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PROFESSIONAL SKEPTICISM AND AUDITORS' ASSESSMENT OF MISSTATEMENT RISKS: THE MODERATING EFFECT OF EXPERIENCE AND TIME BUDGET PRESSURE

Sayed Alwee Hussnie Sayed Hussin,
National Audit Department of Malaysia,
Putrajaya, Kuala Lumpur, Malaysia,
E-mail: sayedalwee2010@gmail.com

Takiah Mohd Iskandar,
Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia,
E-mail: takiah.iskandar@gmail.com

Norman Mohd Saleh,
Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia,
E-mail: norman@ukm.edu.my

Romlah Jaffar,
Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia,
E-mail: romlah@ukm.edu.my

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ABSTRACT. Background: This study employs a field experiment to examine the relationship between professional skepticism, experience, and time budget pressure on auditors' assessment of risk of misstatement. In addition, the study examines the moderating effect of experience and time budget pressure on the relationship between professional skepticism and auditors' assessment of risk from material misstatements; 2) Method: This study employs a multiple regression analysis on 248 auditors from both Big4 and non-Big4 firms; 3) The results indicate that professional skepticism and experience have positive effects while time budget pressure has a negative effect on auditors' assessment of risk from material misstatements; and 4) The positive effect of professional skepticism on auditors' assessment of risk from material misstatement is stronger among more experienced auditors than that among less experienced. On the other hand, the positive effect of professional skepticism on risk assessment is weaker when auditors work under high time budget pressure than that when they work under low time budget pressure. Additional analysis on the samples from the two selected areas, Kuala Lumpur and Selangor, produces consistent results indicating that the use of separate models for different samples is not necessary. Hence, the study uses a single model for the final analysis. The results provide a better understanding on whether the auditors are able to sustain professional skepticism with a given amount of relevant audit experience and under different levels of time budget pressure.

JEL Classification: M41

Keywords: professional skepticism, experience, time budget pressure, and risk of material misstatement.

Introduction

Auditors' failure to detect risk from material misstatements within financial statements has a negative impact on the audit profession in general. Auditors' inability to assess fraud risks has become a serious concern particularly when most incidences of fraud are uncovered after financial statements are audited (KPMG, 2013). This has led to a decrease in public confidence and trust among audit regulators in relation to auditors' role in assessing risks from material misstatement. In response to the increasing complexity of this matter, the profession urges auditors to comply with the standards on professional skepticism while assessing the risks related to fraud. The profession expects that the exercise of professional skepticism among auditors minimizes material misstatements within financial statements.

Professional skepticism refers to the attitude of consistent cynicism and the habit of suspending judgments until an individual obtains sufficient information or evidence (Hurtt, 2010). Skepticism occurs when there is doubt concerning the reliability of the information received. When an individual has doubt concerning the reliability of the information provided by a client, he or she would seek for more indications. In this respect, an auditor who exhibits high level of professional skepticism would search for more information and make additional checks to formulate a sufficient basis for further audit judgments. After making additional checks auditors should be able to achieve their objective, that is, to confirm whether the incidence of fraud has actually taken place or not. Regardless the existence and non-existence of fraud, the main objective of an audit is to ensure that financial statements are free from material misstatements due to fraud. In the presence of fraud, auditors must ensure financial statements reflect the appropriate adjustment on the effect of fraud.

A skeptical auditor is generally suspicious in nature and is driven behaviorally to report fraud (Nelson, 2009). Evidence shows that adoption of professional skepticism significantly enhances auditors' performance in relation to assessing risks of fraudulent material misstatements (Hurtt *et al.*, 2013; Hussin and Iskandar, 2013; Saksena, 2010; Rose, 2007). Such behavior conforms to the auditing standards requirement, which prescribes auditors pay serious attention to the possibility of fraud occurrence (ISA 240 2008). Although auditors are not responsible for discovering frauds, they must obtain reasonable assurance that financial statements taken as a whole are free from material misstatements caused by fraud (ISA 200 2004). Thus, auditors are required to maintain professional skepticism, make additional checks and take longer time to gather audit evidence when performing an audit.

However, skepticism among auditors varies due to differences in personal characteristics and working environments. Based on the social cognitive theory, personal features and work environment may influence the behavior of an individual, which in turn affects his/her performance (Bandura, 1986). In auditing, personal characteristics of auditors and work environment may moderate the effect from professional skepticism on risk assessment (Quadackers *et al.*, 2014). In this study, experience represents the personal characteristic and time budget pressure represents the work environment.

Individuals may acquire experience through direct observation or participation in a particular event or activity (Alleyne *et al.*, 2006). Experiences in work-related challenges expose auditors to gaining more confidence and competences in relation to making risk-connected decisions (Payne and Ramsay, 2005). The more diversified is the experience the auditors gain, the higher is their level of confidence and competency. Evidence shows that experience enhances auditors' ability to assess risks related to fraud (Knap and Knapp, 2001). However, there is lack of empirical evidence to prove the effect of experience on performance of risk assessment by auditors with different levels of professional skepticism.

Time budget pressure, on the other hand, occurs when the amount of time budgeted to complete an audit is less than the actual time required to finish this work. Therefore, auditors may have to use their personal time to respond to the pressures of meeting the deadline (Kelley and Margheim, 1986). Consequently, in the interest of time-saving, auditors may not be able to adopt fully their attitude of professional skepticism. DeZoort and Lord (1997) suggested that auditors' behavior while meeting their time budgets at assessing risks may negatively affect audit effectiveness. However, evidence on the effect of time pressure at the levels of auditors' professional skepticism with respect to assessment of risk from material misstatements is rather limited.

Upon reviewing the professional skepticism related literature, Hurtt *et al.* (2013) postulate the need for further investigation on the potential influence of experience and work pressure on auditors' professional skepticism. In line with their suggestion, this study examines the impact of individual auditors' experience and time budget pressure on the development of auditors' professional skepticism and their assessment of material misstatement risks. The literature consistently demonstrates the influence of experience and time budget pressure on individual judgments and behaviors of accountant and auditors (Rose, 2007; Gundry and Liyanarachchi, 2007). The relationship between professional skepticism and fraud risk assessment is expected to differ by the varying levels on auditors' experience and the pressure coming from the environment around their workplace. The influence of experience and time budget pressure may react differently to auditors' different levels of professional skepticism and sensitivity towards fraud risk despite adhering to the respective auditing standards. This study integrates professional skepticism, experience, and time budget pressures in one model so that to provide explanation on how these variables, directly or indirectly, affect auditors' assessment of risks from material misstatements.

The objective of this study is to examine the effects of professional skepticism, experience and time budget pressure on auditors' assessment of risk from material misstatements due to fraud. The study also investigates the potential moderating effects of experience and time budget pressure on the relationship between professional skepticism and auditors' assessment of fraud risk. It is imperative to investigate the influence of these variables on auditors' assessment of fraud risk given the fact that regulators frequently associate auditors' failure to detect fraudulent financial reporting with their lacking professional skepticism (PCAOB, 2012).

Time budget pressure commonly has negative effects on audit performance (Coram *et al.*, 2003; McDaniel, 1990; Kelley and Margheim, 1990). This study examines time budget pressure in terms of its moderation on the relationship between professional skepticism and auditors' assessment of fraud risks. The environment of serious time budget pressure in Malaysian auditing practice provides an appropriate scenario for this study (Halil *et al.*, 2010). The existence of serious time budget pressure environment in the auditing profession in Malaysia arises due to low amount of audit fees. Insufficient pay restraints auditors from taking enough time to search for new information (Iskandar *et al.*, 2016). Low audit fee thus signifies significant cost limitations to auditors acting skeptically. In this regard, market competitiveness has put pressure on auditors in trying to maintain clients. New clients may demand more work with the same amount of fee, which has already reached the allowable ceiling. The current guidelines and regulations concerning audit fees have imposed constrains on auditors in terms of exercising sufficient level of professional skepticism while performing an audit. From the Malaysian perspective, it is unanimously agreed that very low audit fees may impair professional skepticism of auditors (Iskandar *et al.*, 2016).

1. Literature review and hypothesis development

This section discusses relevant past studies that help form hypotheses. Specifically, there are four hypotheses to be tested in this study.

1.1. Assessment of Risk of Material Misstatement

Auditors have to assess risks of material misstatement before giving a reasonable assurance that the audited financial statements are free from material misstatements. Assessment of risk of material misstatement involves auditors having to think, analyze and act professionally particularly during the process of providing assurance that the financial statement is free from fraudulent material misstatement. Auditors' failure to obtain adequate evidence to support their opinion may result in financial statements not giving a true and fair view of the firm performance and financial position.

However, auditors only reports about 10% of fraud incidences in companies (KPMG, 2013). Either employees or internal auditors companies uncover most incidences of fraud. Auditors' failure to detect fraud reflects auditors' incompetency, which may impair the public confidence. Pothiniker *et al.* (2004) suggest that the auditors' ability in fraud detection may be improved by aligning their individual attitude, which is expected to contribute to the development of their action and behavior. The alignment may be developed between attitude toward behavior and the subjective norm, which significantly influences the behavioral intention of fraudulent financial reporting. The focus on the right attitude may improve auditors' effectiveness in dealing with risks of fraud that is significant in influencing the behavior in certain action such as the assessment of risks of material fraudulent misstatement (Armitage and Conner, 2001). Professional skepticism is identified as an important attitude for auditors that improves their ability to assess audit risks (ISA 240 2008; AOB, 2012). The study uses the social psychology theory of reasoned action to identify factors that could explain this behavior (Bandura, 1986).

In pursuant to the above, this study examines effects of professional skepticism attitude on auditors' assessment of risk of fraudulent misstatement. This study further examines how auditors' assessment of risk of material misstatement is influenced by individual experience and environmental factors. There is a lack of study on this issue. Based on the social cognitive theory, the attitude that an individual formed through the cognitive process is subjected to the influence of environmental surrounding (Bandura, 1986).

1.2. Relationship between Professional Skepticism and Assessment of Risk of Material Misstatement

Professional skepticism refers to consistent skeptic attitudes and suspicious of individuals over their judgments until sufficient information or evidence is obtained (Hurtt, 2010). Skepticism occurs when there is doubt on the information received. Only few studies relate professional skepticism to assessment of risk of fraudulent material misstatement from the perspective of audit consideration (Rose, 2007; Saksena, 2010). Rose (2007) examined the moderating effects of professional skepticism on the relationship between auditors' assessment of fraud risk indicators and level of trust and experience respectively. Saksena (2010), on the other hand, provides evidence on the relationship between professional skepticism and the auditors' skills in preventing and detecting fraudulent misstatements. Both Rose (2007) and Saksena (2010) studies examine how elements of individual consideration such as level of sensitivity, processing of information of certain issues, and auditors' intention to behave affect

fraud detections. Results indicate auditors' attitude, such as skepticism, has a positive effect on their behavior in making audit decisions (Buchan, 2005). Besides positive effects, the attitude of an individual is the main contributor to the formation the individual behavior. The behavior has led to the company managerial intention to produce fraudulent financial statements (Carpenter and Reimers, 2005). Based on this discussion, this study formulates a hypothesis to examine the relationship between auditors' professional skepticism and assessment of risk of material misstatement.

Auditors who exhibit high level of professional skepticism are inspired to obtain sufficient appropriate audit evidence to ensure that financial statements do not contain material misstatements. Auditing literature provides evidence that professional skepticism has a significant and positive relationship with auditors' judgments and decisions (Quadackers *et al.*, 2014). The finding shows that auditors with higher scores on the professional skepticism scale require greater evidence search in the presence of fraud symptoms. Hurtt (2010) theorizes that a skeptical auditor would generally be asking questions to seek for further clarification and demand reasons or justifications. Auditors' intention to report frauds may drive the behavior of skeptical auditors. Hence, it can theoretically be argued that auditors with high skeptical attitude are more engaged in assessing risk of material misstatement than auditors with low skeptical attitude. Based on the discussions the following hypothesis is developed.

H1: Professional skepticism relates positively to auditors' assessment of risk of material misstatement.

1.3. Relationship between Experience and Assessment of Risk of Material Misstatement

Evidence shows that auditors' ability to assess risk of material misstatement is influenced by experience (Eagly and Chaiken, 2005; Payne and Ramsay, 2005). Auditors' experience in fraud reporting improves their understanding on various aspects and challenges related to assessment of risk of fraudulent material misstatement (Knapp and Knapp, 2001). Auditors with fraud related experience are exposed to different fraud related situations. Past experience in the assessment of risk of material misstatement provides input to auditors when given assignments to detect fraud. When assessing risk of material misstatement, more experienced auditors perform better than less experienced auditors. More experienced auditors execute more thorough assessment and more accurate judgments and decisions on matters related to fraud compared to less experienced auditors. Experienced auditors are inclined to initiate and lead fraud investigations whenever there are opposing opinions among audit team members. Generally, prior studies find that auditors' experience affects positively the assessment of risk of fraudulent material misstatement (Knapp and Knapp, 2001).

However, results on the effect of auditors' experience on work performance are mixed. Payne and Ramsay (2005) for instance provide a contradictory finding whereby experienced auditors fail to make better assessment on risk of material misstatement due to fraud compared to less experienced auditors. Variances in opinions may occur because of differences in the methods of audit investigation used in trailing fraud evidence. These mixed findings warrant further investigation in order to identify the discrepancy.

The perspective of social cognitive theory on human development may explain the influence of experience on auditors' risk assessment (Bandura, 1986). Based on the theory, the experiential conditions may develop auditors' capabilities (Bandure, 1986). It is expected, therefore, that experience positively influence auditors' assessment of risk of material misstatement. This assertion is consistent with Knapp and Knapp (2001) on the positive effect of experience on auditors' assessment of risks. The above discussions suggest the development of the following hypothesis.

H2: The auditors' experience relates positively to the auditors' assessment of risk of material misstatement.

1.4. Moderation of Experience on the Relationship between Professional Skepticism and Assessment of Risk of Material Misstatement

Auditors' experience in handling fraud related issues might influence their ability to apply professional skepticism. Past studies in the area of business management provide support on the notion that experience moderates the relationship between one's attitude and behavior (Nair and Kamalanabhan, 2010). The positive relationship between attitude and performance is stronger for more experienced individuals than for less experienced individuals. Effects of experience on performance in the area of management discussed above may also exist in the area of auditing. In auditing, auditors' experience may moderate the relationship between professional skepticism attitude of the auditors and their behavior in assessing risk of material misstatement (Bennett *et al.*, 2005). The moderating effect of experience may occur in the process of assessing risk of material misstatements by auditors. The positive relationship between professional skepticism and the efforts to report fraud is stronger among experienced auditors than that among the less experienced auditors.

The empirical evidence in other related areas and the underlying principles of the planned behavior theory support the argument on the effect of experience on auditors' assessment of risk of material misstatement. The theory of planned behavior explains the role of experience in the formation of one's behavior (Ajzen, 1991). The theory of planned behavior explains how attitudes toward the behavior, subjective norms, and perceived behavioral control may predict with high accuracy the intentions to perform different kinds of jobs (Ajzen, 1991). According to Ajzen (1991) these intentions, together with perceptions of behavioral control, account for considerable variance in actual behavior. Thus, the theory is relevant in explaining the moderating effect of experience on the relationship between one's attitude and performance behavior of individuals. Nair and Kamalanabhan (2010) supports the argument based on the finding on the moderating effect of experience on the relationship between individual attitude and behavior and performance in the area of business management and audit. Studies in the area of business management had shown that experience has a moderating effect on the relationship between attitude and behavior (Bennett *et al.*, 2005).

Based on the discussion above, a similar moderating effect of experience may also occur on auditors' professional skepticism and their behavior in assessing risk of material misstatement by auditors. The positive relationship between professional skepticism and efforts to report frauds may be stronger among the more experienced auditors than that among the less experienced auditors. The following hypothesis of study is developed.

H2(a): The positive relationship between professional skepticism and the auditors' assessment of risk of material misstatement is stronger (weaker) for more (less) experienced auditors.

1.5. Relationship of Budget Time Pressure and Assessment of Risk of Material Misstatement

Past study showed that time budget pressure compromises one's work output (e.g. Kelley and Margheim, 1990). In an audit environment, audit team members often experience time budget pressure, as they need to conclude their audit within the stipulated timeframe. This situation may impair the results of audit works. The issue of insufficient allocation of time is a common problem. In addressing a time constraint, audit firms need to consider the issue of efficiency in the utilization of resources in order to avoid incurring additional cost to audit

works (DeZoort and Lord, 1997). The effect of time budget pressure on the effectiveness of audit is becoming serious when auditors respond to the constraint by neglecting several audit procedures, stealing other clients' audit time, or falsifying the confirmation on the completion of audit procedures in order to meet the stipulated audit deadline (McDaniel, 1990; Kelley and Margheim, 1990). Auditors' experience of work stress and response toward such time budget pressure may have negative impact on the quality of audit report.

The negative effects of time budget pressure are supported by several past studies which discover that time budget pressure is the main factor that compromises the quality of audit report relating to fraud investigation (Coram *et al.*, 2003). Coram *et al.* (2003) find that 80 percent of the auditors participating in the study agree that the decline in the quality of audit report relates to auditors' inability to perform sufficient audit procedures to detect fraudulent material misstatements due to time budget pressure. Based on the above discussion, the following hypothesis is developed which expects that allocation of unreasonable timeframe may increase work pressure, which negatively affects auditors' assessment of risk of material misstatement.

H3: Time budget pressure negatively relates to the auditors' assessment of risk of material misstatement.

1.6. The Moderation of Time Budget Pressure on the Relationship between Professional Skepticism and Assessment of Risk of Material Misstatement

The social cognitive theory suggests that the work environment plays an important role in influencing one's attitude and behavior (Bandura, 1986). Prior studies show that the work environment moderates the relationship between one's personality and behavior (Lee and Truong, 2014). Auditors experience pressure because of having to complete their audit tasks within the stipulated timeframe. This study argues that the work environment in terms of time budget pressure has a moderating effect on the relationship between professional skepticism and auditors' behavior in assessing risk of material misstatement.

The pressure arising from insufficient allocation of audit period has resulted in the auditors' inability to collect sufficient audit evidence. The assessment on the evidence is done hurriedly due to the constraint of stipulated audit timeframe. Such pressure negatively affects skeptical auditors. When working under time pressure auditors may not likely handle the investigation work on probable fraud with reasonable care. Auditors who do not experience time budget pressure because they get flexible timeframe to complete the work may not experience time budget pressure. These auditors will have ample time to execute investigation procedure properly and assess risk of material misstatement of fraud more appropriately. Thus, in the absence of time constraint, the conduct of audit may become more effective and the gathering of fraud evidence become more complete.

The presence of time budget pressure is more likely to affect skeptical auditors than the less skeptical auditors. Skeptical auditors are more thorough in attempting to expose the likelihood of misconducts that lead to fraud. Thus, time budget pressure is expected to negatively affect the relationship between professional skepticism and auditors' assessment of risk of material misstatement. In the absence of deadline pressure environment, auditors that are more skeptical are more likely to detect and report frauds than that of less skeptical auditors. On the other hands, when working in an environment of a tight deadline, the likelihood of more skeptical auditors to detect and report fraud is not significantly higher than that of less skeptical auditors. The hypothesis of this study is developed as follows.

H3(a): The positive relationship between professional skepticism and the auditors' assessment of risk of material misstatement is stronger (weaker) in low (high) time budget pressure.

2. Methodological approach

The study uses a quasi-experiment on auditors from Big 4 and non-Big 4 audit firms in Malaysia. The quasi-experiment involves experience as a between-subject variable, and time budget pressure and professional skepticism as within-subject variables. Prior studies widely use the quasi-experiment to examine audit judgment and decision-making (Quadackers *et al.*, 2014). The experiment utilizes survey instrument to evaluate the effects of experience, time budget pressure and professional skepticism on auditors' assessment of risk of material misstatement. A number of studies use a survey instrument approach in dealing with sensitive issues in financial reporting (e.g. Hassink *et al.*, 2010).

2.1. Research Instrument

The study provides participants with booklets comprising a cover letter and the research instrument. The cover letter provides a brief explanation on the study and the request of participation. The research instrument has four sections. Section A contains a case of risk of material misstatement for Equinox Ltd. The case is adapted from Quadackers *et al.* (2014). It contains a scenario of an unexpected material increase in gross margin. Auditors are setting up the analytical procedures at the planning stage for assessing material misstatements. See the case in *Appendix 1*. Based on the case, participants are required to evaluate, firstly the likelihood of sales misstatement and secondly the likelihood of fraud occurrence (Payne and Ramsay, 2005; Knapp and Knapp, 2001). Section B encompasses 30 questions that measure auditors' level of professional skepticism (Hurt, 2010). Section C consists of six questions that measure time budget pressure in meeting the audit deadline (Otley and Pierce, 1996). Section D consists of questions on the participant profile including gender, academic qualification, current position, type of audit firm, number of audit partners, working experience, fraud incidence and type of courses attended.

2.2. Operationalization of Variables

Variables of this study are assessment of risk of material misstatement as the dependent variable, and professional skepticism, auditor experience and time budget pressure as independent variables. The assessment of risk of material misstatement is based on the management's explanation on the change in sales mix, which accounts for the increase in the gross margin (Payne and Ramsay, 2005; Knapp and Knapp, 2001). Respondents are expected to put a likelihood percentage that sales figure are reported incorrectly. The study uses Hurtt's (2010) instrument to measure the participants' level of professional skepticism. The study also utilizes the Owusu-Ansah *et al.* (2002 and Moyes and Hasan's (1996) approach to define experience. In this study, experience is a categorical variable representing audit junior, audit senior, and audit manager/partner. The study adapts the Otley and Pierce's (1996) six statements on items of identifying the time allocated to perform audit tasks to determine time budget pressure. *Table 1* summarizes the operationalization of variables.

Table 1. Operationalization of Variables

Variables	Operationalization
Assessment of Risk of Material Misstatement	Participants' assessment on the likelihood that sales are reported incorrectly by indicating on a rating scale, ranging from 0% to 100% (Payne and Ramsay, 2005; Knapp and Knapp, 2001).
Professional Skepticism	Participants' scores on a six-point Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree) on thirty items to identify the level of professional skepticism (Hurtt, 2010).
Experience	Participants' indication on their present position level by ticking in the appropriate box either for audit junior; senior; manager; partner or others (Owusu-Ansah *et al.*, 2002; Moyes and Hasan, 1996). The categories of experience with code "1" for audit junior, code "2" for audit senior, and code "3" for audit manager/partner.
Time Budget Pressure	Participants' level of agreement with six statements on items of identifying the time allocated to perform audit tasks by circling the score on a five-point Likert scale ranging from 1 (never) to 5 (always) (Otley and Pierce, 1996).

This study uses a multiple regression model to understand the impact of professional skepticism, experience and time budget pressure as the independent variables on auditors' assessment of material misstatement risk as well as the potential moderating effects of experience and time budget pressure respectively on the relationship between professional skepticism and auditors' assessment of material misstatement risk. Prior studies have used multiple regressions to deal with auditors' judgment and decision-making (Quadackers *et al.*, 2014). The specified regression model is as follows:

$$\text{Auditors' assessment of fraud risk} = \alpha_0 + \alpha_1 skep + \alpha_2 exp + \alpha_3 press + \alpha_4 skep*exp + \alpha_5 skep*press + \varepsilon$$

where:
skep = Professional skepticism,
exp = Experience,
press = Time budget pressure,
skep*exp = Professional skepticism*experience,
skep*press = Professional skepticism*time budget pressure,
ε = Error term.

3. Conducting research and results

The main purpose of the study is to examine the effects of professional skepticism, experience and time budget pressure on auditors' assessment of risk of material misstatements due to fraud. The study also investigates the potential moderating role of experience and time budget pressure on the relationship between professional skepticism and auditors' assessment of fraud risk. This section discusses results of data analysis.

3.1. Pilot Study

The study distributes research instruments to 56 auditors of one non-Big4 firm to pilot test the appropriateness and reliability of the instruments. Each participant received a booklet

comprising the descriptions of the study, instructions and questions of a scenario case on the assessment of material misstatement risks. The research instruments also contain measurement of professional skepticism and extent of time budget pressure. Participants are requested to indicate any problem with regard to the ambiguity, inaccuracy or redundancy of any information in the instrument for improvements. The purpose of the pilot study is to ensure the reliability of the research instrument and the feasibility of the survey to ultimately be used in a larger scale study (Cavana *et al.*, 2001).

3.2. Data Collection

The researcher contacts the partner or person in-charge of the selected audit firms by phone to get permission for the involvement of their audit staff. In July 2013, the researcher mailed instruments to the respective person in-charge together with the cover letter stating objectives of the study and the promise of anonymity and confidentiality of information. Return stamped and self-addressed envelopes were also enclosed. The person in-charge in the audit firm distributes the instruments to the participating audit juniors, seniors and managers or partners. This approach is expected to obtain a response rate of 20% to 30% as evident in previous behavioral studies (Zakaria *et al.*, 2010). After three weeks, the researcher makes follow-up phone calls and letters to remind the person in-charge for the return of completed instruments.

3.3. Participants

Participants in this study are auditors from all the Big4 and 180 non-Big4 audit firms. Sixty-seven of the firms are located in the state of Selangor and 117 firms are in Kuala Lumpur. Selangor and Kuala Lumpur accommodate about 57.6% of all audit firms in Malaysia. The study selects the sample firms randomly from the Malaysian Institute of Accountant Directory 2012 on a systematic basis at an interval of five. The selection process is repeated independently for the respective state until the stipulated number of sample firms represents 23.6% of the total number of audit firms as previously recommended by Cavana *et al.* (2001).

For each selected firm, the study sends five instruments to the person in-charge of audit. The person in-charge has to choose participants to represent different audit levels including audit juniors, seniors, managers and partners. One thousand instruments are sent to 335 firms in Selangor and 665 firms in Kuala Lumpur. Two hundred fifty seven completed instruments (80 from Big4 and 177 from non-Big4 firms) are returned. Upon cleaning up, nine of the returned instruments are excluded from the analysis because of missing values. The data cleaning up is an important part of the process to eliminate the missing and erroneous data, which can pose a significant problem to the reliability and validity of study outcomes. The number of missing data for both professional skepticism and time budget pressure ranges between 0.6% and 1.3%. Since the percentage of total missing data is less than 10%, the observation can generally be ignored (Hair *et al.*, 2010). See *Table 2* for details.

Finally, only 248 research instruments, which are equivalent to a response rate of 24.8 percent, are usable. The response rate represents the percentage of usable instruments to the total number of distributed instruments. The 248 cases of final sample meet the minimum number of data for further analysis. The study carefully monitors data collection and cleaning processes to ensure truly irretrievable data.

Table 2. Distributed Instruments and Response Rate

Area	Participating Audit Firms		Distributed Instruments	Completed Instruments		Usable Instruments (% to total no of distributed instruments
	Big4	Non-Big4		Big4	Non-Big4	
Selangor	-	67	335	-	56	52 (15.5%)
Kuala Lumpur	4	113	665	80	121	196 (29.4%)
Total	4	180	1,000[1]	80	177	248 (24.8%)

Note: [1]Instruments distributed to participating firms with five sample auditors for each non-Big4 firms and twenty-five auditors for each Big4 firms.

3.4. Descriptive Statistics

Table 3 presents descriptive statistics of variables in this study. The mean values of professional skepticism and time budget pressure are 3.43 and 3.64 respectively. The mean of assessment of risk of material misstatements is 55.48. For the purpose of the analysis, the scale for time budget pressure is transformed from 5-poimt scale to 6-point scale in order to be consistent with measurement scale of professional skepticism and to avoid a range bias. Hence, a comparison between the two variables is possible.

Table 3. Descriptive Statistics (N=248)

	Min	Max	Mean	SD	Range
Professional Skepticism	1.04	5.40	3.43	.87	1 – 6
Time Budget Pressure*	1.27	5.73	3.64	.66	1 – 6
Assessment of Risk of Material Misstatements	10.0	97.0	55.48	22.71	0 - 100

Note: *The scale range was transformed or recoded from 5-point to 6-point to avoid range bias.

3.5. Test of Data

The study performs a multicollinearity test using the correlation analysis and collinearity statistics. A multicollinearity problem occurs when the correlations between independent variables are more than 0.7 (Pallant, 2007). See Table 4 for results of correlation matrix. Results show that values of correlation coefficient between independent variables are in the range of 0.03 and .63. Since the correlations are less than 0.7 there is no serious multicollinearity problem, hence, all variables are retained for further analysis (Pallant, 2007).

Table 4. Test of Correlation between Variables

	Assessment of Misstatement Risks	Professional Skepticism	Experience	Time Budget Pressure
Assessment of Misstatement Risks	1.000	.629***	.235***	-.033
Professional Skepticism		1.000	.097*	.119**
Experience			1.000	-.205***
Time Budget Pressure				1.000

Note: *Significant level at 10%, ** Significant level at 5%, *** Significant at 1% level.

3.6. Results of Multiple Regressions Analysis

This study uses multiple regressions analysis to assess the effects of professional skepticism, time budget pressure and experience on auditors' assessment of risk of material misstatements. The regression model as shown in *Table 5* is significant with *F = 37.84*. The adjusted *R* Square is 0.433, which indicates that the model has successfully explained 43.3% of the variance in auditors' assessment of risks of material misstatements. This level of adjusted *R* square is comparable to that in some other auditing studies (Naibei *et al.*, 2014). The analysis is based on a sample of 248 cases, which is considered adequate (Tabachnick and Fidell, 2007). *Table 5* presents results of the multiple regression analysis.

Table 5. Multiple Regression Results

	Coefficients+ (T-Stats) (*p* value)
Constant	(.694) (.488)
Professional Skepticism	.489 (3.204) (.002)
Experience	.294 (3.284) (.001)
Time Budget Pressure	-.160 (-2.031) (.043)
Professional Skepticism* Experience	-.184 (-1.877) (.062)
Professional Skepticism* Time Budget Pressure	.238 (1.444) (.150)
R Square	.445
Adjusted R Square	.433
F Value	37.84***
N	248

Note: *** Significant at 1% level

+Use standardized rather than unstandardized coefficient due to subjectivity and need to be cautious.

The following subsections discuss the results for each the hypothesized relationship between independent variables, i.e., professional skepticism, experience and time budget pressure, and the dependent variable i.e., auditors' assessment of risk of material misstatement. Results also present separately the moderating effects of experience and time budget pressure respectively on the relationships between professional skepticism and assessment of risk of material misstatement.

3.7. Relationship between Professional Skepticism and Assessment of Risk of Material Misstatement

Results in *Table 5* show a significant positive relationship between professional skepticism and auditors' assessment of risk of material misstatement at *p=.002*. The result supports Hypothesis 1. The results suggest that the attitude of professional skepticism of auditors improves the auditors' ability in assessing risks of material misstatement. Results suggest that as the level of professional skepticism increases auditors become more thorough and cautious in assessing the risk of material misstatement and in making audit decisions. Skeptical auditors are more alert with the evidence they obtained to avoid making wrong audit judgment.

The results are consistent with several past studies in the area of audit and accounting on the positive relationship between attitude and behavior (Buchan, 2005). An accountant who is sensitive to moral conflict makes a more ethical decision (Buchan, 2005). The sensitive attitude may possibly have a positive influence on the behavior of an individual. Attitude is the main contributing factor on the formation of one's behavior (Armitage and Conner, 2001). The attitude of the management of an organization is evident to be a significant contributor to the formation of the management behavior in fraudulently preparing financial statements (Carpenter and Reimers, 2005). Therefore, it is necessary that audit firms ensure the development of professional skepticism attitude among their auditors in order to enhance audit performance hence better quality of audit.

3.8. Relationship between Experience and Assessment of Risk of Material Misstatement

Table 5 shows a significant positive relationship between experience and auditors' assessment of risk of material misstatement at *p=.001*. The result provides support to Hypothesis 2. Results indicate that more experienced auditors are more competent in making judgments and decisions with regard to the assessment of risk of material misstatements. Auditors acquire knowledge from their experience to evaluate audit evidence and to make audit judgment for the current audit task.

The findings are consistent with Knapp and Knapp (2001) who find that experience positively influences auditors' efforts in detecting the possibility of the occurrence of frauds. Experienced auditors have better knowledge in audit investigation. They execute more effective investigation techniques and are more efficient in identifying indicators of material fraudulent misstatements (Braun, 2000).

Other studies such as Payne and Ramsay (2005), however, find that experience would negatively affect auditors' performance. The inconclusive findings may be due to effects of the interaction between experience and professional skepticism on auditors' performance. This study expects that professional skepticism work differently among experienced auditors from that among the less experienced auditors. Thus, experience works as a moderating variable on the relationship between auditors' professional skepticism and their assessment of risk of material misstatement Knapp and Knapp's (2001). The following sub-section presents results on this moderating effect.

3.9. Moderating Effects of Experience on the Relationship between Professional Skepticism and Assessment of Risk of Material Misstatement

Table 5 shows a significant moderating positive effect of experience on the relationship between professional skepticism and assessment of risk of material misstatement at *p=.062*.

Figure 1 illustrates the result. The result is consistent with hypothesis 2(a) stating that the positive relationship between professional skepticism and the auditors' assessment of risk of material misstatement is stronger for more experienced auditors. The study hypothesizes that the positive relationship between professional skepticism and the auditors' assessment of risk of material misstatement is weaker for less experienced auditors.

Figure 1 shows that, generally, professional skepticism has a positive and significant relationship with auditors' assessment of risk of material misstatement at all levels of auditors' experience. Using a median split approach, auditors with professional skepticism scores higher than the median value are coded 1, indicating high professional skepticism. Auditors with professional skepticism scores lower than the median value are coded 0, indicating low professional skepticism. Overall, results show that, for each different level of audit experience, i.e., audit juniors, seniors and managers/partners, low professional skepticism auditors set a significantly lower level of risk of material misstatement. High professional skepticism auditors, in contrary, set a significantly higher level of risk of material misstatement.

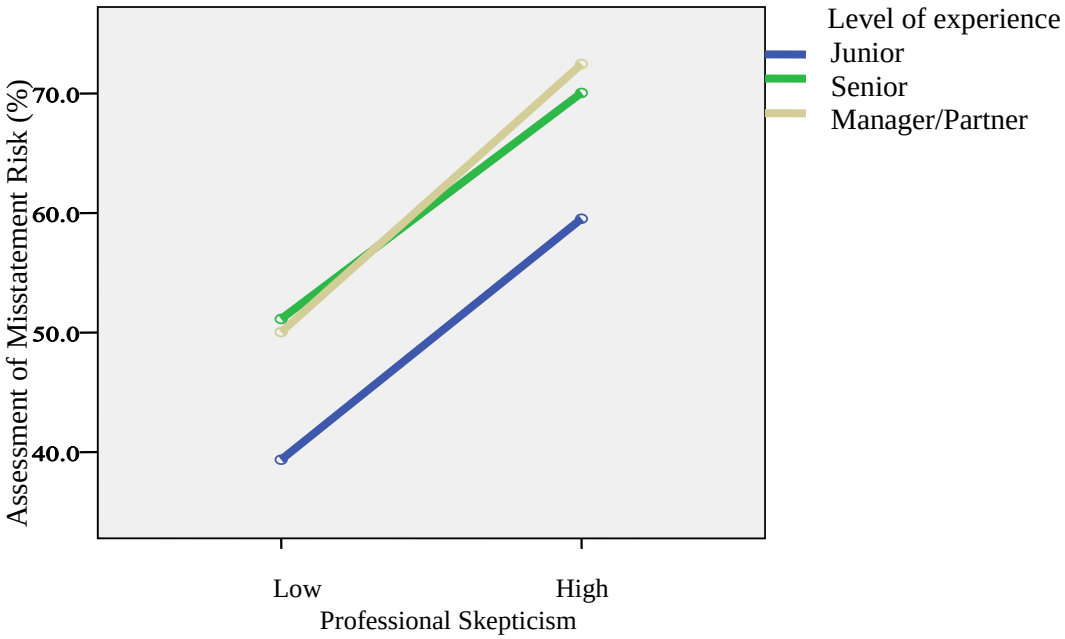

Figure 1. Moderating Effects of Auditor Experience on the Relationship Between Professional Skepticism and Assessment of Risk of Material Misstatement

The results also show that, regardless of the auditors' level of professional skepticism, less experienced auditors, i.e. audit juniors set lower level of risk of assessment of material misstatement than that set by the more experienced auditors, i.e. audit seniors or audit managers/partners. Results suggest that more experienced auditors recognize the significance of risk element in the exercise of assessing material misstatement. The less experience auditors set lower assessment risk may be because they lack of understanding on the threatening incidence of how misleading audit evidence may lead to wrong audit decisions. Thus, they tend to under-estimate the potential consequence of material misstatement due to risk of uncertainties. Hence, less experienced auditors set low level of risk of material misstatement.

In the context of moderating effect of experience, *Figure 1* shows that professional skepticism relates positively to assessment of risk of material misstatement. Such positive relationships exist among auditors with different levels of audit experience. However, the

positive relationship between professional skepticism and auditors' assessment of risk of material misstatement is at a higher level of risk for more experienced auditors than that for less experienced auditors. The graph clearly shows that, among the high professional skepticism auditors, the less experienced auditors (i.e., audit juniors) set risk of material misstatement at a lower level than that set by the more experienced auditors (i.e., audit seniors or audit managers/partners). Among the low professional skepticism auditors, the less experienced auditors (i.e., audit juniors) also set lower level of assessment of risk of material misstatement than that set by the more experienced auditors (i.e., audit seniors or audit managers/partners). However, the level of risk of material misstatement set by the less experienced auditors is consistently lower than that set by more experienced auditors for both low and high professional skepticism groups. In addition, audit managers/partners seem to be the most conservative by setting the highest level of risk of material misstatement.

For the low professional skepticism group, results indicate no significant difference in the level of risk of material misstatement between audit seniors and audit managers/partners. This insignificant difference may exist because the two groups, audit seniors and audit managers or partners, may have the same amount of experience and responsibility. Both audit seniors and audit managers/partners groups have similar audit experience because they have been in service for long enough since appointed to the position. The result suggests that audit experience strengthen the effect of auditors' professional skepticism in assessing the risk of material misstatement. More experienced auditors who are professional skeptical tend to be more careful when assessing material misstatement by setting higher level of risk. The more conservative approach taken by experienced auditors by being more skeptical is expected to improve the quality of audit.

Results of this study are consistent with several past studies in terms of the moderation of auditors' experience on the relationship between professional skepticism and assessment of risk of material misstatement. Past studies found that experience moderates the relationship between the attitude of company managers and their judgments as well as decision making on frauds (Carpenter and Reimers, 2005). Carpenter and Reimers (2005) find that the relationship between the attitude of individuals and their decision performance is stronger among individuals with more experience than among those with less experience. In another study, experience is found to have strengthened the relationship between the attitude of individuals and other decisions on product brand loyalty (Bennet *et al.*, 2005).

3.10. Relationship between Time Budget Pressure and Assessment of Risk of Material Misstatement

Results of multiple regression analysis in *Table 5* show that time budget pressure has a significant negative influence on the assessment of risk of material misstatement at $p=.043$. Thus, the result supports hypothesis 3. As the time budget pressure on auditors increases, auditors' assessment on the risk of material misstatement decreases. As the time budget pressure decreases, auditors' assessment on the risk of material misstatement increases. When auditors work under the pressure, trying to complete the audit assignment within a limited given time auditors may not be able to conduct the necessary audit procedures adequately. Auditors may just accept audit evidence as satisfactory with the view that the likelihood of potential misstatement is low. This inadequate assessment of evidence may to auditors issuing an inappropriate audit opinion.

Results on the negative relationship between time budget pressure and assessment of risk of material misstatement is consistent with past studies. For example, Coram *et al.* (2003) and Gundry and Liyanarachchi (2007) find that an increase in pressure on auditors arising from

insufficient time allocation leads to a negative effect on the quality of audit report. Results provide support to the argument that the presence of time budget pressure results in less effective assessment of risk of material misstatement. Thus, time budget pressure may be able to explain the inconclusive finding on the effect of professional skepticism on auditors' work performance (Kelley and Margheim, 1990).

3.11. The Moderating Effect of Time Budget Pressure on the Relationship between Professional Skepticism and Assessment of Risk of Material Misstatement

Table 5 presents results from a further analysis on the moderation of time budget pressure on the relationship between professional skepticism and assessment of risk of material misstatement. The table shows that the interaction between time budget pressure and professional skepticism does not significantly affects auditors' assessment of risk of material misstatement. Therefore, hypothesis 3(a) is not supported. *Figure 2* graphically presents the result.

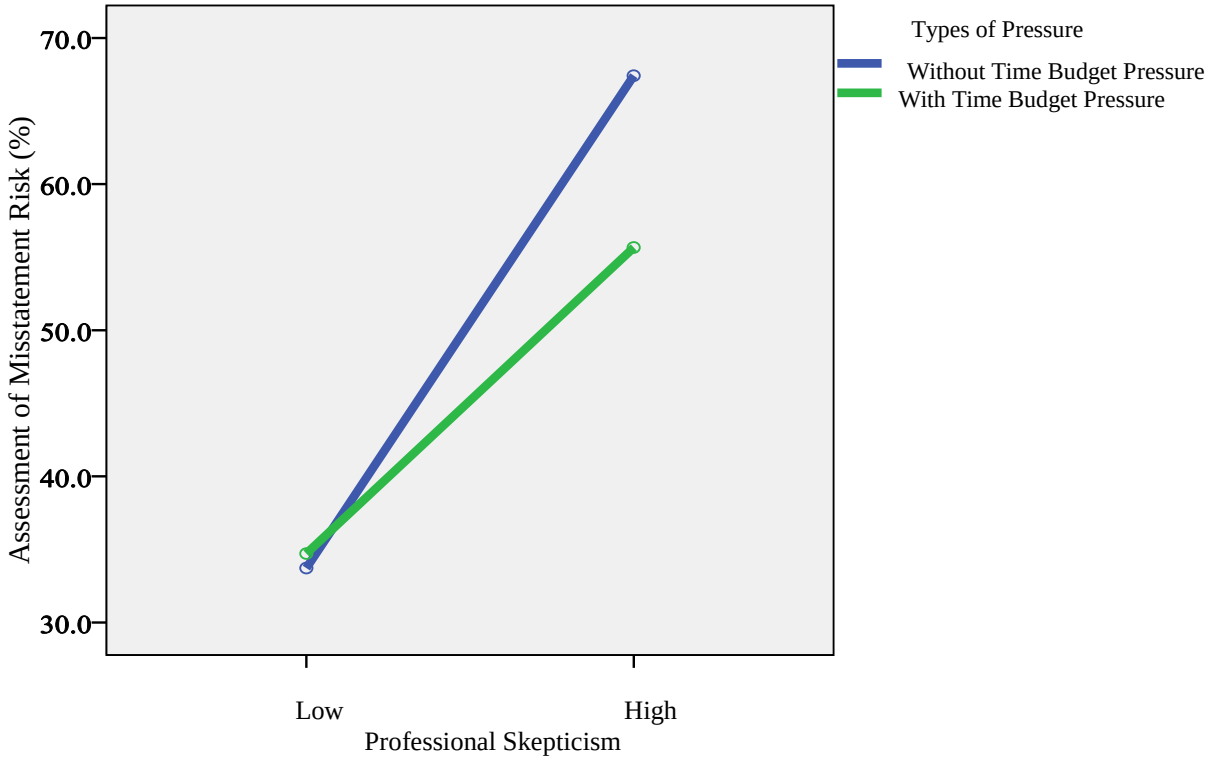

Figure 2. The Moderating Effects of Time Budget Pressure on the Relationship Between Professional Skepticism and Assessment of Risk of Material Misstatement

Using a median split approach, sample auditors are classified into two groups, one group comprising auditors with high level of professional skepticism and another group comprising auditors with low level of professional skepticism. Auditors with professional skepticism scores higher than the median value are coded 1, indicating high professional skepticism. Auditors with professional skepticism scores lower than the median value are coded 0, indicating low professional skepticism. *Figure 2* shows that, overall, in both situations of working with time

budget pressure or working without time budget pressure, highly skeptical auditors assess significantly higher level of risk of material misstatements than low skeptical auditors.

Figure 2 shows that the effects of professional skepticism on auditors' assessment of risk of material misstatements differ with different levels of time budget pressure. Among low professional skepticism auditors, the level of risk of material misstatements they assess when working under budget time pressure has no significant difference from that they do when working under no time budget pressure. However, when working under budget time pressure, highly skeptical auditors assess lower level of risk of material misstatement than they would do when working under no time budget pressure. In the absence of time budget pressure, highly skeptical auditors set high level of risk of material misstatement. Nevertheless, the difference in the level of risk of material misstatement is not statistically significant. See *Table 5* for details.

This finding is inconsistent with Kelley and Margheim (1990) who concluded that time budget pressure moderates auditors' personalities in their judgment process and in reporting of audit findings. Professional skepticism contributes to better assessment of risk of material misstatement when auditors are not pressured by budget time than when they are faced with budget time constraints. This means that given a reasonable amount of time without any limitation or pressure, skeptical auditors would make a more appropriate assessment of material misstatements. Although, results of this study do suggest that time budget pressure can moderate the effects of professional skepticism on auditors' risk of material misstatements, statistically, the results are not significant.

4. Additional Analysis

This study conducts an additional analysis firstly, to check the stability of results on the relationship between auditors' professional skepticism and auditors' assessment of material misstatement risks between the two states, Kuala Lumpur and Selangor. Secondly, the additional analysis is to examine the moderating effects of experience and time budget pressure on the relationship between professional skepticism and auditors' assessment of material misstatement risks.

Table 6 presents consistent results of regression analysis on samples from both states, i.e. Kuala Lumpur and Selangor indicating a significant positive relationship between professional skepticism and auditors' assessment of risk of material misstatement. Results in both states consistently suggest that auditors' attitude of professional skepticism of improves their ability to assess risks of material misstatement. As the level of professional skepticism increases, auditors become more thorough and cautious in assessing the risk of material misstatement and in making audit decisions. Skeptical auditors are more alert with the evidence they obtained to avoid weak audit findings.

The table also indicates consistent results for direct effect of experience towards assessment of material misstatement risks for both sample sets indicating auditors that are more experienced place higher risk compared less experienced auditors. Auditors with more experience appear to be more sensitive to risk of material misstatement thus reflects their wiser judgment consideration. Similarly, results on the direct effect of time budget pressure towards assessment of material misstatement risk are consistent for sample sets from both states. Results consistently show significant negative relationships between time budget pressure and assessment of material misstatement risk. Time budget pressure, which relates to work stress, in general, leads to a lower assessment of material misstatement risk.

Results of the moderating effect of experience and time budget pressure on the relationship between professional skepticism and assessment of material misstatement risks for

both sample sets are consistent. The positive effect of professional skepticism on assessment of material misstatement risks is stronger for more experienced auditors than for the less experienced auditors. Experienced auditors assess significantly higher material misstatement risks than less experienced auditors with either low or high level of professional skepticism. Results for both sample sets consistently indicate that auditors place low assessment of material misstatement risks when they work under no time budget pressure than that they set when they work under budget time pressure. Results show a stronger effect of time budget pressure on assessment of material misstatement risks among highly skeptical auditors than on the less skeptical auditors.

Table 6 shows the multiple regression results for comparison between Kuala Lumpur and Selangor.

Table 6. Multiple Regression Results

	Coefficients+ (T-Stats)	
	Kuala Lumpur	Selangor
Constant	(.852)	(1.006)
Professional Skepticism	.470 (2.909)***	.386 (1.76)*
Experience	.302 (2.837)***	.399 (2.563)***
Time Budget Pressure	-.190 (-2.073)**	-.250 (-2.356)**
Professional Skepticism* Experience	-.217 (-1.847)*	-.277 (-1.542)*
Professional Skepticism* Time Budget Pressure	.226 (1.331)*	.375 (1.721)*
R Square	.426	.539
Adjusted R Square	.408	.506
F Value	23.436***	16.571***
N	248	248

*Significant at 10%, **Significant at 5%, ***Significant at 1%.
+Use standardized rather than unstandardized coefficient due to subjectivity and need to be cautious.

Conclusion

Auditors' limited ability to highlight successfully incidences of fraudulent financial reporting has become the main concern of audit regulatory bodies. Consequently, the auditing profession has required professional auditors to enhance the application of professional skepticism. The profession believes that the lack of professional skepticism among auditors may lead them to compromise the quality of assessing their work at the risk of possible material misstatement (Carpenter and Reimers, 2013). Audit firms must therefore take the responsibility of nurturing the skeptical attitude among audit staffs either through training program or on the job coaching. The application of professional skepticism in the audit procedures may be difficult without a proper guidance by the firms. The lack of understanding of the concept of professional skepticism leads auditors to face difficulties in complying with the professional requirements (Hurtt *et al.*, 2013). Thus, audit firms must assume the responsibility of implanting the professional skepticism attitude among audit staff at both the firm and individual levels.

Results show that professional skepticism is significant for auditors when assessing risk of material misstatement. However, auditors' effort to apply the professional skepticism attitude depends on their individual experience and the working environment. Results provide evidence that professional skepticism attitude is the main factor that explains auditors' ability of assessing risk of material misstatement. Results also indicate that regardless of the level of professional skepticism attitude, auditors with more experience either as audit seniors, managers or as partners set a significantly higher risk of material misstatements. This finding indicates that as auditors become more experienced their appreciation on the importance of professional skepticism in audit increases. In addition to experience, time budget pressure in assessing risks of material misstatement also affects auditors particularly among those who are highly skeptical.

Findings of this study helps audit firms to design quality audit training programs/modules for young and new audit trainees to enhance their professional skepticism attitude specifically to detect risk of material misstatements and fraudulent reporting in the financial statements. Effective training modules would expedite the development of professional skepticism attitudes among young auditors.

The finding also confirms that time budget pressure, has a potential, to have a negative influence in auditors' judgment process to report audit findings. When auditors work under a tight time schedule, trying to complete the audit engagement within a limited time period, they may not be able to conduct the necessary audit procedures adequately and consequently would issue an inappropriate audit opinion. Therefore, audit firms need to create harmonious working environment that emphasizes on effective implementation of audit procedures and compliance of requirements of auditing standards in reasonable time periods.

This study may have some limitations. Firstly, this study examines the application of professional skepticism attitude based on individual auditors. In the real situation, audit teams commonly perform audit works. Thus, it would be more appropriate to assess the effect of professional skepticism on auditors' assessment of risk of material misstatement based on audit team performance. Secondly, the study uses an experimental design on auditors from audit firms located in Selangor and Kuala Lumpur. Thus, results may not be generalizable to other settings or auditors from audit firms in other locations. Thirdly, the use of a decision case in an experimental environment may deprive participating auditors from obtaining additional information in a more natural work environment. The use of a natural audit setting may be able to provide auditors with a more ordinary environment for audit judgments, hence, would improve the result. Future studies may introduce the use of different judgment scenarios other than sales to examine the likelihood of frauds and material misstatements.

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Appendix 1

Section A

Equinox Ltd. is a fifty-year old public company that develops, manufactures and markets pharmaceutical and medical instrumentations. The company has three divisions. Your firm has audited Equinox's financial statements for the last three calendar years. You are required to answer 2 (two) questions about the results of preliminary analytical review and explanation of the findings.

It is November 2012, and you have just begun conducting a preliminary analytical review of Equinox's third quarter financial statements. The gross margin percentage is on pace to increase by roughly 10% over last year's 32.73% to 36.04%. The change is well above the five-year range of 32.1% to 32.8% and mean of 32.5%. Without the change, this year's total gross margin would be roughly $15.5 million lower than currently recorded. While Equinox's gross margin percentage has always been slightly better than industry averages, this year's percentage is well above the predicted industry-average of 33.0%. The tables below highlight the increase:

	2011 and 2012 3rd Quarter Total Performance		2012 3rd Quarter Divisional Performance		
Third Quarter Data (in millions of dollar)	2011 3rd Quarter Totals	2012 3rd Quarter Totals	2012 3rd Quarter Prescription Drugs	2012 3rd Quarter Household Products	2012 3rd Quarter Medical Instrumentation
Net Sales	$315.00	$471.70	$245.30	$99.10	$127.30
Cost of Goods Sold	$211.90	$301.70	$161.60	$69.30	$70.80
Gross Margin	$103.10	$170.00	$83.70	$29.80	$56.50
Gross Margin %	32.73%	36.04%	34.12%	30.07%	44.38%

Sales mix of the divisions in 2011 and 2012				
	Prescription Drugs	Household Products	Medical Instrumentation	Total
% of sales 2012	52%	21%	27%	100%
% of sales 2011	55%	32%	13%	100%

Explanation of the CFO for the findings

When you ask the management about the increase, the CFO Mr. Andrew explains: 'Our margin is up, way up. But, our sales mix changes this year. In 2012, our medical instrumentation products have done better than ever before. Naturally, our margins will improve when we sell relatively more of our instrumentation products, and they have boomed this year. Fortunately, we are currently the most qualified firm to meet high-end users' demands, and our clients are quite appreciative of our products. Prices on instrumentation sales range all over the place, from just over ten thousand dollars to over a million in some cases. But for the record, we average $53,000 per sale and can gross over 45% per sale, depending on how negotiations go with the client. Consider that, and compare the percentage of revenue accounted for by instrumentation sales this year (27%) to last year's figure (13%) and you will understand what caused our gross margin percentage to go up.'

Question 1:

Based on the results of the preliminary analytical review given to you by Equinox Ltd., what is the likelihood that sales figure were reported incorrectly (0-100%)?

_____%

Section B

This section has 30 statements. Please read the following statements carefully and circle the score on a 6 point scale ranging from 1 (strongly disagree) to 6 (strongly agree).

	Statements	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1.	I often accept other peoples' explanations without further thought.	1	2	3	4	5	6
2.	I feel good about myself.	1	2	3	4	5	6
3.	I wait to decide on issues until I can get more information.	1	2	3	4	5	6
4.	The prospect of learning excites me.	1	2	3	4	5	6
5.	I am interested in what causes people to behave the way that they do.	1	2	3	4	5	6
6.	I am confident of my abilities.	1	2	3	4	5	6
7.	I often reject statements unless I have proof that they are true.	1	2	3	4	5	6
8.	Discovering new information is fun.	1	2	3	4	5	6
9.	I take my time when making decisions.	1	2	3	4	5	6
10.	I tend to immediately accept what other people tell me.	1	2	3	4	5	6
11.	Other peoples' behavior doesn't interest me.	1	2	3	4	5	6
12.	I am self-assured.	1	2	3	4	5	6
13.	My friends tell me that I usually question things that I see or hear.	1	2	3	4	5	6
14.	I like to understand the reason for other peoples' behavior.	1	2	3	4	5	6
15.	I think that learning is exciting.	1	2	3	4	5	6
16.	I usually accept things I see, read or hear at face value.	1	2	3	4	5	6
17.	I don't feel sure of myself.	1	2	3	4	5	6
18.	I usually notice inconsistencies in explanations.	1	2	3	4	5	6
19.	Most often I agree with what the others in my group think.	1	2	3	4	5	6
20.	I dislike having to make decisions quickly.	1	2	3	4	5	6
21.	I have confidence in myself.	1	2	3	4	5	6
22.	I don't like to decide until I've looked at all of the readily available information.	1	2	3	4	5	6
23.	I like searching for knowledge.	1	2	3	4	5	6
24.	I frequently question things that I see or hear.	1	2	3	4	5	6
25.	It is easy for other people to convince me.	1	2	3	4	5	6

	Statements	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
26.	I seldom consider why people behave in a certain way.	1	2	3	4	5	6
27.	I like to ensure that I've considered most available information before making a decision.	1	2	3	4	5	6
28.	I enjoy trying to determine if what I read or hear is true.	1	2	3	4	5	6
29.	I relish learning.	1	2	3	4	5	6
30.	The actions people take and the reasons for those actions are fascinating.	1	2	3	4	5	6

Section C

This section has 6 statements. Please read the following statements carefully and circle the score on a 5 point scale ranging from 1 to 5, corresponding to your level of agreement.

What is your respond when you feel a time budget is unattainable?						
	Statements	Never	←		→	Always
1.	Work harder but charge all time properly.	1	2	3	4	5
2.	Under-report time by working on personal time.	1	2	3	4	5
3.	Reduce the quality of audit work to meet budget.	1	2	3	4	5
4.	Request and obtain an increase in the budget.	1	2	3	4	5
5.	Shift time to a non-chargeable code.	1	2	3	4	5
6.	Shift time to a different client.	1	2	3	4	5

Section D: Respondent profile

Please fill in the following information and tick (√) in the appropriate box.

1. Gender
   - ☐ Male
   - ☐ Female

2. Academic qualifications (you may choose more than one):
   - ☐ Diploma
   - ☐ Bachelor Degree
   - ☐ Master
   - ☐ Professional Qualification (eg. CIMA/ ACCA)
   - ☐ Others (specify):_____

3. Present position level:
   - ☐ Junior Auditor
   - ☐ Senior Auditor
   - ☐ Audit Manager
   - ☐ Audit Partner
   - ☐ Others (specify): _____

4. Category of your audit firm (current organization):
   - ☐ Non-Big Four
   - ☐ Big Four

5. Number of audit partners in your organization:
   - ☐ Less than 3 partners
   - ☐ 4-6 partners
   - ☐ 7-10 partners
   - ☐ More than 10 partners

6. Years employed in present position: _____ years

7. Years employed as an auditor: _____ years

8. Have you encountered any fraud cases during your audit?
   - ☐ Yes
   - ☐ No

   If Yes, please specify. _____ times.

9. Have you attended any of the following training or programs?

- ☐ Skepticism
- ☐ Fraud Detection
- ☐ Others (specify): _____