, and 63% in Kelley & Margheim, 1990) but similar to the New Zealand results (49%, Cook & Kelley, 1991). As explained in Section 4, it could be possible that the smallness of the market and the level of business/family relationships may encourage a ‘sharing’ of audit assignments and a lower, or at least a stable, level of competition between audit firms. The international evidence appeared to show a rise in budget tightness over time and although there are no previous results for Mauritius, 51% is sufficient, in absolute terms, to indicate some level of concern. The one-way ANOVA test did not show significant differences between the hierarchical levels.

**Dysfunctional variables – PSO and URT**

The two dysfunctional variables, perceived extent of PSO and URT, were operationalised as explained in Section 5.2. The descriptive statistics are presented in Table 4. In the case of PSO, the 12 items loaded onto a single factor with a cumulative percentage of 65% and the Cronbach alpha reported a very satisfactory reliability score. This was less successful for URT with a Cronbach alpha of 0.59, which was, however, quite close to the acceptable score of 0.60 (Nunnally, 1978). Both the kurtosis and skewness tests indicated that these two variables were normally distributed.

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Table 3: Budget tightness – frequencies and descriptive statistics

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very easy to attain</td>
<td>1</td>
<td>1.9</td>
</tr>
<tr>
<td>Attainable with reasonable effort</td>
<td>24</td>
<td>46.2</td>
</tr>
<tr>
<td>Attainable with considerable effort</td>
<td>23</td>
<td>44.2</td>
</tr>
<tr>
<td>Very tight, practically unattainable</td>
<td>4</td>
<td>7.7</td>
</tr>
<tr>
<td>Budget tightness measure (1 – easy to attain, 5 impossible to achieve)</td>
<td>Mean 2.58</td>
<td>(Standard deviation 0.667)</td>
</tr>
</tbody>
</table>

Table 4: Dysfunctional variables of budget tightness – descriptive statistics

<table>
<thead>
<tr>
<th>No. of items</th>
<th>Perceived extent of premature sign off (PSO)</th>
<th>Perceived extent of under-reporting of time (URT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean ((n = 52))</td>
<td>3.27 (1 – high, 5 – low)</td>
<td>2.34 (1 – high, 5 – low)</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.868</td>
<td>0.873</td>
</tr>
<tr>
<td>Theoretical range</td>
<td>1–5</td>
<td>1–5</td>
</tr>
<tr>
<td>Actual range</td>
<td>1.5–5</td>
<td>1–4</td>
</tr>
<tr>
<td>Cronbach alpha</td>
<td>0.92</td>
<td>0.59</td>
</tr>
</tbody>
</table>
In terms of notable frequency distributions for individual items of dysfunctional behaviours, 25% of the respondents agreed or strongly agreed with the general statement that auditors signed off on required audit steps without completing the work. This was quite similar to Otley & Pierce’s (1996) results (26%). However, in relation to premature sign offs on detailed audit areas (Questions 6(a) to (k)), the percentage of respondents who agreed or strongly agreed with PSO ranged from 17% (long-term debts) to 40% (review and testing of internal control). In addition, 33% and 37% would have signed off prematurely on ‘Cash’ and ‘Expenses’ respectively. The relatively higher level of PSO for internal control could be explained by the fact that respondents were answering in the context of a ‘final’ or ‘end of year’ audit, i.e. the financial statements audit, whereas the ‘interim’ audit, which involves the bulk of compliance and internal control system tests, is usually a separate process done during the financial year. Hence, the auditors would feel more confident in signing off prematurely for internal control systems in cases where the audit assignment included an interim stage.

On the other hand, the low level of PSO for debt could be related to the significant risks attached to signing off prematurely on debt. There are clear responsibilities for assessing going concern issues and overlooking such issues would have serious implications for the audit firm. The relatively higher than average agreement to PSO on cash and expenses is, however, a worrying element considering these are usually risk areas. Overall, these results showed that agreement to, and the extent of, PSO would depend on specific audit areas or audit steps. As shown above, a more general question or statement towards PSO elicited a fair extent of agreement but this level of agreement increased up to 40% when considering individual audit areas or tasks. Finally, in considering the above results, the absence of clear and direct disciplinary consequences for auditors from local regulators or professional associations may also be playing a significant part in the extent of higher PSO.

The URT frequency distributions for the two measured items also provided some significant results. 77% of respondents agreed or strongly agreed to the fact that auditors take work home and do not report the time. In addition, 73% of respondents believed that auditors knowingly under-reported chargeable time (from occasionally to frequently). Although the questions asked in previous studies were slightly different, it is noted that the percentage of respondents who used URT to counter time budget pressures were significantly lower for other countries, e.g. 54% for Ireland (Otley & Pierce, 1996, p. 47) and 33% for the United States (Kelley & Seiler, 1982). The difference in attitudes toward URT behaviour would be related to the fact that respondents were less willing to consider, or were unaware of, the long-term implications of URT. URT could be viewed as an easy and risk-free approach to meet time budgets and this could in fact be encouraged by the supervising seniors. This is evidenced by a one-way ANOVA test of URT variable between the different job categories. There were significant differences with the supervisory/managerial staff being on average more agreeable to URT compared to lower levels of the hierarchy. In an increasingly competitive environment where audit assignments are now expected to be profit centres on their own and which therefore cannot be subsidised by non-audit fees, the high level of URT appeared to have now become the norm.

Hence, the relative magnitude observed for the dysfunctional variables (especially PSO) seemed to confirm the initial expectations that auditors could therefore perceive an existing ‘immunity’ from professional disciplinary actions. However, the extent of PSO remained selective with auditors still focusing on their perceived risk areas in the audit assignment, e.g. long-term debts.

Antecedent variables

The descriptive statistics for various hypothesised antecedent variables, namely (a) importance of budgets in performance evaluation, (b) influence of audit programme, (c) influence of fees expected by clients and (d) participation, are set out in Table 5. From the summary statistics and frequency distributions, it is observed that time budgets were perceived to be very important in performance evaluation (90% of respondents selected very important to moderately important). On the other hand, the perceived extent of participation in the time budget was more moderate with a mean score of 2.77. Also, only 35% of respondents selected the first two possible answers to Question 14, i.e. generating the first draft for review or reviewing the budget for
There were no significant differences (at the 5% level) in the above mean scores between the various categories. As a general observation, the extent of participation in the time budget in the local context was usually constrained to using last year’s time budget as adjusted for any new issues relating to the client. Any significant increases in the time budget were usually questioned (and often refused) in comparison to last year’s budgets.

### 6.4. Testing of hypotheses

#### Hypotheses H1 and H2

The extent of the relationships between budget tightness and the dysfunctional variables were measured using a one-way ANOVA test (including a means plot) and a correlation test. Figure 1 maps the relationship between the mean frequencies of PSO for different levels of budget tightness. The plot indicates a pattern of relationship whereby the

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**Table 5: Antecedent variables of budget tightness – descriptive statistics**

<table>
<thead>
<tr>
<th>Scale Description</th>
<th>Mean (n = 52)</th>
<th>Standard deviation</th>
<th>Actual range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perceived importance of time budgets in evaluation</strong></td>
<td>1 – very important: 1.71, 0.536, 1–3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence of audit programme</td>
<td>1 – not at all: 3.44, 1.162, 1–5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence of client fee expectations</td>
<td>1 – not at all: 3.31, 1.336, 1–5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived extent of participation</td>
<td>2.77, 1.323, 1–5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Figure 1:** Budget tightness and perceived extent of PSO.
extent of perceived PSO (coded as 1 – high and 5 – low) initially rises as the budget tightness increases (coded as 1 – very easy and 5 – very high). The Pearson correlation coefficient was significant (−0.289, \( p \) value = 0.038) and in the hypothesised direction. The one-way ANOVA indicated significant differences between the means of the four budget tightness categories (the easy to attain category was excluded as it contained only one respondent) with an \( F \) ratio of 3.687 (\( p \) value = 0.032, \( n = 52 \)). However, the plot indicated a reversal of the relationship when budget tightness is at its highest, i.e. the perceived extent of PSO drops back to a mean of 3.48 for this category of budget tightness. This is reminiscent of the inverted U-shaped relationship\(^{14}\) which was observed by Kelley & Margheim (1990) but not supported in Otley & Pierce (1996). However, it is important to note that there were only 4 respondents in the category ‘very high, practically unattainable’ compared to more than 20 respondents for the ‘attainable with reasonable effort’ and ‘attainable with considerable effort’ categories. In this respect, the number of observations does appear to be too small to add to Kelley & Margheim’s (1990) claims and in any case, the dysfunctional variables were measured differently. Therefore, based on the results, H1 is supported.

The means plot in Figure 2 describes the relationship between budget tightness (coded as 1 – very easy and 5 – very tight) and the perceived extent of URT (coded as 1 – high and 5 – low). The Pearson correlation coefficient was significant (−0.340, \( p \) value = 0.014). However, the one-way ANOVA indicated a significant difference only at the 10% level (\( F = 2.445, \ p \) value = 0.097) for 51 observations.

In this case, a comparison could be made to the Otley & Pierce (1996) results, which reported a correlation coefficient of \( -0.62 \). The lower extent of the relationship could be explained by the reported lower perceptions of budget tightness, as elaborated above and by the possibility that URT practices are not primarily driven by budget tightness. Indeed, as mentioned above, the relatively higher perceived extent of URT could have been institutionalised and even encouraged in audit firms. Hence, although Figure 2 displays the hypothesised relationship, the statistical results

![Figure 2: Budget tightness and perceived extent of URT.](image-url)
from the ANOVA and correlation tests were more ambivalent and we conclude that H2 is not supported.

**Hypotheses H3 to H6**

The next stage was to consider the four hypothesised antecedent variables of budget tightness. An initial correlation analysis was carried out between the antecedent variables and budget tightness. However, there were no significant correlations between budget tightness and the antecedent variables, and thus hypotheses H3 to H6 had to be rejected. This was in sharp contrast to the results obtained in previous studies, particularly from Otley & Pierce (1996). Exploratory correlations were also estimated between the above-mentioned ‘antecedent variables’ and the dysfunctional variables (PSO and URT) as modelled in Pierce & Sweeney (2004, p. 432). Again no significant correlations were observed, except for a significant relationship (0.313, $p$ value = 0.024) between perceived extent of PSO and extent of influence of audit programme. Although this was not hypothesised, this result is suggestive of a direct negative relationship between influence of the audit programme and a dysfunctional variable (PSO). However, the differences in the variable measurement, particularly in measuring participation, could have influenced the results. Also, Otley & Pierce (1996) used budget attainability, which included budget tightness as a sub-dimension.

It was noted earlier that the importance of time budgets for performance evaluation was quite high among the respondents but, surprisingly, this did not contribute towards the budget tightness variable. One possible explanation for this absence of relationship appears to lie with the level of URT. Given the very positive attitudes of most respondents towards URT, the majority of the auditors would be able to meet the budget (and hence be positively evaluated) through the extensive use of URT. Hence, the budget tightness variable could be dependent on other non-surveyed variables, such as the level of competition in the audit market.

As for the impact of participation in the time budget, it could be that the results are being influenced by the profile of the respondents. Since there were quite a significant number of newly qualified auditors in the sample of respondents, they could have a very low level of participation and influence in the time budget. Also, if the time budget appeared inextricably linked to the previous year’s budget, then there would be little benefit in having more participation to reduce budget tightness.

7. **IMPLICATIONS AND CONCLUSIONS**

This study examined the effects of time budget pressure within a developing country context, characterised by small business sectors, close business and family relationships and a currently unregulated audit profession. In addition, and in response to recent local corporate fraud cases and further to a World Bank Report, the government had been enacting local regulatory rules for auditors involving licensing of auditors, reviews of audit assignments and monitoring of ethical rules via a local Financial Reporting Council (FRC).

Based on the responses from 52 qualified staff from a cross section of local audit firms (including Big 4 representatives), the findings confirm, to some extent, the World Bank Report’s anecdotal comments on the existence of audit time budget pressure in Mauritius. The extent of this budget tightness pressure was significantly lower compared to other surveyed countries and it is argued that this is due to some of the developing country ‘realities’. Although there could be evidence of a stronger competitive environment for audit assignments in certain specific areas (e.g. the African markets), the existence of closer business and family relationships could be allowing for an ‘implicit’ sharing of audit assignments among the audit firms, thereby tempering budget tightness levels. One additional (or alternative) explanation of the lower perception of budget tightness is that respondents might have been able to engage in budgetary slack practices – auditors were able to influence to their advantage the time budget – but this would need to be confirmed.

Budget tightness was then hypothesised to cause two previously researched dimensions of dysfunctional behaviour, namely perceived extent of PSO and URT. It is concluded that budget tightness does significantly lead to PSO and this would be a key finding for policy makers (including the soon-to-be local regulator), in terms of how the level of PSO could be moderated in firms to ensure a quality audit service. There were also some indicative signs of the inverted U-shaped relationship, i.e. that premature sign off would first increase as budget tightness increased but
eventually PSO would decrease at higher levels of budget tightness. However, this remained to be statistically confirmed and so H1 could not be rejected. The variations in the perceived levels of PSO across different audit areas was also a notable result as it would enable peer practice reviewers and regulators to focus on key areas with higher probabilities of PSO. Hence, it was believed that the absence of local professional oversight and regulation has had some influence on the level of PSO. It would therefore be of interest to investigate PSO levels a few years after the establishment of a regulatory framework. In addition, there is some relevance in extending the research in other contexts where local audit oversight is absent or minimal and/or where similar business environments exist to pin down the extent and scope of PSO.

The degree of relationship between budget tightness and perceived extent of URT was (closely) not statistically supported from the one-way ANOVA test. Based on the analysis of responses to URT in general, there was evidence that URT practices have become more widespread, but less in response to instances of budget tightness. Although there could be other independent variables of interest leading to URT, the results obtained in the context of Mauritius may indicate that URT is becoming more of an institutionalised practice, with superiors encouraging it for their own evaluation. The fact that there were not many auditors in the ‘supervisory/managerial’ category in the sample did not allow for a more thorough investigation. In our opinion, URT appeared to be a clearly persistent practice within audit firms in Mauritius and it seemed the long-term implications of URT were not yet apparent amongst audit staff. In the long term, a significant use of URT practices would undermine access to this basic business data and it would generate an increasing distortion of the reality for those engaged in the evaluation of the audit assignment and the audit staff.

Contrary to previous findings, the four hypothesised antecedent variables were not significantly correlated to budget tightness. The high level of institutionalised URT might in turn explain the apparent absence of relationship between budget tightness and the performance evaluation variable. In addition, the profile of respondents and their relatively low level of participation in the time budget determination could have influenced these results. This might indicate that auditors’ perceptions of budget tightness were more related to externally-led variables (such as size of the market, industry and regulatory constraints, financial dependence on audit fees) than internal ones. Again, the developing country context thus appears to be a valid variable of interest. For example, the local Central Bank rules on mandatory audit rotation might have impacted on an audit firm’s performance in light of the potential revenues that could be generated from such assignments.

The growing separation (now almost complete in Mauritius) between audit and non-audit arms would also undoubtedly have an impact on those firms which traditionally had a weaker portfolio of audit clients. These are some factors which could be observed in other countries with similar historical and economic backgrounds (e.g. previous British colonies in Africa and Asia). Based on the findings and in consideration of one of the motivations for this study, it is believed that there are developing country factors that do influence the extent of budget tightness, PSO and URT.

The limitations of this study are related to the use of questionnaires and the number of respondents. In studies involving sensitive topics such as budget tightness and dysfunctional variables, auditors might have avoided responding to the questionnaire or did not answer honestly. This had been one of the main concerns of the pilot-testers and this resulted in questions being amended. In the particular context of Mauritius, the number of respondents was viewed as sufficient for an exploratory analysis. In light of the above, the main recommendations would be to extend one’s understanding of budget tightness and the related dysfunctional practices using different data collection methods, e.g. interviews. This could allow for a more flexible approach in researching antecedent or moderating variables of budget tightness, and pinning down a more specific set of ‘developing country’ characteristics which have an effect on audit procedures and practices.

ACKNOWLEDGEMENTS
The authors wish to thank the two anonymous reviewers as well as Robin Sannassee and Kevin Holland for their helpful comments and suggestions.

NOTES
1. www.worldbank.org/Mauritius
2. In the absence of a local registration body, these numbers are all approximate. Most of the qualified accountants in Mauritius are either members of the Institute of Chartered Accountants in England and Wales (ICAEW) or the Association of Chartered Certified Accountants (ACCA).


4. The government has also recently issued a Code of Corporate Governance to be adopted by listed, public and large companies.

5. Budget tightness is one sub-dimension of budget attainability (Otley & Pierce, 1996, p. 40).

6. Mauritius is a member of regional economic blocks such as the Southern African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA).

7. A recent paper by Shapeero et al. (2003, p. 486) did find differences in auditors’ ethical perceptions when comparing premature sign-offs and under-reporting of time.

8. In fact, the new local registration rules aim at closing this particular gap.

9. The questionnaire is available upon request.

10. None of the respondents ticked off ‘Impossible to achieve’.


12. The mean percentage of respondents who agreed or strongly agreed with PSO for the 11 items was 27%.

13. This was also observed by Alderman & Deitrick (1982).

14. Figure 1 shows a (non-inverted) U-shaped relationship due to the coding adopted for PSO and budget tightness.

15. Perceived extent of PSO (1 coded as ‘high’ and 5 as ‘low’) and influence of audit programme (1 coded as ‘not at all’ and 5 coded ‘very great’ influence).

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