Experimental Evidence on Auditors' Negotiation Behaviour

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THESIS DECLARATION

I, Abhijit Das, certify that:

This thesis has been substantially accomplished during enrolment in this degree.

This thesis does not contain material that has been submitted for the award of any other degree or diploma in my name, in any university or other tertiary institution.

In the future, no part of this thesis will be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of The University of Western Australia and where applicable, any partner institution responsible for the joint award of this degree.

The research involving human data reported in this thesis was assessed and approved by The University of Western Australia Human Research Ethics Committee. Approval No. **RA/4/20/4486.**

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ABSTRACT

This thesis aims to address four separate but closely related research questions in the auditor-client negotiation literature (Koch and Salterio 2017; Gibbins, McCracken and Salterio 2010, Salterio 2012). (1) What are the effects of auditors' performance-based profit-sharing schemes and client pressure on auditors' mindset in the pre-negotiation stage? (2) What are the effects of auditor partners' performance-based profit-sharing schemes and client flexibility on auditors' behaviour in an actual negotiation stage? (3) Whether auditors' pre-negotiation mindset will change in an actual negotiation stage? (4) Whether auditors' personality trait of social value orientation (SVO) have an impact in a simulated negotiation phase?

This thesis relies on the theories of motivated reasoning and dual concern to formulate various hypotheses. This thesis consisted of two experimental studies conducted online. Study One relies upon the theory of motivated reasoning to develop the hypotheses to address the first research question. Based on an online experimental study with a sample of 95 US-based experienced auditors, the study finds that experienced auditors, whose performance-based profit-sharing scheme is based on divisional profits and who face explicit client pressure, record the lowest allowance for obsolete inventory in the client's financial statements. In contrast, experienced auditors, whose performance-based scheme is based on firm-wide profit and who experience implicit pressure, record the highest allowance for obsolete inventory in the client's financial statements. Consistent with theory, the experimental results show that experienced auditors are motivated to partially waive audit adjustments and move towards the client's preferred accounting estimate subject to a reasonableness constraint criterion. Study One finds that performance-based profit-sharing schemes and client pressure considerably reduce the amount of proposed allowance, but the joint effect of client pressure does not vary across levels of performance-based profit-sharing schemes. Overall, the results suggest these two factors influence the concession-making mindset of experienced auditors in a pre-negotiation setting. The findings show that experienced audit managers and partners are prepared to accept smaller audit adjustments by partially waiving the audit adjustment.

To address the second, third and fourth research questions, Study Two draws on the theory of motivated reasoning and dual concern theory to formulate hypotheses. Relying on an online experimental study with a sample of 43 US-based audit managers and partners, the study finds an interaction effect between performance-based profit-sharing schemes and client flexibility.

Surprisingly, this study finds experienced auditors whose performance-based profit-sharing scheme is based on divisional profits and who face flexible clients record the lowest allowance for obsolete inventory in the client's financial statements. In contrast, experienced auditors whose performance-based scheme is based on firm-wide profit and face inflexible clients record the highest allowance for obsolete inventory in the client's financial statements. The results of this study suggest that there is a significant change in auditors' pre-negotiation concession-making mindset in the negotiation setting. That is, auditors are prepared to provide considerably larger concessions from their initial proposed allowance for obsolete inventory, which suggests there is a violation of the reasonableness criterion. These findings imply that clients' financial statements may remain materially misstated after negotiations. The findings of this experiment did not find any impact of auditors' SVO on the negotiation outcome.

This thesis makes several theoretical contributions. First, prior studies have investigated auditors acting as motivated reasoners due to pressure exerted by clients. Study One brings novelty to the theoretical discussion on motivated reasoning that auditors' performance-based profit-sharing schemes may also influence auditors to act as motivated reasoners. Second, Study One extends prior research on auditor client negotiation by providing additional evidence that client pressure influences the behaviour of auditors in a pre-negotiation context, even in the post-SOX era. Second, Study Two extends the negotiation setting of Study One (i.e., pre-negotiation stage) to an actual negotiation stage, relying on a computer-simulated negotiation. The findings advance the auditor-client negotiation literature by providing evidence that a client characteristic (i.e., flexibility), in addition to performance-based profit-sharing schemes, influences the behaviour of experienced audit practitioners in an actual negotiation. In the process, this thesis provides empirical evidence concerning the relationship between auditors' pre-negotiation mindset and negotiated outcomes. This thesis has implications for audit practice. First, the findings of this thesis suggest audit partners in divisional profit-sharing arrangements may be more influenced by the pressure imposed by clients. Hence, the findings of this thesis suggest that audit firms with divisional profit-sharing arrangements may structure audit partners' compensation schemes to de-emphasize the association between audit partners' compensation and client loss measures. Second, the thesis's findings may alert regulators and standard-setters about the influence of economic (i.e., financial) incentives that impact accounting numbers in a pre-negotiation and negotiation context. Both studies support the discussion that financial incentives should not be allowed to impair audit quality (Francis 2004; IAASB 2014; Trompeter 1994; Wyatt 2004, Zeff 2003).

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CHAPTER ONE
INTRODUCTION

1.0 Introduction

Negotiation research in auditing contexts dates back 30 years, with the publication of the first analytical model of negotiation by Antle and Nalebuff in 1991. However, that article gained little prominence until Gibbins, Salterio, and Webb published their study on auditor-client negotiation in 2001. Although client management bears the ultimate responsibility in preparing the financial statements, the study by Gibbins, Salterio, and Webb (2001) led to the acceptance of the premise that financial statements can be characterised as an outcome of negotiations between the auditor and client management. It implies that the auditor "co-creates" the financial statements and related disclosures with client management.

This co-creation of the financial statements happens primarily due to subjective accounting estimates. The use of subjective accounting estimates is pervasive in the preparation of financial statements. The auditor and client may differ in their professional judgements of accounting estimates. The "differences in professional judgement" often result in disagreement over such accounting issues and require negotiations between clients and auditors to resolve the disagreements (Gibbins, McCracken, Salterio, & Johnstone, 2005; Gibbins et al., 2001; Tan & Trotman, 2010). As a consequence, financial statements are viewed as a result of negotiations between an auditor and client (Antle & Nalebuff, 1991; Gibbins et al., 2005; Gibbins et al., 2001; Trotman, Wright, & Wright, 2005). The Public Company Accounting Board (PCAOB), 2012 highlighted that "differences in professional judgement" is one of the common explanations given by audit firms for the findings that auditors did not follow professional standards on an audit engagement. Prior studies have shown subjective audit adjustments involving professional judgement are typically more contentious than objective audit adjustments (i.e., clear-cut errors). Hence, subjective audit adjustments are more likely to be waived by auditors (Braun, 2001; Wright & Wright, 1997).

Both audit research and deficiencies in regulatory inspection reports provide evidence that auditors often adopt self-interested goals to acquiesce to the client's preferred position (Blay, 2005; Hackenbrack & Nelson, 1996; PCAOB 2017, 2014, 2012; Kadous, Kennedy, & Peecher, 2003; Koch & Salterio, 2017; Ng & Tan, 2003). This tendency to waive audit adjustments may lead to financial statements remaining materially misstated after negotiation. This inclination towards accepting the client's preferred position is troubling because it is detrimental to audit quality and protecting the public interest (Koch & Salterio, 2017).

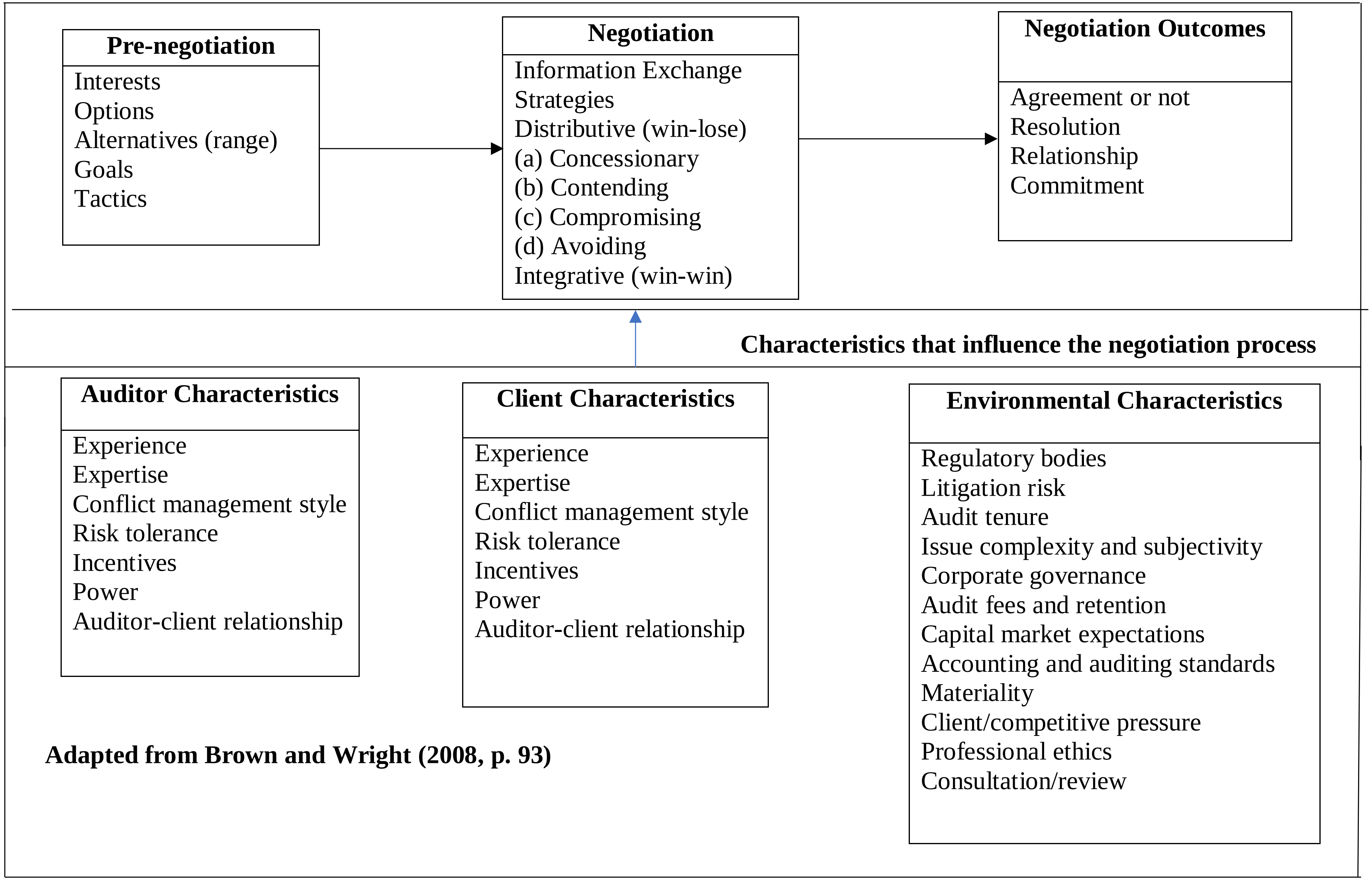
The professional pronouncements (AICPA 1984; AICPA 1997; AICPA, 2002) recognise an auditor's responsibility to detect material misstatements and then ensure an appropriate resolution of them. If those disagreements are not appropriately resolved, and the auditor believes the financial statements are materially misstated, the auditor is required to issue a modified (e.g., qualified or adverse) opinion. A modified audit opinion reduces an auditor's costs associated with litigation risks, regulatory sanctions, and loss of reputation (Carcello & Palmrose, 1994). On the other hand, clients may switch auditors after having received a modified audit opinion (Carey, Geiger, & Oconnell, 2008; Chow & Rice, 1982; Krishnan, 1994; Krishnan & Krishnan, 1996; Lennox, 2000) because they are dissatisfied with the outcome of a negotiation with the auditor (Sanchez, Agoglia, & Hatfield, 2007; Tan & Trotman, 2010). Over the last two decades, several high-profile audit failures prompted reforms in the structure of the auditing profession, especially the enactment of the Sarbanes-Oxley Act, 2002 (hereafter referred to as SOX). The auditing profession ceased to be self-regulated with the enactment of SOX, the creation of the PCAOB in the US, and similar organisations across the globe (e.g., International Forum of Independent Audit Regulation). With increased regulation in the post-SOX period, it may be argued that auditors no longer "negotiate" with their clients as those reforms mandate greater power for auditors, thereby enabling them to take a tougher stand against their clients. However, a survey by Cohen, Krishnamoorthy, and Wright (2008), reported that senior audit partners and clients resolve their accounting disputes and arrive at some form of agreement before they report to the audit committee. The findings by Sanchez et al. (2007) and Tan and Trotman (2010) also suggest that auditor-client negotiations are still common in the post-SOX environment.

This chapter is structured in the following manner: Section 1.0 summarises the research area on auditor-client negotiation, the research questions, and an overview of the two experimental studies. Section 1.1 discusses the motivations for this thesis, and Section 1.2 highlights the theoretical contributions and practical implications. Finally, this chapter concludes with the outline of other chapters and the organisation of the thesis.

Auditor-client negotiations are unobserved. The only observable outcome is the audited figures reported in financial statements. Therefore, it is crucial to understand the determinants that influence decisions made by auditors on the reported figures during auditor-client negotiations. Prior auditing literature provides evidence that various contextual factors such as external conditions and constraints, interpersonal context, and negotiating parties' capabilities influence the decisions made by auditors during auditor-client negotiations (Brown & Wright, 2008; Gibbins et al., 2001; Salterio, 2012). Specifically, research on auditor-client negotiations has been predominantly based on the accounting negotiation model developed by Gibbins et al. (2001). Based on retrospective recalls of experienced auditors, Gibbins et al. (2001) develop a model of the auditor-client negotiation process, which consists of three elements: (1) an accounting issue; (2) the auditor-client process; and (3) the accounting outcome. Subsequently, Brown and Wright (2008) provide an overview of the auditor-client negotiation process.

Figure 1.1 shows an overview of the auditor-client negotiation process:

Figure 1.1 Overview of the Auditor-Client Negotiation Process



Adapted from Brown and Wright (2008, p. 93)

Figure 1.1 shows the auditor-client negotiation process involves three phases: pre-negotiation, negotiation, and negotiation outcomes. The pre-negotiation phase highlights the importance of interests, options, alternatives, and goals of both the negotiators and their counterparts. In the negotiation phase, the auditor and client exchange information and implement their respective negotiation strategies during the actual negotiations. The last phase in Figure 1.1 identifies the negotiated outcomes that result from a negotiation phase. The outcomes affect not only the quality of the financial reports but also the ongoing auditor-client relationship. Moreover, Figure 1.1 also identifies a number of auditor characteristics, client characteristics, and environmental characteristics that influence all three phases of the auditor-client negotiation process.

This thesis conducts two experimental studies to examine the negotiation behaviour of experienced auditors. The first study (i.e., Study One) relates to the pre-negotiation phase, and the second study (i.e., Study Two) relates to the negotiation phase. In this thesis, the investigated characteristics (i.e., factors) are chosen from the several characteristics depicted in Figure 1.1 that influence the auditor-client negotiation process.

The central theme of this thesis is to examine whether the performance-based profit-sharing schemes variable (i.e., economic motivation) affects experienced auditors' concession-making behaviour (i.e., waive material audit adjustment) in a negotiation setting. Prior studies in auditing provide evidence that auditing firms have increasingly adopted performance-based profit-sharing schemes to compensate audit partners (Burrows & Black, 1998; Coram & Robinson, 2017; Ernstberger, Koch, Schreiber, & Trompeter, 2020; Wyatt, 2004). Furthermore, numerous studies in other accounting disciplines (e.g., management accounting) also suggest that using performance-based profit-sharing schemes influence managers' transfer pricing decisions in negotiation contexts (e.g., Ackelsberg & Yukl, 1979; Anctil & Dutta, 1999; Chong, Loy, Masschelein, & Woodliff, 2018; Ghosh, 2000; Ghosh & Boldt, 2006; Ravenscroft & Haka, 1996). The extant literature provides evidence that incentive-based compensation schemes can influence self-interested behaviours (Evans III, Kim, & Nagarajan, 2006; Gong & Ferreira, 2014; Nagar, 2002). The auditing environment is not an exception.

This thesis also examines two other variables: client pressure and client flexibility. The client pressure variable is adapted from a prior study by Koch and Salterio (2017), and the client flexibility variable is adapted from a prior study by Gibbins, McCracken, and Salterio (2010). In Study One, two factors that are expected to influence experienced auditors' pre-negotiation judgements or decisions are examined.[1] Specifically, an auditor's decision whether to waive or record a proposed audit adjustment in the financial statements of clients is investigated. The two factors are audit partners' *performance-based profit-sharing schemes* (i.e., economic incentive) which is an auditor characteristic, and *client pressure*, an environmental characteristic as shown in the above Figure 1.1.

Study Two examines two factors that are likely to influence experienced auditors' decisions to record an audit adjustment in a simulated negotiation process. The first factor, audit partners' *performance-based profit-sharing schemes*, is re-examined. The second factor is the *flexibility* of clients towards the recording of a proposed audit adjustment in the financial statements (i.e., a client characteristic). In addition, Study Two also examines the effect of the personality trait of auditors' *social value orientation* (i.e., an auditor characteristic) on negotiated outcomes. It is because prior research has shown that personality traits (e.g., individuals' social value orientation) influence negotiation outcomes (De Dreu & Boles, 1998; De Dreu & McCusker, 1997; Upton, 2009; Van Lange & Liebrand, 1991; Van Lange & Semin-Goossens, 1998). In addition, social value orientation (SVO) is chosen in this phase because of the treatments. Negotiation literature suggests that individuals are influenced by SVO in a negotiation setting (Lewicki, Barry, & Saunders, 2015). It is expected auditors' SVO will have a stronger impact on auditors' behaviour in the negotiation phase than the pre-negotiation phase as there is an element of interaction with the client.

[1] Trotman (2014 p 213) in the book The Routledge Companion to Auditing, mentioned that "the terms judgement and decision-making are sometimes used interchangeably. When distinguished, judgement usually refers to the process of estimating outcomes and their consequences (e.g., the assessment of the likelihood of a material misstatement, evaluation of internal controls, risk assessments, estimate of future cash flows and future profitability) while decision-making generally involves an evaluation of consequences which leads to an action (e.g., accept/retain an audit client, selection of a type of audit report) (Libby 1981). Judgements are usually an input for decisions." In this thesis, the term "decision" is used throughout the thesis, which is more consistent with the decision task of the case materials.

In the *pre-negotiation phase*, the client pressure factor[2] is chosen because in this phase, clients will warn auditors of the consequences of recording subjective audit adjustments that reduce clients' pre-tax income. This warning by clients will be channelised to auditors in the form of client pressure. Clients will exert pressure on auditors to persuade them to accept clients' accounting preferences. In the *negotiation phase*, client flexibility is chosen because in this phase, the pressure exerted by the client will manifest in the form of the client's flexible or inflexible attitude towards the recording of audit adjustments. This client's attitude will influence auditors' behaviour whether to accept or reject the client preferred accounting

This thesis aims to address four different but closely related research questions in the auditor-client negotiation literature. The research questions are as follows:

RQ1 What are the effects of performance-based profit-sharing schemes and client pressure on auditors' mindset in the pre-negotiation phase?

RQ2 What are the effects of performance-based profit-sharing schemes and client flexibility on auditors' behaviour in a simulated negotiation phase?

RQ3 Whether auditors' pre-negotiation mindset will change in a simulated negotiation phase?

RQ4 Whether auditors' personality trait of social value orientation have an impact in a simulated negotiation phase?

1.1 Motivations of the Thesis

The overall motivation for this thesis is based on the following reasons:

First, the process model on auditor-client negotiation developed by Gibbins et al. (2001) identifies various accounting contextual features that affect negotiations between auditors and client management. Salterio (2012, p. 271) suggested that more experimental research is needed on auditor-client negotiations from an auditor's perspective, given the paucity of studies in all areas except for negotiation expertise (Bame-Aldred & Kida, 2007; Brown & Johnstone, 2009; Fu, Tan, & Zhang, 2011; Trotman et al., 2005) and negotiation strategies and tactics (Gibbins et al., 2010; Hatfield, Agoglia, & Sanchez, 2008; Hatfield, Houston, Stefaniak, & Usrey, 2010; Sanchez et al., 2007; Tan & Trotman, 2010).

[2] The terms 'factor' and 'variable' are used interchangeably in this thesis.

Second, this thesis is motivated to investigate the extent of concession-making behaviour of auditors regarding a “reasonable” material audit adjustment to be recorded in the financial statements of clients. It is debatable that auditors seldom start a negotiation at the most conservative amount they can justify but rather try to be reasonable in proposing their audit adjustment. Generally, auditors reduce clients’ pre-audited income and assets by amounts exceeding materiality (Kinney, Martin, & Martin, 1994). If auditors propose a reasonable material audit adjustment, then there is little or no room to make concessions that are shown to make the negotiation with the client easier (Hatfield et al., 2010).

Third, there is limited evidence in the audit negotiation literature that addresses how auditors’ pre-negotiation mindset is changed in the negotiation phase. Prior studies in auditing have separately examined auditors’ pre-negotiation positions and negotiation behaviour. For example, studies by Bame-Aldred and Kida (2007), Bennett, Hatfield, and Stefaniak (2015), Gibbins et al. (2010), Trotman, Wright, and Wright (2009) examined behaviour (i.e., mindset) of auditors in pre-negotiation settings. On the other hand, prior auditing studies by Brown and Johnstone (2009), Ng and Tan (2003), Fu, Tan, and Zhang (2011), Hatfield et al. (2008), Hatfield et al. (2010), Koch and Salterio (2017), Trotman et al. (2005), Trotman et al. (2009) examined auditors’ negotiated behaviour. Moreover, those above-mentioned studies examined different contextual factors to understand the behaviour of auditors in pre-negotiation and negotiation settings. Therefore, to address this void in the audit literature, this thesis simultaneously investigates auditors’ pre-negotiation mindset and negotiation behaviour in two identical experimental settings while examining the effect of the same factor (i.e., performance-based profit-sharing schemes).

1.1.1 Motivations for Study One (Pre-negotiation Phase)

The underlying motivations for Study One are as follows:

First, the motivation stems from the fact that failure to understand each other's positions (i.e., goals, initial offers, limits) may result in suboptimal negotiation outcomes (Trotman et al., 2005). Pre-negotiation positions are quantitative information (i.e., numbers) in the financial statements that auditors and client management decide in anticipation of future negotiations. These pre-negotiation positions are mindsets of auditors and clients that they possess before entering into a negotiation. It can be argued that this pre-negotiation phase is a difficult concept to visualise. It is beyond doubt that there is something before negotiation, but it is less obvious whether the pre-negotiation phase is a prelude to or a part of the negotiation phase as there are no specific beginnings or ends and ambiguous middles for pre-negotiation positions. These mindsets of auditors will serve as ends in the pre-negotiation phase and are expected to be the starting points (i.e., beginnings) in the negotiation phase. That is the reason in the first instance, Study One is motivated to determine auditors' pre-negotiation mindsets (i.e., positions).

Second, prior auditing studies have shown (Bame-Aldred & Kida, 2007; Bennett et al., 2015; Gibbins et al., 2010; Trotman et al., 2009) that there is a tendency among auditors to accept the client's preferred accounting treatments. However, those studies did not specifically show whether this acceptance of the client's demands is subject to the violation of the reasonableness constraint criterion. In this thesis, the violation of the reasonableness constraint is equated with the breaching of the materiality threshold. Auditors need to maintain an image as independent professionals in the eyes of "dispassionate observers" (e.g., regulatory or professional bodies). As a matter of fact, regulatory or professional bodies review audit files which include reviewing proposed audit adjustments against the materiality threshold. The waiving of proposed audit adjustments may have a detrimental effect on auditors' professional image if waived adjustments breach the materiality threshold. Thus, the motivation for Study One is to understand how far or close these pre-negotiation mindsets are from breaches of materiality threshold (i.e., professional constraint).

1.1.2 Motivations for Study Two (Negotiation Phase)

Previous studies in negotiation in both general and auditing contexts have suggested that pre-negotiation decisions are indicative of the final negotiated outcomes (Bame-Aldred & Kida, 2007; Bennett et al., 2015; Gatzlaff & Liu, 2013; Maaravi, Ganzach, & Pazy, 2011; Pruitt & Carnevale, 1993; Trotman et al., 2009). The motivation is to observe whether pre-negotiation "amounts" are mirrored or changed in the negotiation phase thus, providing an empirical link between pre-negotiation positions and the final negotiated outcomes.

In a prior study, Ng and Tan (2003) argued auditors are not expected to engage in certain types of behaviour. For example, auditors initially propose audit adjustments and then waive those adjustments during negotiations with clients. If auditors waive audit adjustments, then it can be deemed as concession-making behaviour. This kind of concession-making behaviour is deemed as “unprofessional” and falls outside the guidelines of regulatory requirements. A study by Hatfield et al. (2010) also provided support to those arguments. However, Gibbins et al. (2010) found that there is a preference among experienced auditors especially, audit partners, to adopt integrative negotiation strategies and win for client management. According to Gibbins et al. (2010), the result is troubling because it suggests that clients’ financial statements may remain materially misstated after negotiations. Thus, the motivation for this study is to examine the conflicting views from prior studies and address this void in the auditing literature.

1.1.3 Motivations for Choosing Variables

The tendency to accept clients’ preferred accounting positions, in other words, the decision to waive material audit adjustments is often influenced by audit partners’ performance-based profit-sharing schemes (i.e., economic incentives), client pressure, and client characteristics (i.e., flexible and inflexible attitude) that are present in a typical audit environment.

1.1.3.1 Performance-based profit-sharing schemes (Study One and Study Two)

Audit engagements are administered by audit partners in a specific practice office, and accounting firms have increasingly adopted performance-based profit-sharing schemes to remunerate audit partners. Prior literature argues that “the root cause of the questionable decisions attributable to audit firms in recent years has been the purely financial incentives given to audit partners by their firms” (Zeff, 2003, p. 280). Regulators have also expressed concerns that financial considerations should not be allowed to affect the quality of audit work (see Appendix 2 of International Auditing and Assurance Standards Board [IAASB] 2014). The audit partner’s economic incentives depend on how the audit partner’s performance is measured and how firms distribute profits through partnerships. The size of the profit pool can be considered an important element of profit-sharing schemes. Clients can exert more pressure on higher rank auditors (e.g., audit partners) who are more sensitive to the generation of audit fees and client retention because their performance-based profit-sharing schemes are closely linked with audit fees and client retention (Koch, Weber, & Wüstemann, 2012). It can be argued that this economic dependency increases if accounting firms distribute profits based on a small profit pool.

There is evidence from empirical studies that suggest profit-sharing schemes influence the behaviour of audit partners (Carcello, Hermanson, & Huss, 2000; Dekeyser, Gaeremynck, Knechel, & Willekens, 2016; Hay, Baskerville, & Qiu, 2007; Trompeter, 1994; Wyatt, 2004). For example, the findings by Trompeter (1994) indicated audit partners' in small (i.e., office level) profit pool firms are more influenced by client-imposed pressures when downward adjustments to clients' incomes are needed. In another empirical study by Carcello et al. (2000), the authors predicted that client size has a stronger impact on a partner's decision to issue a Going Concern (GC) opinion when the partner belongs to a small profit pool but did not find support for their predictions. However, the authors did find some evidence that audit partners' belonging to small-pool firms are more sensitive to client size when reporting GC opinions. The findings of the study by Hay et al. (2007) showed large-pool firms have a higher proportion of riskier clients compared to small-pool firms. The findings by Dekeyser et al. (2016) indicate that audit quality is lower when partner compensation is closely tied to the partners' total fee revenue for low-risk clients only.

In the current audit environment, audit firms are required to produce "Transparency Reports," where the audit firms disclose some details about partner compensation. Although audit partners' performance-based profit-sharing schemes have received attention in empirical auditing studies, there is no coverage in experimental studies. The motivation of this study is to experimentally examine performance-based profit-sharing schemes in the context of proposed audit adjustments in a pre-negotiation setting.

1.1.3.2 Client Pressure (Study One)

Similarly, the first experiment investigates the second factor, which is client pressure, because prior studies have shown there is a tendency for auditors to acquiesce to client pressure when Generally Accepted Accounting Principles (GAAP) requires recording of the transaction but allows some latitude in the amount of the proposed audit adjustments in the pre-SOX era (Hackenbrack & Nelson, 1996; Kadous et al., 2003; Lord, 1992).

Pressure from the client is defined "as the pressure to yield, or the perceived pressure to yield, to a client's wishes or influence, whether appropriate or not" (DeZoort & Lord, 1997, p. 47).

Subsequently, auditing reforms aimed to reduce the client's ability to exert pressure on auditors, enhance the ability of auditors to withstand client pressure, and protect auditors from client pressure (Nelson, 2006). For example, the Securities and Exchange Commission (SEC) adopted rules that restrict the ability of clients to pressurize auditors as directed by Section 303 of SOX. Thus, the motivation is to examine whether the SOX reforms have succeeded in mitigating client pressure, particularly in the context of proposed audit adjustments. To date, limited studies examining the impact of client pressure on auditors' behaviour have been conducted in the post-SOX era (Hatfield, Jackson, & Vandervelde, 2011; Koch & Salterio, 2017; Messier Jr & Schmidt, 2018).

Those studies used different client pressure constructs and different contextual settings to examine the behaviour of auditors. For example, Hatfield et al. (2011) examined the impact of prior auditor involvement and client pressure on proposed audit adjustments. The authors manipulated client pressure using two constructs: client pressure and client opposition to posting audit adjustments. Similarly, Koch and Salterio (2017) investigated the effect of auditors' affinity for client management and perceived client pressure on proposed audit adjustments. Koch and Salterio (2017) manipulated explicit and implicit client pressure, but also measured perceived client pressure using four items (e.g., intimidation, threat, sanctions, and conflicts), whereas Messier Jr and Schmidt (2018) examined the effect of three factors; misstatement distribution, quantitative materiality and client pressure on auditors' judgement In-fact, in that study client pressure is manipulated as the presence of client pressure versus no client pressure.

DeZoort and Lord (1997, p. 48) suggested that "future research could advance our understanding of professionals' responses to client pressure by distinguishing between explicit and implicit applications of client pressure. Specifically, future research could evaluate whether explicit client pressure (e.g., acute forms of pressure such as specific client demands) is considered differently than implicit client pressure (e.g., chronic forms of pressure such as client financial condition and fee size)."

Specifically, this study distinguishes the extent to which the pressure explicitly versus implicitly mentions what action the client would take if the auditor does not comply with specific client demands. In the social-psychological literature, much attention is devoted to understanding the effectiveness of threats in negotiation (refer to Sinaceur & Neale, 2005 for a discussion). An interesting question that remains under-explored is whether auditors respond differently to explicit and implicit client pressure in the current auditing environment (i.e., post-SOX regime).

Furthermore, Study One is motivated by the interest in, but insufficient evidence of, whether the two independent variables, audit partners' performance-based profit-sharing schemes and client pressure jointly affect auditors' pre-negotiation positions. Prior research in auditing has separately examined the impact of performance-based profit-sharing schemes and client pressure on auditors' behaviour, and there is an ex-ante expectation that these two factors will interact in the context of proposed audit adjustments in a pre-negotiation setting. DeAngelo (1981) argued that the greater the client-specific revenue stream (i.e., the more the auditor loses audit fees by client termination), the lower the chance that the auditor will report a discovered breach. In other words, the greater the observed future economic interest in a given client, the lower the chance that the auditor will report a breach of quality of client's financial statements. Considering DeAngelo's (1981) argument, it is expected that the firm-wide profit-sharing scheme may provide a cushion to withstand client pressure to a certain extent as they are less economically dependent on the revenue stream from a particular client. Relying on the theory of motivated reasoning, it is expected auditors whose performance is based on a firm-wide profit-sharing scheme will be less likely to act as motivated reasoners and acquiesce to extreme client pressure to accept client-specific demands. There is an *apriori* reason to argue that client pressure will have a smaller effect when auditors' performance is based on firm-wide profit-sharing schemes as compared to divisional profit-sharing schemes.

1.1.3.3 Client Flexibility (Study Two)

Study Two is guided by the motivation to examine the client flexibility variable because this variable is underexplored in the audit negotiation literature. Prior qualitative studies in auditing provide evidence that audit partners encounter clients who are unwilling to accept and strongly oppose recording income-decreasing audit adjustments (Beattie, Fearnley, & Brandt, 2004; Gibbins et al., 2001; McCracken, Salterio, & Gibbins, 2008). In a pre-negotiation experimental setting, the findings by Gibbins et al. (2010, p. 593) indicated that when audit partners perceive the client to be inflexible, they resort to more integrative strategies to achieve a solution agreeable to both parties. The authors suggested this finding is troubling because "undifferentiated emphasis" in using integrative strategies may potentially result in financial statements remaining materially misstated subsequent to negotiation. Therefore, the motivation is to investigate whether these findings by Gibbins et al. (2010) hold true in an actual negotiation environment.

A key motivation of Study Two is to investigate whether the auditors' performance-based profit-sharing schemes and client flexibility jointly affect auditors' negotiated outcomes in a simulated environment. Although prior research in auditing has separately examined performance-based profit-sharing schemes and client flexibility on auditors' behaviour, the current auditing literature does not inform us how these two factors interact in the context of the recording of audit adjustments in a negotiation setting. Prior research has shown that the role of those audit partners includes the responsibility of developing and maintaining an amicable relationship with the client, namely, keeping the CFO "happy" (McCracken et al., 2008). Therefore, audit partners are faced with a dilemma to meet the clients' preferred negotiation outcome and keep the clients happy as well as achieve a negotiated outcome that is acceptable to themselves. It is believed that this concern for their own outcome will be more intensified for audit partners whose performance-based compensation (e.g., performance bonus) is distributed from divisional profit-sharing schemes rather than firm-wide profit-sharing schemes. This heightened concern for own low outcome may induce auditors to act as motivated reasoners. Therefore, Study Two argues that based on the theory of dual concern and the theory of motivated reasoning, there is an *apriori* reason to argue that client flexibility will have a lesser impact on audit partners whose performance-based compensation is based on firm-wide profit-sharing schemes as opposed to audit partners whose performance-based compensation is based on divisional profit-sharing schemes.

Study Two also investigates the impact of social value orientation (SVO) on the behaviour of audit practitioners in a simulated negotiation context because Koch and Salterio (2017, p. 137) suggested that "investigating whether individual characteristics *(e.g., personality, skill, knowledge, experience)* play a role in the relative sensitivity of auditors to violations of the reasonableness constraint may be a fruitful area for future research" [emphasis added in italics].

It can be argued that auditors are typically conservative with clients' reported income as they need to abide by the professional rules and regulations, while the client generally would be reluctant to record any income decreasing audit adjustments. However, auditors, especially audit partners, are typically involved in maintaining cordial relationships with clients and may avoid exhibiting confrontational behaviour (Gibbins et al., 2010; Gibbins, McCracken, & Salterio, 2007; McCracken et al., 2008). The motivation is to investigate whether individual characteristics, especially the personality (i.e., pro-self or pro-social) of senior auditors, are sensitive to violations of the reasonableness constraint (an element of the theory of motivated reasoning) when faced with an inflexible client in a negotiation setting.

1.2 Contributions

This thesis has theoretical contributions and practical implications. Section 1.2.1 discusses the theoretical contributions, while Section 1.2.2 discusses the practical implications of this thesis.

1.2.1 Theoretical Contributions - Study One

First, Study One enriches the negotiation literature in auditing by providing additional evidence of a unique concession-making mindset of auditors based on the theory of motivated reasoning. In this Study, the mindset of auditors revealed that they are willing to partially waive material and concede from their initial positions to satisfy the expectations of client management. A prior study by Sanchez et al. (2007) examined concession-making behaviour from a different theoretical perspective. According to the authors, the application of concession-making behaviour in auditing happens when auditors inform client management about all potential audit adjustments and then waive some of the immaterial adjustments, with the expectation that the client would readily accept the material adjustments. It can be argued that that behaviour is closely related to compromising behaviour which is based on the societal norm of reciprocity. Other auditing studies have also examined auditors' concessionary behaviour from the perspective of reciprocity theory (Brown & Johnstone, 2009; Hatfield et al., 2008; Hatfield et al., 2010; Tan & Trotman, 2010). The societal norm of reciprocity suggests that when one negotiating party makes a concession, the other party is expected to and tends to reciprocate the concession (Pruitt & Carnevale, 1993). The influence of reciprocity will create a social need to concede in the negotiation. The negotiation setting in Study One is different from other auditing studies, such that in Study One, there was no need for auditor participants to show concessionary mindsets over a subjective material audit adjustment.

Furthermore, Study One further enriches the theoretical discussion on the theory of motivated reasoning by explaining the association between the theory and auditors' mindset. An audit scenario was provided in the experimental questionnaires where the client explicitly pressured auditor participants to waive the proposed audit adjustment. In reality, the auditor participants would not face any adverse financial consequences (i.e., losing a listed client) if they are not willing to waive the proposed audit adjustment, that is, concede from their initial proposed allowance for obsolete inventory. The results indicate that even if the experimental questionnaires elicit real scenario auditor participants in Study One, they had no reason to exhibit their concessionary mindsets. The theory of motivated reasoning suggests that participants will be unable to detach themselves from their assigned roles as auditors in making their judgements.

In this context, Study One further contributes to the negotiation literature in auditing by discussing the reasonableness constraint viewed in the light of the professional boundary (i.e., materiality threshold). The results show that the violation of the reasonableness constraint criterion may occur under certain conditions. For example, the results show that the allowance for obsolete inventory may remain materially misstated in the financial statements for the divisional profit-sharing scheme and explicit client pressure condition. The results suggest that auditors are willing to waive their proposed audit adjustments even if they breach the chosen materiality threshold.

Second, Study One extends the contemporary research on auditor client negotiation by providing evidence to the literature that performance-based profit-sharing schemes influence the behaviour of auditors in a pre-negotiation context. The findings suggest that auditors do not only act as motivated reasoners due to client pressure since performance-based profit-sharing schemes may also influence auditors' behaviour. This theoretical discussion on the theory of motivated reasoning explains the findings in prior empirical studies in auditing (Carcello et al., 2000; Dekeyser et al., 2016; Trompeter, 1994). Furthermore, the findings of this study also enrich the auditor client negotiation literature by providing additional evidence that client pressure influences the mindsets of auditors in a pre-negotiation context, even in the post-SOX era.

Specifically, the results are consistent with the findings of a prior study Hatfield et al. (2011), and confirm the claim by Moore, Tetlock, Tanlu, and Bazerman (2006) that SOX 2002 reforms may be inadequate to completely restrain auditors from adopting a self-interested goal in response to client demands. The study also confirms prior research by Koch and Salterio (2017) that greater manipulated client pressure can lead auditors to adopt a self-interested goal and acquiesce to client preferences by lowering proposed audit adjustments.

1.2.2 Theoretical Contributions - Study Two

First, Study Two extends the negotiation setting of Study One (i.e., pre-negotiation stage) to an actual negotiation stage, relying on a computer-simulated negotiation. This study provides empirical evidence concerning the relationship between auditors' pre-negotiation mindsets and negotiated outcomes. The findings advance the auditor-client negotiation literature by providing additional evidence that a client characteristic (i.e., flexibility), in addition to performance-based profit-sharing schemes, influences the behaviour of experienced audit practitioners in a simulated negotiation setting. The results show that auditors' pre-negotiation mindset changed significantly in the negotiation phase. Despite increased regulatory oversight in the current audit environment, the results highlight those experienced auditors could breach the professional boundary (i.e., materiality threshold) in the current audit environment. It is observed that a combination of specific situational factors affects the experienced auditor participants to concede to a greater extent in the negotiation phase. The findings confirm the suggestions by Gibbins et al. (2010) that financial statements may remain materially misstated subsequent to negotiation and also provides evidence against the arguments in prior negotiation literature that auditors are less likely to deviate from their initial positions compared to other negotiators because of their professional image to the outside world (Bame-Aldred & Kida, 2007; Hatfield et al., 2010; Ng & Tan, 2003).

In addition, Bennett et al. (2015, p. 1525) commented that "many auditors do not believe they 'negotiate' over proposed audit adjustments; rather, they claim to determine the 'correct number' and insist to be posted" in the financial statements. The findings of Study Two concur with the above statement that auditors may not need to negotiate with the client in the negotiation phase as they determine the appropriate amount to be recorded in the financial statements in the pre-negotiation phase. The results show that a majority of participants (i.e., 56%) did not choose to negotiate with the client meaning, the auditor participants either chose to report the client's preferred allowance or stood firm in their initial positions. It implies that the auditor participants already made up their minds before negotiating with the client. However, the findings suggest that auditors' pre-determined "correct number" may change significantly in the negotiation phase.

Second, the second experiment provides evidence that the social value orientation (i.e., personality) of auditors may not impact their behaviour in a negotiated setting. The findings suggest situational factors play a more influential role than personal characteristics in the auditing environment. The findings add to the existing negotiation literature in auditing by answering the call by Koch and Salterio (2017) whether individual characteristics of auditors have greater or lesser sensitivity to violations of the reasonableness constraint.

1.2.3 Overall Practical Contributions

This thesis has implications for audit practice. First, the findings of this thesis suggest audit practitioners in divisional profit-sharing arrangements may be more influenced by the pressure imposed by clients than those in firm-wide profit-sharing arrangements. Hence, the findings of this thesis suggest that audit firms with divisional profit-sharing arrangements may structure audit partners' compensation schemes to de-emphasise the association between audit partners' compensation and client loss measures to provide greater insulation from client pressure. There is a need for accounting firms with small (i.e., divisional) profit pools to implement additional safeguards in designing performance-based compensation schemes for audit partners.

Second, prior research indicated that only 28 percent of audit partners receive any formal training on negotiation (Hatfield et al., 2010). Anecdotal evidence suggests audit partners receive training on the determination of audit fees. Notwithstanding regulatory measures, this thesis findings may alert accounting firms of how contextual factors may differentially impact the behaviour of experienced auditors in pre-negotiation and negotiation contexts. The findings of this experiment may provide accounting firms with relevant information to design a formal development program for experienced auditors, especially audit partners, to prepare themselves for any future negotiation with client management.

Third, the thesis's findings may alert regulators and standard setters about the influence of economic (i.e., financial) incentives that impact accounting numbers in a pre-negotiation and negotiation context. Both studies support the discussion that financial incentives should not be allowed to impair audit quality (Francis, 2004; Trompeter, 1994; Wyatt, 2004; Zeff, 2003). The Transparency Reports contain details about audit partners' compensation (e.g., fixed salary and variable performance bonus), but information regarding the profit-sharing pool is not mentioned. The regulators and standard-setters may gain insight into how performance-based profit-sharing schemes affect the behaviour of auditors in both the pre-negotiation and negotiation phases. It is known that standard setters are aware of disagreements between auditors and clients, and the related discussions are important in improving audit quality (ISA No. 450). Auditors, especially audit partners, are concerned with both audit quality and maintaining a cordial relationship with the client. Both the experimental studies support the discussion by the IAASB (2014) that financial incentives should not be allowed to impair audit quality. There is the opportunity for standard setters to revise their guidance or update their policies regarding performance-based compensation schemes to audit partners. The findings suggest that the regulators and standard setters may require the accounting firms to disclose information on the nature of the profit-sharing pool along with the entire client portfolio of audit partners. This disclosure may increase the transparency relating to the remuneration structure of audit partners and increase the accountability of audit partners. For example, PCAOB (2015) adopted the rule that requires accounting firms to disclose the names of engagement partners for all public company audits on or after January 31, 2017, because PCAOB believes that such disclosure will increase the transparency of the audit process, improve the responsibility of audit partners, and eventually will enhance audit quality.

1.3 Chapters Outline and Organisations

Chapter 2 reviews the relevant theories and empirical evidence that relates to the determinants of auditors' behaviours in a negotiation setting. In particular, the literature on performance-based profit-sharing schemes, client pressure, client flexibility, and social value orientation (SVO) are reviewed.

Chapter 3 presents theoretical arguments that lead to the development of a number of testable hypotheses.

Chapter 4 describes the research method employed, including the operational definitions of the variables used in the experiment in Study One. The sample selection and experimental procedures are explained.

Chapter 5 discusses the data analysis and reports the results of the first experiment. The descriptive statistics are reported, followed by the data analyses of the three hypotheses in Study One.

Chapter 6 describes the research method employed, including the operational definitions of the variables used in Study Two. The sample selection and experimental procedures are explained.

Chapter 7 discusses the data analysis and reports the results of the second experiment. The descriptive statistics are reported, followed by the data analyses of the three hypotheses in Study Two.

Chapter 8 summarises the major findings of the two experiments and discusses the contributions of this thesis, along with its limitations and opportunities for future research.

CHAPTER 2
LITERATURE REVIEW

2.0 Introduction

Negotiation research in auditing dates back 30 years with the publication of the first analytical model of negotiations by Antle and Nalebuff (1991). In the prior year, a discussion paper on negotiation in accounting and auditing was also published by Murnighan and Bazerman (1990). However, that article by Antle and Nalebuff (1991) did not make a significant impact until Gibbins, Salterio, and Webb published their paper in 2001. The authors developed an auditor-client negotiation model based on a theory drawn from psychology research and their knowledge of how audit firms work based on field research. After their publication, researchers in academia widely accepted that interactions in the auditing environment consist of a large negotiation system.

This chapter reviews prior literature in psychology and auditing relevant to this thesis. In this chapter, the review of auditing literature is mainly based on studies published after Gibbins et al. (2001). The chapter is organised as follows:

Section 2.1 contains a brief overview of prior works of literature on the importance of pre-negotiation positions relevant to Study One of this thesis. Sub-section 2.1.1 within Section 2.1 discusses the theory of motivated reasoning and prior studies related to motivated reasoning theory. Sub-section 2.1.2 provides a review of the literature on the performance-based profit-sharing schemes variable that impacts auditors' pre-negotiation mindsets. Sub-section 2.1.3 contains a review of literature on the client pressure variable that impacts auditors' pre-negotiation mindsets. Sub-section 2.1.4 provides a discussion of the dependent variable (i.e., auditors' limit).

Section 2.2 provides a brief overview of prior literature on the importance of negotiation outcomes relevant to Study Two of this thesis. Sub-section 2.2.1 within Section 2.2 reviews the dual concern theory along with the theory of motivated reasoning theory and prior studies related to dual concern theory. Sub-section 2.2.2 briefly highlights the influence of the performance-based profit-sharing schemes variable on auditors' negotiated outcomes. Sub-sections 2.2.3 and 2.2.4 contain a review of the literature on client flexibility and social value orientation (SVO). Finally, Section 2.3 provides an overview of the review.

2.1 Study One - Pre-negotiation phase

The first study focuses on auditors' pre-negotiation concession-making behaviour, which can be viewed as the concessionary mindsets of auditors before entering the negotiation process. There is evidence from prior research in the negotiation literature that the pre-negotiation position influences the final negotiation outcome (Gatzlaff & Liu, 2013; Maaravi et al., 2011; Pruitt & Carnevale, 1993). In the pre-negotiation phase, negotiating parties develop a goal which is their preferred outcome and also determine a range of possible outcomes (Thompson & Hastie, 1990). In addition, the negotiating parties also determine a point where the agreement is perceived to be detrimental to their preferred outcome (discussed in section 2.1.4).

Prior auditing studies have examined the effect of different contextual features on pre-negotiation decisions (Bame-Aldred & Kida, 2007; Gibbins et al., 2010; Hatfield et al., 2008; Hatfield et al., 2010; Trotman et al., 2005, 2009). These studies are based on the premise that pre-negotiation decisions are likely to impact the future negotiated outcome.

2.1.1 Theory of Motivated Reasoning

Study One relies on the theory of motivated reasoning to formulate hypotheses about the effects of performance-based profit-sharing schemes and client pressure on the extent of proposed audit adjustments to be recorded in the financial statements of the client.

In her seminal work in social psychology, Kunda (1990, p. 480) states that "the motivated reasoning phenomena fall under two major categories: those in which the motive is to arrive at an accurate conclusion, whatever it may be, and those in which the motive is to arrive at a particular directional conclusion."

Prior auditing studies have shown that auditors act as motivated reasoners to accept clients' preferred accounting treatments (Blay, 2005; Hackenbrack, 1992; Jenkins & Haynes, 2003; Kadous et al., 2003; Koch & Salterio, 2017; Peecher, Piercey, Rich, & Tubbs, 2010). Kunda (1990, p. 493) states that "directional goals have been shown to affect people's attitudes, beliefs, and inferential strategies in a variety of domains and studies conducted by numerous researchers in many paradigms." For example, purely financial considerations may motivate auditors to act as motivated reasoners and adopt directional goals that are consistent with client preferences. Bazerman and colleagues (Bazerman, Loewenstein, & Moore, 2002; Bazerman & Moore, 2011; Bazerman, Moore, Tetlock, & Tanlu, 2006; Bazerman, Morgan, & Loewenstein, 1997; Moore et al., 2006) argue that since auditors are hired and paid by the client, it enhances the willingness of an auditor to adopt a self-interested directional goal "to see the world through the eyes of client management" (Koch & Salterio, 2017, p. 118).

In the article, Bazerman et al. (1997, p. 90) state that

> Only very rarely are audit failures the result of deliberate collusion of auditors with clients in issuing faulty financial statements. Instead, we maintain that audit failure is the natural product of the auditor-client relationship. Under current institutional arrangements, it is psychologically impossible for auditors to maintain their objectivity; cases of audit failures are inevitable, even with the most honest auditors.

Although the auditor examines a company's financial statements on behalf of external users, the client management of the company that prepared and issued the statements under examination hires and pays the auditor. Auditors have strong business reasons to remain in the client's good graces and are thus motivated to approve their client's accounts. In that sense, auditors have a strong incentive to remain in the client's good graces and are thus highly motivated to accept their client preferred accounting treatments. That is to say, auditors can be viewed as self-interested economic agents (Antle, 1982).

Moreover, individuals tend to be far more responsive to immediate consequences than delayed ones, especially when the delayed outcomes are uncertain. In the same way, auditors may hesitate to issue qualified audit reports because of the immediate adverse consequences such as damage to the relationship, potential loss of the contract, and possible unemployment. But the costs of an unqualified audit report when a qualified audit report is called for – protecting the accounting firm's reputation or avoiding a lawsuit, for example, are likely to be distant and uncertain.

This thesis links the arguments expressed by Bazerman and his associates in terms of motivated reasoning theory (Blay, 2005; Kadous et al., 2003; Koch & Salterio, 2017). It can be argued that an auditor might adopt a self-interested goal to acquiesce to the client's preferable reporting choices because the client hires and fires the auditor. The findings of a prior study show that experienced auditors propose audit adjustments consistent with clients' preferences (Haynes, Jenkins, & Nutt, 1998).

Kunda (1990, pp. 482-483) proposes individuals who are motivated to arrive at a particular goal, attempt to be rational and try to find seemingly justifiable reasons for those conclusions to persuade a "dispassionate observer." They draw the desired conclusion only if they can muster up the evidence necessary to support it. In other words, individuals maintain an illusion of objectivity. That is to say, the theory of motivated reasoning posits that such directional goals are subject to a "reasonableness constraint" (Boiney, Kennedy, & Nye, 1997).

In the study by Koch and Salterio (2017), the authors describe how the concept of "reasonableness constraint" is applicable in the auditing environment. They argue that the constraint may be triggered when auditors perceive a challenge to their self-image as an independent professional whose responsibility is to provide an unbiased opinion on the financial statements, thereby resisting pressure from the client. It implies a dispassionate third party would perceive those auditors acted in a professionally independent manner while evaluating the client's financial statements.

In this thesis, it is argued that the "reasonableness constraint" criterion is viewed in light of the materiality threshold chosen by the auditors while evaluating the client's financial statements. In an audit setting the constraint will be triggered when auditors subconsciously feel a threat to their self-image as an independent professional whose responsibility is to provide opinion on the appropriateness of GAAP without pressure from the client.

In the context of this thesis, it is expected that auditors will perceive a threat to their self-image if they waive material audit adjustments that breach the materiality threshold due to client pressure. Furthermore, auditors will feel that their image as independent professionals will be questionable if they inadequately justify the reason for the breach of the materiality threshold.

2.1.2 Independent Variable - Performance-based Profit-Sharing Schemes

Study One examines the performance-based profit-sharing schemes variable in the pre-negotiation phase. Over the last two decades, auditing firms have increasingly incorporated performance-based profit-sharing schemes as opposed to more traditional models (i.e., equal sharing of profits) to compensate audit partners (Burrows & Black, 1998; Coram & Robinson, 2017; Ernstberger et al., 2020; Wyatt, 2004). Regulators have raised concerns that financial considerations should not affect the quality of audit work (see Appendix 2 of IAASB 2014). The regulatory bodies in the United States, the United Kingdom, and the European Union have all proposed or imposed rules to improve the transparency of audit firms. Nowadays, audit firms are required to produce "Transparency Reports," which include details about audit partner remuneration.

Extant literature in management accounting suggests that using performance-based profit-sharing schemes influence managers' transfer pricing decisions in negotiation contexts (e.g., (Ackelsberg & Yukl, 1979; Anctil & Dutta, 1999; Chong et al., 2018; Ghosh, 2000; Ghosh & Boldt, 2006; Ravenscroft & Haka, 1996). Furthermore, numerous studies argue that incentive-based compensation schemes can influence self-interested behaviours (Evans III et al., 2006; Gong & Ferreira, 2014; Nagar, 2002). The auditing environment is not an exception.

Performance-based profit-sharing schemes can also influence the behaviours of audit partners. The problem of audit partners being financially dependent on their clients will depend on how performance-based profit-sharing schemes are implemented to compensate audit partners. Wyatt (2004) expresses concern about how a more performance-based approach to partner compensation could affect core values such as integrity, objectivity, professional competence, due care, and confidentiality of audit firms. The dominant organizational form for audit firms is a partnership structure (Greenwood, Hinings, & Brown, 1990; Huddart & Liang, 2003, 2005; Kandel & Lazear, 1992; Liu & Simunic, 2005). Audits are administered by engagement partners based in a specific practice office. Audit partners are incentivised using various forms of performance-based profit-sharing schemes by audit firms. Burrows and Black (1998) report that partner appraisals create considerable variation in the sharing of profit, suggesting that audit firms employ performance-based profit-sharing schemes to improve the performance of audit partners. A recent study by Coram and Robinson (2017) finds that the focus on performance in determining partner remuneration and the spreads within audit partnerships has increased among Big 4 and a sample of mid-tier firms in Australia. They find revenue generation and client retention by audit partners is given significant weight in partner compensation along with several metrics that capture the traditional value of professionalism, for example, audit quality, people development, and review outcomes from regulatory bodies.

Limited studies have looked at how audit firms distribute profits among partners (Burrows & Black, 1998; Coram & Robinson, 2017). The survey by Burrows and Black (1998) finds that there is a trend that accounting firms in Australia use large profit pools. Similarly, in the US, a study by Trompeter (1994) finds some audit firms use a large (i.e., national or international) profit-sharing pool and some audit firms use a small (i.e., office-level) profit-sharing pool. Audit firms with a small profit-sharing pool place significant weight on the profitability of office-level or the local operating unit in compensating audit partners (Trompeter, 1994). As a result, it can be argued that partners in a small profit pool may become economically dependent on their clients. Auditing studies involving audit partners and examining the consequences of profit-sharing schemes are predominantly archival in nature. A comprehensive discussion can be found in the article by Lennox and Wu (2018).

In a recent empirical study, Ernstberger et al. (2020) investigate the association between variable compensation of audit partners and the size of the profit-sharing pool on audit quality among German accounting firms. They find that there is an association between lower audit quality and audit partners' variable compensation and profit-sharing in a small profit pool. In the study, the authors use discretionary accruals as a measure of audit quality. The findings suggest that audit partners working in firms with a profit-sharing arrangement from small profit pools provide lower audit quality as compared to partners working in audit firms with a profit-sharing arrangement from large profit pools. From an economic perspective, audit partners will become economically dependent if they rely heavily on variable compensation to divide a small profit pool.

An archival study by Carcello et al. (2000) investigates whether audit partners in small profit pools are less likely to issue going-concern opinions to financially distressed clients. Using a sample of 316 financially distressed U.S. companies, they did not find any support. A plausible reason may be that going-concern decisions rely less on the economic bond because a failing client does not provide a long-term stream of revenues. However, the authors find there is an interaction between partners' compensation schemes and client size. The evidence suggests partners in small-profit pools are more influenced (i.e., reluctant) by client size when making going-concern decisions.

A study by Hay et al. (2007) investigates how compensation plans affect the risk-taking behaviour of audit partners. The authors predict that large profit pool firms have riskier clients. It is because high-risk clients require more cooperation and monitoring between partners. When audit firms use a large profit pool to share profits, the partners across different offices have more incentive to cooperate with the engagement partner and monitor the quality of the engagement partner's work. Based on profit-sharing schemes of the Big 8 firms in New Zealand, the authors find audit firms with a large profit pool have a higher proportion of risky clients as compared to small profit pool firms.

A recent study in the post-SOX era by Dekeyser et al. (2016) used Belgian data to examine whether partners' compensation affects audit quality. In that study, the proxies used for audit quality are discretionary accruals and discretionary revenues. The authors find audit quality is lower when partner compensation is more linked with the partner's total audit revenue, but the finding applies to low-risk clients only. Similarly, using proprietary data from Sweden, a study by Knechel, Niemi, and Zerni (2013) finds in two of the Big 4 firms, partner compensation is associated with revenue generation from other partners across different offices within the firm. The finding suggests those two Big 4 firms adopt a large profit pool to share profits, while the other two Big 4 firms adopt a small profit pool to distribute profits. The results of Knechel et al. (2013) show that partner compensation is more closely linked to performance-related incentives, such as attracting new clients and revenue generation. The authors also find that if audit partners commit audit failures, where failures are identified based on going-concern reporting errors, the partners receive lower compensation. This finding is consistent with survey findings that audit quality is one of the parameters used in determining performance-based profit-sharing schemes (Coram and Robinson 2017).

A client's economic importance to the audit partner and performance-based profit-sharing schemes are interconnected. A few empirical studies examine the economic importance of clients to the behaviour of individual partners (Chen, Sun, & Wu, 2010; Chi, Douthett Jr, & Lisic, 2012; Hossain, Monroe, Wilson, & Jubb, 2016). The findings of the empirical study by Chen et al. (2010) suggest that prior to 2001, when the institutional environment for investor protection was weak in China, auditors' economic dependence on clients dominated over their concerns for litigation risks and regulatory sanctions. Specifically, they found the probability of issuing modified audit opinions (MAOs) was significantly lower for clients that were economically important to auditors. However, with the subsequent improvements in the institutional environment in 2001, auditors' concerns for litigation risks and regulatory sanctions took priority over economic incentives. In another empirical study by Chi et al. (2012), the authors did not find any evidence that Taiwanese "Big N" audit partners compromise their independence for economically important listed as well as unlisted clients, but they find that non-Big N audit partners compromise independence for economically important listed and/or unlisted clients. In a different empirical setting, Hossain et al. (2016) investigate the association between audit quality and economic importance of networked clients using Australian-domiciled companies listed on the Australian Securities Exchange (ASX). A client network is created when an audit committee member of a company is also an audit committee member of other companies that are audited by the same audit firm and audit partner. Their results suggest that audit partners' economic dependency on the fee income of networked clients may erode auditor independence and, as a result, reduce audit quality. However, those studies did not identify the entire client portfolios of audit partners, even though it is important to determine whether a client is economically important relative to the partner's other clients. Moreover, those studies did not consider the underlying profit-sharing schemes when measuring economic importance. A client is much less important to a partner's income when the partner is compensated using a large profit-sharing pool.

Unlike studies in management accounting, there is a dearth of research examining the effect of performance-based profit-sharing schemes on audit partners' behaviour in an experimental setting. To examine the theory of motivated reasoning and extend prior research, Study One investigates the effect of performance-based profit-sharing schemes on experienced auditors' mindset in an experimental setting.

2.1.3 Independent Variable - Client Pressure

Study One examines the client pressure variable in the pre-negotiation phase. Client pressure is defined as "the pressure to yield, or the perceived pressure to yield, to a client's wishes or influences, whether appropriate or not" DeZoort and Lord (1997, p. 38). Such pressure results from the hiring and compensation agreements between an accounting firm and a client. The primary risk to the professional associated with this pressure is the threat that a client will choose the services of a competitor firm. The potential impact of this variable is magnified given the high level of competition within the public accounting market and a client's ability to shop around for an accounting firm that is willing to agree with the client's accounting or reporting positions.

Prior research in the pre-SOX era indicates that client pressure increases the likelihood of auditors accepting aggressive and even controversial accounting methods (Farmer, Rittenberg, & Trompeter, 1987; Hackenbrack & Nelson, 1996; Kadous et al., 2003; Knapp, 1985; Lindsay, 1990; Lord, 1992).

Subsequently, auditing reforms (e.g., SOX Act 2002) aimed to reduce the client's ability to exert pressure on auditors, enhance the ability of auditors to withstand client pressure, and protect auditors from client pressure (Nelson, 2006). A specific section, 303 in the SOX Act 2002, directs the Securities and Exchange Commission (SEC) to adopt rules that limit the ability of client management to pressure or coerce auditors. The rule is as follows:

> "… we are adopting rules to prohibit officers and directors of an issuer, and persons acting under the direction of an officer or director, from taking any action to coerce, manipulate statements if that person knew or should have known that such action, if successful, could result in rendering the financial statements materially misleading."

The findings of the study by Ng and Tan (2007) show auditors' tendency to record an audit adjustment decreases when client pressure is present. The authors operationalise client pressure as the client stating their concern about the damaging consequences of recording the audit adjustment. A study by Hatfield et al. (2011) finds that client pressure still exerts a strong impact on US auditors' judgements even in the post-SOX period. The authors examine the joint effect of prior auditor involvement in recording audit adjustments and client pressure on proposed audit adjustments. The client pressure variable in that study was manipulated as high versus low. The authors operationalise client pressure using two constructs: client size (i.e., client importance) and client opposition to posting audit adjustments. It may be argued that the second construct of the client pressure, that is, client opposition to audit adjustments closely resembles the client flexibility construct examined in Study Two in the thesis. The findings by Hatfield et al. (2011) reveal the client pressure variable had a significant impact on auditors' proposed adjustment, but they did not find any interaction effect between prior auditor involvement and client pressure. The authors claim that their study is the first to provide evidence that SOX reforms are inadequate to mitigate client pressure. In another study by Nelson, Elliott, and Tarpley (2002), the findings suggest that auditors are more likely to adjust income when small clients attempt to manage earnings than when large clients attempt to manage earnings. The results imply that auditors are more influenced by the pressure imposed by large clients compared to small clients.

A recent study by Koch and Salterio (2017) investigates the joint effect of auditors' affinity for the client and perceived client pressure on auditors' behaviour. First, they manipulate explicit and implicit client pressure and hypothesise that auditors facing explicit pressure from client management are more likely to propose smaller audit adjustments than auditors experiencing implicit pressure from client management. The authors also propose a competing hypothesis based on the concept of "reasonableness constraint" mentioned in the theory of motivated reasoning. They argue if auditors believe their self-image as an "independent arbiter" of GAAP is likely to be violated, then auditors who perceive greater client pressure are more likely to propose a larger audit adjustment than auditors who perceive lesser client pressure to bring clients' accounting in conformance with GAAP. In the process, they measure perceived client pressure using four items (i.e., intimidation, threat, sanctions, and conflict). The authors argue those four items reflect that client pressure is a multi-faceted construct. The authors find that German auditors facing explicit client pressure and experiencing greater client affinity suggest lower audit adjustments to the client's aggressive accounting. The findings also suggest some auditors who perceive greater client pressure are likely to propose larger audit adjustments to client accounting. The findings imply when an individual auditor's reasonableness constraint is triggered (i.e., when auditors perceive a third party would judge their acts as unprofessional), then they may not completely acquiesce to client demands even under intense client pressure.

In another study by Messier Jr and Schmidt (2018), the authors investigate how the distribution of misstatement, quantitative materiality, and client pressure influence auditors' judgments regarding the correction of offsetting misstatements in the clients' income statement. The authors manipulate client pressure and no client pressure. The client pressure operationalisation was based on the same process followed by Hatfield et al. (2011). For example, in the no-pressure condition, the authors mention that the client's Chief Accountant and the CFO did not oppose correcting misstatements proposed by auditors, whereas in the client pressure condition, they state that the client management is reluctant to correct any further misstatements. They hypothesise that when there is no client pressure, and the misstatements are in different accounts more auditors will fully adjust material misstatements in the financial statements of clients. Their argument is based on auditing standards which state that it "may not be appropriate" to offset misstatements contained in two different accounts (IAASB 2008, ISA 450.A14). However, auditing standards offer some latitude for adjusting misstatements when the misstatements are contained in the same account because misstatements in the same account are unlikely to affect the decisions of users. They find a significant interaction between the distribution of material misstatements and client pressure. Specifically, their results show in the absence of client pressure, more auditors are willing to fully adjust to offsetting misstatements when those misstatements are present in two different accounts. Interestingly, more experienced auditors are more likely to waive the misstatements when faced with client pressure but more likely to fully adjust the misstatements when there is no pressure.

Both the above-mentioned studies use German auditors. In Germany, the general practice is audit partners as well as non-partner auditors (i.e., audit managers), sign audit reports on behalf of their firm, whereas in the Anglo-Saxon world, only audit partners sign audit reports. It is to be noted that in the Anglo-Saxon world, researchers have found a differential impact of experience among the behaviour of audit partners and managers in a negotiation situation (Fu et al., 2011; McCracken, Salterio, & Schmidt, 2011). Generally, audit partners are more experienced and have more power than audit managers.

Although client pressure is a crucial construct and embedded in most of the auditor-client negotiation setting, limited research has been conducted in the post-SOX era with varied results. For example, Hatfield et al. (2011) report a significant main effect for client pressure, while the results of Messier Jr and Schmidt (2018) show an insignificant main effect of client pressure.

A prior study mentions that the client pressure variable is a multi-faceted construct (Hatfield et al., 2011). It may be argued that the use of multi-faced faceted constructs may pose difficulty in understanding which construct drives the client pressure variable. For example, Hatfield et al. (2011) did not investigate whether client preference or client importance impact the client pressure variable. Furthermore, most studies measure auditors' perception (e.g., Koch & Salterio, 2017) when they are exposed to client pressure. In order to have a more robust understanding of the client pressure variable, Study One in this thesis captures the variable by simply varying the levels of pressure.

This experiment neither uses multiple constructs to capture the pressure variable nor measures auditors' perception regarding client pressure instead capturing the client pressure variable by manipulating explicit pressure versus implicit pressure. Explicit pressures are short-term, acute, high-intensity impactors on individual behaviour, whereas implicit pressures are persisting, chronic, relatively unchanging factors of the work environment (DeZoort & Lord, 1997).

2.1.4 Dependent Variable – Auditor's Limit

Study One focuses on proposed audit adjustments as they are one of the most important decisions that auditors make. Prior evidence from audit literature suggests that some material audit adjustments are waived by auditors and not recorded in the financial statements (Nelson et al., 2002). This study focuses on auditors' decisions regarding limits in a pre-negotiation setting. Especially, this study investigates the pre-negotiation concessionary mindsets of experienced auditors, determined by the extent to which auditor participants move away from their initial recommendations in the scenario. During the pre-negotiation stage, auditors and clients estimate their range of possible outcomes and develop a goal that is their desired outcome. Furthermore, the negotiating parties (i.e., auditor and client) also decide the point where agreement is perceived to be disadvantageous to both parties. This point is called the "limit" or "reservation point" because at this point the costs of agreements are greater than the costs of no agreements. The limit for auditors can be viewed as the point where the auditor considers qualifying the audit opinion whereas, the limit for clients can be looked at as the point where the client is willing to terminate the relationship.

Although a qualified audit opinion reduces auditors' costs associated with litigation risks, loss of reputation, and regulatory sanctions (Carcello & Palmrose, 1994), prior research provides empirical evidence that clients switch auditors after receiving a qualified audit opinion (Carey et al., 2008; Chow & Rice, 1982; Lennox, 2000). This conundrum of the audit function forces auditors to weigh the positive impact of reduced assessment of litigation cost against the risk of client loss, especially if the client is important to the auditor.

2.2 Study Two - Negotiation Phase

Study Two examines the effect of performance-based profit-sharing schemes, client flexibility and social value orientation (SVO) on auditors' behaviour in a negotiation setting. Study Two also investigates whether there is a change in the pre-negotiation mindsets of auditors in the negotiation process. Although in auditing contexts, mindsets of auditors in the pre-negotiation phase are indicative of the outcome in the negotiation phase, there is a possibility that this pre-negotiation mindset may change into a different behaviour in the negotiation phase because of the actual interaction between auditor and client in the negotiation phase. In the negotiation phase, the auditor engages with the client and employs various negotiation strategies to find an acceptable solution for both parties.

In any negotiation, there is a range of acceptable outcomes (i.e., solution sets) for negotiators. A negotiating or bargaining range exists if there is an overlap in solution sets, which is the set of viable choices for both negotiating parties. If wider solution sets exist then more viable alternatives are available to negotiators, while narrower solution sets represent fewer viable alternatives. In an audit setting, those solution sets lie between the amount auditor and client want to report and what the minimum acceptable amount would be. Auditors need to abide by the accounting standards and legal pronouncements when they propose audit adjustments. Moreover, auditors believe they have a better understanding of GAAP than their clients. They may believe their accounting judgements are not open for negotiation. In effect, auditors may not have wider solution sets because those solution sets may have a professional boundary that is related to their professional responsibility to provide financial statements that are free from material misstatements. Study Two examines whether experienced auditors have narrower or wider solution sets in terms of making concessions such that the financial statements will be materially misstated.

It is difficult to conduct a dynamic experiment and observe actual negotiations between an auditor and a client hence, prior published studies have relied on auditors' self-reports rather than actual negotiation except for the study by Trotman et al. (2005). There is an emerging body of studies that seek to directly examine the negotiation process. Prior studies have used computer-mediated negotiation to examine the behaviour of auditors (Brown & Johnstone, 2009; Hatfield et al., 2010). Brown and Johnstone (2009) vary the negotiation experience of auditors and ask auditors to negotiate with a computer-simulated client. The findings show that auditors with more negotiation experience generally do not deviate from their initial position even when the engagement risk (i.e., auditor business risk) is high, whereas auditors with less negotiation experience provide greater concessions toward the client's preferred method in high-risk engagements. In another computer simulated experiment, Hatfield et al. (2010) examine the effect of the magnitude of the audit difference (i.e., the difference between the auditor's proposed amount and the client's unaudited amount) and the presence of prior client concession on auditors' negotiated outcomes. The findings suggest auditors propose smaller audit adjustments when the audit difference is large, and the client provided prior concession on the issue of accounting estimates before entering the negotiation. Study Two in this thesis attempts to follow the simulation design in the study by Hatfield et al. (2010) to elicit responses from auditor participants.

2.2.1 Dual Concern Theory and Theory of Motivated Reasoning

Study Two draws upon prior research on dual concern theory and the theory of motivated reasoning to examine the effects of performance-based profit-sharing schemes and client flexibility on the magnitude of proposed audit adjustments recorded in the financial statements of the client.

The negotiation research in social psychology assumes that the negotiator's behaviour is driven by their motivational orientation (Carnevale & Pruitt, 1992). The analysis of the negotiator's motives has largely centred around the dual concern model, which is a theory emanating from the motivational orientation and choice of strategies to resolve disputes (Pruitt & Carnevale, 1993, pp. 109-112). This model postulates that situational factors affect two variables that comprise a negotiators' motivational orientation: concern for own outcome and concern for the other party's outcome. The combination of motivational orientation in any negotiation setting affects the strategies used by negotiators (Pruitt & Carnevale, 1993).

There are mainly five types of strategies mentioned in the general negotiation literature. First, the contending strategy aims to "persuade the other party to concede or trying to resist similar efforts by the other party" (Pruitt & Carnevale, 1993, p. 3). Second, the concession-making strategy aims to reduce one's own goals or offers to provide less benefit to one-self and more benefit to the other party. Third, the problem-solving strategy which is a part of an integrative strategy, aims to understand and adopt options that meet both parties' interests. Fourth, the compromising strategy aims to find a middle ground where both parties move from their preferred positions towards an "in-between" solution. Lastly, inaction strategy refers to doing nothing or as little as possible.

Pruitt (1983) argues concern about the other party's outcome can take two basic forms: genuine concern and strategic concern. The strategic concern is aimed at helping the other to advance one's self-interests. "It is common whenever one sees oneself as dependent on the other party – when the other seems able to provide rewards and penalties" (Pruitt, 1983, p. 176). In that situation, an individual tries to impress the other party with their own concern about the other party's welfare.

The dual concern model makes predictions about the antecedents of the strategies: contending strategy for high concern for own outcome and low concern for others' outcome whereas concessionary strategy for low concern for own outcome and high concern for others' outcome. For one extreme condition, that is, high concern for own outcome and high concern for others outcome the model predicts, the negotiator will use an integrative (i.e., problem-solving) strategy. Lastly, the model predicts inaction (i.e., avoiding) strategy when there is low concern for own outcome and low concern for others' outcome. Pruitt (1983) excluded the compromising strategy because he argues that the compromising strategy arises from "lazy problem-solving involving a half-hearted attempt to satisfy both parties' interests."

A brief description of the experiments that were conducted in social psychology to test the predictability of the dual concern model is as follows:

Ben-Yoav and Pruitt (1984 (a)) operationalise the concern for negotiators' own outcome by requiring them to achieve a high profit target. In the experimental settings, the participants assumed the roles of buyers and sellers in a wholesale appliance market to reach an agreement on the prices of three appliances – television sets, vacuum cleaners, and typewriters. In the case material, each negotiator received a separate profit schedule that showed information about his/her own profit. The prices of the three appliances were represented by the letters A through I, with A being the lowest and I being the highest price. As in all negotiation situations, the interests of the two negotiators are divergent since profits increase for the buyer as prices approach to lowest sections of the profit schedule, whereas profits increase for the seller as prices approach to highest sections of the profit schedule. However, the task has integrative (log rolling) potential in that their interests are not perfectly opposed since their priorities on the three appliances are reversed. The buyer earns his/her highest rate of profit on television sets and lowest rate of profit on typewriters, whereas the reverse is true for the seller.

Negotiators can achieve the high profit target if they resist concession. The concern for others' outcomes was operationalised by informing the negotiators that they would have to cooperate in future interactions. The results show when the resistance to concession was high, the expectation of future cooperative interaction encouraged problem-solving behaviour (i.e., integrative); when resistance was low, the expectation of future cooperative interaction encouraged concession-making behaviour. In another study by the same researchers, the concern for own outcomes and concern for other's outcome was operationalised by making the negotiators accountable to powerful constituents and the expectation of future cooperative interaction, respectively (Ben-Yoav & Pruitt, 1984 (b)). The results show accountability encouraged contentious behaviour when the expectation of future cooperative interaction was absent and encouraged problem-solving (i.e., integrative) when the expectation of future cooperative interaction was present. The results of both studies supported the dual concern model's prediction. It can be inferred from both the results that behaviour is a function of both a concern for own outcome and the concern for the relationship with the other party.

Study Two also argues that both the dual concern theory and the theory of motivated reasoning are interrelated. Prior evidence suggests that situational factors influence auditors to act as motivated reasoners (Blay, 2005; Hackenbrack, 1992; Jenkins & Haynes, 2003; Kadous et al., 2003; Koch & Salterio, 2017; Peecher et al., 2010). It is equally true that auditors' motivational orientation that is, concern for their own outcome and concern for other (i.e., client) outcome will also influence auditors to act as motivated reasoners.

In auditing contexts, Kleinman and Palmon (2000, pp. 37-38) suggest auditors' concern for their own outcome and others' outcome can be conceptualised by creating a three-dimensional grid. The concern for others' outcomes can be bifurcated into concern for the client and concern for the broader community that receives audited financial statements and relies on the financial statements for decisions. This thesis argues that auditors' concern for their own outcome may arise due to economic concern because of economic dependency on clients' revenue. On the other hand, auditors' concern for clients' outcomes can be viewed as a strategic concern for clients' outcomes as auditors see themselves as economically dependent on clients' revenue. Therefore, to advance their own interests' auditors will care for clients' outcomes.

In auditing contexts, the findings of two studies (Gibbins et al., 2010; McCracken et al., 2011) contradict each other to a certain extent. For example, the findings of McCracken et al. (2011) show audit partners tend to adopt contending strategies and do not deviate from their initial recommendations in the negotiation phase. Contrary, the findings of Gibbins et al. (2010) show audit partners have a preference to adopt integrative strategies and routinely look for "wins" for client management irrespective of what the accounting circumstances are, including circumstances when they faced an inflexible client with financial statements likely to be materially misstated. In their opinion, the adoption of integrative strategies suggests the financial statements could potentially remain misstated after the negotiation.

So, considering the opinions put forward by Gibbins et al. (2010), it can be argued that the adoption of strategies in the pre-negotiation phase will ultimately manifest in the final amounts to be reported in the financial statements of clients in the negotiation phase. For example, a contending strategy implies auditors will stand firm in their recommendations and fully record their proposed audit adjustments in the financial statements of the client or make irrevocable commitments to issue a qualified audit opinion if clients' accounting practices are not changed.

This chapter provides a discussion on the strategies and tactics used in the study by Gibbins et al. (2010). The authors investigate three distributive strategies (e.g., compromising, concession-making, and contending) and two integrative strategies (e.g., expanding the agenda and problem-solving). The following Table 2.1 shows the five negotiation strategies and associated tactics with each negotiation strategy examined by Gibbins et al. (2010).

Table 2.1 Negotiation Strategies' Tactics
Compromising strategy's tactics 1. I would propose some middle ground on this issue at some point during the process of resolving the disagreement with JEL management. 2. I would negotiate with JEL management so that a compromise could be reached. 3. I would try to find some middle ground to resolve this issue with JEL management. 4. I would use "give and take" so that a compromise could be made with JEL management.

5. I would try to play down the differences with JEL management to reach a compromise.

Conceding (i.e., concession-making) strategy's tactics

6. I would try to satisfy the expectations of JEL management.
7. I would try to satisfy the needs of JEL management.
8. I would attempt to accommodate the wishes of JEL management.
9. I would give into the wishes of JEL management.
10. I would make concessions from my position to JEL management.

Contending strategy's tactics

11. I would use my influence to get my position accepted by JEL management.
12. I would argue with JEL management to show them the merits of my position.
13. I would use my ability to qualify JEL's financial statements to obtain a resolution in my favour.
14. I would be firm in pursuing my position.
15. I would use my expertise in accounting to influence the resolution in my favour.

Expanding the agenda strategy's tactics

16. I would bring other issues to the discussion, such that I could trade off on other issues to resolve this issue in my favour.
17. I would try to work with JEL management to develop a proper understanding of this issue in the context of other issues.
18. I would provide all relevant information to JEL management so we could solve this issue together in the context of other issues.

19. I would attempt to find other issues with JEL, which I could add to the discussion.

20. I would attempt to find other issues with JEL, so I could accede to their wishes at the same time as achieving my position on this issue.

Problem-solving strategy's tactics

21. I would try to bring all my concerns about this issue out into the open with JEL management so that the issue could be resolved in the best possible way.

22. I would try to investigate the issue further with JEL management to find a new solution acceptable to both of us.

23. I would try to work with JEL management to find new solutions to this issue that satisfy both of our expectation.

24. I would try to integrate my ideas about how to resolve this issue with JEL management to come up with a new solution jointly.

25. I would collaborate with JEL management to come up with a new solution acceptable to both of us.

Adapted from Gibbins et al. (2010, p. 590)

Based on the results Gibbins et al. (2010) suggest the adoption of integrative strategies' tactics may result in financial statements remaining materially misstated after negotiations. By observing the tactics under each type of strategy Study Two argues that the financial statements will more likely be materially misstated if participants adopt conceding (i.e., concession-making) tactics rather than integrative tactics. The five conceding strategy tactics (e.g., I would try to satisfy the needs of JEL management, I would make concessions from my position to JEL management) suggest auditors could fully waive audit adjustments so that the needs of client management are satisfied.

It is to be noted for the purpose of this thesis the concession-making strategy refers to partially or fully waiving material audit adjustments. However, other auditing studies examine auditors' concession-making behaviour from a different theoretical perspective. Those studies draw upon prior research on the societal norm of reciprocation (Brown & Johnstone, 2009; Hatfield et al., 2008; Sanchez et al., 2007; Tan & Trotman, 2010). The concept of reciprocation in a negotiation represents when one party will offer a concession, the other party will reciprocate by providing a concession from their position which resembles compromising behaviour. For example, if auditors inform the client management regarding all potential audit adjustments and subsequently waive the immaterial audit adjustments, with the expectation that the client management would accept to record the material audit adjustments (Sanchez et al. 2007). Therefore, a compromising behaviour can be viewed as a phenomenon involving a "reciprocity heuristic" whereby one party makes a concession hence invoking a social norm that the other party must follow up with a concession of their own. Hence, this thesis argues that the concession-making behaviour observed in those above-mentioned studies is compromising behaviour.

Experienced auditors, especially audit partners are expected to remain firm in their positions and employ contending strategies when negotiating with clients irrespective of situational demands. Ng and Tan (2003) argue that auditors would be viewed as unprofessional if they propose conservative accounting recommendations in anticipation of making later concessions. The findings of Hatfield et al. (2010) also show 76% of the auditors in that study did not move from their initial position. However, a subsequent study has shown that auditors make concessions from their initial positions under tight deadline pressure (Bennett et al., 2015).

The findings from Trompeter (1994) indicated if compensation of audit partners is closely tied to client retention then it is less likely that audit partners will record audit adjustments to reduce client income. It can be argued those audit partners will be concerned about their own outcome in terms of losing clients thus affecting their career prospects. It seems the concern for own outcome may trigger commercial motivation. This motivation may prompt auditors to adopt a self-interested goal (Lander, Koene, & Linssen, 2013) and act as motivated reasoners to keep the client "happy" and accept the client's accounting practice. Similarly, audit partners' concern for clients can be viewed as a "strategic" concern. Audit partners may be hesitant to issue qualified audit opinions because prior auditing studies provide evidence that a qualified audit opinion would likely have negative consequences for the client (Ghicas, Papadaki, Siougle, &

Sougiannis, 2008) such as negative market returns (Taffler, Lu, & Kausar, 2004), a decline in future earnings (Frost, 1994), and a decrease in market share (Loudder et al., 1992) thereby, terminating the working relationship with client management.

Study Two discusses the applicability of the dual concern theory in audit settings. The dual concern theory predicts negotiators will adopt integrative strategies when the concern for their own outcome and concern for the other party's outcome is high. The evidence from (Gibbins et al., 2010) suggests audit partners prefer to adopt integrative strategies irrespective of circumstances which signifies that auditors have high concerns for their own outcome as well as high concerns for clients' outcomes. Prior studies also provide evidence that auditors prefer to stay firm in their initial recommendations regarding client's accounting treatments (Hatfield et al., 2010; Ng & Tan, 2003) which is an indication that auditors prefer to adopt contending strategies. The dual concern theory predicts a negotiator will adopt contending strategies when there is a high concern for their outcome and low concern for the other party's outcome. Although economic concern plays a crucial role in determining the auditor's concern for their outcome but in certain circumstances, auditors will be concerned about the damage to their professional image (i.e., reputation) if their behaviour raises doubts to the outside world that they fail to act as an independent arbiter of GAAP. If their own concern for reputational damage takes precedence over economic concern, then it is expected that auditors will exhibit low concern for the clients' outcome, thereby issuing qualified audit opinions and jeopardising the client relationship. In those circumstances, it is expected that auditors will take a hard stance in their initial accounting positions and employ contending strategies to resolve the dispute with client management.

The concession-making behaviour is not desirable in audit settings, especially if auditors fully or partially waive material audit adjustments. According to the theory of dual concern, parties in a negotiation will be involved in adopting the concession-making strategy when the concern for the own outcome (i.e., auditor) is low, and the concern for the other party's (i.e., client) outcome is high. Avoiding is not a likely strategy in auditor-client negotiation, which represents a low concern for own outcome as well as low concern for other's outcome (Brown & Wright, 2008).

Table 2.2 summarises the above discussion:

Table 2.2 Desirability and Applicability of Strategy Predicted by Dual Concern Theory in Auditing Contexts					
Dual Concern	**Own Outcome**	**Other's Outcome**	**Strategy Prediction**	**Desirability Auditing Context**	**Applicability Auditing Context**
Situation 1	High	Low	Contending	Desirable in all circumstances	Applicable
Situation 2	High	High	Integrative	Not Desirable	Applicable
Situation 3	Low	High	Concession-making	Not Desirable	**Unclear***
Situation 4	Low	Low	Inaction	Not applicable	Not applicable
Situation 5	**Moderate****	**Moderate****	Compromising	Desirable to a certain degree	Applicable

* Prior auditing studies relied upon the social norm of reciprocity to examine auditors' concession-making behaviour. In that context, it may be argued that auditors' concession-making behaviour is actually compromising behaviour.

** Not predicted by dual concern theory.

2.2.2 Independent Variable – Performance-based Profit-Sharing Schemes

Study Two re-examines the same variable; performance-based profit-sharing schemes in the negotiation phase. The discussion regarding the variable is mentioned in section 2.1.2.

2.2.3 Independent Variable - Client Flexibility

Study Two examines the client flexibility variable in the negotiation phase. The term flexibility has been widely discussed in organisational behaviour and political contexts (Bleeke & Ernst, 1991; Druckman, 1986; Fisher, Ury, & Patton, 2011; Touval, 1995; Weick, 1993). The dictionary definition of flexibility includes (1) pliable, not rigid, (2) ready to yield to influence, (3) capable of being adapted, changed, or moulded (4) responsive to or readily to changing conditions as to hold flexible opinions. The impression here is "one of being moulded or manipulated, lacking in principles or framework, and readily adjustable to circumstances-chameleon-like behaviour" (Druckman & Mitchell, 1995, p. 11). Another author, Hopmann (1995), discusses the term flexibility from two paradigms of negotiation theory: bargaining and problem-solving.

> "For the bargaining paradigm indicators of flexibility include concession rates, initiation of new proposals, and other soft behaviours. For the problem-solving paradigm, flexibility is usually indicated by a search for better, mutually beneficial solutions to the problems that satisfy the needs, identifies, and interests of all parties" (Hopmann, 1995, p. 24).

Druckman and Mitchell (1995) highlight the positive and negative aspects of flexibility in a negotiation context. The authors mention that flexibility could lead to a favourable negotiated outcome if used in problem-solving behaviour. On the other hand, if flexibility is used tactically by one or the other party, it can lead to unfavourable outcomes, at least for one party. A study in psychology by Olekalns, Smith, and Walsh (1996) suggests flexibility keeps the negotiations going ahead; the more flexible one party is, the more the other party will believe that settlement is possible. A meta-analysis by Hüffmeier, Freund, Zerres, Backhaus, and Hertel (2014) has shown that negotiators who take the "hard-line" approach achieve a favourable economic outcome for themselves, but these are achieved at the cost of being perceived more negatively by the other party. Flexible negotiators are open to differences, empathic towards others' views, possess skills to solve problems, and resolve conflicts.

When a negotiator faces a flexible opponent, the individual negotiator is faced with the dilemma of a firm standing position or moving toward the other's position. An individual negotiator who is willing to stand firm in their position may use a contending strategy when faced with a flexible opponent, use a concession making or integrative strategy if that individual wants to move towards another party's position, or find a new solution acceptable to both the negotiating parties. When the parties are flexible, it will be less difficult for the negotiating parties to manoeuvre the opponent's position as both parties are willing to move from their respective positions. In the negotiation literature, two negotiation strategies are found to be used when negotiating with a flexible opponent: a compromise and a concession (Ben-Yoav & Pruitt, 1984 (a); Brett, Shapiro, & Lytle, 1998; Olekalns & Smith, 2000; Olekalns et al., 1996).

On the other hand, when a negotiating party is faced with difficult negotiations and sees that the other party is inflexible, the negotiating party will resort to more integrative strategies to resolve the issue under negotiation. Thus, the negotiator is faced with the dual concerns of keeping the opponent happy as well as achieving an outcome that is acceptable to them. If one party is firmly committed to its position, an integrative strategy is not feasible. The general negotiation literature suggests that negotiators do not employ integrative strategies because those negotiations take longer to resolve, and the relationship starts worsening (Greenhalgh & Chapman, 1998). Limited support for integrative strategy is observed even in laboratory experiments (Rhoades & Carnevale, 1999). The findings highlight a less effortful contending (i.e., distributive) strategy will be invoked, which includes determining how to "split the pie". Thus, negotiators may tend to resort to contending strategies to achieve a maximum share of the pie for themselves (Thompson & Hastie, 1990).

In an auditing context, Beattie, Fearnley, and Brandt (2001) provide an example where the client management did not want to accept the proposed change in accounting treatment for goodwill by the auditor. The audit partner did not see any other option other than to stay firm in their position considering the standards for goodwill accounting. Hence, the negotiation became hostile and difficult to resolve. Beattie et al. (2001) also describe a case where the auditor-client negotiating over the fair value assessment of a property. Contrarily, in that scenario, both the auditor and client management moved from their positions, easing the negotiated outcomes.

In an experimental setting with 140 audit partners, Gibbins et al. (2010) examine the joint effect between the flexibility of client's initial accounting position and nature of the client relationship on audit partners' selection of negotiation strategies with client management. The audit partners completed the case materials via paper and pencil on their own or at firm annual partners' meetings, or online. The study Gibbins et al. (2010) investigate two hypotheses relating to client inflexibility in a pre-negotiation setting. Their first hypothesis states an audit partner negotiating with an inflexible client may likely adopt integrative strategies to resolve negotiation issues. Based on the evidence in the negotiation literature that negotiating parties do not employ integrative strategies, so the authors formulate the second hypothesis that auditors will be more likely to adopt a contending strategy when facing an inflexible client. For the first hypothesis, the results show that there is only a marginally significant relationship between client inflexibility and an expanding agenda strategy. The problem-solving strategy did not show any significant relationship with client inflexibility. The authors formulate the third hypothesis that when an audit partner is facing a flexible client, there is a higher possibility of adopting either a compromising or a concession-making strategy. They report there is a significant relationship between client flexibility and both the compromising and concession-making strategies.

Gibbins et al. (2010) report a problematic finding is that the audit partners in the study are more likely to adopt an integrative strategy across all the experimental conditions. They argue that this undifferentiated emphasis on integrative strategies may be troublesome because it shows audit partners will look for “wins” for inflexible client management during negotiations. The authors suggest that the adoption of integrative strategies may not be a desirable strategy in auditing contexts because there is a high probability that the financial statements may remain materially misstated after negotiations. From the perspective of the dual concern theory, it is understandable that this systematic preference for integrative strategies across all the experimental conditions may be due to the nature of the institutional arrangement regarding the hiring and firing of auditors by client management. Audit partners have high concerns about safeguarding their own economic interests in terms of compensation and career prospects. Likewise, audit partners also have high strategic concerns to not make clients unhappy and to not strain working relationships which lead to termination of contracts resulting in future loss of revenue for audit firms.

This thesis provides some arguments to the explanations provided by Gibbins et al. (2010) regarding the results and development of hypotheses. First, Gibbins et al. (2010) state that the financial statements will remain misstated after negotiation because the auditor participants prefer to adopt the integrative strategy (i.e., expand the agenda and problem-solving) when they face inflexible clients. The result for their first hypothesis on the integrative strategy is marginally supported; they find support for expanding the agenda strategy but not for the problem-solving strategy. Moreover, it is uncertain whether the financial statements will remain misstated if auditors adopt those tactics mentioned in expanding the agenda strategy. This thesis argues there is a higher chance that the financial statements will be misstated if auditors adopt a concession-making (i.e., conceding) strategy rather than an integrative strategy (i.e., expand the agenda strategy).

Second, Gibbins et al. (2010) formulate their second hypothesis that auditors will prefer to use a contending strategy when they face an inflexible client. They argue that an integrative strategy is difficult to employ, so auditors will prefer to use a contending strategy. The authors did not provide a theoretical discussion on the dual concern theory for their competing hypothesis. However, the authors did mention the dual concern theory when they predict the relationship between auditors' intended use of integrative strategy and client inflexibility. The question arises why auditors in practice adopt a contending strategy knowing that the client is difficult to convince. There is a high possibility that the client management will switch the auditor for future engagements if both the parties do not come to an agreement and a qualified opinion is issued.

It is to be noted that decision to hire or fire auditors is made by those charged with governance (e.g., audit committee). SOX Act (2002) mandates the Blue Ribbon Committee recommendation that for publicly traded companies, the audit committee hires/terminates the audit firm. However, in the article published by Hatfield, Agoglia, and Sanchez (2008), it is stated in Footnote 8 (pp 1190 -1191) that "while the audit committee is responsible for engaging/terminating the auditor, discussions with several Big-4 partners (including a national officer in charge of practice issues) indicate that management's role in the auditor retention decision has not significantly diminished. Further, a survey of audit committee members and other executives finds that controllers/CFOs have the greatest influence (e.g., greater than the audit committee) over issues such as auditor compensation and retention (KPMG [2004])." Prior studies also provide evidence that clients may switch auditors after having received a modified (e.g., qualified) audit opinion (Carey, Geiger, and Oconnell, 2008; Chow and Rice, 1982; Krishnan 1994; Krishnan & Krishnan, 1996; Lennox, 2000) because they are dissatisfied with the outcome of a negotiation with the auditor (Sanchez, Agoglia and Hatfield 2007; Tan and Trotman, 2010).

The dual concern theory predicts negotiators' will adopt the contending strategy when the concern for their own outcome is high and the concern for the other's outcome is low. The question arises when an auditor's concern for the client's outcome will be low given their economic motivation to keep the client management happy. This thesis argues it is possible when auditors perceive that their independent image as the arbiter of GAAP (i.e., reasonableness constraint criteria) will be violated and a third party knowing the situation would judge them as unprofessional. In those circumstances, auditors concern for the client's outcome will be low and they will try to convince inflexible clients to record audit adjustments. If auditors fail to convince the client, then they will not hesitate to issue a qualified audit opinion knowing the client will definitely terminate the working relationship.

Third, based on the prior negotiation literature (Ben-Yoav & Pruitt, 1984 (a); Pruitt & Carnevale, 1993), Gibbins et al. (2010) formulate their third hypothesis that auditors are likely to adopt a concession-making and compromising strategy when they perceive the client is flexible in recording audit adjustments but the authors did not provide a theoretical discussion on the dual concern theory for their hypothesis.

The dual concern theory does not predict the compromising strategy, but the theory predicts negotiators' will adopt the concession-making strategy when the concern for their own outcome is low and the concern for the other's outcome is high. The question arises when an auditor's concern for their own outcome will be low given their own economic motivation to keep the client management happy. This thesis argues auditors' concern for their own outcome will be low (i.e., economic concern) when they are relatively certain that the client will change the auditor in the coming year even after receiving a favourable audit outcome. This thesis argues auditors' concern for their own outcome will be low when they face either a flexible or an inflexible client. It may be argued that there is a higher chance that inflexible clients will switch auditors compared to flexible. For that reason, auditors may offer comparatively more (less) concessions to inflexible (flexible) to satisfy their expectations.

2.2.4 Independent Variable – Social Value Orientation

Study Two also examines the effect of auditors' social value orientation (SVO) on audit adjustments to be recorded in the financial statements of clients. An individual personality is a stable characteristic, immutable, and less malleable to situational influence. Extant literature in negotiation shows that individual differences affect decisional outcomes (Chong & Eggleton, 2003; Gul, 1984). Prior studies have shown in a general negotiation context that personality traits (e.g., individuals' social value orientation) influence negotiation outcomes (De Dreu & Boles, 1998; De Dreu & McCusker, 1997; Upton, 2009; Van Lange & Liebrand, 1991; Van Lange & Semin-Goossens, 1998).

SVO is normally classified into three categories: pro-social, individualists, and competitors. However, some researchers support classifying social value orientation into two categories, pro-social and pro-self (Gärling, Fujii, Gärling, & Jakobsson, 2003; Nauta, De Dreu, & Van Der Vaart, 2002; Van Lange, Vugt, Meertens, & Ruiter, 1998). Pro-selfs consist of those with individualist and competitive social value orientations.

Pro-self-individuals are concerned with their own outcomes and try to maximise the share of the pie (Van Lange, De Bruin, Otten, & Joireman, 1997; Van Lange & Kuhlman, 1994). Pro-self individuals tend to ignore the outcomes of other parties as they have a high concern for their own gains. On the other hand, pro-social individuals tend to maximise outcomes for both themselves and other parties. Evidence from prior organisational behaviour literature shows that in negotiations, pro-socials choose more cooperative heuristics whereas pro-selfs adopt more competitive heuristics (De Dreu & Boles, 1998). It can be said that pro-self individuals are more likely to adopt contending strategies to maximise their own monetary payoffs (i.e., your gain is my loss). In contrast, pro-social individuals prefer to adopt either integrative or concession-making strategies to maximise outcomes for both themselves and others (i.e., an equal split is fair).

According to the Cooperation theory (Deutsch, 1949a, 1949b, 1960), an individual with cooperative orientation (i.e., pro-social) will start with cooperative signals to negotiate with the other party because pro-social individuals have an internal guide to maximising outcomes of other people. It is also possible pro-social individuals can change to competitive or individualistic behaviour (i.e., pro-self) if their cooperative behaviour is not quickly reciprocated (Parks & Rumble, 2001). On the other hand, an individual with a competitive orientation (i.e., pro-self) can exhibit either cooperative or competitive behaviour while negotiating with other parties because pro-self individuals lack an internal guide on how to relate to others. As a result, pro-self individuals depend more on situational factors or cues when negotiating with others.

Study Two explores whether auditors' social value orientations affect negotiation outcomes in a negotiating setting. Auditors need to abide by rules and regulations during audit engagements Moreover, auditors are expected to act within a professional boundary (i.e., materiality threshold). In this context, it is worthwhile to mention that Hurtt (2010) developed a scale to measure auditors' level of trait scepticism. Professional scepticism is a professional requirement as auditors should always demonstrate a sufficient level of professional scepticism while performing audit engagements. Auditors can be highly sceptical as an individual but they may not exhibit sceptical behaviour during audit engagements because Nelson (2009) argues that the level of professional scepticism must reach some threshold before it is sufficient to promote action. That threshold not only depends on auditors' personality trait but also on environmental factors (e.g., avoid displeasing client, client pressure, time, and budget pressure).

It may be argued that in an audit setting, environmental factors play a more prominent role than the personality of auditors although personality is less malleable to environmental influence. Although, there is no professional requirement for auditors to negotiate with client management. However, prior literature in auditing provides evidence that auditors need to negotiate with clients. Similarly, prior research in social psychology provides evidence that negotiation skills depend on the personality of individuals. Negotiation skills can be considered distinct from auditing (i.e., professional) skills. For example, pro-self auditors are expected to remain firm in their positions and adopt contending strategy but there is a possibility that they can adopt an integrative strategy to cooperate with the client during a negotiation. Similarly, pro-social auditors are expected to adopt an integrative or a concession-making strategy, but they can resort to a contending strategy if their cooperative behaviour is not reciprocated by the client. Therefore, Study Two investigates whether auditors' social value orientation impacts negotiation outcome, specifically when there is a possibility that the “reasonableness constraint” criterion might be violated.

2.3 Overview

This chapter discussed relevant literature relating to the two studies in this thesis. Study One examines auditors’ concessionary mindset in a pre-negotiation context. Study Two examines auditors’ negotiation behaviour in a simulated negotiation environment.

In section 2.1, the significance of auditors’ pre-negotiation positions was discussed. In subsequent sub-sections, prior literature on the theory of motivated reasoning (section 2.1.1) was reviewed; followed by a review of auditing studies regarding the chosen independent variables namely, performance-based profit-sharing schemes (section 2.1.2) and client pressure (section 2.1.3). In sub-section 2.1.4 the importance of auditors’ limit in a negotiation setting was presented.

In section 2.2 the motive for examining auditors’ negotiation behaviour was discussed. In section 2.2.1 discussions on the dual concern theory as well as arguments regarding the applicability of the dual concern theory in an audit setting are put forward. The performance-based profit-sharing schemes variable was highlighted again in section 2.2.2 in the second study. In section 2.2.3 prior literature regarding the client flexibility variable was reviewed. Lastly, in section 2.2.4 a brief review of studies on social value orientation was presented.

CHAPTER 3
THEORETICAL DEVELOPMENT AND HYPOTHESES FORMULATION

3.0. Introduction

This chapter presents a theoretical model to address the following research questions developed in Chapter 1:

Study One (Pre-negotiation Phase)

(a) What are the effects of auditors' performance-based profit-sharing schemes and client pressure on auditors' mindset in the pre-negotiation phase?

Study Two (Negotiation Phase)

(b) What are the effects of performance-based profit-sharing schemes and client flexibility on auditors' behaviour in an actual negotiation phase?

(c) Whether auditors' pre-negotiation mindset will mirror or change in an actual negotiation stage?

(d) Whether auditors' personality trait of social value orientation have an impact in an actual negotiation phase.

The conceptual model for this thesis is shown in Figure 3.1.

Chapter 3 is organised as follows. Sections 3.1 and 3.2 summarise the discussion on the theories in Chapter 2 and formulate the hypotheses for Study One and Study Two, respectively. A summary of the hypotheses for both studies is presented at the end of the chapter in Table 3.1.

Relying on the theory of motivated reasoning, Study One investigates the joint effect of audit partners' performance-based profit-sharing schemes and client pressure on auditors' mindset in a pre-negotiation setting involving a subjective accounting estimate (i.e., provision for inventory obsolescence). Negotiations involving subjective accounting estimates are typically more difficult to resolve because those estimates are subject to differences in professional judgement between auditors and client management.

Audits are administered by engagement partners based in a specific practice office. The extant literature suggests accounting firms have increasingly adopted performance-based profit-sharing schemes to compensate audit partners (Burrows & Black, 1998; Coram & Robinson, 2017). Generation of revenue and client retention is one of the performance measures used to evaluate an audit partner's performance and determine the performance bonus. From one of the most egregious audit failures in history, Enron, it could be argued that the root cause of the questionable decisions attributable to audit firms stems from the financial incentives given to audit partners by their firms. Prior studies provide evidence that performance-based compensation given to audit partners influence their behaviour (Zeff, 2003). In an article published by Wyatt (2004, p. 48) the author stated that accounting firms started to move "from those with outstanding technical accounting and auditing skills to those who were pre-recognised as the pre-eminent 'rainmakers' within the organisation." The findings by Coram and Robinson (2017) also support the above statement.

It can be inferred from prior literature that the design of performance-based profit-sharing schemes influences the behaviour of audit partners within a partnership-based structure. It is to be noted that although Study One emphasises the generation of revenue and client retention, the primary focus of both studies is the size of the profit pool used to distribute the performance bonus to audit partners.

On the other hand, prior studies (Hackenbrack & Nelson, 1996; Kadous et al., 2003; Lord, 1992) have shown there is a tendency for auditors to acquiesce to client pressure when Generally Accepted Accounting Principles (GAAP) require recording of the proposed audit adjustments but allow some latitude in the amount (e.g., provision for inventory obsolescence) of the audit adjustments. Although rules (e.g., section 303 of the SOX Act, 2002) are enacted to insulate auditors from client pressure a prior study has provided evidence (Hatfield et al., 2011) that auditors are not completely immune to client pressure in the current auditing environment (i.e., post-SOX era).

The empirical model for Study One is presented in Figure 3.2.

Figure 3.1 Conceptual Model

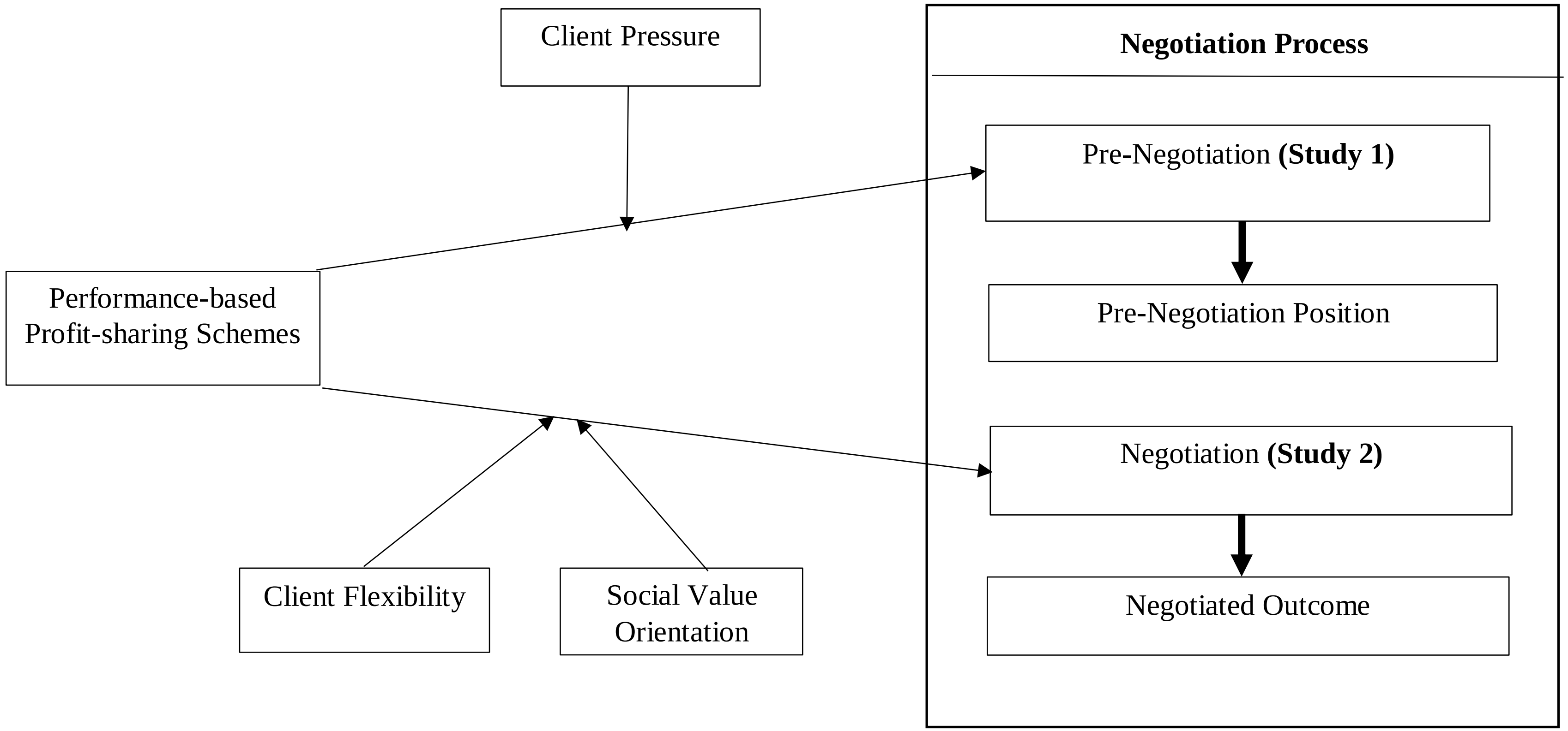
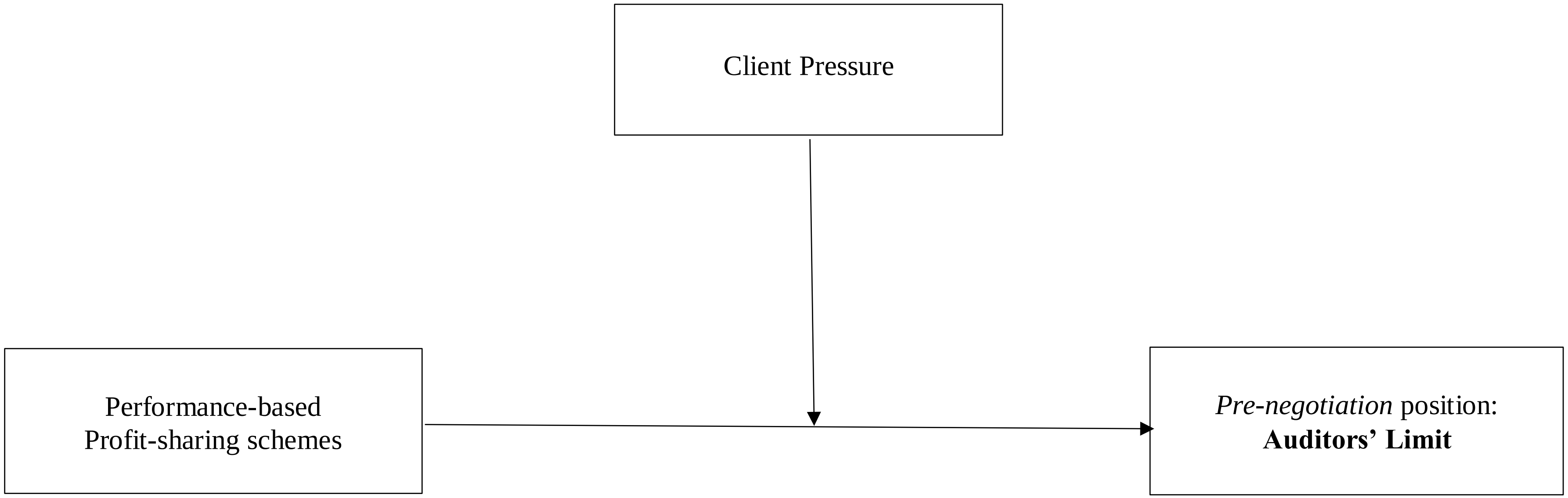


Figure 3.2. Empirical Model for Study One



3.1 Theory of Motivated Reasoning

Prior auditing studies have shown that auditors act as motivated reasoners (Blay, 2005; Hackenbrack, 1992; Kadous et al., 2003; Koch & Salterio, 2017; Peecher et al., 2010). In the social psychology literature, Kunda (1990) suggests motivated reasoning occurs when an individual is motivated to arrive at a particular goal. However, the author also proposes that individuals are motivated to arrive at particular goals, attempt to be rational, and try to find seemingly justifiable reasons for those goals to persuade a "dispassionate observer" (Kunda, 1990, pp. 482-483). That is to say, the theory of motivated reasoning posits that such goals are subject to a "reasonableness constraint" (Boiney et al., 1997).

Similarly, in audit settings, auditors should be able to justify to themselves that a third party (i.e., dispassionate observer) in similar situations, would perceive them as acting in a professionally independent manner when evaluating the financial statements of clients (Koch & Salterio, 2017). It implies auditors will resist accepting clients' preferred accounting treatments given the possibility that auditors' professional image will be tarnished. However, Koch and Salterio (2017) did not explain how this reasonableness constraint criterion is identified in auditing settings.

This thesis argues the materiality threshold (i.e., professional boundary) chosen by individual auditors will act as a yardstick to identify the reasonableness constraint criterion. There are circumstances where the client specifically asks auditors to fully waive audit adjustments that breach the materiality threshold. In those circumstances, it will be difficult for auditors to maintain an independent professional image if they choose to fully waive the audit adjustments. It is expected due to the reasonableness constraint criterion, auditors may still accommodate client demands but at the same time remain within the professional boundary.

3.1.1 Performance-based Profit-Sharing Schemes

The dominant organisational form for audit firms is a partnership structure (Greenwood et al., 1990; Huddart & Liang, 2003, 2005; Kandel & Lazear, 1992; Liu & Simunic, 2005), and accounting firms are predominantly using a performance-based profit-sharing scheme to remunerate auditors, especially audit partners. Consistent with the theory of motivated reasoning, financial (i.e., economic) considerations may influence auditors to act as motivated reasoners and reach client preferred outcomes. The reason is that an individual partner obtains a significant portion of the expected benefits from accepting client demands while passing the expected cost to the partnership as a whole. Trompeter (1994) suggests if accounting firms use a small profit pool (i.e., divisional profits) in determining audit partner compensation, then it is more likely an individual audit partner will acquiesce to client preferences as they may become financially dependent on the client. In contrast, when accounting firms use a large profit pool (i.e., firm-wide profits) to compensate an audit partner, each partner has less stake in a particular engagement. It can be argued that an individual partner will be less financially dependent on a particular client. Hence, that individual partner will be less motivated to accept the client preferred treatments as the client is much less important to the partner's income. Prior empirical research shows audit quality improves when audit partners' compensation is based on a large profit pool (Carcello et al., 2000; Dekeyser et al., 2016; Hay et al., 2007). This is because when audit firms share profits across a larger pool, the partners from other offices also have a stake in a particular engagement.

Kunda (1990, p. 493) states that "directional goals have been shown to affect people's attitudes, beliefs, and inferential strategies in a variety of domains and studies conducted by numerous researchers in many paradigms." For example, purely economic considerations may motivate auditors to act as motivated reasoners and adopt goals that are consistent with client preferences. Bazerman and his colleagues argue that as long as auditors are hired and paid by the client, it enhances the willingness of an auditor to adopt a self-interested directional goal "to see the world through the eyes of client management" (Koch & Salterio, 2017, p. 118). Auditors have a strong incentive to remain in the client's good graces and are thus highly motivated to accept clients' preferred accounting treatments. Expressing the arguments by Bazerman and his colleagues in terms of the theory of motivated reasoning, it can be argued that an auditor might adopt a self-interested goal to acquiesce to the client's preferred reporting choices because the client hires and fires the auditor.

In Study One, the performance-based profit-sharing schemes (hereafter, profit-sharing schemes) of audit partners are evaluated based on a divisional profit-sharing scheme and a firm-wide profit-sharing scheme (see Anctil & Dutta, 1999). In this thesis Study One, predicts that auditors, especially audit partners in the divisional profit-sharing scheme (hereafter, divisional scheme) will be more accommodating in meeting client demands because an individual auditor is much more economically dependent on a particular client engagement.

On the other hand, Study One predicts that auditors, especially audit partners in the firm-wide profit-sharing scheme (hereafter, firm-wide scheme), will be less accommodating in meeting client demands because an individual auditor is comparatively less economically dependent on a particular client engagement. Accordingly, Hypothesis 1 is stated as follows:

H1: Ceteris paribus, auditors in the divisional scheme condition will be prepared to accept a smaller allowance for obsolete inventory than auditors in the firm-wide scheme condition in a pre-negotiation context.

3.1.2 Client Pressure

In an audit setting, client pressure may affect auditors' decisions by motivating them to accept a client's preferred outcome. If client pressure triggers the financial motivation of auditors, they might adopt the self-interested goal to keep their clients satisfied. Consistent with the theory of motivated reasoning and the arguments put forward by Bazerman and colleagues (Bazerman et al., 2002; Bazerman & Moore, 2011; Bazerman et al., 2006; Bazerman et al., 1997; Moore et al., 2006), Study One argues that as long as auditors are hired and paid by the client, the auditor will have a strong self-interest to accede to the client demands. The plausible reason is that the potential loss of a publicly listed client will lose not only future revenue for the audit firm but also have a negative impact on an individual's performance bonus, eventually adversely affecting their career prospects. When the client intensifies pressure by explicitly demanding to waive the proposed audit adjustment and threatens to remove the auditor from future engagements, the auditor will be more motivated to adopt a self-interested goal to satisfy the client's preference by accepting smaller audit allowances for obsolete inventory.

On the other hand, when the client does not explicitly exert pressure but expects auditors to waive the proposed audit allowance, auditors will experience an implicit pressure to accept the client preferred outcomes. However, the intensity of implicit pressure is comparatively less acute than when the client is overtly suggesting waiving the proposed audit allowance for obsolete inventory.

Thus, when auditors propose an audit allowance, it is expected that the explicit (implicit) client pressure conditions will lead them to propose a smaller (larger) audit allowance. Accordingly, Hypothesis 2 is stated as follows:

H2: Ceteris paribus, auditors in the explicit client pressure condition will be prepared to accept a smaller allowance for obsolete inventory than auditors in the implicit client pressure condition in a pre-negotiation context.

3.1.3 Interaction between Profit-Sharing Schemes and Client Pressure

This study investigates whether client pressure is mitigated by performance-based profit-sharing schemes. The theory of motivated reasoning suggests individuals have a rationale to reach a particular goal. Similarly, in an auditing context, experienced auditors also have a rationale to reach a client preferred accounting treatment. The rationale stems from whether the audit partner is financially (i.e., economically) dependent on the specific audit engagement. From an economic perspective, experienced auditors, especially audit partners in firm-wide profit-sharing schemes, will be less economically dependent on revenue generated by an individual client, although losing a publicly listed client may affect audit partners' future career prospects. It is argued that audit partners in firm-wide profit-sharing schemes will be less motivated to agree to the client's preferred position because an individual partner has less stake in a particular engagement; therefore, being more immune to client pressure. In this instance, audit partners may adopt a more conservative stance to record the proposed audit allowance for obsolete inventory.

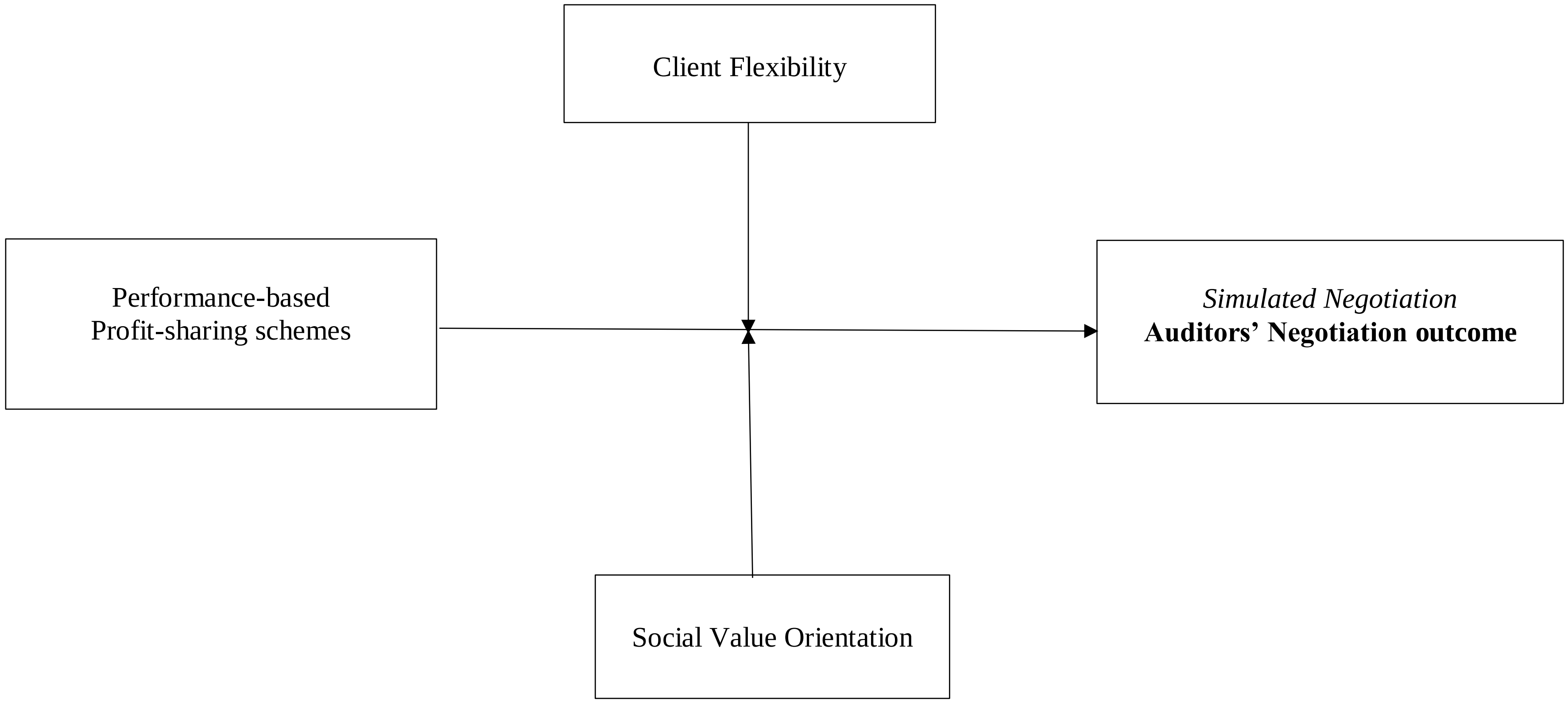
On the other hand, audit partners in divisional schemes will be more vulnerable to client pressure as they are more economically dependent on individual client engagement. Hence, it is expected that audit partners in divisional schemes are more likely to adopt a self-interested goal to satisfy client demands, that is, take a more liberal position when recording the proposed audit adjustment. Accordingly, Hypothesis 3 is stated as follows:

H3: Ceteris paribus, client pressure has a smaller downward effect on the magnitude of proposed allowance for obsolete inventory when auditors are in firm-wide scheme condition than when auditors are in the divisional scheme condition in a pre-negotiation context.

Auditor-client negotiation happens in an unobserved setting. Now, it is widely acknowledged in academia that financial statements are a joint product of negotiations between auditors and client management. The decision on audit reports is held in abeyance until the negotiations between auditors and client management over the accounting and disclosures in the financial statements are finished. Study One examines auditors' concessionary mindsets, whereas Study Two attempts to emulate a real negotiation setting to examine auditors' negotiation behaviour. Study Two investigates whether the concessionary behaviour will change, albeit in a simulated negotiated setting. This study also relies on the theory of motivated reasoning but additionally draws upon research on dual concern theory to generate testable hypotheses about the effects of profit-sharing schemes and client flexibility on the magnitude of allowance for obsolete inventory in a negotiation environment. This study also examines the effect of auditors' social value orientation on the negotiated outcome.

The empirical model for Study Two is presented in Figure 3.3.

Figure 3.3 Empirical Model for Study Two



3.2. Dual Concern Theory and Theory of Motivated Reasoning

Based on an individual's motivational concerns, the dual concern theory posits four types of strategies a negotiator can adopt to negotiate with other parties. If a negotiator's concern for their own outcome and the concern for the other party's outcome is high integrative strategies may be a feasible option. However, in general, negotiators do not resort to integrative strategies. Contrarily, if the negotiator's concern for their own outcome is high and the concern for the other party's outcome is low a negotiator may adopt contending strategies to resolve a dispute and when a negotiator's concern for their own outcome is low and the concern for the other party's outcome is high, then it is expected a negotiator will adopt a concession-making strategy. The fourth strategy is inaction where the concern for both own outcome and other's outcome is low.

Study 2 argues that due to financial (i.e., economic) dependency on clients, auditors' concern for their own outcome will be always high. It is arguable that auditors' strategic concerns for client outcomes will also be high irrespective of audit engagements because auditors need to advance their own interests. It has been shown in a prior study that auditors, especially audit partners feel responsible for maintaining cordial relationships with clients and keep them "happy" (McCracken et al., 2008). The findings from Gibbins et al. (2010) also suggest audit partners usually look for "wins" for client management no matter what the accounting circumstances are, including circumstances when the financial misstatements are likely to be materially misstated. It implies audit partners will be reluctant to qualify audit opinions even if financial statements are materially misstated. Evidence from prior studies suggests a qualified opinion will likely bear negative consequences for client management (Chow & Rice, 1982; Ghicas et al., 2008; Loudder et al., 1992; Taffler et al., 2004). Therefore, to avoid any undesirable situations for client management, audit partners will be inclined to accommodate client-specific demands to a certain extent. Based on a high concern for own outcome as well as the client's outcome, an auditor will act as a motivated reasoner to satisfy the client's desired outcome. However, the findings by Koch and Salterio (2017) highlight that auditors may be reluctant to accede to client demands completely and behave differently if there is a possibility that auditors' professional image will be violated.

3.2.1 Performance-based Profit-Sharing schemes

The discussion related to this variable is presented in Section 3.1.1. Study Two expects that the profit-sharing schemes variable will have an impact on auditors' negotiation behaviour that is similar to auditors' pre-negotiation mindset. It is predicted that divisional (firm-wide) schemes will motivate auditors to be more (less) accommodating in meeting client demands. Accordingly, Hypothesis 4 is stated as follows:

H4: Ceteris paribus, auditors in the divisional profit-sharing scheme condition will record a smaller allowance for obsolete inventory than auditors in the firm-wide scheme condition in a simulated negotiation context.

3.2.2 Client Flexibility

Research in organisational behaviour (Bleeke & Ernst, 1991; Hüffmeier et al., 2014; Olekalns et al., 1996; Weick, 1993) has shown evidence about the importance of flexibility in negotiations. In an auditing study, Beattie et al. (2001) provide an example where the client management did not want to accept the proposed change in accounting treatment by the auditor. The negotiation became hostile and difficult to resolve. The audit partner did not see any other option other than to stay firm in their recommendation, considering the standards for goodwill accounting. This example suggests the audit partner may have adopted a contending strategy and did not move from their position. In contrast, Beattie et al. (2001) report another scenario where both the audit partner and the client moved from their initial positions. The negotiation proceeded smoothly and was easy to resolve. This example suggests audit partner may have adopted either an integrative strategy or a compromising strategy.

In this context, Study Two clarifies that client flexibility in recording audit adjustments does not mean completely accepting the auditor's proposed recommendations. Similarly, client inflexibility does not mean completely opposing auditors' proposed recommendations. The difference between the client's flexible and inflexible attitude can be viewed as the degree of easiness (i.e., malleability) towards the recording of audit adjustments.

When negotiating parties are firmly committed (i.e., inflexible) to their position, an agreeable outcome is difficult to achieve, and the relationship starts to worsen (Greenhalgh & Chapman, 1998). A prior auditing study by McCracken et al. (2008) has shown that the role of the audit partner includes the responsibility to maintain a cordial relationship with client management. It implies when an audit partner faces an inflexible client, the general tendency will be to achieve a negotiated outcome that will satisfy both the auditor's as well as the client's expectation. In a subsequent study Gibbins et al. (2010) found that audit partners predominantly resort to integrative strategies when faced with inflexible client management. The findings suggest that audit partners tend to accept clients' wishes and at the same time fulfil their own expectations. It is to be noted the authors also found support for the premise that audit partners adopt a contending strategy when faced with inflexible clients.

On the other hand, prior studies suggest if negotiating parties are flexible then the negotiated outcome will be achieved easily (Ben-Yoav & Pruitt, 1984 (a); Pruitt & Carnevale, 1993). In general negotiation research two negotiation strategies tend to be used: a concession-making strategy and a compromising strategy. Gibbins et al. (2010) predicted auditors' intended negotiation strategies will be more likely to be either compromising or concession-making when the client is perceived to be flexible. The results supported their prediction, suggesting there is a more or less equal preference among audit partners to adopt both strategies while dealing with flexible clients.

Study Two specifically examines auditors' concession-making behaviour in a negotiation setting. Auditors' concession-making behaviour is not desirable in any circumstances, especially if that behaviour is related to waiving material audit adjustments in order to satisfy the needs of the client. Study Two argues that in a negotiation setting, auditors need to concede from their initial recommendations or positions to convince both flexible and inflexible clients to satisfy the expectations of their clients. However, the magnitude of the concessions will be considerably more for inflexible clients as compared to a flexible client because an inflexible client is relatively difficult to convince as compared to a flexible client. Hence, auditors need to offer less concessionary amounts from their initial recommendations to satisfy them.

It is understandable that auditors' strategic concern for a client's outcome will always be high regardless of whether faced with a flexible or an inflexible client. Auditors, especially audit partners will be reluctant to take any decisions that jeopardise their working relationships with clients and hinder their economic interests. From the perspective of the dual concern theory, negotiators will adopt a concession-making strategy when their concern for their own outcome is low and concern for the other party's outcome is high. In auditing contexts, auditors' concern for their own outcome will be low when they are more or less certain that the client will switch to another auditor in the next year.

Therefore, Study Two argues that auditors will be relatively more certain that they will lose future engagements when they face inflexible clients as compared to flexible clients. It is because auditors will face more resistance to convince inflexible clients compared to flexible clients to record audit adjustments. At the same time, there is a higher possibility that inflexible clients will terminate future engagements as compared to flexible clients even if most of their demands are met. Therefore, it is expected that auditors when faced with inflexible clients will have to weaken their positions to a greater extent and offer more concessions compared to flexible clients. It is also possible that due to the reasonableness constraint criterion, some auditors will prefer to remain firm in their recommendations and may not move towards the client's preferred outcomes after a certain point, even if the client shows an inflexible attitude towards recording audit adjustments.

Thus, it is expected in normal circumstances that auditors will be prepared to record a comparatively smaller allowance for obsolete inventory when faced with inflexible clients as compared to flexible clients. Accordingly, Hypothesis 5 is stated as follows:

H5: Ceteris paribus, auditors in the inflexible client condition will record a smaller allowance for obsolete inventory than auditors in the flexible client condition in a simulated negotiation context.

3.2.3 Interaction between Profit-Sharing Schemes and Client Flexibility

This study investigates whether there is an interaction between the profit-sharing schemes variable and the client flexibility variable. Particularly of interest, this study examines whether an auditor in the divisional scheme condition is more likely to be influenced by specific demands from an inflexible client. In other words, whether an auditor in firm-wide scheme condition is less likely to accept client-specific demands.

Based on the earlier discussion on the theory of motivated reasoning, it is known auditors, particularly audit partners, are motivated to reach a client preferred treatment. This motivation stems from whether the audit partner is economically dependent on the specific client engagement. From an economic perspective, audit partners in firm-wide schemes will be less economically dependent on revenue generated by an individual client as compared to divisional schemes, although losing a publicly listed client may affect the audit partners' future career prospects. There is an expectation that audit partners in firm-wide schemes are likely to adopt a more conservative stance and remain firm in their positions when recording audit adjustments in the financial statements of clients.

From the perspective of the dual concern theory, it can be argued audit partners have a high concern for their own outcomes in terms of future revenue generation and career prospects. Audit partners also have a high strategic concern for clients to maintain cordial working relationships and not to make them “unhappy” to advance their future self-interest. Therefore, audit partners are likely to be motivated to meet client-specific demands and “win” for the client management. The dual concern theory predicts an integrative strategy when negotiators have a high concern for their own outcome as well as a high concern for other outcomes. However, prior literature in general negotiation provides evidence that negotiators find difficulty in adopting an integrative strategy. The study by Gibbins et al. (2010) provided evidence that there is an undifferentiated preference by audit partners to adopt an integrative strategy irrespective of circumstances. However, Study Two argues that it will be easier for auditors to meet client-specific demands if they concede from their positions. Specifically, this thesis argues that if auditors either waive partially or completely material audit adjustments, they can always win for the client management.

From the perspective of motivated reasoning theory, there is an expectation that audit partners in divisional schemes are likely to be more susceptible to give into the wishes of client management even if they face inflexible clients. The plausible reason is those audit partners are more economically dependent on the revenue generated from a specific client engagement and see no way to convince the inflexible client to resolve the negotiation issue. Hence, those audit partners will take liberal positions and offer more concessions in recording audit adjustments. On the other hand, audit partners in firm-wide schemes are likely to be less susceptible to satisfy the needs of client management even if they face an inflexible client. The reason may be that audit partner are less economically dependent on a specific client engagement. Hence, those auditors will take conservative positions and offer less concessions in recording audit adjustments.

From the perspective of dual concern theory, there is an expectation that auditors, especially audit partners' concern for client outcome will be always high. However, audit partners' concern for their own outcome will be low when they face either inflexible or flexible clients. The reason may be if audit partners are relatively certain that the client will switch to a new auditor even after the client receives a favourable audit opinion. If the client shows an inflexible attitude in recording audit adjustments, then the audit partner may need to concede more from their positions to accommodate the wishes of client management. Similarly, if the client shows a flexible attitude in recording audit adjustments, then the audit partner may need to concede less from their positions to satisfy the needs of client management.

Therefore, based on two theoretical perspectives, Study Two argues that audit partners will likely concede more to convince inflexible clients as compared to flexible clients, but at the same time, because of less economic dependency on a particular client, those audit partners who are in the firm-wide schemes will concede less as compared to audit partners in the divisional schemes. Accordingly, Hypothesis 6 is stated as follows:

H6: Ceteris paribus, client inflexibility has a smaller downward effect on the magnitude of recording allowance for obsolete inventory when auditors are in the firm-wide scheme condition than when auditors are in the divisional scheme condition in a simulated negotiation setting.

3.2.4 Social Value Orientation

In auditing contexts, no study has examined whether an auditor's social value orientation (i.e., personality) influences their behaviour or whether situational demands (i.e., economic incentive and client flexibility) impact more than the personality of auditors. The Cooperation theory (Deutsch, 1949a, 1949b, 1960) predicts an individual with cooperative orientation (i.e., pro-social) will cooperate with the other party to maximise outcomes of other parties during a negotiation. However, the behaviour of pro-social individuals will change to competitive or individualistic behaviour to maximise their own outcome if their cooperative behaviour is not quickly reciprocated (Parks & Rumble, 2001). In auditing contexts, it is possible pro-social auditors may show individualistic behaviour (i.e., pro-self) to maximise their own outcome that is, stay firm in their recommendation of increasing the allowance for obsolete inventory to $7,000,000.

On the other hand, an individual with a competitive orientation (i.e., pro-self) can exhibit either cooperative or competitive behaviour while negotiating with others because pro-self individuals lack an internal guide on how to relate to others. As a result, pro-self individuals depend more on situational factors (i.e., economic incentive and client flexibility) or cues when negotiating with others. In auditing contexts, an auditor who is a pro-self individual may act as a pro-social individual and maximise the outcome that is acceptable to both the auditor and the client that is, either provide concession or completely acquiesce to the wishes of the client by not increasing the allowance for obsolete inventory to $7,000,000 based on their initial recommendation.

Negotiation is a skill, and anecdotal evidence suggests auditors especially, audit partners do not receive any training on negotiation, except for audit fees. It will be worthwhile to examine whether the auditors' social value orientation influences their behaviour in negotiation contexts, specifically when there is a possibility that the "reasonableness constraint" criterion might be violated. The inclusion of this variable in this study is exploratory in nature. Hence, in this thesis, no hypothesis regarding this variable is formulated.

3.3 Summary of Hypotheses

A summary of hypotheses is presented in Table 3.1 below:

Table 3.1 Summary of Hypothesis Statements

Hypotheses	Hypothesis Statement
H1	Ceteris paribus, auditors in the divisional scheme condition will be prepared to accept a smaller allowance for obsolete inventory than auditors in the firm-wide scheme condition in a pre-negotiation context.
H2	Ceteris paribus, auditors in the explicit client pressure condition will be prepared to accept a smaller allowance for obsolete inventory than auditors in the implicit client pressure condition in a pre-negotiation context.
H3	Ceteris paribus, client pressure has a smaller downward effect on the magnitude of proposed allowance for obsolete inventory when auditors are in the firm-wide scheme condition than when auditors are in the divisional scheme condition in a pre-negotiation context.
H4	Ceteris paribus, auditors in the divisional scheme condition will record a smaller allowance for obsolete inventory than auditors in the firm-wide scheme condition in a simulated negotiation setting.
H5	Ceteris paribus, auditors in the inflexible client condition will record a smaller allowance for obsolete inventory than auditors in the flexible client condition in a simulated negotiation setting.

Hypotheses	Hypothesis Statement
H6	Ceteris paribus, client inflexibility has a smaller downward effect on the magnitude of recording allowance for obsolete inventory when auditors are in the firm-wide scheme condition than when auditors are in the divisional scheme condition in a simulated negotiation setting.

CHAPTER 4
RESEARCH METHODOLOGY
STUDY ONE

4.0 Introduction

Chapter 4 outlines the research methodology employed in Study One. The chapter is organised as follows. In Section 4.1, there is a discussion on the type of participants required for this study. Section 4.2 discusses the method of data collection (i.e., online platform), participant compensation, including the benefits and criticisms of the online platform. Section 4.3 presents the sample size and demographic information regarding Study One. This section also compares the demographic information of Study One with the demographic information of another auditing study that used a similar online platform. Section 4.4 provides details of the screening procedures of participants. There is a discussion on the experimental task in Section 4.5. In Section 4.6, there is a discussion of the manipulation of independent variables and the dependent variable. Lastly, Section 4.7 discusses the results of comprehension and manipulation checks used in this study.

4.1 Type of Participants

This study requires experienced external auditor participants[3], preferably audit partners because one of the independent variables is performance-based profit-sharing schemes. This variable is typically related to the compensation of audit partners. Moreover, a negotiation study in an audit setting typically requires the participation of audit partners because the audit partner generally negotiates with the client (Gibbins et al., 2010). In another interview-based study by Gibbins et al. (2001), the authors reported 82 out of 93 audit partners (i.e., engagement partners) always played a role in negotiation with the client. The study reported that other people from the auditor's side were also involved in the negotiation with the client. For example, the authors reported audit managers (i.e., 63% of the time) and even staff auditors (i.e., 11% of the time)

[3] This research involving human data reported in this thesis was assessed and approved by the University of Western Australia Research Ethics Committee. The approval reference number is RA/4/20/4486.

were involved in the negotiation process. Prior studies have also used audit managers as participants (Fu et al., 2011; McCracken et al., 2011; Ng & Tan, 2003). Therefore, for this experiment, experienced external audit practitioners (e.g., audit partners, directors, senior managers, and managers) were targeted and recruited from the US.

However, it is to be noted that audit partners and managers exhibit different behaviour, particularly in the selection of negotiation strategies to resolve issues with client management (McCracken et al., 2011). The plausible reason is those audit partners generally have a higher level of experience, expertise, and power than audit managers when negotiating with clients.

4.2 Data Collection Method

External auditors represent a reasonably difficult participant group to access for behavioural accounting researchers. Given the seniority of external audit practitioners who usually negotiate with a client, it is even more difficult to get access to participants for this experiment. Hence, this study employs a reputed international online research panel, Qualtrics to collect data for this experiment. Other published accounting studies (Long & Basoglu, 2016; Nelson & Rupar, 2015) also used the Qualtrics panel to recruit tax accountants and MBA graduates (Study 2), respectively. The recruitment of tax accountants indicates it is not uncommon to use Qualtrics Panel to recruit hard-to-reach participants.

4.2.1 Participant Compensation

Qualtrics Panel provides participant recruitment services for a fee. The researcher of this study did not have direct contact with participants, who were compensated for completing the study instruments by Qualtrics. Qualtrics does not divulge participant compensation information. For the two experiments conducted in this study, the researcher paid 160 Australian dollars per response to Qualtrics. The total cost of two experimental studies is Australian dollar is 24,000.

4.2.2 Benefits of Qualtrics Panel

There is considerable debate among academic researchers regarding using online platforms (e.g., Qualtrics) to recruit participants with specialised knowledge, skill, and experience (e.g., external auditors, tax accountants). Nevertheless, recent studies suggest after incorporating adequate screening questions, and online platforms may be considered as a potential avenue for recruitment of external auditor participants for research purposes (Brandon, Long, Loraas, Mueller-Phillips, & Vansant, 2014; Holt & Loraas, 2019; Leiby, Rennekamp, & Trotman, 2021).

The two appealing aspects of the Qualtrics Panel are that participation is truly voluntary and participants are truly anonymous to the researcher (Holt & Loraas, 2019). Voluntary participation implies participants recruited through Qualtrics Panel are true "pull" participants as they willingly decide to volunteer to participate in surveys or experiments. Similarly, a potential benefit of true anonymity of participants to the researcher is that participants feel no demand effects as they know their responses cannot be tied to themselves or their firm and they can, therefore, answer freely. Based on their findings Holt and Loraas (2019) commented, "Qualtrics Panels present a promising avenue for obtaining external auditor participants when the research context is applicable to a broad spectrum of auditors."

Furthermore, in the article by Leiby et al. (2021, p. 65), the authors mentioned that critics of online platforms often point to participant anonymity and low wages as red flags for inattention or low effort (Clifford and Jerit 2014), but there is no evidence to support these criticisms. Moreover, Hauser and Schwarz (2016) found that online participants actually are more sensitive to subtle yet meaningful changes in the wording of questions.

4.2.3 Criticisms against Qualtrics Panel

Holt and Loraas (2019) also cautioned that besides cost concerns, the primary risk with participants recruited through Qualtrics Panel is the "black box" approach taken to fulfil a sample request, and any identifiable information about the participants is not provided. Therefore, the authors suggested this risk could be mitigated by incorporating clear and specific screening questions at the beginning of the instrument and including attention check questions throughout the instrument (Holt & Loraas, 2019, p. 39). Prior research also provides comprehensive discussions about the potential benefits and limitations of recruiting difficult-to-access participants through online platforms (see Brandon et al., 2014; Leiby, Rennekamp, & Trotman, 2019 for review).

4.3 Sample Size and Demographic Information

4.3.1 Sample Size

The total sample size for Study One is 95. The sample sizes across the four experimental conditions are as follows: Divisional profit and Explicit pressure (25), Divisional profit and Implicit pressure (25), Firm-wide profit and Explicit pressure (24), and Firm-wide profit and Implicit pressure (21).

4.3.2 Demographic Information

At the end of the research instrument (i.e., questionnaire), the auditor participants responded to a series of demographic questions. The demographic information is summarised in Table 4.1 below:

Out of 95 participants, 61 are male, and 34 are female participants. Out of the total participants, 11, 42, and 23 participants are audit partners, directors, and senior audit managers, respectively. The remaining 19 are audit managers. In terms of audit experience, 34 participants have more than 10 years of experience. Forty-two participants reported they have audit experience between 7 to 9 years, whereas 19 participants mentioned their audit experience falls between 4 to 6 years. Out of the total participants, 27 participants reported that they work in Big 4 firms, 18 and 16 participants reported that they work in non-Big 4 firms with international presence and non-Big 4 firms with a national presence, respectively. The remaining 25 and 9 participants work in regional and local firms. Lastly, the participants were asked how often they resolve audit differences with clients. 26 and 44 participants reported that they resolve audit differences very frequently and frequently, respectively while 22 participants reported that they occasionally resolve audit differences. One and two participants mentioned that they resolve audit differences rarely and very rarely.

Table 4.1 Demographic Information

Demographics		n=95	Percentage
1. Gender	Female	34	34.8%
	Male	61	64.2%
2. Position	Partner	11	11.6%
	Director	42	44.2%
	Senior Manager	23	24.2%
	Manager	19	20.0%
3. Audit Experience (Years)	10 or more	34	35.8%
	07-09	42	44.2%
	04-06	19	20.0%
4. Accounting Firm	Big 4	27	28.4%
	Non-Big 4 with an international presence	18	18.9%
	Non-Big 4 with a national presence	16	16.8%
	Regional	25	26.3%
	Local	9	9.5%
5. Resolve Audit Difference	Very Frequently	26	27.4%
	Frequently	44	46.3%
	Occasionally	22	23.2%
	Rarely	1	1.1%
	Very Rarely	2	2.1%

To understand the efficacy of using a Qualtrics panel to recruit experienced external auditors, this chapter provides a comparison with the demographics (e.g., auditors' position and their level of experience) reported by Holt and Loraas (2019). The authors also recruited external auditors through Qualtrics to replicate two prior studies by Malaescu and Sutton (2015) and Brown and Popova (2016). The following Table 4.2 and Table 4.3 shows auditors' position and their level of experience as shown in Holt and Loraas (2019).

Table 4.2 Demographic Information – Malaescu and Sutton (2015) replication

	Malaescu and Sutton (2015) Percent (n=87)	Replication 1[4] Percent (n=102)	Replication 2[5] Percent (n=40)
Work Experience			
0-2 Years	0.00	4.95	10.00
3-4 Years	45.98	14.85	17.50
5-7 Years	28.74	22.77	20.00
8-11 Years	25.29	26.73	22.50
12+ Years	0.00	30.69	30.00
Title			
Staff Auditor	12.64	0.00	0.00
Senior Auditor	54.02	36.27	42.50
Audit Manager	27.59	41.18	40.00
Audit Director	4.60	14.71	12.50
Audit Partner	1.15	7.84	5.00

Adapted partially from Holt and Loraas (2019, p. 35)

[4] Replication 1 involved the replication of the study by Malaescu and Sutton (2015), who examined the reliance that external auditors place on internal auditors using traditional or continuous audit methodologies. The target population for Replication 1 was auditors with three to five years of audit experience working with a large regional or international firm.

[5] Replication 2 also involved the replication of the study by Malaescu and Sutton (2015). The target population for Replication 2 was Big 4 auditors only.

Table 4.3 Demographic Information – Brown and Popova (2016) replication

	Brown and Popova (2016) Percent (n=58)	**Replication 3[6] Percent (n=61)**
Audit Staff Level		
Staff	3%	0%
Seniors	90%	39%
Managers	7%	41%
Partners/Directors	0%	20%
Audit Experience		
18-27 Months	14%	26%
28-60 Months	72%	40%
61-96 Months	10%	6%
More than 96 Months	4%	28%

Adapted partially from Holt and Loraas (2019, p. 39)

Furthermore, Holt and Loraas (2019) were able to fully replicate the result that was reported in Brown and Popova (2016). The authors were also able to replicate some of the results (i.e., Replication 1) that were reported in Malaescu and Sutton (2015). The authors commented that they believe "the responses provided by the Qualtrics Panel to be valid, and the results

[6] Replication 3 involved the replication of the study by Brown and Popova (2016), who examined the interaction between management incentives and audit committee communication on auditors' judgements regarding inventory obsolescence. The target population for Replication 3 was auditors with three to five years of audit experience working with a large regional or international firm.

generated by the data to be generalizable to auditors from a diverse firm set that includes local, regional, and national firm types" (Holt & Loraas, 2019, p. 38). The authors further commented that "Qualtrics is most appropriate when a study's research questions are universal to most auditors, regardless of firm size or experience level, as Qualtrics Panels can deliver a wide cross-section of auditor types" (Holt & Loraas, 2019, p. 41).

It is observed from the above tables that the Qualtrics Panel was able to provide more experienced auditor participants (e.g., managers, directors, and partners) than were reported in the original studies. The above discussion provides further evidence that the participants recruited through the Qualtrics Panel for Study One are experienced auditors.

4.4 Screening Procedures of Participants

This study employs an online method to collect experimental data. The Qualtrics Panel randomly distributed four condition-based research instruments to its relevant panel members along with invitation letters stating the purpose of the study. The Qualtrics Panel did a 'soft launch' (i.e., pilot study) to pre-test the instruments for case realism. The pre-test did not highlight the need for any significant changes to the instruments.

Study One incorporates three screening questions to filter out participants who did not meet the criteria. The first screening question was about the current profession of the participant. If participants select a profession other than "External Auditor," the survey would terminate. The second screening question was the actual external audit position of the participant. If participants select "Junior Auditor," the survey would terminate. The last screening question was related to participants' experience (i.e., number of years) as an external auditor. If participants select "0-3" years' experience as an external auditor, the survey will terminate. Then, an examination of the respondents' identification (ID) numbers and internet protocol (IP) addresses was conducted. The examination did not reveal any similar ID numbers or IP addresses. This examination of IP addresses suggests that there were no multiple responses from the same respondents. The quality check protocol (e.g., Prevent Ballot Box Stuffing) option generally prevents participants from taking a survey more than once. The preventive option places a cookie option on participants' browsers when they submit a response. If a participant clicks on the survey link for a second time, Qualtrics will detect this cookie and not permit the participant to retake the survey.

4.5 Task Overview

In this study, the scenarios about Highpoint Electronics are based on two published studies (Bennett et al., 2015; Koch & Salterio, 2017). The scenario requires participants to assume the role of an audit partner receiving a report from the audit manager about disagreements regarding an estimation for inventory obsolescence resulting in a potential overstatement of pre-tax income. Highpoint Electronics is also involved in a merger discussion with a competitor firm. The client is reluctant to record the income-reducing audit adjustment because it may adversely affect the merger discussion. The client is important from the local office perspective because it contributes significantly to the total revenue derived from audit fees.

Participants are given background information regarding the audit firm and the client. Other important contextual factors relating to the audit firm are held constant. Specifically, the instrument mentions that the audit firm is subject to annual review by the regulatory authority, and the firm is also registered for peer review by the professional body every three years.

Moreover, the concurrent partner for this engagement is a very senior audit partner and specialises in manufacturing industry audits. Also, there was a mention about the “Form AP” that the form must be submitted to the regulatory authority. This information is given because the PCAOB adopted new rules requiring audit firms to disclose names of audit partners on audit reports issued on or after January 31, 2017 (PCAOB 2015; SEC 2016). The engagement team possesses sufficient experience to perform this engagement, and the team comprises an audit manager, two audit seniors, and two junior auditors.

Moreover, the key contextual factors of the client are held constant. Specifically, the client CFO is professionally qualified with prior audit experience, quite flexible regarding audit adjustments, and in prior years, the CFO agreed to most audit adjustments. The plausible reason that the CFO agreed to most audit adjustments in previous financial years because Highpoint did not face any intense competition from other players in the market which might result in a significant reduction in income due to inventory obsolescence. In prior years, there was cooperation from the CFO and accounting staff with the audit team. The audit team and client have developed a good working relationship. Therefore, in prior years no qualified audit opinions are issued. The Board of Directors takes an active interest in the day-to-day working of the company. The internal controls are sound and can be relied upon. The audit committee is considered strong and asks many probing questions on accounting decisions.

Along with the background information, participants are given a simplified comparative income statement along with information on inventory balance (current year unaudited and prior year audited). **[Please refer to Appendix 1 for information on the income statement and the inventory balance.]**

Participants then considered a situation where a material difference ($5,000,000) arose during the audit between the auditor's estimate ($7,000,000) and the client estimate ($2,000,000) for inventory obsolescence. The audit client recorded $2,000,000 as the allowance for obsolete inventory in the unaudited financial statements. The audit team's initial estimate was their independent estimate for the obsolete inventory allowance.

In all the cases, information on the materiality level is not given upfront because there is an expectation that providing information on materiality upfront in the case scenarios might influence auditors' judgements regarding the allowance. Hence, the question of materiality is deliberately incorporated after participants made their decision regarding the allowance for obsolete inventory to be reported in the financial statements. A prior study showed on average, auditors reduce clients' pre-audited income and assets by amounts exceeding materiality (Kinney et al., 1994). Based on the engagement audit manager's report there is an overstatement of the pre-tax income by a material amount of $5,000,000 (up to 10% of pre-tax income) when the materiality level is 5% of pre-tax income (i.e., $2,475,000). **[Please refer to Appendix 2 to Appendix 3 for the experimental materials.]**

Out of 95 responses, 93 subjects chose 5% of pre-tax income as the appropriate materiality level. One respondent mentioned 3% of pre-tax income[7] as materiality level in the firm-wide profit explicit pressure condition. Another respondent mentioned 1% of revenue[8] as the materiality level in the firm-wide profit and implicit pressure condition. The result adds further confidence to the fact that the participants recruited by Qualtrics are real external auditors as prior auditing

[7] The materiality level chosen by the participant is 3% of $49,500, 000 (i.e., pre-tax income) = $1,485,000.
[8] The materiality level chosen by the participant is 1% of $495,000,000 (i.e., revenue) = $4,950,000.

studies also provide evidence that 5% of pre-tax income is a common quantitative assessment of materiality (Eilifsen & Messier Jr, 2015; Ng & Tan, 2007).

4.6 Independent Variables and Dependent Variable

4.6.1 Independent Variables

To test the hypotheses, Study One employs a 2X2 experimental design by fully crossing; profit-sharing schemes (i.e., divisional scheme vs. firm-wide scheme) and client pressure (i.e., explicit vs implicit).

4.6.1.1 Divisional Scheme versus Firm-wide Scheme

Study One adopts the manipulation for the divisional scheme and the firm-wide scheme from the study by Chong et al. (2018). For the divisional profit-sharing scheme manipulation, the following information was given to the participants, "The compensation structure in your firm includes a profit-sharing method. The profits are distributed using a hybrid model of a fixed salary and a performance bonus.

It is the policy of your firm that all audit partners' bonus is tied to the financial performance of your local office (divisional profits). Your bonus is calculated by the office managing partner from a profit pool based on the divisional profits."

Similarly, for the firm-wide profit-sharing scheme manipulation, the following information was mentioned to the participants, "The compensation structure in your firm includes a profit-sharing method. The profits are distributed using a hybrid model of a fixed salary and a performance bonus.

It is the policy of your firm that all audit partners' bonus is tied to the financial performance of your audit firm at the national level (firm-wide profits). Your bonus is calculated by the office managing partner from a profit pool based on the overall firm-wide profits."

4.6.1.2 Explicit Pressure versus Implicit Pressure

Study One adopts the manipulation for explicit and implicit client pressure manipulation from the study by Koch and Salterio (2017). It should be noted that Koch and Salterio (2017) did not consider a situation where clients bring explicit pressure with ultimatums to terminate the relationship because the authors suggested that such strong threats are not generally part of auditor-client negotiation (Gibbins et al., 2007; Gibbins et al., 2001). However, two published experimental studies have provided cases where clients are threatening auditors with the termination of the relationship (Blay, 2005; Hatfield et al., 2008). Therefore, Study One creates a scenario where the client brings explicit pressure with ultimatums.

For the explicit client pressure manipulation, the following information was given to the participants, "Based on your discussion with your audit manager, you understood that the CFO suggested to your audit manager that your firm should waive the adjustment in the current year. The CFO told your audit manager that your firm should provide Highpoint with the benefit of the doubt for any judgement calls this year, given their long relationship.

The CFO told your audit manager that Highpoint would adjust for any clear-cut errors. However, beyond that, any adjustment is not acceptable given the delicate stage that the merger discussions are at. The merger might not go ahead if there were adjustments made to the financial statements that reduce the pre-tax income. The CFO told your audit manager that a successful merger meant your audit firm would likely continue to be the auditor of the merged firm for a considerably higher fee. The CFO also pointed out that if your firm reduces the pre-tax income, the management of Highpoint would likely appoint a new auditor in the next year."

Similarly, for the implicit client pressure manipulation, the following information was given to the participants, "Based on your discussion with your audit manager, your personal view is that the CFO expects your firm might waive the adjustment in the current year. You are under the impression that the CFO thinks your audit firm might provide Highpoint with the benefit of the doubt for any judgement calls this year, given their long relationships.

The CFO told your audit manager that Highpoint would adjust for any clear-cut errors. However, beyond that, any adjustment may be evaluated in light of the delicate stage that the merger discussions are at. The merger might not go ahead if there were adjustments made to the financial statements that reduce the pre-tax income. In your personal view, if the adjustment is waived, your audit firm may be likely to continue to be the auditor of the merged firm for a considerably higher fee. You have the impression that Highpoint management may appoint a new auditor in the next year if your firm reduces the pre-tax income."

It is to be noted that in practice, the auditors need to report to the regulatory bodies like SEC or ASIC. It is equally true that "experiments are well suited to test theories, not to simulate reality" (Kachelmeier, 2018).

In the case an explicit statement was used to ensure a strong manipulation of the client pressure variable and to differentiate between the intensity of explicit versus implicit client pressure. This statement was modified from Blay (2005) and incorporated in case material. For example, Blay (2005, p 776) manipulated high independence threat as "The original partner on the engagement has told you that management once indicated that they would likely to hire a new auditor in the event of a modified opinion."

4.6.2 Dependent Variable

Prior evidence in the auditing literature suggests, auditors are unwilling to issue qualified audit opinions because it will weaken the relationships with clients. There is a possibility that clients may switch auditors after receiving qualified audit opinions. According to the theory of motivated reasoning, auditors may move towards clients' preferred estimates to satisfy clients' preferences. If clients agree to accept auditors' proposed estimate, the auditors will issue unqualified audit opinions without jeopardising their relationship with clients.

In this pre-negotiation setting, the focus is to investigate auditors' mindset regarding how much the auditor participants are willing to concede from their initial proposed allowance of $7,000,000 and still issue an unqualified audit opinion. Therefore, this experiment captures the minimum allowance (i.e., limit) of obsolete inventory that the auditor participants are willing to accept without qualifying the opinion.

A prior survey by Bame-Aldred and Kida (2007) investigated auditors' limits in a pre-negotiation setting. In that study, the auditor participants were asked to state the gross profit they would be willing to report before the participants would feel the need to qualify the audit opinion. The dependent variable in this experiment closely follows the operationalisation of the auditors' limit captured by Bame-Aldred and Kida (2007). Specifically, Study One requires participants to answer the following question, "What would be the minimum allowance for obsolete inventory you would be willing to accept and give an unqualified audit opinion?"

The question features a slider option with an increment of $250,000. The question requires the participants to choose an amount between $2,000,000 and $7,000,000. For example, a participant could choose an amount of $2,250,000 or $2,500,000, or $2,750,000, etc.

In this experiment, auditor participants were specifically required to answer the question about the allowance of obsolete inventory to be reported in the client's financial statements, not the adjusting journal entry of $5,000,000 to be recorded in their audit work papers. For that reason, the question did not ask the participants to choose an amount between $0 and $5,000,000. Instead, it is expected that auditor participants will be able to record the required adjusting journal entry (i.e., Dr Cost of Sales and Cr Allowance for obsolete inventory) in hindsight after determining the allowance for the obsolete inventory.

For example, if an auditor wants to report $5,500,000 as the allowance for the obsolete inventory in the client's financial statements, then the following adjustment entry would need to be recorded in the work papers of the auditor:

Dr Cost of Sales $3,500,000

Cr Allowance for obsolete inventory $3,500,000

It is because there is an allowance of $2,000,000 for obsolete inventory recorded by the client in the unaudited financial statements. In order to report an allowance of $5,500,000 in the client's financial statements, the auditor needs to record an adjustment entry of $3,500,000 in their work papers.

4.7 Comprehension Checks and Manipulation Checks

4.7.1 Comprehension Checks

After reading the case materials, participants were asked to respond to a number of comprehension and manipulation check questions. Next, subjects were asked to respond to two questions regarding the minimum allowance they would accept (i.e., dependent variable) and their chosen materiality level.

Study One introduces two comprehension questions that were included to check whether the majority of the participants read the case with reasonable attention. The first comprehension question related to the divisional and firm-wide schemes. Specifically, the participants were asked to "Indicate to what extent you agree or disagree that your performance bonus depends on the divisional (firm-wide) profits" for divisional (firm-wide) manipulation on a 7-point Likert scale (7 - Strongly Agree and 1 - Strongly Disagree).

The results show that out of 50 participants in the divisional profit-sharing schemes, 20, 18, and 10 participants responded, "Strongly agree," "Agree," and "Somewhat agree," respectively to the question of whether the performance bonus depends on the divisional profit. Only two participants answered "Neither agree nor disagree" to the above comprehension question.

Similarly, the results show that out of 45 participants in the firm-wide profit-sharing schemes, 16 and 25 respondents answered "Strongly agree" and "Agree," respectively, to the question of whether the performance bonus depends on the firm-wide profit. The remaining four participants answered "Somewhat agree" to the above comprehension question. Therefore, the results suggest that the majority of the participants in this study understood the case information and answered this comprehension question in the right direction.

The second comprehension question was to check whether the participants agreed to reduce the pre-tax income as the financial statements were materially misstated as per the generally accepted accounting principles (GAAP). Koch and Salterio (2017) stated that the International Accounting

Standard (IAS 8) requires "material or immaterial errors designed to achieve a particular presentation" to be rectified or adjusted without referring to the size of adjustment. This rule may be applied to mergers where a particular presentation of financial statements is required. In the US, similar requirements are present under Staff Accounting Bulletin 99.

The experimental conditions include a sentence, "In your opinion, Highpoint Electronic's current pre-tax income is unacceptable, and an audit adjustment is required to reduce the pre-tax income." The participants were required to answer the following question, "Indicate to what extent you agree or disagree that you are required to reduce Highpoint's pre-tax income under the generally accepted accounting principles (GAAP)?"

The results show that out of 95 respondents across all the experimental conditions, 37 and 34 participants responded "Strongly Agree" and "Agree," respectively. Out of the remaining 24 respondents, 20 answered "Somewhat Agree," and four answered "Neither Agree nor Disagree" to this question. Therefore, the results suggest that the majority of the participants in this study understood the case information and answered this comprehension question in the right direction.

4.7.2 Manipulation Checks

Then, participants were required to answer a manipulation question on the performance-based profit-sharing scheme. "Indicate to what extent you believe that your performance bonus depends on this audit engagement" on a 4 - point scale (4 – To a great extent, 3 – Somewhat, 2 – Very little, and 1- Not at all). The manipulation question on performance bonus did not show an impact ($t=0.018$ p-value$=0.493$, one-tailed) with a reported mean of 3.38 for both divisional profit-sharing and firm-wide profit-sharing conditions, respectively.

To assess the validity of experimental studies, there is a growing concern in academia that every experimental study suffers if questions on manipulation checks fail. A recent article provides arguments against dropping participants based on manipulation checks (Aronow, Baron, & Pinson, 2019). The authors provided a number of statistical results that excluding participants who failed manipulation checks may bias estimates or undermine identification of causal effects.

They showed that "this practice is equivalent to inducing differential attrition across treatment arms, which may induce bias of unknown sign and magnitude" (Aronow et al., 2019, p. 573). In another article, it is argued that sometimes manipulation check questions cannot measure the impact of the independent variable directly because the question tries to capture or measure participants' internal state of feeling or understanding of the case (Hauser, Ellsworth, & Gonzalez, 2018).

It seems the manipulation question on whether the performance bonus depends on this engagement did not elicit that internal state of feeling among auditor participants. The researcher of this study assumed that most participants in divisional (firm-wide) profit-sharing conditions would answer that manipulation question in the direction expected by the researcher. For example, the researcher expected most participants in the divisional profit-sharing condition would feel their performance bonus depends "To a great extent" on this engagement. Similarly, it was expected most participants in the firm-wide profit-sharing scheme condition would feel that their performance bonus depends "Very little" on this engagement. Apparently, the researcher did not fully capture the internal state feeling of auditor participants regarding the impact of the current audit engagement on their performance bonus. There are two possible reasons for the failure of this manipulation check:

Considering the opinion of Chow (1983, p. 673), the manipulation question on performance bonus was "make-believe," where there would be no impact on the actual performance bonus of auditors. The potential issue with using a hypothetical performance bonus is that the participants may fail to internalise treatment conditions. However, the study by Chow (1983) provided evidence that participants with fictitious payoffs can behave in a similar way as they would have with real payoffs. Similarly, in Study One, some of the auditor participants did not fully internalise the manipulation question on performance bonus, but their responses to the question on the allowance (i.e., dependent variable) suggest that the auditor participants would have shown a similar mindset if they received real performance bonus.

Another possible reason could be although the following information was held constant, "The Highpoint is one of your office's largest clients based on the number of billable hours that are generated from audit services and contributes significantly to total revenue derived from audit fees at the local office", but information regarding how large the client is for the audit firm overall was not given in the case. Apparently, some of the respondents assumed that the local office of the audit firm contributes significantly in terms of generating revenue for the audit firm overall. For that reason, those participants in the firm-wide profit-sharing condition responded that their bonus depends "to a great extent" on this audit engagement. Therefore, Study One did not delete any responses based on failed manipulation answers given by auditor participants.

Study Two also incorporates a manipulation question on client pressure, "Indicate to what extent you agree or disagree that the CFO is attempting to exert tremendous pressure on your audit manager in this situation" on a 7-point Likert scale (7 - Strongly Agree and 1- Strongly Disagree).

There was an expectation that participants in the explicit pressure condition would feel pressure to a greater extent than participants in the implicit pressure condition. The mean responses are 6.35 and 6.00 for the explicit and implicit pressure conditions, respectively. Although the mean responses are directionally consistent with the client pressure manipulation, the result is marginally significant ($t= 1.605$, $p=0.053$, one-tailed). This manipulation question on client pressure also tries to capture auditors' internal state of feeling regarding the client-imposed pressure. The researcher expects that a majority of auditor participants under the implicit pressure condition would answer either "Disagree," "Somewhat Disagree," or even "Somewhat agree" to the manipulation question. However, the mean value of 6.00 for implicit pressure conditions suggests that some participants felt the same magnitude of pressure akin to participants in explicit pressure conditions.

CHAPTER FIVE
DATA ANALYSIS AND DISCUSSION
STUDY ONE

5.0 Introduction

This chapter presents the results of the data analysis and tests of hypotheses for the first study. The outline of this chapter is as follows: Section 5.1 sets out the descriptive statistics of the variables, while Section 5.2 shows the results of the Analysis of Variance (ANOVA) statistics technique conducted to test the various hypotheses developed for Study One. Section 5.3 discusses the additional analyses with demographic variables as covariates to check the robustness of the results. At the end of this chapter, a summary of the results is shown in Table 5.9.

5.1 Descriptive Statistics

Table 5.1 presents the descriptive statistics for the variables used in this experiment. These variables include the manipulated variables (i.e., profit-sharing schemes, client pressure) and the dependent variable (i.e., allowance for obsolete inventory to be reported without qualifying the audit opinion).

The results show that the mean allowances for obsolete inventory auditors were willing to accept in the four conditions. The mean allowance for the divisional scheme and explicit pressure condition is $4,390,000 whereas the mean allowance for the divisional scheme and implicit pressure condition is $5,020,000. Similarly, the mean allowance for the firm-wide scheme and explicit pressure condition is $5,052,083 whereas the mean allowance for the firm-wide scheme and implicit pressure condition is $5,297,619. The mean of the two group mean allowances for the divisional scheme conditions and the firm-wide scheme conditions are $4,705,000 and $5,174,851, respectively. Similarly, the mean of the two group mean allowances for the implicit pressure conditions and the explicit client pressure conditions are $5,158,810 and $4,721,042, respectively.

A higher allowance for obsolete inventory means auditors are willing to concede less from their initial proposed allowance and vice-versa. Overall, the results show that auditor participants are willing to concede from their initial proposed allowance of $7,000,000 in all four conditions. The auditor participants are willing to provide the highest concession in the divisional scheme and explicit pressure condition and the least concession in the firm-wide scheme and implicit pressure condition. However, it is noted that the mean allowance for the divisional scheme and implicit pressure condition is slightly lower than the firm-wide scheme and explicit pressure condition.

Table 5.1 Descriptive Statistics (n=95)

Profit-sharing schemes	**Client pressure**		
	Allowance for obsolete inventory to be reported (USD)		
Divisional scheme	**Implicit**	**Explicit**	**Average**
Mean	5,020,000	4,390,000	4,705,000
(S.D.)	(997,184)	(803,897)	(900,541)
Sample size	25	25	25
Firm-wide scheme			
Mean	5,297,619	5,052,083	5,174,851
(S.D.)	(1,406,723)	(1,160,910)	(1,283,817)
Sample size	21	24	23
Average			
Mean	5,158,810	4,721,042	4,939,926
(S.D.)	(1,201,954)	(982,404)	(1,092,179)
Sample size	46	49	48

In this experiment, 93 out of 95 auditor participants have chosen 5% of pre-tax income (i.e., $2,475,000) as the overall materiality threshold. This materiality threshold denotes an auditor's tolerable misstatement. This thesis argues that auditors' chosen materiality threshold will act as a professional boundary, hence, the auditor participants in this study will be reluctant to breach the materiality threshold as it will trigger an individual auditor's "reasonableness constraint" criterion.

It is to be noted in practice, auditors compute overall materiality and account balance materiality (i.e., performance materiality) during the audit planning process and the execution process on 50%-75% of overall materiality during the audit planning process and the execution process (Hatfield et al. 2010). Auditors also take a holistic view to determine the level of materiality and also evaluate the financial and non-financial information before recording audit adjustments in the client's financial statements. Furthermore, although the case is representative of real negotiations they generally face, the task is simplified such that the auditor participants are supplied with only minimal information required to complete the materials. When preparing to negotiate with clients, auditors would have more information, resources, and experience in addition to real-world incentives, which may also influence their recording of audit adjustments.

In this experimental setting, limited information as to material misstatement is provided. Specifically, in this case, only one misstatement (i.e., \$5m) is provided relating to inventory obsolescence. The auditor proposed an audit adjustment of \$5m (i.e., auditor's proposed allowance of \$7m – client's allowance of \$2m). In this experimental setting, the majority of auditors chose 5% of pre-tax income, which is \$2,475,000, as overall materiality. In other words, any misstatements that exceed \$2,475,000 would be considered material misstatements. It is to be noted that "experiments are well suited to test theories, not to simulate reality" (Kachelmeier, 2018). Hence, for the purpose of this thesis only, the calculation regarding the breach of materiality is shown in the following manner:

For example, considering the materiality threshold of \$2,475,000 and audit adjustment of \$5,000,000, participants should have proposed a minimum allowance of \$4,525,000 [i.e., the client's initial allowance of \$2,000,000 + the audit adjustment of \$2,525,000 (\$5,000,000 - \$2,475,000)] for obsolete inventory to be recorded in the client's financial statements in all four conditions. In other words, there should be a reduction in the client's pre-tax income by a further \$2,525,000 in all four conditions. The inference is that the client's financial statements will remain materially misstated if any allowance of less than \$4,525,000 is recorded in the client's financial statements. That is to say, if a client pressures an auditor to record an allowance below $4,525,000, the auditor will be reluctant to accommodate the client's demand any further. In that situation, auditors will subconsciously perceive a threat to their professional image as an independent professional if they record an allowance below $4,525,000 in the client's financial statements. Generally, auditors reduce clients' pre-audited income and assets by amounts exceeding materiality (Kinney et al., 1994) which is $5,000,000 in Study One. In that context, the group average of $4,390,000 in the divisional scheme and explicit pressure condition warrants further analysis. The result shows the auditor participants are willing to record an audit adjustment of $2,390,000 (excluding the initial client estimate of $2,000,000). That means the journal entry would require the cost of sales to be debited by $2,390,000 and allowance for obsolete inventory would have to be credited by $2,390,000. It shows that there is a reduction of the client's pre-tax income only by a further $2,390,000. In other words, participants in the divisional scheme and explicit pressure condition are willing to waive an average of $2,610,000 (i.e., $5,000,000 – 2,390,000). It appears this amount of $2,610,000 will be unrecorded in the financial statements of the client. Given the chosen materiality level of $2,475,000, the financial statements will be on average materially misstated by $2,610,000 and this exceeds the materiality threshold by $135,000 (i.e., $2,610,000 - $2,475,000).

Considering the 5% of pre-tax income (i.e., $2,475,000) as the reference point the following Table 5.2 shows the number of participants who had breached their chosen materiality level across the four conditions:

Table 5.2 Descriptive: Auditors' Breach of Materiality Threshold

Condition	Number of participants who chose *significantly less* than $4,525,000	Number of participants who chose *marginally less* than $4,525,000 (e.g., $4,500,000)	Total
Divisional scheme and Explicit pressure	11	4	15
Divisional scheme and Implicit pressure	5	2	**7**
Firm-wide scheme and Explicit pressure	7	1	8
Firm-wide scheme and Implicit pressure	7	2	9
Total	**30**	**9**	**39**

It is noted that out of 95 participants, a total of 39 participants (i.e., 41%) had breached their chosen materiality threshold while determining the allowance for obsolete inventory. A total of 30 participants across the four conditions mentioned their preference allowance significantly less than $4,525,000. Furthermore, a total of nine participants across the four conditions mentioned $4,500,000 as their preferred allowance, which is marginally less than the minimum allowance of $4,525,000. All the participants except one chose 5% of pre-tax income as their materiality threshold[9].

Further analysis reveals 11 out of 25 participants (i.e., 44%) in this condition would likely record an allowance that is significantly below the minimum allowance of $4,525,000 in the

9 It is noted in the firm-wide profit and explicit pressure condition one participant chose 3% of pre-tax profit that is $1,485,000 as the materiality threshold. The minimum allowance for the obsolete inventory should be [$2,000,000 + $3,515,000 (i.e., $5,000,000 – 1,485,000)] = $5,515,000. The participant mentioned $3,500,000 as the preferred allowance for obsolete inventory to be reported in the client's financial statements.

divisional scheme and explicit pressure condition. Those 11 participants chose 5% of pre-tax income as their materiality level. Moreover, another four out of 25 (i.e., 16%) participants would likely record an allowance of $4,500,000, which is marginally less than the minimum allowance of $4,525,000. Those four participants also chose 5% pre-tax income as their materiality level. Therefore, 15 participants out of a total of 25 (i.e., 60%) participants in the divisional scheme and explicit client pressure condition are willing to waive the audit adjustment that might render the financial statements to remain materially misstated. This result implies under this condition most of the auditor participants are likely to disregard the reasonableness constraint criterion and are likely to waive a significant portion of material audit adjustment and accept client-specific demands. The result of this experimental condition (i.e., divisional scheme and explicit pressure) suggests that the findings of Gibbins et al. (2010) may hold true that is, financial statements may remain materially misstated subsequent to negotiation.

Four chi-square tests are conducted to examine whether there are any significant results under four conditions (see Table 5.2) between the participants who chose allowance significantly less than $4,525,000 and the participants who chose allowance marginally less than $4,525,000. The results are as follows:

For the Divisional scheme and Explicit pressure condition, the result is statistically significant showed X^2 (5, N =15) = 15.0, p = 0.010.

For the Divisional scheme and Implicit pressure condition, the result is statistically insignificant showed X^2 (5, N =7) = 7.0, p = 0.221.

For the Firm-wide scheme and Explicit pressure condition, the result is statistically insignificant showed X^2 (5, N =8) = 8.0, p = 0.156.

For the Firm-wide scheme and Implicit pressure condition, the result is statistically significant showed X^2 (3, N =9) = 9.0, p = 0.029.

5.2 Analysis of Variance (ANOVA)

Study One uses the traditional ANOVA technique to examine the hypotheses formulated in the first experiment. It should be noted the Levene's Test of Equality of Error Variance (i.e., $p < 0.05$) was violated when testing the assumption of homogeneity of variances. So, Study One uses the more robust Welch's ANOVA test to report the equality of error variance for both the manipulated variables. It is because Welch's test provides better control over Type 1 error when the assumption of homogeneity of variance is not met (Delacre, Lakens, & Leys, 2017; Derrick, Toher, & White, 2016). After performing the Welch's test result on the homogeneity of variance, this study performs two one-way ANOVAs to separately examine the effect of two independent variables (i.e., profit-sharing schemes and client pressure) on the dependent variable.

The Welch test for equality of error variance for the profit-sharing schemes variable shows ($F = 3.520$, $p = 0.064$, two-tailed). The ANOVA result for the profit-sharing scheme variable was statistically significant ($F = 4.062$, $p = 0.024$, one-tailed). Similarly, the Welch test for equality of error variance for the client pressure variable shows ($F = 3.941$, $p = 0.051$, two-tailed). The ANOVA result for the client pressure variable was also statistically significant ($F = 3.551$, $p = 0.032$, one-tailed). When there is no violation of the homogeneity of variances, and the results of two one-way Welch ANOVAs are statistically significant, it is reasonable to conclude that a two-way traditional ANOVA will also show a similar significant result. Therefore, Study One conducts a two-way traditional ANOVA to test the hypotheses. The ANOVA results are shown below in Table 5.3.

Table 5.3 ANOVA Results

Source	df	F	p-value (one-tailed)
Corrected Model	3	2.948	0.019
Intercept	1	1,908.919	0.000
Profit-sharing schemes (PS)	1	4.317	**0.021**
Client pressure (CP)	1	3.748	**0.028**
PS*CP	1	0.723	0.199
Error	91		
Total	95		
Corrected Total	94		

R Squared = 0.089 (Adjusted R Squared = 0.059)

5.2.1 Hypothesis H1

H1 predicts that auditors are willing to accept a lower allowance for obsolete inventory in divisional scheme conditions than auditors in a firm-wide scheme conditions. The ANOVA result shows a significant main effect for the profit-sharing scheme variable (F=4.317, p=0.021, one-tailed). The result provides support for H1.

The finding supports the arguments put forward by academic researchers (Trompeter, 1994; Wyatt, 2004; Zeff, 2003) in the current strict inspection regime (i.e., post-SOX era). The result also supports the cautionary advice from a regulatory body (see Appendix 2 of IAASB 2014) that financial considerations given to auditors, especially audit partners, should not impede the quality of financial statements. The implication of this result is that the profit-sharing schemes affect the mindset of auditors in the current auditing environment. The financial motivation will influence auditors, especially audit partners, to act as motivated reasoners. The arrangement of profit-sharing schemes influences auditors' mindset so that audit partners may be motivated to accept client preferred accounting treatments and satisfy the expectations of client management.

5.2.2 Hypothesis H2

H2 predicts that auditors are willing to accept lower audit allowance for obsolete inventory in explicit pressure conditions than auditors in implicit pressure conditions. The ANOVA result shows a significant main effect for client pressure (F= 3.748, p-value=0.028, one-tailed). The result provides support for H2.

The result is consistent with the findings by Hatfield et al. (2011). The authors reported that client pressure has a significant main effect on auditors' propensity to record audit adjustments; auditors who faced high client pressure will propose smaller audit adjustments than auditors who faced low client pressure. The finding of Study One implies that auditors may act as motivated reasoners and acquiesce to client pressure even in the post-SOX era. The finding also supports the discussion by Nelson (2006) that SOX-related reforms may be inadequate to mitigate client pressure. It seems that pressure exerted by clients may influence experienced auditors to act as motivated reasoners. The client pressure may impact auditors' mindsets in such a manner that they will be inclined to accommodate the wishes of client management.

5.2.3 Hypothesis H3

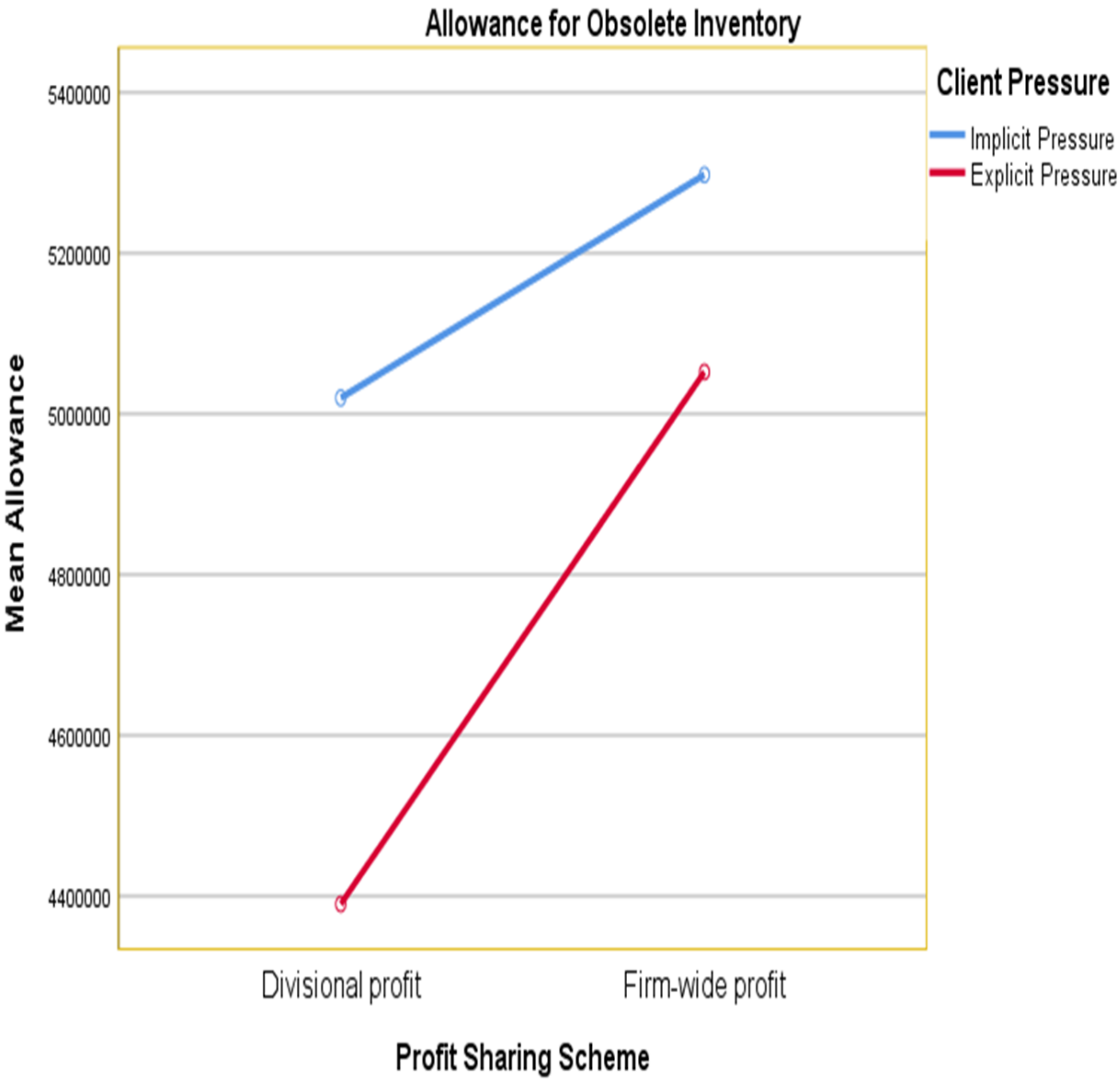
Finally, to consider H3, this study examines whether an interaction between profit-sharing schemes and client pressure exists. The prediction is firm-wide profit-sharing scheme will mitigate client pressure to a certain degree. In other words, the pressure exerted by the client will have a smaller downward effect on the magnitude of the proposed allowance when auditors are in the firm-wide scheme conditions than when auditors are in the divisional scheme conditions. It is because auditors in the firm-wide scheme conditions are not economically dependent on revenue generated by a single "big" client. Auditors in firm-wide scheme conditions will be less inclined to waive audit adjustments and will be less motivated to accept clients' specific demands. The ANOVA result shows the interaction between profit-sharing schemes and client pressure is statistically insignificant (F=0.723, p=0.199, one-tailed). The result did not provide support for H3.

However, in the study by Fu et al. (2011), the authors performed a planned contrast analysis despite having an insignificant interaction effect between auditor's negotiation experience and client's negotiating style to support their predicted interaction. They argued that their prediction involved an ordinal interaction, so they used the planned contrast method to support their hypothesis. They also used custom contrast coding (i.e., -3,-1, +2, +2) based on prior literature (Buckless & Ravenscroft, 1990; Rosnow & Rosenthal, 1995).

Based on the observation of means for obsolete inventory allowance shown in Table 5.1, there is an indication of interaction between the two variables. Following the prior study by Fu et al. (2011), this study also uses the contrast weights of -3 for the divisional scheme and explicit pressure group, -1 for the divisional scheme and implicit pressure group, +2 for the firm-wide scheme, and explicit pressure group, and +2 for the firm-wide scheme and implicit pressure group.

The planned contrast results of Study One show there is a significant interaction effect between profit-sharing schemes and client pressure (F=2.948, p=0.037, two-tailed). Further analyses reveal that the simple main effect of client pressure on the divisional scheme is statistically significant (F=4.106, p=0.046, two-tailed), whereas the simple main effect of client pressure on the firm-wide scheme is insignificant (F=0.559, p=0.457, two-tailed). Similarly, the simple main effect of the profit-sharing scheme on the explicit client pressure is statistically significant (F=4.443, p=0.038, two-tailed), whereas the simple main effect of profit-sharing schemes on the implicit client pressure is insignificant (F=0.728, p=0.396, two-tailed). However, there is a debate in academia regarding the use of a planned contrast test when the interaction effect is not visible. Some researchers prefer not to perform a planned contrast test when the interaction effect is not shown by the statistical analysis. Moreover, in a recent article by Guggenmos, Piercey, and Agoglia (2018), the authors argue that future researchers should discuss the rationale behind the use of custom codes. The authors proposed future researchers should consider three pieces of complementary evidence, for example, the visual evaluation of fit, traditional significance testing, and quantitative evaluation of the contrast variance residual to justify the use of custom weights. Based on the above arguments, Study One did not consider the results of the planned contrast test to support H3.

Figure 5.1 Interaction of Profit-Sharing Schemes and Client Pressure on the Allowance for Obsolete Inventory to be Reported



5.3 Additional Analyses

To check the robustness of the manipulated variables on the dependent variable, Study One performs five additional tests using demographic information as co-variates. The results are shown below in Tables 5.4 to 5.8:

5.3.1 Position[10] of Auditor Participants

In this study, the position of audit partner was assigned a code of 4 and the position of director was assigned 3. The senior manager and manager positions were coded as 2 and 1, respectively. The position of auditor participants did not show any impact on the dependent variable in this experiment. The results show the profit-sharing scheme variable is statistically significant whereas client pressure is marginally significant at a 95% confidence level. The following Table 5.4 shows the ANOVA results:

Table 5.4 Position of auditor participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.240	0.071
Intercept	1	247.900	0.000
Position	1	0.195	**0.660**
Profit-sharing schemes (PS)	1	4.208	0.043
Client pressure (CP)	1	3.780	0.055
PS*CP	1	0.650	0.422
Error	90		
Total	95		
Corrected Total	94		

R Squared = 0.091 (Adjusted R Squared = 0.050)

A t-test was also conducted to examine the difference between the mindset of audit partners (n=11) and non-partner auditors (n=84). A non-significant difference in allowance for audit partners (M= 4,500,000.00, SD = 1,172,603.94) and non-partner auditors (M= 4,979,166.67, SD = 1,122,878.41); t (93) = -1.324, p=0.189 (two-tailed) was observed.

[10] Further analysis is performed with position of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 6)**

5.3.2 External Audit Experience of Auditor Participants

In this study, auditors with 10 or more years of audit experience were coded as 3. The auditors with 7-9 years and 4-6 years of audit experience were coded as 2 and 1, respectively. The external audit experience (in years) of auditor participants did not show any effect on the dependent variable in this experiment. The independent variables of interest mainly; profit-sharing schemes and client pressure both show a marginal significance at a 95% confidence level. The following Table 5.5 shows the ANOVA results:

Table 5.5 External Audit experience[11] of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.348	0.060
Intercept	1	160.482	0.000
External audit experience (in years)	1	0.591	**0.444**
Profit-sharing schemes (PS)	1	3.680	0.058
Client pressure (CP)	1	3.186	0.078
PS*CP	1	0.670	0.415
Error	90		
Total	95		
Corrected Total	94		

R Squared = 0.095 (Adjusted R Squared = 0.054)

5.3.3 Gender of Auditor Participants

In this study, the male and female respondents were assigned a code 1, and 0, respectively. The gender of auditor participants did not have any significant effect on the dependent variable in this experiment. The main variables of interest are profit-sharing schemes and client pressure

[11] Further analysis is performed with audit experience of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 6)**

show a statistical significance at a 95% confidence level. The following Table 5.6 shows the ANOVA results:

Table 5.6 Gender[12] of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.843	0.029
Intercept	1	628.947	0.000
Gender	1	2.394	**0.125**
Profit-sharing schemes (PS)	1	4.941	0.029
Client pressure (CP)	1	4.484	0.037
PS*CP	1	0.648	0.423
Error	90		
Total	95		
Corrected Total	94		

R Squared = 0.112 (Adjusted R Squared = 0.073)

5.3.4 Accounting Firm of Auditor Participants

In this study, the Big 4 firms are assigned a code of 5, non-Big 4 firms with international presence are coded as 4 followed by 3 to non-Big 4 firms with a national presence. The regional and local accounting firms are coded as 2 and 1, respectively. The accounting firms where auditor participants are employed did not show a statistically significant effect on the dependent variable in this experiment. The results show client pressure is marginally significant at a 95% confidence level, but performance-based profit-sharing schemes did not show any impact. The following Table 5.7 shows the ANOVA results:

[12] Further analysis is performed with gender of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 6)**

Table 5.7 Accounting Firm[13] of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.801	0.030
Intercept	1	212.455	0.000
Accounting firm	1	2.239	**0.138**
Profit-sharing schemes (PS)	1	2.214	0.140
Client pressure (CP)	1	3.742	0.056
PS*CP	1	0.648	0.412
Error	90		
Total	95		
Corrected Total	94		

R Squared = 0.111 (Adjusted R Squared = 0.071)

5.3.5 Frequency of Resolving Audit Differences

The frequency of resolving audit differences can be viewed as the negotiation experience of auditors. In this study, auditor participants who very frequently resolve audit differences were assigned a code of 5 and auditors who frequently resolve audit differences was assigned a code of 4. Auditor participants who resolve audit differences occasionally, rarely, and very rarely were coded as 3, 2 and 1, respectively. The results show the performance-based profit-sharing variable is statistically significant whereas client pressure is marginally significant at a 95% confidence level. The following Table 5.8 shows the ANOVA results:

[13] Further analysis is performed with accounting firms of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 6)**

Table 5.8 Frequency of Resolving Audit Differences[14] by Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.563	0.044
Intercept	1	107.844	0.000
Resolve audit differences	1	1.374	**0.244**
Profit-sharing schemes (PS)	1	4.221	0.043
Client Pressure (CP)	1	3.887	0.052
PS*CP	1	0.538	0.465
Error	90		
Total	95		
Corrected Total	94		

R Squared = 0.102 (Adjusted R Squared = 0.062)

The robustness tests reveal that the results for the main hypotheses are not entirely affected by the inclusion of covariates. It is to be noted that Study One reports one-tailed p-values for the purpose of hypotheses testing. For covariate analyses, Study Two reports two-tailed p-values. Therefore, it can be said that the hypotheses are supported at approximately the same level of significance regardless of which covariate was used.

5.4 Summary

To conclude, the ANOVA results reveal that auditors' concessionary mindset in a pre-negotiation setting. Furthermore, the results also show that certain situational demands (e.g., profit-sharing schemes, client pressure) may affect auditors' mindset so that their professional image as an independent arbiter of GAAP may become questionable. The findings suggest that

[14] Further analysis is performed with frequency of resolving audit differences by auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 6)**

auditors' concessionary mindset may be subject to violation of the "reasonableness constraint" criterion. A summary of the hypotheses testing results is provided in Table 5.9.

Table 5.9 Summary of Hypotheses

Hypothesis	Hypothesis Statement	Extent of Support
H1	Ceteris paribus, auditors in the divisional schemes condition, will be prepared to accept a smaller allowance for obsolete inventory than auditors in the firm-wide schemes condition in a pre-negotiation context.	Supported
H2	Ceteris paribus, auditors in the explicit client pressure condition, will be prepared to accept a smaller allowance for obsolete inventory than auditors in the implicit client pressure condition in a pre-negotiation context.	Supported
H3	Ceteris paribus, client pressure has a smaller downward effect on the magnitude of proposed allowance for obsolete inventory when auditors are in the firm-wide scheme condition than when auditors are in the divisional scheme condition in a pre-negotiation context.	Not Supported

CHAPTER 6
RESEARCH METHODOLOGY
STUDY TWO

6.0 Introduction

Chapter 6 outlines the research methodology employed in Study Two. This chapter is organised as follows. In Section 6.1, there is a brief overview of the type of participant and the data collection method for this study. Section 6.2 presents the sample size and demographic information regarding Study Two. This section also provides information on the social value orientation (SVO) of the auditor participants. Section 6.3 provides details of the screening procedures of participants, followed by the task overview in Section 6.4. In Section 6.5, there is a discussion of the manipulation of independent variables and the dependent variable. Lastly, Section 6.6 discusses the comprehension and manipulation checks used in this study.

6.1 Type of Participant and Data Collection Method

Study Two conducts an experiment involving a dyadic interaction between experienced auditors and a computer-simulated client to understand the negotiation behaviour of auditors. Similar to Study One, this study also recruited US auditor participants through Qualtrics Panel.

6.2 Sample Size and Demographic Information

6.2.1 Sample Size

The total sample size for Study Two is 43. The sample sizes across the four experimental are conditions as follows: Divisional profit and Client flexibility (13), Divisional profit and Client inflexibility (9), Firm-wide profit and Client flexibility (9), and Firm-wide profit and Client inflexibility (12). It is noted that prior experimental studies with experienced auditor participants also reported findings with similar sample sizes.

For example, the sample size of the experimental study conducted by Brazel et al. (2004) had 45 audit seniors who had, on average, about three years of work experience (p. 955). Similarly, the sample size of the experimental study conducted by Blay (2005) had 48 audit managers. The study by Sanchez et al. (2007) reported the results of 2 experiments. The first experiment was conducted with 124 controllers/CFO, and the second experiment was conducted with 36 audit managers and partners who had, on average, about 10 years of audit experience (p 257). Similarly, the study by Bennett et al. (2015) also reported a comparative result with 49 auditors (mostly partners and some managers) and 51 corporate executives (mostly CFOs) where they crossed (2x2) the profession (auditor and CFO) with deadline pressure (high and low). It is to be noted both studies used two different groups of participants to report their results.

In another study by Hatfield et al. (2008), the sample sizes for Experiment 1 and Experiment 2 were 60 and 44, respectively. To further elaborate, Experiment 1 was conducted with 60 audit managers and partners from national and international public accounting firms who had, on average, about 10 years of experience (p. 1191). Experiment 2 was 44 audit managers and partners from national and international public accounting firms who have, on average, about 9.7 years of experience (p. 1198). Therefore, it is not uncommon to report findings involving auditor participants with such a sample size.

6.2.2 Demographic Information

At the end of the research instrument (i.e., questionnaire), the auditor participants responded to a series of demographic questions. The demographic information is summarised in Table 6.1. Out of 43 participants, 32 are male, and 11 are female participants. Out of the total participants, 6, 8, and 13 participants are audit partners, directors, and senior audit managers, respectively. The remaining 16 are audit managers. In terms of audit experience, 17 participants have more than 10 years of experience. Nineteen participants reported they have audit experience between 7 to 9 years, whereas 7 participants mentioned their audit experience falls between 4 to 6 years. Out of the total participants, 9 participants reported that they work in Big 4 firms, 6 and 5 participants reported that they work in non-Big 4 firms with international presence and non-Big 4 firms with a national presence, respectively. The remaining 17 and 6 participants work in regional and local firms. Lastly, the participants were asked how often they resolve audit differences with clients. 15 and 19 participants reported they resolve audit differences very frequently and frequently, respectively, while 6 participants reported they occasionally resolve audit differences. One and two participants mentioned they resolve audit differences rarely and very rarely.

Table 6.1 Demographic Information

Demographics		n=43	Percentage
1. Gender	Female	11	25.6%
	Male	32	74.4%
2. Position	Partner	6	14.0%
	Director	8	18.6%
	Senior Manager	13	30.2%
	Manager	16	37.3%
3. Audit Experience (Years)	10 or more	17	39.5%
	07-09	19	44.2%
	04-06	7	16.3%
4. Accounting Firm	Big 4	9	20.9%
	Non-Big 4 with an international presence	6	14.0%
	Non-Big 4 with a national presence	5	11.6%
	Regional	17	39.5%
	Local	6	14.0%
5. Resolve Audit Difference	Very Frequently	15	34.9%
	Frequently	19	44.2%
	Occasionally	6	14.0%
	Rarely	1	2.3%
	Very Rarely	2	4.6%

6.2.2.1 Social Value Orientation (SVO) – Distribution

At the beginning of the research instrument (i.e., questionnaire) the auditor participants were asked to respond to the SVO scale. The auditor participants' social value orientation distribution across the four conditions is summarised in Table 6.2 below:

There are 10 pro-social and three pro-self auditors in the divisional scheme and client flexibility condition, whereas there are three pro-social and six pro-self auditors in the divisional scheme and client inflexibility condition. In firm-wide scheme and client flexibility conditions, there are four and five pro-social and pro-self auditors, respectively. Lastly, there are two pro-social auditors and 10 pro-self auditors in the firm-wide scheme and client inflexibility condition.

Table 6.2 Distribution of Social Value Orientation

Experimental conditions	Pro-social	Pro-self	Total
Divisional scheme and client flexibility	10	3	13
Divisional scheme and client inflexibility	3	6	9
Firm-wide scheme and client flexibility	4	5	9
Firm-wide scheme and client inflexibility	2	10	12
Total	**19**	**24**	**43**

6.3 Screening Procedures of Participants

Study Two follows a similar methodology used in Study One to design the research instruments and collect data as discussed in Chapter 4 Qualtrics Panel did a 'soft launch' (i.e., pilot study) to pre-test the instruments for case realism. The pre-test did not highlight the need for any major changes to the instruments.

The three screening questions to filter out undesired participants are exactly the same as in Study One as discussed in Chapter 4. Then, the examination of the respondents' identification (ID) numbers and internet protocol (IP) addresses was conducted. The examination did not reveal any similar ID numbers or IP addresses. This examination of IP addresses suggested that there were not multiple responses from the same respondents.

In addition, another question relating to audit assertion was asked to participants to check their understanding about audit assertions: “Which assertion is most at risk when assessing the allowance for inventory obsolescence?” It is noted this question was not used as a screening question to filter out participants. The result shows that a majority of participants (i.e., 95%) selected the “Valuation” assertion.

6.4 Task Overview

Study Two administers the social value orientation scale (SVO) to measure the trait personality of auditors. It can be argued that the responses to the SVO questionnaire might be influenced if used at the end of the instruments. Hence, to avoid any influence of the case materials on SVO, participants were asked to respond to the SVO questionnaire before reading the case. The case scenario in Study Two is akin to Study One. Moreover, the key contextual factors which are held constant in Study Two are the same as Study One **(Please refer to the discussion in Chapter 4)**.

In addition, Study Two incorporates logic conditions in Qualtrics to simulate the negotiation environment. Prior studies have used computer simulation to examine auditors’ negotiation behaviour (Brown & Johnstone, 2009; Hatfield et al., 2010). The logic conditions were provided by the researcher to the Qualtrics Panel. The programmers of the Qualtrics Panel incorporated those logic conditions into the task. The logics offered pre-programmed counteroffers based on the offers by auditor participants. In all the experimental conditions, the CFO of Highpoint Electronics (i.e., computer logics) always challenged the auditor’s proposed estimate for allowance for obsolete inventory when the auditor’s estimation fell outside the CFO’s preferred estimate. The auditor participants were informed that there is a maximum of 5 rounds of negotiation with the CFO.

The following logics are the same across all four conditions. If participants decide to accept the allowance of $2,000,000 (i.e., the first option) a message from the CFO would appear: *“I am* *extremely happy with your decision. I cherish our working relationship and look forward to appointing you as our auditor in the next year."* Then, the participants were asked to confirm by clicking "Yes" whether they agreed that the allowance of $2,000,000 is the appropriate allowance to be reported in the financial statements.

Similarly, if participants insisted on increasing the allowance to $7,000,000 (i.e., the second option), a message from the CFO would appear: "*I am extremely unhappy with your decision. As I told you this difference is a matter of professional judgement, you should provide us with the benefit of the doubts. I would like to maintain our working relationship in the future. I ask you to reconsider your decision."*

Then, participants were asked to confirm by clicking "Yes" whether they agreed that the allowance of $7,000,000 is the appropriate allowance to be reported in the financial statements. If the participants selected "No," they were asked to propose an allowance somewhere between $2,000,000 and $7,000,000. This relaxation was incorporated because the researcher wanted to check whether auditor participants subsequently changed their behaviour after insisting on increasing the allowance to $7,000,000.

If the participants selected to propose an allowance between $2,000,000 and $7,000,000 (i.e., the third option), the computer will propose counteroffers according to pre-set logics. The pre-set logics are discussed below:

(i) Participants cannot increase the proposed allowance higher than the allowance proposed in the first round. For example: if the proposed allowance is $4,500,000 in the first round. Then, the proposed allowance in the second round cannot be more than $4,500,000. It should be either 4,500,000 or less.

(ii) The computer's counteroffer cannot be greater than auditor participants' proposed allowance under any of the four conditions.

(iii) If the auditor participants did not move from their positions, the computer's counteroffers would not change.

(iv) The counter offered by the computer will be increased by the computer allowance in the previous round plus *10* percent for flexible client conditions.

(v) The counter offered by the computer will be increased by the computer allowance in the previous round plus *one* percent for inflexible client conditions. For example, a calculation of counteroffers by computer (i.e., CFO) to the auditor participants is shown in Table 6.3:

Table 6.3 Example of Counteroffers by the CFO

Round	Participant	Flexible client	Inflexible client
One	$5,000,000	$2,300,000 [$2,000,000 + 10% of ($5,000,000 - $2,000,000)]	$2,030,000 [$2,000,000 + 1% of ($5,000,000 - $2,000,000)]
Two	$4,500,000	$2,520,000 [$2,300,000 +10% of ($4,500,000 - $2,300,000)]	$2,054,700 [$2,030,000 + 1% of ($4,500,000 - $2,030,000)]
Three	$4,000,000	$2,668,000 [$2,520,000 + 10% of ($4,000,000 - $2,520,000)]	$2,074,153 [$2,054,700 + 1% of ($4,000,000 - $2,054,700)]

(vii) After each counteroffer by the CFO (i.e., computer), the auditor participants were asked whether they accepted the proposed allowance or whether they wanted to propose a new allowance for obsolete inventory.

The following messages will also appear from the CFO (i.e., computer) along with the counteroffers if the auditor participants want to negotiate over five rounds which are constant for all four conditions.

Round One: *"I cannot accept your proposed allowance. I mentioned earlier it is a matter of professional judgement. I am expecting you will waive this adjustment. Here is my proposed allowance which can be considered appropriate."*

Round Two: *"Still, I cannot accept your proposed allowance. This year you should provide us with the benefit of the doubt I am proposing another allowance which you can consider."*

Round Three: *"I am not convinced with your proposed allowance. Because we have a good working relationship, I am proposing another amount which I think is appropriate. Give us the benefit of the doubt."*

Round Four: *"I am not so keen to increase the provision. Our merger discussion will jeopardise if you reduce our pre-tax income any further. I think my proposed amount is appropriate."*

Round Five: *"Seriously, you should think of waiving the adjustment. This is my final allowance. I cannot increase it any further. I would suggest you report this allowance and finalise the financial statements as quickly as possible. Before our merger deal, I would like the audited financial statements."*

After the participants determined the final allowance to be recorded in the client's financial statements, they were asked to respond to two questions regarding their satisfaction during the negotiation process and issuing of audit opinions. **[Please refer to Appendix 4 to Appendix 5 for the experimental materials.]**

Specifically, the participants were asked, "Are you satisfied with the final allowance for obsolete inventory to be reported in the financial statements?" The participants were given an option to select either "Yes" or "No." It was observed four participants (i.e., 9.3%) selected "No." It means those participants were not satisfied with the negotiated outcome.

Then, in the following question, participants were asked, "Would you issue a qualified audit opinion regarding allowance for obsolete inventory?" The participants were given a similar option to select either "Yes" or "No." A majority of the participants, 41 out of 43 participants (i.e., 95%), selected "No," implying they did not want to issue a qualified audit opinion. Surprisingly, two participants out of four participants who were unsatisfied with the negotiated outcome would not qualify the audit opinion. The result implies that experienced auditors, in a small number of cases, are not willing to issue qualified audit opinions even though they are not satisfied with the negotiated outcome and jeopardise relationships with clients.

It is observed out of 43 responses, 42 subjects chose 5% of pre-tax income as the appropriate materiality level. One respondent mentioned 1% of revenue[15] as the materiality level under firm-wide profit and client flexibility conditions. This result provides confidence that the participants are real auditors as prior auditing literature also suggests 5% of pre-tax income is a common quantitative assessment of materiality (Eilifsen & Messier Jr, 2015; Ng & Tan, 2007).

6.5 Independent Variables and Dependent Variable

6.5.1 Independent Variables

To test the hypotheses, Study Two employs a 2X2 experimental design by fully crossing; profit-sharing schemes (divisional scheme versus firm-wide scheme) and client flexibility (flexibility versus inflexibility).

6.5.1.1 Divisional Scheme versus Firm-wide Scheme

Study Two adopts the manipulation for the divisional scheme and the firm-wide scheme from Chong et al. (2018). The manipulation for the divisional and firm-wide schemes is the same as Study One. **(Please refer to the discussion in Chapter 4)**.

6.5.1.2 Client Flexibility

In addition to the different negotiation logics described above, Study Two adopts the manipulation for the client flexibility and the client inflexibility from Gibbins et al. (2010). The following information was given to the auditor participants for the manipulation of client flexibility, "You learned from the conversation that the CFO is not fully committed to the unaudited pre-tax income of $49,500,000. You believe that the CFO would accept some

[15] The materiality level chosen by the participant is 1% of $495,000,000 (i.e., revenue) = $4,950,000.

adjustments to the pre-tax income of $49,500,000. It seems the CFO is willing to "live with" a range of pre-tax income numbers."

Similarly, the following information was given to the auditor participants for the manipulation of client inflexibility, "You learned from the conversation that the CFO is firmly committed to the unaudited net income of $49,500,000. You believe that the CFO would not accept any adjustments to the pre-tax income of $49,500,000. It seems the CFO is not willing to "live with" a range of pre-tax income numbers."

6.5.1.3 Social Value Orientation Scale

Study Two measures the personality trait of auditors using the social value orientation (SVO) scale. This study adopts the scale from a prior study by Van Lange et al. (1997). The SVO scale is commonly classified into three major categories: pro-socials, individualists, and competitors. Prior studies also support that the SVO can be classified into two categories, namely pro-socials which consist of individuals with a pro-social value orientation, and pro-selfs which consist of those with individualist and competitive social value orientations (Gärling et al., 2003; Nauta et al., 2002; Van Lange et al., 1998). This study also classifies SVO into two categories, namely pro-socials and pro-selfs.

On the SVO scale, there are nine choice situations. Participants are classified when they make six or more consistent choices. Prosocial choices are lc, 2b, 3a, 4c, 5b, 6a, 7a, 8c, 9b; individualistic choices are lb, 2a, 3c, 4b, 5a, 6c, 7b, 8a, 9c; and competitive choices are la, 2c, 3b, 4a, 5c, 6b, 7c, 8b, 9a. The nine choice situations are presented in Table 6.4 below:

Table 6.4 Social Value Orientation Instrument

Situations	A	B	C
1. You get	480	540	480
Other gets	80	280	480
2. You get	560	500	500
Other gets	300	500	100
3. You get	520	520	580
Other gets	520	120	320
4. You get	500	560	490
Other gets	100	300	490
5. You get	560	500	490
Other gets	300	500	90
6. You get	500	500	570
Other gets	500	100	300
7. You get	510	560	510
Other gets	510	300	110
8. You get	550	500	500
Other gets	300	100	500
9. You get	480	490	540
Other gets	100	490	300

6.5.2 Dependent Variable

In order to understand auditors' negotiation behaviour, this experiment captures auditors' final allowance for obsolete inventory to be reported in the client's financial statements. Prior experimental studies also employed a computer-simulated negotiation setting to examine auditors' behaviour (Brown & Johnstone, 2009; Hatfield et al., 2010).

The dependent variable in this experiment closely resembles the operationalisation of the auditors' negotiated outcome captured by Hatfield et al. (2010). Specifically, Study Two mentions that "Assume that you are now in the meeting with Highpoint's CFO to resolve the inventory issue. You may choose to agree or disagree with the CFO over a maximum of 5 rounds of interaction. You must now decide how to proceed."

The auditor participants were given three options, and they needed to choose any one of the options. The three options are mentioned below:

Option 1: - Waive Adjustment: Accept the allowance of $2,000,000 currently in the financial statements.

Option 2: - Require Full Adjustment: Insist that Highpoint increase the allowance to $7,000,000.

Option 3: - Propose New Adjustment: Propose a new allowance somewhere between $2,000,000 and $7,000,000.

By providing three options to participants, this study also captures whether the participants are willing to negotiate with clients or the participants already have decided the allowance to be reported before negotiating with clients.

6.6 Comprehension Checks and Manipulation Checks

6.6.1 Comprehension Checks

After reading the case materials, participants responded to comprehension and manipulation check questions. There were two comprehension questions in Study Two to check whether the majority of the participants read the case with reasonable attention.

The first comprehension question was related to the divisional and firm-wide schemes. Specifically, the participants were asked to "Indicate to what extent you agree or disagree that your performance bonus depends on the divisional (firm-wide) profits" for the divisional (firm-wide) conditions, respectively, on a 7-point Likert scale (7 - Strongly Agree and 1 - Strongly Disagree).

It was observed that 90% of the participants in the divisional scheme conditions answered the case in the right direction. For example, nine, seven, and three participants responded, "Strongly agree," "Agree," and "Somewhat agree," respectively, to the question of whether the performance bonus depends on the divisional profit.

Similarly, it was observed that 86% of the participants in the firm-wide scheme conditions answered the case in the right direction. For example, five, six, and seven participants responded, "Strongly agree," "Agree," and "Somewhat agree," respectively, to the question of whether the performance bonus depends on the firm-wide profit. The results show that the majority of the participants in this study read the case with reasonable attention.

The second comprehension question was to check whether the participants agreed to reduce the pre-tax income as the financial statements were materially misstated as per the generally accepted accounting principles (GAAP). Specifically, a sentence was included in all the experimental conditions, "In your opinion, Highpoint Electronic's current pre-tax income is unacceptable, and an audit adjustment is required to reduce pre-tax income."

Then, in the questionnaire, the following question was asked, "Indicate to what extent you agree or disagree that you are required to reduce Highpoint's pre-tax income under the generally accepted accounting principles (GAAP)?"

Out of 43 respondents across all the experimental conditions, 36 participants (i.e., 84%) answered this comprehension question in the right direction. For example, 16, 15, and five participants responded, "Strongly Agree," "Agree," and "Somewhat Agree," respectively. Three participants answered "Neither Agree nor Disagree" to the question. The results show that the majority of the participants in this study read the case with reasonable attention.

6.6.2 Manipulation Checks

Then, participants answered a manipulation question on the profit-sharing scheme variable. "Indicate to what extent you believe that your performance bonus depends on this audit engagement" on a 4 - point scale (4 – To a great extent, 3 – Somewhat, 2 – Very little, and 1- Not at all). The manipulation question on performance-based profit-sharing scheme bonus did not show an impact (t=0.508 p-value=0.310, one-tailed) with a reported mean of 3.09 and 2.95 for the divisional scheme and firm-wide scheme conditions, respectively. Study Two follows the same arguments in Chapter 4 regarding the failure of the manipulation question. Hence, this study did not delete any responses based on failed manipulation answers by the auditor participants.

A manipulation question on client flexibility was included, "Indicate how difficult it will be to move the CFO from his/her initial position of reportable pre-tax income of $49,500,000" on a 7-point Likert scale (7 – Extremely difficult and 1- Extremely Easy). The mean responses are 5.14 and 4.18 for the inflexibility and flexibility conditions, respectively, which are directionally consistent with our manipulation and the t-test is statistically significant (t= 1.858, p=0.035, one-tailed).

CHAPTER SEVEN

DATA ANALYSIS AND DISCUSSION

STUDY TWO

7.0 Introduction

This chapter presents the results of the data analysis and tests of hypotheses for the second study. The outline of this chapter is as follows: Section 7.1 sets out the descriptive statistics of the variables while Section 7.2 shows the results of the Analysis of Variance (ANOVA) statistics technique conducted to test the various hypotheses developed for Study Two. Section 7.3 discusses the additional analyses with demographic variables as covariates to check the robustness of the results. A summary of the results is presented at the end of this chapter in Table 7.13.

7.1 Descriptive Statistics

Table 7.1 presents the descriptive statistics for the number of participants who completely waived the audit adjustment; the participants who insisted the client record the audit adjustment fully; and the participants who chose to negotiate with the client.

Table 7.1 Descriptive: Auditors' Negotiation Behaviour

Conditions	n	Waive Adjustment	Require Full Adjustment	Propose New Adjustment
Divisional scheme Flexible client	13	9	0	4
Divisional scheme Inflexible client	9	1	3	5
Firm-wide scheme Flexible client	9	2	3	4
Firm-wide scheme Inflexible client	12	2	4	6
Total	43	14	10	19

From Table 7.1, it can be said that out of 43 participants, 14 participants (i.e., 33%) chose to waive the audit adjustment, and another 10 participants (i.e., 23%) insisted the client record the audit adjustment fully. Interestingly, a majority of participants (i.e., 9/13 or 69%) in the divisional scheme and flexible client condition chose to waive the audit adjustment and accept the client preferred accounting estimate. The remaining 19 participants (i.e., 44%) chose to negotiate with the client. The results further reveal that out of 19 participants who chose to negotiate with the client, 16 participants (i.e., 84%) were prepared to record the audit adjustment considerably close to the client's preferred estimate.

It was observed that out of 19 participants who chose to negotiate with the client, one participant initially in the divisional profit and client flexibility condition chose to record the full adjustment but in the second round chose to propose a new audit adjustment. At the end, that participant accepted the CFO's counteroffer. Similarly, it was observed that another two participants initially, one in the firm-wide profit and flexible client condition and another in the firm-wide and inflexible client condition, chose to record the full adjustment but in the subsequent rounds chose to propose a new audit adjustment. In the end, both of the participants accepted the CFO's counteroffer.

It was observed that all the 33 participants who chose to either waive the audit adjustment or propose a new audit adjustment selected 5% of pre-tax income as their chosen materiality level. It can be said that 30 participants (i.e., 14 + 16), equalling 70 percent of the total number of participants, breached their chosen materiality level.

It can be argued this behaviour of participants can be viewed as concession-making behaviour as opposed to compromising behaviour mainly for two reasons. First, participants in this study were given the option to insist the client record the full audit adjustment of $7,000,000. Second, the auditor participants had the option to ignore the pre-programmed CFO's counteroffers. The auditor participants could have decided not to move from their proposed allowance for obsolete inventory.

Table 7.2 presents the descriptive statistics for the variables used in this experiment. These variables include the manipulated variables (i.e., profit-sharing schemes, client flexibility) and the dependent variable (i.e., allowance for obsolete inventory to be recorded in the client's financial statements).

Table 7.2 Descriptive Statistics (n=43)

Profit-sharing schemes	**Client flexibility**		
	Allowance for obsolete inventory to be recorded (USD)		
Divisional scheme	**Flexibility**	**Inflexibility**	**Average**
Mean	2,165,812	4,193,179	3,179,496
(S.D.)	(351,663)	(2,267,973)	(1,314,318)
Sample size	13	9	11
Firm-wide scheme			
Mean	4,157,778	3,975,849	4,066,814
(S.D.)	(2,312,260)	(2,438,546)	(2,375,403)
Sample size	9	12	11
Average			
Mean	3,161,795	4,084,514	3,623,155
(S.D.)	(1,331,962)	(2,357,760)	(1,844,861)
Sample size	11	11	11

At the end of the negotiation, Table 7.2 shows the mean allowance for obsolete inventory auditors were willing to record for the four conditions. The mean allowance for the divisional scheme and client flexibility condition is $2,165,812, whereas the mean allowance for the divisional scheme and client inflexibility condition is $4,193,179. Similarly, the mean allowance for the firm-wide scheme and client flexibility is $4,157,778, whereas the mean allowance for the firm-wide scheme and client inflexibility is $3,975,849.

The mean of the two group mean allowances for the divisional and firm-wide scheme conditions are $3,179,496 and $4,066,814, respectively. Similarly, the mean of the two group mean allowances for the client flexibility and client inflexibility conditions are $3,161,795 and $4,084,514, respectively.

Surprisingly, it is observed that the lowest allowance is reported in the divisional scheme and client flexibility condition, and the highest allowance is reported in the divisional scheme and client inflexibility condition. In other words, the auditor participants are willing to provide the highest concession in the divisional scheme and client flexibility condition and the lowest concession in the divisional scheme and client inflexibility condition. A plausible reason may be participants in the client inflexibility condition became aware that the client is very rigid in terms of recording the audit adjustment. Hence, those participants took a relatively tough stance to negotiate with the inflexible client knowing that the client management would be unhappy.

Overall, the results in Table 7.3 show that auditor participants conceded more from their initial proposed allowance of $7,000,000 in all four conditions in the negotiation phase as compared to the pre-negotiation phase. The results imply, auditors' concession-making mindset observed in the pre-negotiation phase changed to a large extent in the negotiation phase.

Table 7.3 Comparison of Concessions between Study 1 (S1) and Study 2 (S2)

Conditions	Mean allowance to be recorded (a)	Mean allowance excluding client's allowance of $2m (b) = (a) - $2m	Concession (c) = $5m – (b)
Divisional scheme			
Explicit pressure (S1)	$4,390,000	$2,390,000	$2,610,000
Implicit pressure (S1)	$5,020,000	$3,020,000	$1,980,000
Flexible client (S2)	$2,165,812	$165,812	$4,834,188
Inflexible client (S2)	$4,193,179	$2,193,179	$2,806,821
Firm-wide scheme			
Explicit pressure (S1)	$5,052,083	$3,052,083	$1,947,917
Implicit pressure (S2)	$5,297,619	$3,297,619	$1,702,381
Flexible client (S2)	$4,157,778	$2,157,778	$2,842,222
Inflexible client (S2)	$3,975,849	$1,975,849	$3,024,151

Similar to Study One, the majority of the auditor participants in this study chose 5% of pre-tax income (i.e., $2,475,000) as the materiality threshold. The minimum allowance for obsolete inventory without breaching the materiality threshold would be $4,525,000 **[Please refer to the discussion in Chapter 5].**

The results further highlight that there is a breach of the materiality threshold across all four conditions. It appears that the auditor participants in the divisional scheme and client flexibility condition are willing to completely waive the proposed audit adjustment. The result also implies under all conditions, auditors are likely to disregard the reasonableness constraint criterion and are motivated to accept client-specific demands. The results of this experiment suggest that the prediction of Gibbins et al. (2010) are true under certain circumstances, that is to say, clients' financial statements may remain materially misstated after negotiations. However, these findings are dependent on specific accounting contexts and experimental settings.

7.2 Analysis of Variance (ANOVA)

Study Two uses the traditional ANOVA technique to examine the hypotheses formulated in the study. The result for Levene's Test of Equality of Error Variance shows a p-value of 0.053 based on the median. From the result, it can be said that the assumption of homogeneity of variances was violated. So, Study Two uses the more robust Welch's ANOVA test to report the equality of error variance for both the manipulated variables. After performing the Welch's test result on the homogeneity of variance, this study performs two one-way ANOVAs to separately examine the effect of the two independent variables (i.e., profit-sharing schemes and client flexibility) on the dependent variable.

The Welch test for equality of error variance for the profit-sharing schemes variable shows (F= 2.814, p= 0.102, two-tailed). The ANOVA result for the profit-sharing scheme variable was statistically significant (F= 2.851, p=0.049, one-tailed). Similarly, the Welch test for equality of error variance for the client flexibility variable shows (F= 2.987, p= 0.092, two-tailed). The ANOVA result for the client flexibility variable was also statistically significant (F= 3.025, p=0.045, one-tailed).

When there is no violation of the homogeneity of variances, and the results of two one-way Welch ANOVAs are statistically significant, it is reasonable to conclude that a two-way traditional ANOVA will also show a similar significant result. Therefore, Study Two conducts a two-way traditional ANOVA to test the hypotheses. The ANOVA results are shown in Table 7.4.

Table 7.4 ANOVA Results

Source	df	F	p-value (one-tailed)
Corrected Model	3	2.930	0.023
Intercept	1	141.696	0.000
Profit-sharing schemes (PS)	1	2.125	0.077
Client Flexibility (CF)	1	2.298	0.069
PS*CF	1	3.293	**0.039**
Error	39		
Total	43		
Corrected Total	42		

R Squared = 0.184 (Adjusted R Squared = 0.121)

Furthermore, a Kruskal Wallis H test (i.e., non-parametric) test to further validate the ANOVA result reported in the thesis. Kruskal Wallis H test is a rank-based non-parametric test that can be used to examine whether there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. The results are as follows:

The mean rank for flexibility and divisional condition (n=13) is 12.81, inflexibility and divisional condition (n=9) is 27.44, flexibility and firm-wide condition (n=9) is 26.72 and inflexibility firm-wide condition (n=12) is 24.33. The test statistics showed a significant result $H(3) = 10.856$, $P=0.013$.

7.2.1 Hypothesis H4

H4 predicts auditors in the divisional scheme conditions will record a smaller allowance for obsolete inventory than auditors in the firm-wide scheme conditions without breaching their chosen materiality level in a negotiation setting. The ANOVA result shows a marginal effect of profit-sharing schemes (F=2.125, p=0.077, one-tailed) on the allowance for obsolete inventory. The result provides marginal support for H4.

The result suggests that the effect of the profit-sharing schemes variable in Study Two is more or less similar compared to the result reported in Study One. It can be inferred that the profit-sharing schemes variable may have a stronger effect on auditors' mindset in pre-negotiation contexts, but the effect diminishes in an actual negotiation setting. It may be due to the fact that in the actual negotiation, auditors are more influenced by the behaviour of the client management. This result signifies the effect of profit-sharing schemes on auditors' behaviour depends more on environmental characteristics in negotiation settings as compared to pre-negotiation settings. The impact of profit-sharing schemes will depend on the strength of the interaction with other environmental characteristics. Apparently, in an actual negotiation setting, this variable may have a limited impact on auditors' desire to satisfy the expectations of client management. This finding provides support to the arguments put forward by academic researchers (Trompeter, 1994; Wyatt, 2004; Zeff, 2003) as well as to the cautionary advice that financial considerations provided to audit partners should not hinder the quality of financial statements in the current regulatory regime (IAASB 2014).

7.2.2 Hypothesis H5

H5 predicts auditors in the inflexible client condition will record a smaller allowance for obsolete inventory than auditors in the flexible client condition without breaching their chosen materiality level in a negotiation setting. The ANOVA results show a marginal effect for client flexibility (F= 2.298, p-value=0.069, one-tailed). The result provides marginal support for H5.

This finding may be considered consistent with the findings by Gibbins et al. (2010) in a pre-negotiation setting to some extent. In that study, the findings suggest that when audit partners perceive clients are inflexible about recording audit adjustments to their initial accounting position, audit partners become strongly committed (i.e., goal commitment) to substantially reduce clients' pre-tax income (Gibbins et al., 2010, p. 591).

It is observed that the average mean allowance (i.e., $4,084,514) for client inflexibility conditions is higher than the average mean allowance (i.e., $3,161,795) for client flexibility conditions. The result is surprising because this thesis argues that it will be comparatively difficult to convince an inflexible client to record an audit adjustment that reduces the client's pre-tax income. The result implies that if auditors face inflexible clients, they are more committed to taking a tougher stance to reduce the client's pre-tax income. This kind of behaviour (i.e., goal commitment) is reflected in the results reported by Gibbins et al. (2010). However, at the same time, they tend to move as much as possible towards the client's preferred accounting choice. The authors reported that audit partners have a greater intention to use integrative strategies when they perceive the client management to be inflexible. The authors commented that the findings are troubling as audit partners routinely look for "wins" even for inflexible client management with financial statements that are likely to be materially misstated (Gibbins et al., 2010, p. 593). It is to be noted that in the study by Gibbins et al. (2010), the authors predicted and found support that auditors will adopt concession-making strategy (also compromising strategy) when they face flexible clients but not for inflexible clients. The results of Study Two also points in that direction. It seems auditors would concede more from their initial positions when faced with flexible clients.

Furthermore, the results show that the violation of reasonableness constraint criteria (i.e., breach of materiality threshold) has occurred for most of the auditor participants across all four experimental conditions. The implication of this result is that clients' attitudes may deter auditors from acting in a professional manner even in the current regulatory regime (i.e., post-SOX era).

7.2.3 Hypothesis H6

Lastly, to consider H6, this study examines whether an interaction between profit-sharing schemes and client flexibility exists. The prediction was the inflexible client will have a smaller downward effect on the magnitude of the proposed allowance when auditors are in the firm-wide scheme conditions than when auditors are in the divisional scheme conditions. The ANOVA result shows the interaction effect between profit-sharing schemes and client flexibility is statistically significant ($F=3.293$, $p=0.039$, one-tailed). Although the p-value is statistically significant, it can be observed that the mean allowance for the divisional scheme and inflexibility condition is higher than the mean allowance for the divisional and flexibility condition, which is opposite to the prediction. Therefore, the result did not find support for H6.

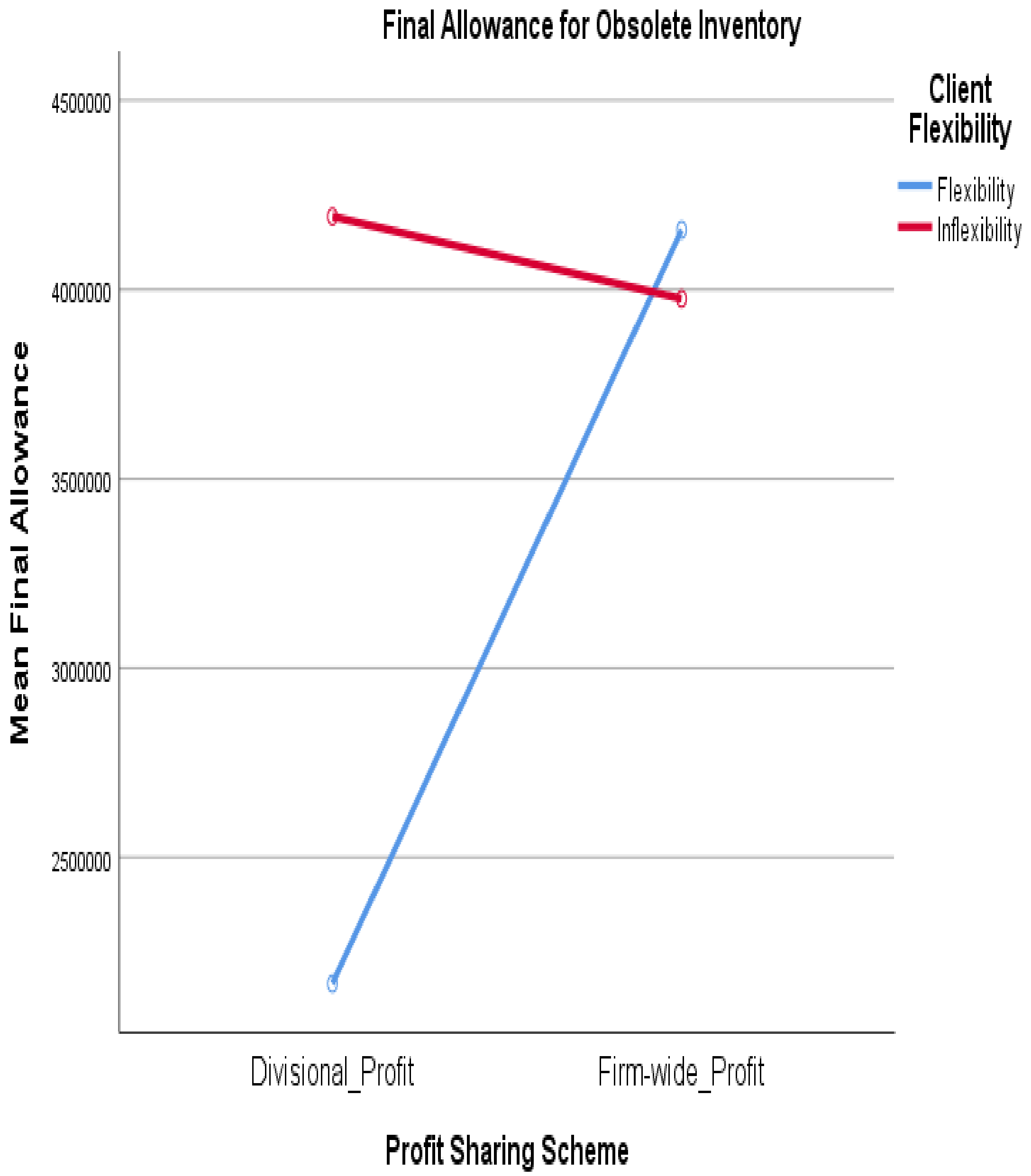
This study attempts to explain the result by combining two theoretical perspectives from both the theory of motivated reasoning and dual concern theory perspectives. From the perspective of dual concern theory auditors' concerns for clients' outcome will be always high. However, auditors' concerns for their own outcome will be low when they face either inflexible or flexible clients because audit partners will be more or less certain that the client will switch to a new auditor even after the client receives a favourable audit opinion. If the client shows an inflexible attitude in recording audit adjustments, then the audit partner may need to concede more from their positions to accommodate the wishes of client management and concede less when the client shows a flexible attitude.

This result may also be explained by the societal rule of reciprocity. The inflexible client is just not very responsive, so in a multiple-round experiment, this is going to irk the auditor and invoke a tit-for-tat response (Sanchez et al., 2007; Tan & Trotman, 2010). Hence, the flexible client gets the lowest proposed allowance, and the inflexible one gets the highest proposed allowance. The reason is that it is when profits are at the divisional level that the auditor really minds and feels involved in the negotiation. Of course, there is tension as it can be well argued that the auditor may actually want to please the inflexible client in a multiple-round negotiation. The negotiation dynamics might have played a crucial role.

The findings suggest that the average concession is less in inflexible client conditions as compared to flexible client conditions. The reason may be auditors who are in the firm-wide scheme are less economically dependent on a particular client's income, and therefore, after a certain point auditor will be reluctant to concede any further. In other words, for auditors in the firm-wide scheme condition, client inflexibility will have a comparatively lesser impact on auditors' concession-making behaviour.

In this experiment, the simple main effects analysis shows the client flexibility variable affects the divisional scheme variable ($F=5.640$, $p= 0.023$, two-tailed), whereas the client flexibility variable did not affect the firm-wide scheme variable ($F=0.044$, $p=0.835$, two-tailed). Similarly, the profit-sharing scheme variable affects the client flexibility variable ($F=5.445$, $p=0.025$, two-tailed), whereas the profit-sharing variable did not affect the client inflexibility variable ($F=0.063$, $p=0.804$, two-tailed).

Figure 7.1 Interaction of Profit-Sharing Schemes and Client Flexibility on the Allowance for Obsolete Inventory to be Reported



7.2.4 Effect of Social Value Orientation (SVO)

This experiment uses an individual auditor's social value orientation as a third independent variable to analyse the behaviour of auditor participants. The results in Table 7.5 show the effect of auditors' social value orientation in a negotiation setting is statistically insignificant (F= 0.054, p=0.409, one-tailed). The reason may be there is a preponderance of pro-social participants in the divisional/flexible condition and of pro-self participants in the firm/inflexible condition. This may result in a confounding effect with both the dependent variable (i.e., provision of allowance) and independent variables (i.e., profit-sharing schemes and client flexibility).

Table 7.5 SVO Analysis

Source	df	F	p-value (two-tailed)
Corrected Model	7	1.169	0.345
Intercept	1	100.443	0.000
Social Value Orientation (SVO)	1	0.062	**0.804**
Profit-sharing schemes (PS)	1	2.086	0.158
Client Flexibility (CF)	1	2.015	0.165
PS*CF	1	1.897	0.177
PS*SVO	1	0.085	0.772
CF*SVO	1	0.000	0.990
PS*CF*SVO	1	0.123	0.728
Error	35		
Total	43		
Corrected Total	42		

R squared = 0.189 (Adjusted R Squared = 0.027)

7.3 Additional Analysis

To check the robustness of the manipulated variables on the dependent variable, five additional tests were performed using demographic information as co-variates. The results are shown below in Tables 7.6 to 7.10:

7.3.1 Position of Auditor Participants

In this study, a code of 4 was assigned to the position of audit partner and a code of 3 was assigned to the position of director. The senior manager and manager positions are coded as 2 and 1, respectively. The position of auditor participants did not show any impact on the dependent variable in this experiment. The results show the interaction effect between the profit-sharing schemes variable and client flexibility variable is marginally significant (F=3.464, p=0.070, two-tailed) at a 95% confidence level. The following Table 7.6 shows the ANOVA results:

Table 7.6 Position[16] of Auditor Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	4	2.282	0.078
Intercept	1	33.363	0.000
Position	1	0.457	**0.503**
Profit-sharing schemes (PS)	1	2.419	0.128
Client Flexibility (CF)	1	2.452	0.126
PS*CF	1	3.464	0.070
Error	38		
Total	43		
Corrected Total	42		

R Squared = 0.194 (Adjusted R Squared = 0.109)

[16] Further analysis is performed with position of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 7)**

A t-test was also conducted to examine the difference between the negotiated behaviour of audit partners (n=6) and non-partner auditors (n=37). A non-significant difference in allowance for audit partners (M= 3,495,208.83, SD = 2,191,580.74 and non-partner auditors (M= 3,514,948.65, SD = 2,116,061.05); t (41) = -0.021, p=0.983 (two-tailed).

7.3.2 External Audit Experience of Auditor Participants

In this study, a code of 3 was assigned to the auditors who have 10 years or more years of external audit experience. Auditors with 7-9 years and 4-6 years of external audit experience were coded as 2 and 1, respectively. The external audit experience (in years) of auditor participants did not show any effect on the dependent variable in this experiment. The results show the interaction effect between the profit-sharing schemes variable and client flexibility variable is marginally significant (F=3.289, p=0.078, two-tailed) at a 95% confidence level. The following Table 7.7 shows the ANOVA results:

Table 7.7 External Audit Experience[17] of Auditor Participants

Source	df	F	p-value two-tailed)
Corrected Model	4	2.166	0.091
Intercept	1	14.252	0.001
External Audit Experience (in years)	1	0.079	**0.780**
Profit-sharing schemes (PS)	1	2.141	0.152
Client Flexibility (CF)	1	2.312	0.137
PS*CF	1	3.289	0.078
Error	38		
Total	43		
Corrected Total	42		

R Squared = 0.186 (Adjusted R Squared = 0.100)

[17] Further analysis is performed with external audit experience of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 7)**

7.3.3 Gender of Auditor Participants

In this study, the male and female respondents were assigned a code of 1 and 0, respectively. The gender of auditor participants did not have any significant effect on the dependent variable in this experiment. The results show the interaction effect between the profit-sharing schemes variable and client flexibility variable is significant (F=4.223, p=0.047, two-tailed) at a 95% confidence level. The following Table 7.8 shows the ANOVA results:

Table 7.8 Gender[18] of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.867	0.036
Intercept	1	23.712	0.000
Gender	1	2.369	**0.132**
Profit-sharing schemes (PS)	1	2.451	0.126
Client Flexibility (CF)	1	2.639	0.113
PS*CF	1	4.223	0.047
Error	38		
Total	43		
Corrected Total	42		

R Squared = 0.232 (Adjusted R Squared = 0.151)

[18] Further analysis is performed with gender of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 7)**

7.3.4 Accounting Firm of Auditor Participants

In this study, a code of 5 was assigned to the Big 4 firms. Non-Big 4 firms with international presence and non-Big 4 firms with a national presence were coded as 4 and 3, respectively. The regional and local accounting firms were coded as 2 and 1, respectively. The results show the interaction effect between the profit-sharing schemes variable and client flexibility variable is marginally significant (F=3.186, p=0.082, two-tailed) at a 95% confidence. The following Table 7.9 shows the ANOVA results:

Table 7.9 Accounting Firm[19] of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.148	0.094
Intercept	1	20.318	0.000
Accounting firm	1	0.021	**0.884**
Profit-sharing schemes (PS)	1	1.534	0.223
Client Flexibility (CF)	1	2.189	0.147
PS*CF	1	3.186	0.082
Error	38		
Total	43		
Corrected Total	42		

R Squared = 0.184 (Adjusted R Squared = 0.099)

[19] Further analysis is performed with audit firms of auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 7)**

7.3.5 Frequency of Resolving Audit Difference

The frequency of resolving audit differences can be viewed as the negotiation experience of auditors. In this study, auditor participants who very frequently resolve audit differences were assigned a code of 5 followed by a code of 4 for auditor participants who frequently resolve audit differences. Auditor participants who resolve audit differences occasionally, rarely, and very rarely were coded as 3, 2 and 1, respectively. The results show the interaction effect between the profit-sharing scheme variable and the client flexibility variable is significant (F=5.011, p=0.031, two-tailed) at a 95% confidence level. The following Table 7.10 shows the ANOVA results:

Table 7.10 Frequency of Resolving Audit Difference[20] of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	4	2.737	0.043
Intercept	1	1.934	0.172
Resolve Audit Difference	1	1.943	**0.171**
Profit-sharing schemes (PS)	1	2.409	0.129
Client Flexibility (CF)	1	2.595	0.115
PS*CF	1	5.011	0.031
Error	38		
Total	43		
Corrected Total	42		

R Squared = 0.224 (Adjusted R Squared = 0.142)

The robustness tests reveal that the results for the main hypotheses are not entirely affected by the inclusion of covariates. It is to be noted that p-values (one-tailed) were reported for the purpose of hypotheses testing. For covariate analyses, all the p-values reported are two-tailed.

[20] Further analysis is performed with frequency of resolving audit differences by auditors as the third independent variable to examine whether there is any interaction effect with two main independent variables **(see Appendix 7)**

It can be said that the hypotheses are supported at approximately the same level of significance regardless of which covariate was used.

7.4 Summary

To conclude, the ANOVA results reveal auditors' concessionary behaviour in a negotiation setting. Furthermore, the results also show that there is a significant change in auditors' concessionary mindset in the negotiation phase. This concessionary behaviour provides evidence that certain situational demands (e.g., profit-sharing schemes, client flexibility) may prevent auditors from acting in a professional manner, and their behaviour is subject to violation of the "reasonableness constraint" criterion. A summary of the hypotheses testing results is provided in Table 7.11.

Table 7.11 Summary of Hypotheses

Hypothesis	Hypothesis Statement	Extent of Support
H4	Ceteris paribus, auditors in the divisional profit-sharing scheme conditions, will record a smaller allowance for obsolete inventory than auditors in the firm-wide profit-sharing scheme conditions in a simulated negotiation setting.	Marginally Supported
H5	Ceteris paribus, auditors in inflexible client conditions, will record a smaller allowance for obsolete inventory than auditors in the flexible client condition in a simulated negotiation setting.	Marginally Supported
H6	Ceteris paribus, client inflexibility has a smaller downward effect on the magnitude of recording allowance for obsolete inventory when auditors are in the firm-wide scheme condition than when auditors are in the divisional scheme condition in a simulated negotiation setting.	Not Supported

CHAPTER EIGHT

CONCLUSION

8.0 Introduction

This thesis consists of two experimental studies examining the behaviour of experienced auditors in an identical negotiation setting. Both the studies use a case-based questionnaire method to investigate the behaviour of experienced auditors from the US. This thesis addresses the following research questions in the auditor-client negotiation literature:

(a) What are the effects of auditors' performance-based profit-sharing schemes and client pressure on auditors' mindset in the pre-negotiation phase?

(b) What are the effects of performance-based profit-sharing schemes and client flexibility on auditors' behaviour in a simulated negotiation phase?

(c) Whether auditors' pre-negotiation mindset will mirror or change in a simulated negotiation stage?

(d) Whether auditors' personality trait of social value orientation have an impact in a simulated negotiation phase.

This chapter summarises the main findings from the two experiments in this thesis and discusses the implications, limitations, and avenues for future research. Section 8.1 discusses the major findings of the two studies. Section 8.2 highlights the contributions and practical implications of this thesis. Section 8.3 discusses the limitations of both studies and provides directions for future research.

8.1 Main Findings of the Thesis

8.1.1 Pre-negotiation Phase - Study One

Study One examines the impact of profit-sharing schemes and client pressure on auditors' proposed allowance for obsolete inventory in a pre-negotiation phase. In the experiment, the key contextual factors of the client were held constant. The client's position regarding the proposed allowance (i.e., $2,000,000) was also held constant. The results highlight the concession-making mindsets of experienced auditors in all four experimental conditions. It implies that there is a tendency among experienced auditors to partially waive audit adjustments and satisfy the expectations of client management. Study One tests the theory of motivated reasoning to explain auditors' concession-making behaviour in a pre-negotiation phase. Consistent with prior auditing studies, the finding of Study One also shows that experienced auditors act as motivated reasoners to accept the client's preferred accounting treatments.

In the study by Koch and Salterio (2017), the authors argued it is true that there is a tendency among auditors to move towards clients' preferred outcomes, but their behaviour is subject to the "reasonableness constraint" criterion. The authors suggested auditors may not accede to clients' demands if their professional image as an independent arbiter of GAAP is threatened. Similarly, this experiment argues that the materiality threshold chosen by auditors will be a yardstick for the reasonableness constraint criteria and act as a professional boundary for auditors. There is an expectation that the auditor participant will accommodate the client's preferred allowance for obsolete inventory by waiving the audit adjustment, but that waived adjustment will not breach their chosen materiality threshold. The results of Study One confirm that expectation but the results also show a considerable minority of participants breached the materiality standard. The results show that auditor participants are willing to partially waive the proposed audit adjustment and move towards clients' preferred allowance to be reported in the clients' financial statements. Specifically, the results highlight that the allowance for obsolete inventory was lowest for the divisional scheme and explicit pressure condition and highest for the firm-wide scheme and implicit pressure condition. Furthermore, the findings highlight that even experienced auditors are prone to breach the professional boundary and acquiesce to specific demands from clients under the divisional scheme and explicit pressure condition.

In the experiment, an audit scenario was simulated where the client explicitly pressured auditor participants to waive the proposed audit adjustment. In reality, the auditor participants would not face any adverse financial consequences (i.e., losing a listed client) if they are not willing to waive the proposed audit adjustment, that is, concede from their initial proposed allowance for obsolete inventory. The results indicate, even though the experimental questionnaires elicit real scenario, auditor participants in Study One had no reason to exhibit their concessionary mindsets. The theory of motivated reasoning suggests that participants will be unable to detach themselves from their assigned roles as auditors in making their judgements. The results highlight that the regulatory measures may be inadequate to completely restrain auditors from adopting a self-interested goal in response to client demands. The findings suggest compensating audit partners from a large (i.e., firm-wide) profit pool may mitigate client pressure to a certain extent.

8.1.2 Simulated Negotiation Phase - Study Two

Study Two relies on a pre-programmed computer to simulate an "actual" negotiation environment to re-examine the impact of profit-sharing schemes on auditors' behaviour. In this experiment, auditors negotiate with a pre-programmed client. In addition to the manipulation statements on client flexibility, the program conditions were also incorporated to reflect the client's flexible and inflexible attitude towards the recording of an audit adjustment. The results show the main effect of the independent variables; profit-sharing schemes and client flexibility marginally impact auditors' negotiated outcomes. However, the interaction between those two variables is statistically significant. The simple main effect analysis shows the divisional scheme variable affects client flexibility and vice-versa.

The results of this study also show auditors' concessionary mindset observed in the pre-negotiation phase have changed significantly in a simulated negotiation environment. Specifically, the concession-making behaviour by auditors in all four experimental conditions has increased. Furthermore, auditor participants on average breached their chosen materiality threshold in all four conditions suggesting the financial statements might remain materially misstated subsequent to negotiation. The results of this study provide evidence these two factors may influence experienced auditors to violate the reasonableness criterion even if there is a possibility that their professional image may be questionable in the future.

Study Two also investigates whether the individual personal characteristics of auditors have any impact on their behaviour to adopt a self-interested goal to satisfy the demands of clients in the negotiation phase. In particular, this study investigates whether social value orientation (SVO) plays a role in the "relative sensitivity of auditors to violations of the reasonableness constraint" criterion. The results did not show any statistically significant impact.

8.2 Contributions and Implications

The main theoretical and practical contributions are summarised below:

8.2.1 Theoretical Contributions – Study One

First, Study One extends prior research on auditor client negotiation by providing evidence that performance-based profit-sharing schemes influence the behaviour of auditors in a pre-negotiation context. The findings suggest that auditors act as motivated reasoners due to the influence of an economic (i.e., profit-sharing scheme) factor. In this regard, the first experiment brings richness to the theoretical discussion on motivated reasoning that there is a tendency among experienced auditors to adopt self-interested goals to lower proposed audit adjustments.

Second, Study One advances prior research on auditor client negotiation by providing additional evidence that client pressure influences the behaviour of auditors in a pre-negotiation context, even in the current regulatory regime (i.e., post-SOX era). Specifically, the results are consistent with the findings of prior studies (Hatfield et al., 2011; Koch & Salterio, 2017). The findings also confirm the claim by Moore et al. (2006) that SOX reforms may be inadequate to completely prevent auditors from adopting a self-interested goal in response to client demands.

Third, Study One contributes to negotiation research in auditing by providing a discussion on the professional boundary viewed in the light of the reasonableness constraint criterion. The results of Study One also show that the professional boundary may be subject to the violation of reasonableness constraint criteria under certain circumstances.

8.2.2 Theoretical Contributions - Study Two

First, Study Two advances the auditor-client negotiation literature by providing evidence that a client characteristic (i.e., flexibility) influenced the behaviour of experienced auditor participants. Despite professional constraints and regulatory oversight, the results highlight those experienced auditors, on average, might breach materiality thresholds under certain circumstances even in the current auditing environment. The findings confirm that the prediction by Gibbins et al. (2010) that financial statements may remain materially misstated after negotiation. The results also provide evidence against the statements made by Ng and Tan (2003) and Bame-Aldred and Kida (2007) that auditors are less likely to move from their initial positions than other negotiators during the negotiation process. The findings of the study show that the interaction of contextual factors during negotiations, such as profit-sharing schemes and client flexibility may bring a significant change in the pre-negotiation mindsets of experienced auditors.

Second, in a prior study by Bennett et al. (2015), the authors mentioned that auditors do not believe they "negotiate" with the client rather than determine the "correct number" and insist the client records those audit adjustments. This thesis concurs with the statement that auditors do not need to negotiate with clients because they already have determined the correct number in their minds. In the second experiment, the results show that nearly 56% of participants did not choose to negotiate with the client. It suggests that the auditor participants have already made up their minds before negotiating with the client. However, the findings suggest that auditors' pre-determined "correct number" may change significantly. That is, the number may move significantly closer towards clients' preferred accounting estimate in the negotiation phase. Therefore, the findings also contribute to the auditing literature by providing evidence that the pre-negotiation mindset of auditors is significantly changed in a negotiated setting.

8.2.2 Overall Practical Contributions

Study One has important implications for practice. The findings of the study suggest that accounting firms should "uncouple" the association between audit partners' variable compensation components (e.g., performance bonuses) with client loss measures. This uncoupling may provide greater insulation to audit partners from client pressure. The accounting firms with small (i.e., divisional) profit pool arrangements may implement additional safeguards when designing performance-based compensation for audit partners.

Prior research has indicated that only 28 percent of audit partners receive any formal training on negotiation (Hatfield et al., 2010). Notwithstanding regulatory measures, findings from Study One and Study Two will alert accounting firms of how contextual factors may differentially impact the behaviour of auditors in both a pre-negotiation and a negotiation context. The findings of both studies may equip accounting firms with relevant information to design a formal development program for audit partners to train themselves for any future negotiations.

It is known that standard setters are aware of disagreements between auditors and clients, and the related discussions are important in improving audit quality (ISA No. 450). Auditors, especially audit partners, are concerned with both audit quality and maintaining a cordial relationship with the client. The results will raise awareness among standard setters about the influence of client pressure, client characteristics, and economic (i.e., financial) incentives on accounting numbers in a pre-negotiation and negotiation context. Both studies support the discussion by the IAASB (2014) that financial incentives should not be allowed to impair audit quality. There is the opportunity for standard setters to revise their guidance or update their policies regarding performance-based compensation given to audit partners.

8.3 Limitations and Future Research

There are a number of limitations and avenues for future research of the thesis.

First, both studies focus only on one dimension of profit-sharing schemes, that is, client retention and generation of future revenue. In audit practice, the performance-based profit-sharing schemes of audit partners are based on various parameters, for example, leadership, people development, operational excellence, and client service (Coram & Robinson, 2017).

Second, any inferences from the results of Study One and Study Two should be made with reasonable caution as there is a potential issue with the manipulation question on the performance-based profit-sharing scheme variable. This is because the performance bonus was “make-believe” (Chow 1983; p. 673) that is, no actual bonus payment would be paid.

Third, the manipulation for the profit-sharing scheme variable may induce artificial demand effects, but an attempt was made to minimise artificial demand effects by emphasising to participants before they commenced their tasks that there was no right or wrong answer. Furthermore, the participants are experienced auditors (i.e., audit managers and above) as Bamber (1983, p. 404) stated, “audit managers are experienced and successful professionals who have little motivation for providing misleading responses and are unlikely to be intimidated by the experimental task.”

Fourth, experiments are generally well-suited to test theories rather than simulate reality. That is why both studies in this thesis follow the *sine qua non* of experimentation to alter two factors at a time while controlling for other factors that could complicate causal inferences. In practice, the decision to waive or record audit adjustments also depends on other factors such as assessment of engagement risk and deadline of the engagement.

Fifth, this thesis did not investigate the role of the audit committee in an auditor-client negotiation setting. In the current institutional arrangement, audit committees are entrusted to hire and pay auditors and also resolve disputes between auditors and client management. Future researchers may investigate the role of audit committee members in auditor-client negotiation settings. It will enrich the negotiation literature in auditing if researchers can design experiments that capture triadic interactions between auditors, members of the audit committee, and client management.

Sixth, in Study One, auditor subjects did not negotiate with a client over the proposed audit adjustment, although we know the final amount reported in the financial statements by auditors is the negotiated outcome.

Lastly, care should be taken when drawing inferences from the results of Study Two because of the mechanistic nature of simulated negotiation. This experiment partially captures the richness of auditor-client negotiation in practice. It is because this experiment is limited by the fact that the role of client management is fixed by design. Future research could investigate whether auditors’ pre-negotiation behaviour will change in the negotiation phase when auditors negotiate with a real client. The negotiation with a real client may be either face-to-face or through a computer-mediated communication mechanism. Auditors are increasingly relying on computer-mediated communication (CMC) with clients (Baltes, Dickson, Sherman, Bauer, & LaGanke, 2002; Brazel, Agoglia, & Hatfield, 2004). For example, social presence theory predicts the degree to which the communication mode indicates another person is “present” affects individual behaviour (Short, Williams, & Christie, 1976). It is expected the extent to which the social behaviour (i.e., negotiated outcome with a simulated CFO) corresponds with actual behaviour depends on whether the environment suppresses or reinforces the social presence necessary to reflect actual behaviour. Future research may specifically design experiments that employ face-to-face interactions between auditors and client management. The reason is prior studies (Bazerman, Curhan, Moore, & Valley, 2000; Bennett & Hatfield, 2018) observed that face-to-face interactions maximise “social presence” more than computer-mediated (e.g., email-based) interactions.

Other potential future research avenues include:
The two experimental studies in the thesis did not manipulate the audit environment (i.e., pre-SOX and post-SOX). Future studies could investigate whether SOX regulations influence the relation between auditors’ performance-based profit-sharing schemes and other variables (i.e., client pressure and client flexibility).

Future studies could investigate whether gender affects auditors’ behaviour in negotiation settings because prior research has shown under certain situations, gender affects negotiation behaviour (Barron, 2003; Flynn & Ames, 2006). In the thesis, Study One did not find any effect of gender on auditors’ pre-negotiation mindset. Moreover, Study Two also did not find any impact of gender on auditors’ negotiated outcome. It may be because the participants in both studies are primarily male (e.g., 64% in Study One and 74% in Study Two).

Future studies could employ confederates (representing client management) similar to prior studies (Bennett & Hatfield, 2013, 2018; Saiewitz & Kida, 2018) to examine auditors’ behaviour. However, it is to be acknowledged that confederates act on behalf of researchers, and therefore, the role of confederates is scripted beforehand. Still, the nature of the experiment will be far richer than the experiment involving computer simulation. Another fruitful area of auditor-client negotiation research would be to incorporate experimental economic designs that often examine multiple parties (e.g., auditor, client management) at the same time rather than holding one party constant (Kachelmeier, 2018).

Besides, a future study may experimentally investigate the timing of pressure during auditor-client negotiation. For example, an explicit (implicit) pressure exerted by the client at the beginning (end) of the negotiation may have a differential effect than explicit (implicit) pressure exerted at the end (beginning).

Notwithstanding the aforementioned limitations, this thesis has tested empirical models (please see Figure 3.2 and Figure 3.3) on auditors' decisions in a negotiation setting. The findings of this thesis have advanced the existing knowledge on audit negotiation literature by examining the effects of environmental factors such as client pressure and client flexibility on auditors' decisions relating to the recording of an audit adjustment in the client's financial statements. Furthermore, the findings of this thesis extend the contemporary research on auditor client negotiation by providing evidence that an economic factor, such as performance-based profit-sharing schemes, can influence the behaviour of auditors.

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Appendix 1

Financial Information for Study One and Study Two*

	Unaudited 31st Dec 2018 USD ('000)	**Audited 31st Dec 2017 USD ('000)**
Net sales	495,000	490,600
Cost of sales	280,660	279,800
Gross profit	**214,340**	**210,800**
Operating expenses	145,000	145,000
Amortization of intangibles	600	1,200
General and Administrative	18,340	18,040
Total operating expenses	**163,940**	**164,240**
Operating income	50,400	46,560
Interest expense	(2,100)	(1,100)
Interest income	1,200	3,400
Income before income tax	**49,500**	**48,860**

Balance sheet (Extract)		
	Unaudited 31st Dec 2018 USD ('000)	**Audited 31st Dec 2017 USD ('000)**
Merchandise inventories	40,000	20,600
Short-term borrowings	90,700	10,200
Long-term borrowings	130,300	115,300

***Note:** The financial year-end was changed to 31st December 2018 and 31st December 2019 for audited and unaudited financial statements, respectively.

Appendix 2

Divisional scheme and Explicit pressure

This is the cover letter for the auditor participants

Dear Participant,

We are writing to seek your assistance in an international research project. This research aims to gain an insight on auditors' decision on a proposed audit adjustment.

In the scenario presented, you will review the information given for an audit firm and a client. You are requested to make decisions by answering the questions that will follow the scenario. **There are no correct answers because the researcher is solely interested in your opinion.**

This research takes the following structure:
Part 1 describes the scenario
Part 2 contains decision questions
Part 3 contains demographic questions

This survey will take approximately 15 minutes to complete. Kindly note that completion of this survey will be taken as your consent to participate.

Your responses will remain completely anonymous as the survey does not require any identification of participant information. Please be assured that the data collected will only be used by the researchers for this research will not be distributed to third parties.

Thank you for your willingness to participate in this research project.

Screening Questions

1) Please select your current profession.

- ◯ Internal Auditor
- ◯ Tax Accountant
- ◯ Financial Accountant
- ◯ External Auditor
- ◯ Management Accountant
- ◯ Other

2) Please select your actual position as an external auditor at your firm.

- ◯ Partner
- ◯ Director
- ◯ Senior Manager
- ◯ Manager
- ◯ Junior Auditor

3) How many years of external audit experience do you have?

- ◯ 10 or more
- ◯ 7-9
- ◯ 4-6
- ◯ 0-3

Part 1

Imagine you are a partner in a local office of a highly reputed middle tier accounting firm with offices in all of the capital cities across the US. You are in charge of the current year audit of a hypothetical publicly listed company Highpoint Electronics Incorporated (HEI). The company is incorporated and domiciled in the US.

Information about the accounting firm

Your firm is subject to annual inspection by the regulatory authority. Your firm (and individuals) are registered for peer review by the professional body every three years. Moreover, in your firm, all the publicly listed engagements are subject to concurrent partner review. The concurrent partner for this engagement is a very senior audit partner and highly experienced in manufacturing industry audits. Your firm must complete and submit the 'Form AP' for all public engagements to the regulatory body.

Your team consists of an audit manager, two audit seniors and two junior auditors. The team conducting the audit of Highpoint Electronics under your supervision is suitably qualified, competent and has sufficient experience to perform this engagement efficiently and effectively.

Information about the compensation structure of audit partners

The Highpoint is one of your office's largest clients based on the number of billable hours that are generated from audit services and contributes significantly to total revenue derived from audit fees at the local office.

The compensation structure in your firm includes a profit-sharing method. The profits are distributed using a hybrid model of a fixed profit salary and a performance bonus. It is the policy of your firm that all audit partners' bonus is tied to the financial performance of your local office (divisional profits). Your bonus is calculated by the office managing partner from a profit pool based on the divisional profits.

Information about Highpoint Electronics Incorporated

The company is a large well-established electronic gadgets manufacturer that sells gadgets to retail stores across the US. The company operates in an extremely volatile business environment due to the rapid advancement in technology. There is possibility that the demand and prices of Highpoint products will be considerably reduced with the availability of new improved products and associated price reductions in competitors' price.

Highpoint's board of directors take an active interest in the day to day working of the company and its performance. The chief financial officer (CFO) is professionally qualified with prior audit experience. The internal controls of the company are sound and can be relied upon. The audit committee is considered strong and asks many probing questions on accounting decisions.

Information about relationship between accounting firm and Highpoint Electronics

Your firm has audited Highpoint Electronics for the past three years. In prior years, the CFO agreed to most of the audit adjustments, and as a result, unqualified audit opinions were issued. In prior years, the CFO and accounting staff cooperated with the audit engagement team. You and your team established a good working relationship with the CFO and the accounting staff of Highpoint Electronics.

Information about current year audit issue

During the prior year audit, you were aware that several competitors were conducting research that could make one of the Highpoint's products technologically obsolete. However, the competitors' research was at an early stage at that time. From the previous year, audit file you noticed Highpoint Electronics was in merger discussion with a competitor company. Last year, the merger discussion was at a preliminary stage.

In the current year, the audit manager informed you that based on discussions with the Highpoint's sales manager; the company is facing intense competition because one of the Highpoint's competitors introduced a product line that seems technologically superior to, and less expensive than, similar products currently in Highpoint's inventory. The competitor's new product is likely to reduce the demand and sales prices for similar products currently in Highpoint's inventory. You understand that it is likely some of this inventory may be sold at lower prices (potentially below cost) and that some of this inventory may never be sold.

You also learned from your team that Highpoint already started work on developing a replacement product but it at a very early stage. Moreover, your engagement manager informed you that Highpoint Electronics is in a merger discussion reached a delicate stage.

During the current year audit of the significant estimates included in 2018 financial statements, your team found one discrepancy between your estimate and management. The discrepancy relates to the estimation for the allowance for obsolete inventory.

Based on the sales team's most current assessment of product sales, Highpoint has decided that an inventory obsolescence allowance of $2,000,000 is appropriate for the current year financial statements.

The engagement team under your supervision gathered additional evidence and developed an independent estimate. Based on this information, you and your team believe that the allowance for obsolete inventory should be increased to $7,000,000 for the financial statements as of, 31/12/2018.

In your opinion, Highpoint Electronic's current pre-tax income is unacceptable, and an audit adjustment is required to reduce pre-tax income. You, the partner in charge asked your audit manager to inform the CFO that the following adjusting entry is proposed:

Dr Cost of sales $5,000,000
    Cr Allowance for obsolete inventory $5,000,000

The audit manager informed you that the CFO pointed out the difference in valuation of inventory is due to professional judgement. Based on your discussion with your audit manager, you understood that the CFO suggested to your audit manager that your firm should waive the adjustment in the current year. The CFO told your audit manager that your audit firm should provide Highpoint with the benefit of the doubt for any judgement calls this year given their long relationship.

The CFO told your audit manager that Highpoint would adjust for any clear-cut errors. However, beyond that, any adjustment is not acceptable given the delicate stage that the merger discussions are at. The merger might not go ahead if there were adjustments made to the financial statements that reduce the pre-tax income. The CFO told your audit manager that a successful merger meant your audit firm would likely continue to be the auditor of the merged firm for a considerably higher fee. The CFO also pointed out that if your firm reduces the pre-tax income, the management of Highpoint would likely appoint a new auditor in the next year.

You, the partner in charge is planning to meet the CFO to discuss the audit adjustment. Before you meet the CFO, your informed decision is requested on the following matters.

Part 2

4) Indicate to what extent you agree or disagree that your performance bonus depends on the divisional profits?

- ◯ Strongly agree
- ◯ Agree
- ◯ Somewhat agree
- ◯ Neither agree nor disagree
- ◯ Somewhat disagree
- ◯ Disagree
- ◯ Strongly disagree

5) Indicate to what extent you believe that your performance bonus depends on this audit engagement?

- ◯ To a great extent
- ◯ Somewhat
- ◯ Very little
- ◯ Not at all

6) Indicate to what extent you agree or disagree that the CFO is attempting to exert tremendous pressure on your audit manager in this situation?

- ◯ Strongly agree
- ◯ Agree
- ◯ Somewhat agree
- ◯ Neither agree nor disagree
- ◯ Somewhat disagree
- ◯ Disagree

○ Strongly disagree

7) Indicate to what extent you agree or disagree that you are required to reduce Highpoint's pre-tax income under the generally accepted accounting principles (GAAP)?

○ Strongly agree

○ Agree

○ Somewhat agree

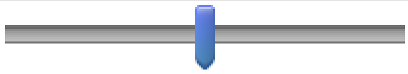
○ Neither agree nor disagree

○ Somewhat disagree

○ Disagree

○ Strongly disagree

8) What would be the minimum allowance for obsolete inventory you would be willing to accept and give an unqualified audit opinion?

Highpoint Electronics estimate $2,000,000	Audit firm estimate $7,000,000
Minimum allowance ($ in millions)	

9) What is your level of planning materiality for this engagement?

○ 5% of pre-tax profit (i.e., $2,475,000)

○ Other please specify ____

Part 3

Demographic Information

10) What is your gender?

- ◯ Male
- ◯ Female

11) Which accounting firm are you currently employed?

- ◯ Big 4
- ◯ Non-Big 4 with international presence
- ◯ Non-Big 4 with national presence
- ◯ Regional
- ◯ Local

12) How often do you resolve audit differences?

- ◯ Very frequently
- ◯ Frequently
- ◯ Occasionally
- ◯ Rarely
- ◯ Very rarely
- ◯ Never

Appendix 3

Firm-wide scheme and Implicit pressure

This is the cover letter for the auditor participants

Dear Participant,

We are writing to seek your assistance in an international research project. This research aims to gain an insight on auditors' decision on a proposed audit adjustment.

In the scenario presented, you will review the information given for an audit firm and a client. You are requested to make decisions by answering the questions that will follow the scenario. **There are no correct answers because the researcher is solely interested in your opinion.**

This research takes the following structure:
Part 1 describes the scenario
Part 2 contains decision questions
Part 3 contains demographic questions

This survey will take approximately 15 minutes to complete. Kindly note that completion of this survey will be taken as your consent to participate.

Your responses will remain completely anonymous as the survey does not require any identification of participant information. Please be assured that the data collected will only be used by the researchers for this research will not be distributed to third parties.

Thank you for your willingness to participate in this research project.

Screening Questions

1) Please select your current profession.

- ◯ Internal Auditor
- ◯ Tax Accountant
- ◯ Financial Accountant
- ◯ External Auditor
- ◯ Management Accountant
- ◯ Other

2) Please select your actual position as an external auditor at your firm.

- ◯ Partner
- ◯ Director
- ◯ Senior Manager
- ◯ Manager
- ◯ Junior Auditor

3) How many years of external audit experience do you have?

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Part 1

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Information about the accounting firm
Your firm is subject to annual inspection by the regulatory authority. Your firm (and individuals) are registered for peer review by the professional body every three years. Moreover, in your firm, all the publicly listed engagements are subject to concurrent partner review. The concurrent partner for this engagement is a very senior audit partner and highly experienced in manufacturing industry audits. Your firm must complete and submit the 'Form AP' for all public engagements to the regulatory body.

Your team consists of an audit manager, two audit seniors and two audit juniors. The team conducting the audit of Highpoint Electronics under your supervision is suitably qualified, competent and has sufficient experience to perform this engagement efficiently and effectively.

Information about the compensation structure of audit partners
The Highpoint is one of your office's largest clients based on the number of billable hours that are generated from audit services and contributes significantly to total revenue derived from audit fees at the local office.

The compensation structure in your firm includes a profit-sharing method. The profits are distributed using a hybrid model of a fixed salary and a performance bonus. It is the policy of your firm that all audit partners' bonus is tied to the financial performance of your firm at the national level (i.e., firm-wide profits). Your bonus is calculated by the office managing partner from a profit pool based on the overall firm-wide profits.

Information about Highpoint Electronics Incorporated
The company is a large well-established electronic gadgets manufacturer that sells gadgets to retail stores across the US. The company operates in an extremely volatile business environment due to the rapid advancement in technology. There is possibility that the demand and prices of Highpoint products will be considerably reduced with the availability of new improved products and associated price reductions in competitors' price.

Highpoint's board of directors take an active interest in the day to day working of the company and its performance. The chief financial officer (CFO) is professionally qualified with prior audit experience. The internal controls of the company are sound and can be relied upon. The audit committee is considered strong and asks many probing questions on accounting decisions.

Information about relationship between accounting firm and Highpoint Electronics
Your firm has audited Highpoint Electronics for the past three years. In prior years, the CFO agreed to most of the audit adjustments, and as a result, unqualified audit opinions were issued. In prior years, the CFO and accounting staff cooperated with the audit engagement team. You and your team established a good working relationship with the CFO and the accounting staff of Highpoint Electronics.

Information about current year audit issue
During the prior year audit, you were aware that several competitors were conducting research that could make one of the Highpoint's products technologically obsolete. However, the competitors' research was at an early stage at that time. From the previous year, audit file you noticed Highpoint Electronics was in merger discussion with a competitor company. Last year, the merger discussion was at a preliminary stage.

In the current year, the audit manager informed you that based on discussions with the Highpoint's sales manager; the company is facing intense competition because one of the Highpoint's competitors introduced a product line that seems technologically superior to, and less expensive than, similar products currently in Highpoint's inventory. The competitor's new product is likely to reduce the demand and sales prices for similar products currently in Highpoint's inventory. You understand that it is likely some of this inventory may be sold at lower prices (potentially below cost) and that some of this inventory may never be sold.

You also learned from your team that Highpoint already started work on developing a replacement product but it at a very early stage. Moreover, your engagement manager informed you that Highpoint Electronics is in a merger discussion reached a delicate stage.

During the current year audit of the significant estimates included in 2018 financial statements, your team found one discrepancy between your estimate and management. The discrepancy relates to the estimation for the allowance for obsolete inventory.

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The CFO told your audit manager that Highpoint would adjust for any clear-cut errors. However, beyond that, any adjustment may be evaluated in the light of the delicate stage that the merger discussions are at. The merger might not go ahead if there were adjustments made to the financial statements that reduce the pre-tax income. In your personal view, if the adjustment is waived, your audit firm may be likely to continue to be the auditor of the merged firm for a considerably higher fee. You have the impression that Highpoint management may appoint a new auditor in the next year if your firm reduces the pre-tax income.

You, the partner in charge is planning to meet the CFO to discuss the audit adjustment. Before you meet the CFO, your informed decision is requested on the following matters.

Part 2

4) Indicate to what extent you agree or disagree that your performance bonus depends on the firm-wide profits?

- ◯ Strongly agree
- ◯ Agree
- ◯ Somewhat agree
- ◯ Neither agree nor disagree
- ◯ Somewhat disagree
- ◯ Disagree
- ◯ Strongly disagree

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6) Indicate to what extent you agree or disagree that the CFO is attempting to exert tremendous pressure on your audit manager in this situation?

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- ◯ Agree
- ◯ Somewhat agree
- ◯ Neither agree nor disagree
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- ◯ Disagree

- Strongly disagree

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- Disagree
- Strongly disagree

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Highpoint Electronics estimate $2,000,000	Audit firm estimate $7,000,000
Minimum allowance ($ in millions)	

9) What is your level of planning materiality for this engagement?

- 5% of pre-tax profit (i.e., $2,475,000)
- Other please specify ____

Part 3

Demographic Information

10) What is your gender?

- ○ Male
- ○ Female

11) Which accounting firm are you currently employed?

- ○ Big 4
- ○ Non-Big 4 with international presence
- ○ Non-Big 4 with national presence
- ○ Regional
- ○ Local

12) How often do you resolve audit differences?

- ○ Very frequently
- ○ Frequently
- ○ Occasionally
- ○ Rarely
- ○ Very rarely
- ○ Never

Appendix 4

Divisional scheme and Flexible client

Dear Participant,

I am writing to seek your assistance in an international research project. This research aims to gain insights about auditors' decisions on proposed audit adjustments.

In the scenario presented, you will review the information given for an audit firm and a client. You are requested to make decisions by answering the questions that will follow the scenario.

There are no correct answers because the researchers are solely interested in your opinion.

This research takes the following structure:
Part 1 contains personality questions
Part 2 describes the scenario
Part 3 contains decision questions
Part 4 contains demographic questions

This survey will take approximately 20 minutes to complete. Kindly note that completion of this survey will be taken as your consent to participate.

Your responses will remain completely anonymous as the survey does not require any identification of participant information. Please be assured that the data collected will only be used by the researchers and will not be distributed to third parties.

Thank you for your willingness to participate in this research project.

Screening Questions

1) Please select your current profession.

- ◯ Internal Auditor
- ◯ Tax Accountant
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2) Please select your actual position as an external auditor at your firm.

- ◯ Partner
- ◯ Director
- ◯ Senior Manager
- ◯ Manager
- ◯ Junior Auditor

3) How many years of external audit experience do you have?

- ◯ 10 or more
- ◯ 7-9
- ◯ 4-6
- ◯ 0-3

Additional question not used as a screening question

4) Which assertion is **most** at risk when assessing the allowance for inventory obsolescence?

- ○ Existence
- ○ Completeness
- ○ Valuation
- ○ Rights

Social Value Orientation Questionnaire

Part 1

In this task, we ask you to imagine that you have been randomly paired with another person, whom we will refer to simply as the "Other". This "Other" person is someone you do not know and that you will not knowingly meet in the future. Both you and the "Other" person will be making choices by clicking either A, B or C.

Your own choices will produce points for both yourself and the "Other" person. Likewise, the "Other's" choice will produce points for him/her and for you. Every point has value: the more points you receive, the better for you, and the more points the "Other" receives, the better for him/her.

Here is an example of how this task works:

	A	B	C
You get	500	500	550
Other gets	100	500	300

In this example, if you chose A you would receive 500 points, and the "Other" would receive 100 points; if you chose B, you would receive 500 and the "Other" 500; and if you chose C, you would receive 550 points and the "Other" 300. So, you see that your choice influences both the number of points you receive and the number of points the "Other" receives.

Before you begin making choices, please keep in mind that there are no right and wrong answers - choose the option that you, for whatever reason, prefer most.

There are 9 choice situations, click either A, B or C depending on which column you prefer most:

Situation 1

A: You get 560 Other gets 300

B: You get 500 Other gets 500

C: You get 500 Other gets 100

Situation 2

A: You get 480 Other gets 80

B: You get 540 Other gets 280

C: You get 480 Other gets 480

Situation 3

A: You get 520 Other gets 520

B: You get 520 Other gets 120

C: You get 580 Other gets 320

Situation 4

A: You get 500 Other gets 100

B: You get 560 Other gets 300

C: You get 580 Other gets 490

Situation 5

A: You get 560 Other gets 300

B: You get 500 Other gets 500

C: You get 490 Other gets 90

Situation 6

A: You get 500 Other gets 500

B: You get 500 Other gets 100

C: You get 570 Other gets 300

Situation 7

A: You get 510 Other gets 510

B: You get 560 Other gets 300

C: You get 510 Other gets 110

Situation 8

A: You get 550 Other gets 300

B: You get 500 Other gets 100

C: You get 500 Other gets 500

Situation 9

A: You get 480 Other gets 100

B: You get 490 Other gets 490

C: You get 540 Other gets 300

Part 2
Imagine you are a partner in a local office of a highly reputed middle-tier accounting firm with offices in all of the capital cities across the US. You are in charge of the current year audit of a hypothetical publicly listed company Highpoint Electronics Incorporated (HEI). The company is incorporated and domiciled in the US.

Information about the accounting firm
Your firm is subject to an annual inspection by the regulatory authority. Your firm (and individuals) are registered for peer review by the professional body every three years. Moreover, in your firm, all the publicly listed engagements are subject to concurrent partner review. The concurrent partner for this engagement is a very senior audit partner and highly experienced in manufacturing industry audits. Your firm must complete and submit the 'Form AP' for all public engagements to the regulatory body.

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The compensation structure in your firm includes a profit-sharing method. The profits are distributed using a hybrid model of a fixed profit salary and a performance bonus. It is the policy of your firm that all audit partners' bonus is tied to the financial performance of your local office (i.e., divisional profits). Your bonus is calculated by the office managing partner from a profit pool based on the divisional profits.

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The company is a large well-established electronic gadget manufacturer that sells gadgets to retail stores across the US. The company operates in an extremely volatile business environment due to the rapid advancement in technology. There is a possibility that the demand and prices of Highpoint products will be considerably reduced with the availability of new improved products and associated price reductions in competitors' price. Highpoint's board of directors take an active interest in the day to day working of the company and its performance. The chief financial officer (CFO) is professionally qualified with prior audit experience. The internal controls of the company are sound and can be relied upon. The audit committee is considered strong and asks many probing questions on accounting decisions.

Information about relationship between accounting firm and Highpoint Electronics
Your firm has audited Highpoint Electronics for the past three years. In prior years, the CFO agreed to most of the audit adjustments, and as a result, unqualified audit opinions were issued. In prior years, the CFO and accounting staff cooperated with the audit engagement

team. You and your team established a good working relationship with the CFO and the accounting staff of Highpoint Electronics.

Information about current year audit issue
During the prior year audit, you were aware that several competitors were conducting research that could make one of the Highpoint's products technologically obsolete. However, the competitors' research was at an early stage at that time. From the previous year, audit file you noticed Highpoint Electronics was in a merger discussion with a competitor company. Last year, the merger discussion was at a preliminary stage.

In the current year, the audit manager informed you that based on discussions with Highpoint's sales manager; the company is facing intense competition because one of their competitors introduced a product line that seems technologically superior to, and less expensive than, similar products currently in Highpoint's inventory. The competitor's new product is likely to reduce the demand and sales prices for similar products currently in Highpoint's inventory. You understand that it is likely some of this inventory may be sold at lower prices (potentially below cost) and that some of this inventory may never be sold.

You also learned from your team that Highpoint has already started work on developing a replacement product but it at a very early stage. Moreover, your engagement manager informed you that Highpoint Electronics' merger discussion has reached a delicate stage.

During the current year audit of the significant estimates included in 2019 financial statements, your team found one discrepancy between your estimate and management. The discrepancy relates to the estimation for the allowance for obsolete inventory.

Based on the sales team's most current assessment of product sales, Highpoint has decided that an inventory obsolescence allowance of $2,000,000 is appropriate for the current year financial statements.

The engagement team under your supervision gathered additional evidence and developed an independent estimate. Based on this information, you and your team believe that the allowance for obsolete inventory should be increased to $7,000,000 for the financial statements as of, 31/12/2019.

In your opinion, Highpoint Electronic's current pre-tax income is unacceptable, and an audit adjustment is required to reduce pre-tax income. You, the partner in charge asked your audit manager to inform the CFO that the following adjusting entry is proposed:

Dr Cost of sales $5,000,000
Cr Allowance for obsolete inventory $5,000,000

The audit manager informed you that the CFO pointed out the difference in valuation of inventory is due to professional judgement. Based on your discussion with your audit manager, you understood that the CFO suggested to your audit manager that your firm should waive the adjustment in the current year. The CFO told your audit manager that your audit firm should provide Highpoint with the benefit of the doubt for any judgement calls this year given their long relationship.

The CFO told your audit manager that Highpoint would adjust for any clear-cut errors. However, beyond that, any adjustment may be evaluated in the light of the delicate stage that the merger discussions are at. The merger might be adversely affected if there were adjustments made to the financial statements that reduce the pre-tax income.

You, the partner in charge had a preliminary telephone conversation with the CFO to understand the gravity of the issue.

You learned from the conversation that the CFO is not fully committed to the unaudited pre-tax income of $49,500,000. You believe that the CFO would accept some adjustments to the pre-tax income of $49,500,000. It seems the CFO is willing to "live with" a range of pre-tax income numbers.

Assume that you, the partner in charge, are now in the meeting with Highpoint's CFO to resolve the inventory issue.

Recall the following:

Highpoint's balance in the allowance for obsolete inventory is $2,000,000.

Your team's proposed balance for the allowance for obsolete inventory is $7,000,000.

You proposed the following journal entry:

Dr Cost of sales $5,000,000
Cr Allowance for obsolete inventory $5,000,000

Part 3

5) Indicate to what extent you agree or disagree that you are required to reduce Highpoint's pre-tax income under generally accepted accounting principles (GAAP)?

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree
- ○ Strongly disagree

6) Indicate to what extent you agree or disagree that your performance bonus depends on the divisional profits?

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree
- ○ Strongly disagree

7) Indicate to what extent you believe that your performance bonus depends on this audit engagement?

- ○ To a great extent
- ○ Somewhat
- ○ Very little
- ○ Not at all

8) Indicate how difficult it will be to move the CFO from his/her initial position of reportable pre-tax income of $49,500,000?

- ◯ Extremely difficult
- ◯ Difficult
- ◯ Somewhat difficult
- ◯ Neither difficult nor easy
- ◯ Somewhat easy
- ◯ Easy
- ◯ Extremely easy

Assume that you are now in the meeting with Highpoint's CFO to resolve the inventory issue. You may choose to agree or disagree with the CFO over a maximum of 5 rounds of interaction.

You must now decide how to proceed.

(Please indicate your decision by clicking on any one of the buttons below)

◯ Waive Adjustment: Accept the allowance of $2,000,000 currently in the financial statements

◯ Require Full Adjustment: Insist that Highpoint increase the allowance to $7,000,000

◯ Propose New Adjustment: Propose a new allowance somewhere between $2,000,000 and $7,000,000

The following messages would appear depending on the choice made by auditor participants.

(a) Waive Adjustment

CFO: I am extremely happy with your decision. I cherish our working relationship and look forward to appointing you as our auditor in the next year.

Please confirm by clicking "Yes" that you agree that the allowance of $2,000,000 is appropriate allowance to be reported in the financial statements.

(b) Require Full Adjustment

CFO: I am extremely unhappy with your decision. As I told you this difference is a matter of professional judgement, you should provide us with benefit of doubt. I would like to maintain our working relationship in future. I ask you to reconsider your decision.

Please confirm by clicking "Yes" that you agree that the allowance of $7,000,000 is appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

(**c) Propose New Adjustment**

Propose an allowance somewhere between $2,000,000 and $7,000,000

Your proposed allowance**: (Enter amount without comma)**

1st Round

CFO: I cannot accept your proposed allowance. I mentioned earlier it is a matter of professional judgment. I am expecting you will waive this adjustment. Here is my proposed allowance which can be considered appropriate.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ○ Yes
- ○ No

2nd Round

CFO: Still, I cannot accept your proposed allowance. This year you should provide us with the benefit of the doubt I am proposing another allowance which you can consider.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ◯ Yes
- ◯ No

3rd Round

CFO: I am not convinced with your proposed allowance. Because we have a good working relationship. I am proposing another allowance which I think is appropriate. Give us the benefit of doubt.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ◯ Yes
- ◯ No

4th Round

CFO: I am not so keen to increase the allowance. Our merger discussion will jeopardize if you reduce our pre-tax income any further. I think my proposed allowance is appropriate.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ◯ Yes
- ◯ No

5th Round

CFO: Seriously, you should think of waiving the adjustment. This is my final allowance. I cannot increase it any further. I would suggest you report this allowance and finalize the financial statements as quickly as possible. Before our merger deal, I would like to have the audited financial statements.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" refer to the next question.

Would you be willing to accept an allowance of $?

- ○ Yes
- ○ No

If you **clicked "No"** in the previous question, what is the final allowance for obsolete inventory, you as the engagement partner want to report in the financial statements?

[Your final allowance should be equal or less than your proposed allowance in the previous round].

10) Are you satisfied with the final allowance for obsolete inventory to be reported in the financial statements?

- ○ Yes
- ○ No

11) Would you issue a qualified audit opinion regarding allowance for obsolete inventory?

- ○ Yes
- ○ No

12) What is your level of planning materiality for this engagement?

- ○ 5% of pre-tax profit (i.e., $2,475,000)
- ○ Other please specify__________________________________

Part 4
Demographic Information

13) What is your gender?

- ○ Male
- ○ Female

14) Which accounting firm are you currently employed?

- ○ Big 4
- ○ Non-Big 4 with international presence
- ○ Non-Big 4 with national presence
- ○ Regional
- ○ Local

15) How often do you resolve audit differences?

- ○ Very frequently
- ○ Frequently
- ○ Occasionally
- ○ Rarely
- ○ Very rarely
- ○ Never

Appendix 5

Firm-wide scheme and Inflexible client

Dear Participant,

I am writing to seek your assistance in an international research project. This research aims to gain insights about auditors' decisions on proposed audit adjustments.

In the scenario presented, you will review the information given for an audit firm and a client. You are requested to make decisions by answering the questions that will follow the scenario.

There are no correct answers because the researchers are solely interested in your opinion.

This research takes the following structure:
Part 1 contains personality questions
Part 2 describes the scenario
Part 3 contains decision questions
Part 4 contains demographic questions

This survey will take approximately 20 minutes to complete. Kindly note that completion of this survey will be taken as your consent to participate.

Your responses will remain completely anonymous as the survey does not require any identification of participant information. Please be assured that the data collected will only be used by the researchers and will not be distributed to third parties.

Thank you for your willingness to participate in this research project.

Screening Questions

1) Please select your current profession.

- ◯ Internal Auditor
- ◯ Tax Accountant
- ◯ Financial Accountant
- ◯ External Auditor
- ◯ Management Accountant
- ◯ Other

2) Please select your actual position as an external auditor at your firm.

- ◯ Partner
- ◯ Director
- ◯ Senior Manager
- ◯ Manager
- ◯ Junior Auditor

3) How many years of external audit experience do you have?

- ◯ 10 or more
- ◯ 7-9
- ◯ 4-6
- ◯ 0-3

Additional question not used as a screening question

4) Which assertion is **most** at risk when assessing the allowance for inventory obsolescence?

- ◯ Existence
- ◯ Completeness
- ◯ Valuation
- ◯ Rights

Social Value Orientation Questionnaire

Part 1

In this task, we ask you to imagine that you have been randomly paired with another person, whom we will refer to simply as the "Other". This "Other" person is someone you do not know and that you will not knowingly meet in the future. Both you and the "Other" person will be making choices by clicking either A, B or C.

Your own choices will produce points for both yourself and the "Other" person. Likewise, the "Other's" choice will produce points for him/her and for you. Every point has value: the more points you receive, the better for you, and the more points the "Other" receives, the better for him/her.

Here is an example of how this task works:

	A	B	C
You get	500	500	550
Other gets	100	500	300

In this example, if you chose A you would receive 500 points, and the "Other" would receive 100 points; if you chose B, you would receive 500 and the "Other" 500; and if you chose C, you would receive 550 points and the "Other" 300. So, you see that your choice influences both the number of points you receive and the number of points the "Other" receives.

Before you begin making choices, please keep in mind that there are no right and wrong answers - choose the option that you, for whatever reason, prefer most.

There are 9 choice situations, click either A, B or C depending on which column you prefer most:

Situation 1

A: You get 560 Other gets 300

B: You get 500 Other gets 500

C: You get 500 Other gets 100

Situation 2

A: You get 480 Other gets 80

B: You get 540 Other gets 280

C: You get 480 Other gets 480

Situation 3

A: You get 520 Other gets 520

B: You get 520 Other gets 120

C: You get 580 Other gets 320

Situation 4

A: You get 500 Other gets 100

B: You get 560 Other gets 300

C: You get 580 Other gets 490

Situation 5

A: You get 560 Other gets 300

B: You get 500 Other gets 500

C: You get 490 Other gets 90

Situation 6

A: You get 500 Other gets 500

B: You get 500 Other gets 100

C: You get 570 Other gets 300

Situation 7

A: You get 510 Other gets 510

B: You get 560 Other gets 300

C: You get 510 Other gets 110

Situation 8

A: You get 550 Other gets 300

B: You get 500 Other gets 100

C: You get 500 Other gets 500

Situation 9

A: You get 480 Other gets 100

B: You get 490 Other gets 490

C: You get 540 Other gets 300

Part 2
Imagine you are a partner in a local office of a highly reputed middle-tier accounting firm with offices in all of the capital cities across the US. You are in charge of the current year audit of a hypothetical publicly listed company Highpoint Electronics Incorporated (HEI). The company is incorporated and domiciled in the US.

Information about the accounting firm
Your firm is subject to an annual inspection by the regulatory authority. Your firm (and individuals) are registered for peer review by the professional body every three years. Moreover, in your firm, all the publicly listed engagements are subject to concurrent partner review. The concurrent partner for this engagement is a very senior audit partner and highly experienced in manufacturing industry audits. Your firm must complete and submit the 'Form AP' for all public engagements to the regulatory body.

Your team consists of an audit manager, two audit seniors and two junior auditors. The team conducting the audit of Highpoint Electronics under your supervision is suitably qualified, competent and has sufficient experience to perform this engagement efficiently and effectively.

Information about the compensation structure of audit partners
Highpoint Electronics is one of your office's largest clients based on the number of billable hours that are generated from audit services and contributes significantly to total revenue derived from audit fees at the local office.

The compensation structure in your firm includes a profit-sharing method. The profits are distributed using a hybrid model of a fixed profit salary and a performance bonus. It is the policy of your firm that all audit partners' bonus is tied to the financial performance of your firm at the national level (i.e., firm-wide profits). Your bonus is calculated by the office managing partner from a profit pool based on the overall firm-wide profits.

Information about Highpoint Electronics Incorporated
The company is a large well-established electronic gadget manufacturer that sells gadgets to retail stores across the US. The company operates in an extremely volatile business environment due to the rapid advancement in technology. There is a possibility that the demand and prices of Highpoint products will be considerably reduced with the availability of new improved products and associated price reductions in competitors' price. Highpoint's board of directors take an active interest in the day to day working of the company and its performance. The chief financial officer (CFO) is professionally qualified with prior audit experience. The internal controls of the company are sound and can be relied upon. The audit committee is considered strong and asks many probing questions on accounting decisions.

Information about relationship between accounting firm and Highpoint Electronics
Your firm has audited Highpoint Electronics for the past three years. In prior years, the CFO

agreed to most of the audit adjustments, and as a result, unqualified audit opinions were issued. In prior years, the CFO and accounting staff cooperated with the audit engagement team. You and your team established a good working relationship with the CFO and the accounting staff of Highpoint Electronics.

Information about current year audit issue

During the prior year audit, you were aware that several competitors were conducting research that could make one of the Highpoint's products technologically obsolete. However, the competitors' research was at an early stage at that time. From the previous year, audit file you noticed Highpoint Electronics was in a merger discussion with a competitor company. Last year, the merger discussion was at a preliminary stage.

In the current year, the audit manager informed you that based on discussions with Highpoint's sales manager; the company is facing intense competition because one of their competitors introduced a product line that seems technologically superior to, and less expensive than, similar products currently in Highpoint's inventory. The competitor's new product is likely to reduce the demand and sales prices for similar products currently in Highpoint's inventory. You understand that it is likely some of this inventory may be sold at lower prices (potentially below cost) and that some of this inventory may never be sold.

You also learned from your team that Highpoint has already started work on developing a replacement product but it at a very early stage. Moreover, your engagement manager informed you that Highpoint Electronics' merger discussion has reached a delicate stage.

During the current year audit of the significant estimates included in 2019 financial statements, your team found one discrepancy between your estimate and management. The discrepancy relates to the estimation for the allowance for obsolete inventory.

Based on the sales team's most current assessment of product sales, Highpoint has decided that an inventory obsolescence allowance of $2,000,000 is appropriate for the current year financial statements.

The engagement team under your supervision gathered additional evidence and developed an independent estimate. Based on this information, you and your team believe that the allowance for obsolete inventory should be increased to $7,000,000 for the financial statements as of, 31/12/2019.

In your opinion, Highpoint Electronic's current pre-tax income is unacceptable, and an audit adjustment is required to reduce pre-tax income. You, the partner in charge asked your audit manager to inform the CFO that the following adjusting entry is proposed:

Dr Cost of sales $5,000,000
Cr Allowance for obsolete inventory $5,000,000

The audit manager informed you that the CFO pointed out the difference in valuation of inventory is due to professional judgement. Based on your discussion with your audit manager, you understood that the CFO suggested to your audit manager that your firm should waive the adjustment in the current year. The CFO told your audit manager that your audit firm should provide Highpoint with the benefit of the doubt for any judgement calls this year given their long relationship.

The CFO told your audit manager that Highpoint would adjust for any clear-cut errors. However, beyond that, any adjustment may be evaluated in the light of the delicate stage that the merger discussions are at. The merger might be adversely affected if there were adjustments made to the financial statements that reduce the pre-tax income.

Assume that you, the partner in charge, are now in the meeting with Highpoint's CFO to resolve the inventory issue.

Recall the following:

Highpoint's balance in the allowance for obsolete inventory is $2,000,000.

Your team's proposed balance for the allowance for obsolete inventory is $7,000,000.

You proposed the following journal entry:

Dr Cost of sales $5,000,000
Cr Allowance for obsolete inventory $5,000,000

You, the partner in charge had a preliminary telephone conversation with the CFO to understand the gravity of the issue.

You learned from the conversation that the CFO is firmly committed to the unaudited net income of $49,500,000. You believe that the CFO would not accept any adjustments to the pre-tax income of $49,500,000. It seems the CFO is not willing to "live with" a range of pre-tax income numbers.

Part 3

5) Indicate to what extent you agree or disagree that you are required to reduce Highpoint's pre-tax income under generally accepted accounting principles (GAAP)?

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

6) Indicate to what extent you agree or disagree that your performance bonus depends on the firm-wide profits?

- Strongly agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Strongly disagree

7) Indicate to what extent you believe that your performance bonus depends on this audit engagement?

- To a great extent
- Somewhat
- Very little
- Not at all

8) Indicate how difficult it will be to move the CFO from his/her initial position of reportable pre-tax income of $49,500,000?

- Extremely difficult
- Difficult
- Somewhat difficult
- Neither difficult nor easy
- Somewhat easy
- Easy
- Extremely easy

Assume that you are now in the meeting with Highpoint's CFO to resolve the inventory issue. You may choose to agree or disagree with the CFO over a maximum of 5 rounds of interaction.

You must now decide how to proceed.

(Please indicate your decision by clicking on any one of the buttons below)

- Waive Adjustment: Accept the allowance of $2,000,000 currently in the financial statements

- Require Full Adjustment: Insist that Highpoint increase the allowance to $7,000,000

- Propose New Adjustment: Propose a new allowance somewhere between $2,000,000 and $7,000,000

The following messages would appear depending on the choice made by auditor participants.

(a) Waive Adjustment

CFO: I am extremely happy with your decision. I cherish our working relationship and look forward to appointing you as our auditor in the next year.

Please confirm by clicking "Yes" that you agree that the allowance of $2,000,000 is appropriate allowance to be reported in the financial statements.

(b) Require Full Adjustment

CFO: I am extremely unhappy with your decision. As I told you this difference is a matter of professional judgement, you should provide us with benefit of doubt. I would like to maintain our working relationship in future. I ask you to reconsider your decision.

Please confirm by clicking "Yes" that you agree that the allowance of $7,000,000 is appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

(**c) Propose New Adjustment**

Propose an allowance somewhere between $2,000,000 and $7,000,000

Your proposed allowance**: (Enter amount without comma)**

1st Round

CFO: I cannot accept your proposed allowance. I mentioned earlier it is a matter of professional judgment. I am expecting you will waive this adjustment. Here is my proposed allowance which can be considered appropriate.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ○ Yes
- ○ No

2nd Round

CFO: Still, I cannot accept your proposed allowance. This year you should provide us with the benefit of the doubt I am proposing another allowance which you can consider.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ○ Yes
- ○ No

3rd Round

CFO: I am not convinced with your proposed allowance. Because we have a good working relationship. I am proposing another allowance which I think is appropriate. Give us the benefit of doubt.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ○ Yes
- ○ No

4th Round

CFO: I am not so keen to increase the allowance. Our merger discussion will jeopardize if you reduce our pre-tax income any further. I think my proposed allowance is appropriate.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" propose another allowance for obsolete inventory.

Would you be willing to accept an allowance of $?

- ○ Yes
- ○ No

5th Round

CFO: Seriously, you should think of waiving the adjustment. This is my final allowance. I cannot increase it any further. I would suggest you report this allowance and finalize the financial statements as quickly as possible. Before our merger deal, I would like to have the audited financial statements.

Please confirm by clicking "Yes" that you agree that the proposed allowance by CFO is the appropriate allowance to be reported in the financial statements.

If you click "No" refer to the next question.

Would you be willing to accept an allowance of $?

- ○ Yes
- ○ No

If you **clicked "No"** in the previous question, what is the final allowance for obsolete inventory, you as the engagement partner want to report in the financial statements?

[Your final allowance should be equal or less than your proposed allowance in the previous round].

10) Are you satisfied with the final allowance for obsolete inventory to be reported in the financial statements?

- ○ Yes
- ○ No

11) Would you issue a qualified audit opinion regarding allowance for obsolete inventory?

- ○ Yes
- ○ No

12) What is your level of planning materiality for this engagement?

- ○ 5% of pre-tax profit (i.e., $2,475,000)
- ○ Other please specify___________________________________

Part 4
Demographic Information

13) What is your gender?

- ○ Male
- ○ Female

14) Which accounting firm are you currently employed?

- ○ Big 4
- ○ Non-Big 4 with international presence
- ○ Non-Big 4 with national presence
- ○ Regional
- ○ Local

15) How often do you resolve audit differences?

- ○ Very frequently
- ○ Frequently
- ○ Occasionally
- ○ Rarely
- ○ Very rarely
- ○ Never

Appendix 6

Additional Analyses relating to Chapter 5: Demographic Variables are used as Third Independent Variable

Table 5.10 Position of Auditor Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	15	1.403	0.167
Intercept	1	1269.84	0.000
Position	3	0.132	**0.941**
Profit-sharing schemes (PS)	1	3.399	0.069
Client pressure (CP)	1	4.696	0.033
PS*CP	1	0.197	0.659
PS*Position	3	1.109	0.351
CP*Position	3	2.279	0.086
PS*CP*Position	3	0.099	0.960
Error	79		
Total	95		
Corrected Total	94		

R Squared = 0.210 (Adjusted R Squared = 0.060)

Appendix 6 (continued)

Table 5.11 Experience of Auditor Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	11	1.415	0.182
Intercept	1	1482.49	0.000
Experience	2	0.497	**0.610**
Profit-sharing schemes (PS)	1	2.095	0.152
Client pressure (CP)	1	4.856	0.030
PS*CP	1	0.635	0.428
PS*Experience	2	1.311	0.275
CP*Experience	2	0.874	0.421
PS*CP*Experience	2	0.887	0.416
Error	83		
Total	95		
Corrected Total	94		

R Squared = 0.158 (Adjusted R Squared = 0.046)

Appendix 6 (continued)

Table 5.12 Gender of Auditor Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	7	2.530	0.020
Intercept	1	1773.33	0.000
Gender	1	2.545	**0.114**
Profit-sharing schemes (PS)	1	2.154	0.146
Client pressure (CP)	1	5.465	0.022
PS*CP	1	0.188	0.666
PS*Gender	1	4.453	0.038
CP*Gender	1	0.957	0.331
PS*CP*Gender	1	0.481	0.490
Error	87		
Total	95		
Corrected Total	94		

R Squared = 0.169 (Adjusted R Squared = 0.102)

Appendix 6 (continued)

Table 5.13 Accounting Firm of Auditor Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	19	0.836	0.658
Intercept	1	1116.77	0.000
Accounting firm	4	0.835	**0.507**
Profit-sharing schemes (PS)	1	0.185	0.669
Client pressure (CP)	1	3.033	0.086
PS*CP	1	0.220	0.640
PS*Accounting firm	4	0.855	0.495
CP*Accounting firm	4	0.190	0.943
PS*CP*Accounting firm	4	0.200	0.937
Error	75		
Total	95		
Corrected Total	94		

R Squared = 0.175 (Adjusted R Squared = -0.034)

Appendix 6 (continued)

Table 5.14 Frequency of Resolving Audit Differences by Auditor Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	14	1.168	0.316
Intercept	1	496.809	0.000
Resolve audit differences	4	0.954	**0.437**
Profit-sharing schemes (PS)	1	2.185	0.143
Client pressure (CP)	1	4.323	0.041
PS*CP	1	0.373	0.543
PS*Resolve audit differences	2	0.351	0.705
CP*Resolve audit differences	2	0.116	0.891
PS*CP*Resolve audit differences	2	0.151	0.860
Error	80		
Total	95		
Corrected Total	94		

R Squared = 0.170 (Adjusted R Squared = 0.024)

Appendix 7

Additional Analyses relating to Chapter 7: Demographic Variables are used as Third Independent Variable

Table 7.12 Position of auditor participants

Source	df	F	p-value (two-tailed)
Corrected Model	13	1.402	0.217
Intercept	1	108.606	0.000
Position	3	0.500	**0.685**
Profit-sharing schemes (PS)	1	0.126	0.725
Client Flexibility (CF)	1	1.250	0.273
PS*CF	1	3.106	0.089
PS*Position	3	1.183	0.333
CF*Position	3	1.747	0.179
PS*CF*Position	1	0.784	0.383
Error	29		
Total	43		
Corrected Total	42		

R Squared = 0.386 (Adjusted R Squared = 0.111)

Appendix 7 (continued)

Table 7.13 Experience of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	11	1.000	0.468
Intercept	1	101.426	0.000
Experience	2	0.327	**0.723**
Profit-sharing schemes (PS)	1	0.423	0.520
Client Flexibility (CF)	1	2.676	0.112
PS*CF	1	3.268	0.080
PS*Experience	2	0.282	0.756
CF*Experience	2	0.888	0.422
PS*CF*Experience	2	0.571	0.571
Error	31		
Total	43		
Corrected Total	42		

R Squared = 0.262 (Adjusted R Squared = 0.000)

Appendix 7 (continued)

Table 7.14 Gender of Auditor Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	7	1.906	0.098
Intercept	1	95.227	0.000
Gender	1	1.922	**0.174**
Profit-sharing schemes (PS)	1	0.701	0.408
Client Flexibility (CF)	1	0.682	0.414
PS*CF	1	3.645	0.064
PS*Gender	1	0.704	0.407
CF*Gender	1	1.050	0.313
PS*CF*Gender	1	0.254	0.617
Error	35		
Total	43		
Corrected Total	42		

R Squared = 0.276 (Adjusted R Squared = 0.131)

Appendix 7 (continued)

Table 7.15 Accounting Firm of Auditor Participants

Source	df	F	p-value (two-tailed)
Corrected Model	15	1.131	0.378
Intercept	1	87.710	0.000
Accounting Firm	4	0.812	**0.529**
Profit-sharing schemes (PS)	1	0.821	0.373
Client Flexibility (CF)	1	0.950	0.338
PS*CF	1	4.320	0.047
PS*Accounting Firm	4	0.758	0.561
CF*Accounting Firm	4	0.389	0.815
PS*CF*Accounting Firm	0	-	-
Error	27		
Total	43		
Corrected Total	42		

R Squared = 0.386 (Adjusted R Squared = 0.045)

Appendix 7 (continued)

Table 7.16 Resolve Audit Differences by Audit Participants

Source	**df**	**F**	**p-value (two-tailed)**
Corrected Model	13	1.209	0.322
Intercept	1	50.778	0.000
Resolve audit differences	4	1.273	**0.303**
Profit-sharing schemes (PS)	1	3.754	0.062
Client Flexibility (CF)	1	0.680	0.416
PS*CF	1	4.517	0.042
PS*Resolve audit differences	2	1.293	0.290
CF*Resolve audit differences	2	0.286	0.753
PS*CF*Accounting Firm	1	0.014	0.907
Error	29		
Total	43		
Corrected Total	42		

R Squared = 0.352 (Adjusted R Squared = 0.061)