THE JOINT INFLUENCE OF ACCOUNTABILITY AND PREPARES’ TACIT MANAGERIAL KNOWLEDGE ON TASK PERFORMANCE AND WORK PAPER STYLIZATION: THE MODERATING EFFECTS OF PREPARES’ TECHNICAL KNOWLEDGE AND TASK COMPLEXITY

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ABSTRACT

This study examines the joint influence of accountability (specifically, accountability to a reviewer with similar or dissimilar task preferences) and preparers’ tacit managerial knowledge on task performance, and how this relationship is moderated by preparers’ technical knowledge and task complexity. In addition, the study examines the complex interaction of the above-mentioned variables on preparers’ work paper stylization attempts.

The current audit environment is characterized by greater interaction among audit team members. In such an environment, audit preparers are likely to become aware of the early task preferences of their reviewers (that is, their immediate superior) on the treatment of particular audit issues. The reviewer’s task preferences may either be similar or dissimilar to the preparers’ task preferences, and this may have an effect on the preparers’ task performance. The extent this difference in performance is a joint function of the attributes of the preparers (in terms of their tacit managerial knowledge and technical knowledge) and task complexity is unknown. The current study attempts to shed some light on these issues.

In addition, the current study specifically identifies forms of stylization that preparers engage in when they prepare justifications to their reviewers. Stylization refers to varying the form of framing and presenting the audit work paper justifications with the objective of persuading the reviewers on the quality of their work performed, and to enhance their reputations in the minds of their reviewers. Specifically, it examines how the attributes of the preparers interact with the accountability requirement facing the preparers, and with task complexity in influencing different forms of stylization.
I examine these issues by conducting an experiment in which audit preparers perform two ambiguous audit tasks: one of moderate complexity (doubtful debts task) and the other of higher complexity (inter-company hedging task). The results show that for the moderate complexity task, task performance (as evaluated by the reviewers) is a joint function of the accountability requirement, preparers’ tacit managerial knowledge and technical knowledge. Unlike the moderate complexity task, in the higher complexity task, there is no moderating effect of technical knowledge on the joint influence of accountability and tacit managerial knowledge on task performance.

With regard to preparers’ stylization attempts, in the moderate complexity task, as expected, when preparers are held accountable to a reviewer with dissimilar task preferences, preparers stylize by presenting greater net persuasive evidence (that is, greater number of arguments in support of their positions than arguments against their positions), as well as presenting greater breadth of arguments. Preparers with greater tacit managerial knowledge engage to a greater extent in these forms of stylization, but only when they possess high levels of technical knowledge. When preparers are held accountable to a reviewer with similar task preferences, preparers stylize by structuring evidence to be consistent with their conclusions. Once again, preparers with greater tacit managerial knowledge are better at this form of stylization. Finally, analyses show that all three forms of stylization positively influence the reviewers’ evaluated performance. Unlike the moderate complexity task, in the higher complexity task, preparers’ stylization attempts are constrained by their level of technical knowledge, with work paper stylization restricted to presenting arguments in support of their conclusions.
These results suggest that preparers’ evaluated task performance and stylization attempts are a complex function of the attributes of the preparers, accountability requirement facing the preparers, and task complexity. Specifically, the results highlight the consequences of early communication of task preferences from audit reviewers to preparers. In addition, the findings have implications for audit firms in terms of staff training and development.
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The joint influence of accountability and preparers’ tacit managerial knowledge on task performance and work paper stylization: the moderating effects of preparers’ technical knowledge and task complexity.

Chapter 1: Introduction

This study examines the joint influence of accountability (specifically, accountability to a reviewer with similar or dissimilar task preferences)\(^1\) and preparers’ tacit managerial knowledge on task performance, and how this relationship is moderated by preparers’ technical knowledge and task complexity. In addition, the study examines the complex interaction of the above-mentioned variables on preparers’ work paper stylization attempts.

The current audit environment is characterized by greater interaction among audit team members (Rich et al., 1997a). This results in audit team members developing and communicating early preferences on the treatment of particular audit issues to fellow team members. In such a situation, the reviewers’ task preferences may either be similar or dissimilar with the preparers’ task preferences, and it is possible that the preparers’ task performance may differ depending on whether their task preferences are similar or dissimilar to that of their reviewers. Specifically, the extent of the preparers’ cognitive processing of available information may vary as a function of whether the reviewers’ task preferences are similar or dissimilar to their task preferences, and this may translate into variations in the preparers’ task performance. The extent this difference in performance is a joint function of the attributes of the preparers (in terms of their technical knowledge and tacit managerial knowledge) and task complexity is unknown. It is important to consider this issue as it may provide insights on whether audit reviewers should communicate their initial task

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\(^1\) In the public accounting setting, auditors are held accountable to multiple parties such as others in the audit team, hierarchical superiors, clients and third parties (Gibhins and Newton, 1994). The current study focuses on accountability to the immediate superior on the audit engagement (that is, the audit reviewer).
preferences to their subordinates to enhance the subordinates’ performance, and how the attributes of the subordinates may be improved to bring forth their best performance under differing accountability requirements. Examining the moderating role of tacit managerial knowledge is also important because this knowledge affects whether preparers can successfully influence their superiors’ impressions. This effect of tacit managerial knowledge on task performance has not previously been examined.

Extant research provides evidence on the moderating role of technical knowledge on the accountability-performance relationship, where accountability is to a reviewer with unknown task preferences (Cloyd, 1997; Tan and Kao, 1999). These studies do not focus on accountability to a reviewer with similar or dissimilar task preferences, although it is highly likely that, in practice, preparers generally have some knowledge of their reviewer’s task preferences. Furthermore, these studies do not examine how tacit managerial knowledge influences task performance. In contrast, the current study examines the moderating role of technical knowledge on the joint influence of accountability to a reviewer with similar or dissimilar task preferences and preparers’ tacit managerial knowledge on task performance. It is important to examine the joint influence of preparers’ attributes (technical knowledge and tacit managerial knowledge) on task performance, as it may provide insights to CPA firms on potential training and development matters pertaining to their audit staff.

Finally, the study considers the moderating effect of task complexity. Extant research suggests that technical knowledge can mitigate the adverse effect of task complexity on task performance (Bonner, 1994; Tan et al., 2002). In addition, Tan and Kao (1999) provide evidence suggesting that accountability (to a reviewer with
unknown task preferences) improves performance on audit tasks of varying complexity, when the individuals possess the requisite technical knowledge and problem solving ability. Tan and Kao (1999) manipulate audit task complexity at three levels (low, medium and high), and the participants in their study possess the requisite technical knowledge to meet the cognitive demands of even the high complexity task. The high complexity task is a ratio analysis task, which is a routine task on all audit engagements and generally performed by staff auditors (Abdolmohammadi, 1999). In contrast, the current study attempts to delineate the boundary conditions under which performance may be adversely affected by increasing task complexity, by selecting a higher complexity task where the participants are likely to possess less than the requisite technical knowledge to meet the cognitive demands of the task. This experimental design provides insights into limits on whether and how preparers’ tacit managerial knowledge and accountability (to a reviewer with similar or dissimilar task preferences) together influence task performance. It is important to consider this issue, as auditors with a given level of knowledge (technical and tacit managerial) engage in a range of audit tasks of varying complexity and accountability requirements, and an understanding of factors influencing their performance would be of benefit to the audit profession.

This study examines these issues in the context of ambiguous audit tasks with no one single appropriate answer (c.f., Tan and Kao, 1999, who examine tasks with right or wrong answers). These tasks are examined because, in the audit environment, they are likely to be more common than tasks with right or wrong answers. For such tasks, auditors’ performance is evaluated by the “justifiability and defensibility” of the judgments or solutions (Waller and Felix, 1984; Davis and Solomon, 1989; Koonce et
al., 1995; Kennedy et. al., 1997). Indeed, justifiability of decisions is considered to be of utmost importance in the audit profession (Emby and Gibbins, 1988).

In the audit firm setting, numerous parties (superiors, peers, jurors, judges, and regulators) assess the justifiability of the auditors' decisions (Kennedy et al., 1997). However, the primary and most immediate evaluator of the justifiability of preparers' arguments is the audit reviewer (that is, the immediate superior on the audit engagement). If the reviewer is satisfied with the arguments presented by the preparer (that is, the reviewer's assessed quality of the justifications), then the decision is generally considered to be adequately justified. Koonce et al. (1995) provide evidence suggesting that anticipation of audit review to a reviewer with unknown task preferences (vs. no review) during audit planning decisions increases the quantity of the justifications, but not the proportion of justifications documented by specific categories (e.g., identification of problem, requesting for additional information or procedures to be performed). Koonce et al. (1995) acknowledge that although the preferences of the reviewer are often known by the reviewee, they do not specify the reviewer's preferences as the purpose of their study is to ascertain the effect of anticipation of review (by a reviewer with unknown task preferences) vs. no anticipation of review. Thus, their study does not address how preparers justify their decisions as a function of the reviewers' task preferences. In a related study, Tan et al. (1997) assess the effect of accountability to a reviewer with known task preferences (specifically the reviewer's assessment of the likelihood of inventory obsolescence of given inventory items) vs. unknown task preferences on the quantity of justifications. Auditors held accountable to a reviewer with unknown task preferences cited more justifications than those held accountable to a reviewer with known task preferences. Their study does not investigate variations in reviewer's task preferences, and neither
does it examine the types of justifications that preparers use to persuade a reviewer of the acceptability and appropriateness of their position. Hence, there is lack of empirical evidence on how the types and quality of the justifications differs under the above circumstances. It is important to consider this issue as auditors’ justifications documented in the working papers, serve as a source of legal evidence in litigation cases. An insight into factors that may enhance the quality of these justifications will benefit the audit profession.

A key feature of the experimental setting in this study is that the quality of the justifications documented by the audit preparers is evaluated by the reviewers to whom they are held accountable. The reviewers’ evaluation serves as the measure of the preparers’ task performance, consistent with the practice prevalent in accounting firms where audit reviewers evaluate the acceptability and appropriateness of the preparers’ justifications. This measure of performance is adapted since the performance on ill-structured audit tasks is based on the assessed “justifiability and defensibility” of the decisions (Waller and Felix, 1984; Davis and Solomon, 1989).

The audit review process serves as a quality control mechanism (Bamber and Bylinski, 1982; Solomon, 1987). As a quality control mechanism, the audit reviewer’s objective is to assess both the appropriateness of the preparers’ opinion formation (based on the evidence presented), as well as the defensibility of the documentation (Emby and Gibbins, 1988; Roebuck and Trotman, 1992; Rich et. al., 1997b; Gibbins and Trotman, 2002). Assessing the quality of work paper documentation is important as working papers serve as a source of evidence in litigation cases. The importance of audit work paper documentation is also highlighted in professional auditing standards, which require sufficient, appropriate documentation of evidence to support or justify the opinion (SAS 96). In assessing the appropriateness of preparers’ opinion
formation and documentation, reviewers also implicitly assess the performance of the audit preparers (Rich et. al., 1997b). The reviewers’ favorable evaluation of the preparers’ work could translate into promotions and pay rises for the preparers (Wright, 1986; Dillard and Ferris, 1989; Rich et. al., 1997b). Hence, in this accountability inducing nature of the audit review process, the audit preparers face numerous incentives to format the content and presentations of the working papers (that is, stylize the working papers) to persuade the reviewer of the quality of their work performed and to enhance their reputations in the minds of their reviewers (Rich et. al., 1997b). In other words, the audit review process provides an opportunity for preparers to manage their impressions in the minds of their reviewers, and from this perspective, work paper stylization to persuade the reviewer of the quality of the work performed need not necessarily be dysfunctional (Rich et. al., 1997b). Preparers may, however, engage in dysfunctional stylization behavior if there is tremendous pressure to support the client’s favored position or meet tight time budgets by failing to report material evidence, signing off on an audit program without performing the audit procedures, and suppressing evidence that may require additional work or supports an alternative viewpoint (Rhode, 1977; Kelly and Margheim, 1990; Carcello et al., 1996; Rich et al., 1997b).

Preparers have numerous opportunities to stylize the working papers. The preparers can choose what and how audit evidence is gathered, provide an initial interpretation of the audit evidence, select what to document, determine the order of presentation and framing of the evidence and finally, determine the work paper documentation format (in terms of organization, conciseness) (Rich et. al., 1997b). Prior studies provide evidence suggesting that audit preparers stylize their working papers (that is, frame their audit evidence and presentation in the justifications) to
influence the judgment of their audit reviewers (e.g. Rich et al., 1997b; Gibbins and Trotman, 2002; Wilks, 2002). However, little is known of how the attributes of the preparers (in terms of their technical and tacit managerial knowledge) interact with the accountability requirement facing the preparers, and with task complexity in influencing the different forms of stylization. It is important to understand these determinants as it may provide insights to audit firms on how the accountability requirement facing the preparers may lead the preparers to engage in different forms of stylization, and on ways reviewers can respond (if at all) to such stylization attempts.

In a departure from prior studies, the current study attempts to shed some light on this issue by examining specific forms of stylization documented by the audit preparers to persuade the reviewers of the quality of their work. Emby and Gibbins (1988)’s survey on public accountants’ perceptions of the characteristics of good judgment in public accounting suggests that the presence of evidence to support decisions or actions, and appropriate analysis to show how the decision is logically arrived at, are two important criteria. Using these criteria, the current study identifies three forms of stylization that may be engaged by audit preparers to persuade the audit reviewers of the quality of their work performed. Specifically, the audit preparers may attempt to persuade the reviewer of the quality of their work performed (that is, the acceptability and appropriateness of their conclusions) by documenting greater net persuasive evidence (that is, more arguments in support of their conclusions (pro arguments) than arguments that provide contradictory evidence (con arguments)): (proxied as the number of pro less con arguments), structuring the evidence in a manner to persuade the reviewer of the appropriateness of their position by highlighting evidence consistent with their conclusions and downplaying evidence
inconsistent with their conclusions (proxied as the number of instances of evidence structuring), and finally performing a broad based analysis of the issue by considering the issue from multiple perspectives (proxied in terms of the breadth of categories elicited in the pro and con arguments).

Although preparers may engage in various forms of stylization, certain forms of stylization may have greater impact on reviewers’ judgments. Prior studies provide evidence suggesting that reviewers are indeed sensitive to various forms of stylization (e.g. Tan and Yip-Ow, 2001; Tan and Trotman, 2002). However, in all these studies, only a specific form of stylization is manipulated and the reviewers’ response to that specific form of stylization is considered. In practice, it is unlikely that preparers engage in only one specific form of stylization to influence reviewers’ judgments. Hence, unlike these prior studies, the current study examines how the preparers “naturally” stylize in preparing justification memos to their reviewers (by using memos written by “actual” preparers), and the extent to which the forms of stylization contained in these memos influence reviewers’ evaluation of the quality of the justifications documented by the preparers.

Finally, supplementary analysis is conducted to ascertain the influence of preparers’ attributes, accountability requirement, and task complexity on preparers’ tendency to align their decisions with that of the reviewer. Prior studies provide evidence suggesting that auditors are influenced by the reviewers’ or clients’ favored position, as moderated by client integrity (Peecher, 1996), engagement risk (Hackenbrack and Nelson, 1996), or presence of accounting precedents (Salterio and Koonce, 1997). However, none of these studies examine the cognitive aspects of the preparers (in terms of the preparers’ technical and tacit managerial knowledge) and task characteristics that may influence the tendency of preparers to align with the
reviewers’ position. If audit preparers merely align with the reviewers’ views without considering the basis for doing so, it may have adverse implications for audit effectiveness. Hence, an understanding of the determinants of preparers’ decision change may enable CPA firms to institute measures to induce the preparers to behave in the desirable manner.

I examine these issues by conducting an experiment in which audit preparers perform two ill-structured tasks (that is, ambiguous audit tasks with no one single appropriate answer):- one of moderate complexity (doubtful debts task), and the other of higher complexity (inter-company hedging task). The tasks are performed in two stages. For the doubtful debts task, the preparers first assess the adequacy of the client-provided allowance for doubtful debts (provide additional allowance for doubtful debts vs. provide a footnote disclosure on client’s credit granting and monitoring policies). For the latter task, the preparers assess the appropriateness of the client’s accounting treatment of inter-company foreign exchange differences in the holding company’s accounts (agree vs. disagree with the client’s accounting treatment). In the second stage of the experiment, the preparers are informed of their superior’s task preferences on each of the two tasks, and once again assess the appropriateness of the client’s accounting treatment on both the tasks. Following this assessment, the preparers write memos to their superior justifying their chosen decisions. An evaluator (holding the specific superior’s task preference that the participants are assigned to) assesses the quality of each memo. These evaluations serve as measures of the participants’ evaluated performance on the task. In addition, the author and an independent coder code the preparers’ justifications to identify the forms of stylization that the preparers adopt to persuade the reviewer of the quality of their work performed.
Results show that for the moderate complexity task, task performance (as evaluated by the reviewers) is a joint function of the accountability requirement (accountability to a reviewer with similar or dissimilar task preferences), tacit managerial knowledge, and technical knowledge. Specifically, when the preparers possess high levels of technical knowledge, and are held accountable to a reviewer with dissimilar task preferences, audit preparers with higher tacit managerial knowledge outperform those with lower tacit managerial knowledge. This effect is not observed when the audit preparers are held accountable to a reviewer with similar task preferences. At low levels of technical knowledge (which constrains preparers’ ability to stylize), as expected, tacit managerial knowledge is not a significant explanatory of task performance when task preferences are dissimilar between the preparers and the reviewer. However, when task preferences are similar, tacit managerial knowledge appears to compensate for the lack of preparers’ technical knowledge.

The following results are obtained with regard to the preparers’ stylization attempts to persuade the reviewer of the quality of their work performed (that is, the appropriateness of their position) on the moderate complexity task. When preparers are held accountable to a reviewer with dissimilar task preferences, preparers appear to stylize their working papers by presenting greater net persuasive evidence (greater number of arguments in support of their conclusions than arguments against their conclusions), as well as presenting greater breadth of arguments. Preparers with greater tacit managerial knowledge engage to a greater extent in these forms of stylization, but only when they possess high levels of technical knowledge. Hence, preparers’ stylization attempts are constrained by their level of technical knowledge. When preparers are held accountable to a reviewer with similar task preferences, preparers stylize by structuring evidence to be consistent with their conclusions (that
is, highlighting evidence consistent with their conclusions and downplaying evidence inconsistent with their conclusions). Preparers with greater tacit managerial knowledge are better at this form of stylization. The above results suggest that preparers engage in various forms of stylization to persuade the reviewer of the quality of their work performed, as a function of the accountability requirement, as well as their technical and tacit managerial knowledge. Finally, analyses show that the reviewers’ evaluated performance is positively influenced by all three forms of stylization.

Unlike the moderate complexity task, in the higher complexity task, there is no moderating effect of technical knowledge on the joint influence of accountability and tacit managerial knowledge on task performance. Task performance is driven solely by the preparers’ technical knowledge, in that the higher the technical knowledge, the better is the preparers’ task performance. In addition, compared to the moderate complexity task, attempts at work paper stylization are restricted to presentation of arguments in support of their conclusions (with significantly fewer number of such “pro” arguments cited, as opposed to those cited in the moderate complexity task).

Finally, preparers’ tendency to adopt the position favored by the reviewer is shown to be a joint function of preparers’ technical and tacit managerial knowledge, and task complexity. For the moderate complexity task, preparers with greater tacit managerial knowledge are more likely to shift towards the reviewer’s opinion when they possess lower levels of technical knowledge; for preparers with lower tacit managerial knowledge, technical knowledge does not influence the tendency to shift opinions. The results are generally weaker for the higher complexity task.

The study makes three primary contributions to the audit literature. First, earlier studies (e.g. Tan and Libby, 1997) provide evidence suggesting that auditors
with superior performance possess higher levels of tacit managerial knowledge. However, this study is the first to demonstrate that the link between auditors’ tacit managerial knowledge and task performance depends on the preparers’ technical knowledge, the task preferences of the reviewer to whom they are held accountable, and task complexity.

Second, the study contributes to the literature on work paper stylization by demonstrating that the nature of work paper stylization (designed to persuade the reviewer of the quality of the work performed) is a complex function of the attributes of the preparers, accountability requirement, and task complexity. Also, unlike prior studies that manipulate stylization attempts by the preparers and assess reviewer’s sensitivity to these stylization attempts (e.g. Tan and Yip-Ow, 2001; Tan and Trotman, 2002), the current study captures three specific forms of stylization, in a more realistic setting (that is, based on preparers’ actual justifications). It also demonstrates that preparers’ attempts at various forms of stylization influence the reviewers’ evaluation of the quality of the justifications.

Finally, prior literature on factors influencing auditors’ decision change towards the clients’ or reviewers’ opinion has focused on the moderating effects of environmental factors such as client integrity, engagement risk, presence of accounting precedents etc. (Peecher, 1996; Hackenbrack and Nelson, 1996; Salterio and Koonce, 1997). This is the first to show that auditors’ cognitive characteristics (technical and tacit managerial knowledge) interact with factors in the audit environment (task complexity) in influencing the tendency of audit preparers to adopt the position favored by the reviewers.

The rest of the thesis is organized as follows. Chapter 2 reviews the previous literature and discusses the development of the hypotheses. Chapter 3 describes the
research design. Chapter 4 presents the results, while Chapter 5 concludes with a discussion of the implications of the results and suggestions for future research.
Chapter 2: Background and hypotheses development

2.1. The joint effects of accountability (to a reviewer with similar or dissimilar task preferences) and tacit managerial knowledge on task performance

Accountability, the need to justify decisions to an audience, has been found to have an effect on an individual’s thought processes and judgments (Tetlock, 1992). In the audit setting, preparers generally justify their judgments to their immediate reviewers. Hence, the preparers’ knowledge of the reviewer’s task preferences, which may either be similar or dissimilar with the preparers’ task preferences, is likely to result in varying extent of cognitive processing of all available information by the preparers. Tetlock (1992) depicts individuals as cognitive misers, who generally prefer solutions involving least amount of effort exertion.

Using the cognitive miser framework, consider a situation where the audit preparers are held accountable to an audit reviewer with similar task preferences. In this instance, the preparers knowing that the reviewer will agree with their decision may consider it unnecessary to present extensive arguments in support of their position. Now, consider another situation, where the audit preparers are held accountable to a reviewer with dissimilar task preferences. In this instance, the preparers are likely to reduce their cognitive miserly manners and consider reasons for the dissimilar preferences of the reviewer. This is because the preparers should be aware that if they remain with their original decision, despite the opposing view held by the reviewer, they would need to elaborate on why their position is more justifiable than the reviewer’s favored preference. On the other hand, even if the preparers decide to adopt the position favored by the reviewer, they would still need to gather relevant evidence to support the alternative position, leading them to exert greater cognitive processing. Hence, being held accountable to a reviewer with dissimilar task preferences (vs. similar) is likely to result in the preparers considering all evidence in
a more thorough manner to arrive at a defensible position, thus resulting in higher quality justifications being documented in support of their final decision.

The effect of accountability to a reviewer with similar or dissimilar task preferences on task performance is expected to be influenced by the preparers’ tacit managerial knowledge. As discussed earlier, in the context of ambiguous audit tasks with no one single appropriate solution, task performance is evaluated based on the “justifiability and defensibility” of the decisions, which, in turn, is primarily based on the evaluation of the preparers’ justifications by the reviewers. Hence, preparers’ tacit managerial knowledge, specifically knowledge pertaining to managing superior’s impressions, is likely to play an important role in the preparers’ task performance. The task performance of preparers with higher tacit managerial knowledge is expected to be better than others with lower tacit managerial knowledge. This is because, compared to preparers with lower tacit managerial knowledge, those with higher tacit managerial knowledge are more likely to be aware of the importance of impression management techniques, and hence may be more likely to successfully frame their justifications (in other words, stylize the working papers) in a manner to obtain the reviewer’s approval and acceptance. In addition, the preparers may exert more effort in performing their task, as they are likely to be aware of the importance of doing so.

However, the need to manage superior’s impressions and the role of tacit managerial knowledge would be smaller when preferences are similar than when preferences are dissimilar between the preparers and the reviewer. In the former situation, as preferences are similar, the preparers may consider it less necessary to exert greater cognitive effort to engage in work paper stylization. On the other hand, when preferences are dissimilar, tacit managerial knowledge becomes more important
as the preparers need to know how to persuasively frame the justifications so as to convince the superior of the acceptability and appropriateness of their position.

Hence, accountability to a reviewer with known task preferences (specifically, similar or dissimilar task preferences) and preparers’ tacit managerial knowledge is expected to jointly influence task performance. Specifically, tacit managerial knowledge is expected to have a stronger influence on task performance when preferences are dissimilar (vs. similar) between the preparers and the reviewer. However, as discussed below, the above relationship is expected to be moderated by the preparers’ technical knowledge.

2.2. The moderating effect of technical knowledge

Technical knowledge consists of both content (Anderson, 1982; Bonner and Lewis, 1990) and structure (Choo and Trotman, 1991; Frederick, 1991; Libby, 1995). Individuals with higher knowledge have better organization of knowledge (Fiske et al, 1983; Frederick, 1991), more complete representation of knowledge (Bedard and Chi, 1983; Kaplan and Reckers, 1989; Choo and Trotman, 1991), greater knowledge of cues relevant for a specific task together with the knowledge of the importance of the cues (weighting) (Alba and Hutchinson, 1987; Bonner, 1990; Bonner and Lewis, 1990), greater search effectiveness for relevant cues (Spilker, 1995; Cloyd, 1997), and more domain specific knowledge storage and retrieval (Solomon et al., 1999). This suggests that audit preparers with higher levels of technical knowledge should perform better in an audit task than those with lower technical knowledge.

Two studies in the accounting context consider the role of knowledge and accountability to a reviewer with unknown task preferences on performance (Cloyd, 1997; Tan and Kao, 1999). Cloyd (1997) examines the joint effects of accountability and knowledge on the performance of a tax research task. He finds that accountability
exerts a positive influence on the search effectiveness of high knowledge subjects but not that of low knowledge subjects. Tan and Kao (1999) examine the moderating effects of problem solving ability, technical knowledge and task complexity, on the relationship between accountability to a superior with unknown task preferences and auditor performance. Accountability results in performance improvement only when the individual performing the task has the requisite ability and knowledge for the specific task. Both these studies demonstrate the importance of technical knowledge in the accountability-performancerelationship, where accountability is to a reviewer with unknown task preferences. However, in practice, audit preparers are likely to have some knowledge of the preferences of their reviewers, and in such a situation, the moderating role of technical knowledge may differ as a function of whether the preferences of the reviewers are similar or dissimilar and the extent of tacit managerial knowledge possessed by the audit preparers.

As discussed earlier, tacit managerial knowledge is expected to have a stronger effect on task performance when preferences are dissimilar (vs. similar) between the preparers and the reviewer. However, despite the preparers’ level of tacit managerial knowledge, preparers are likely to be constrained by their task specific technical knowledge in applying tacit managerial knowledge in stylizing the memos. This is because preparers need to possess the necessary store of technical knowledge to be able to present arguments in the memo in a manner to convince the superior of the appropriateness and acceptability of their position. Therefore, when preparers’ technical knowledge is high, preparers with higher tacit managerial knowledge are likely to perform better than those with lower tacit managerial knowledge. On the other hand, when technical knowledge is lower, tacit managerial knowledge is less likely to have an effect on task performance, as preparers are likely to be constrained
by their lack of technical knowledge in being able to frame the justifications in a convincing manner. Hence, when preparers possess higher levels of technical knowledge, tacit managerial knowledge is expected to have a stronger effect on task performance, when preferences are dissimilar between the preparers and the reviewer than when preferences are similar between the two parties. On the other hand, the joint influence of accountability and tacit managerial knowledge on task performance is expected to be weaker when the preparers possess lower levels of technical knowledge.

However, the manner in which technical knowledge moderates the joint influence of accountability and tacit managerial knowledge on task performance is likely to be dependent on task complexity.

2.3. The moderating effect of task complexity

Following wood (1986), task complexity is defined in terms of its objective characteristics independent of the attributes of the individual performing the task. Task complexity is likely to vary in terms of the amount and clarity of information processed at the input and processing stage (Bonner, 1994; Tan et al., 2002). Now, consider two tasks, both of which do not have a single appropriate answer. The first task is a doubtful debts task requiring participants to assess the client provided allowance for doubtful debts (henceforth, moderate complexity task). The second task is an inter-company hedging task requiring participants to assess the appropriateness of the client’s accounting treatment of the exchange differences in the holding company’s accounts (higher complexity task). The doubtful debts task is considered to be of lower complexity than the inter-company hedging task due to the following reasons. The doubtful debts task involves the integration of fewer numbers of cues in
the input stage, and the execution of fewer separate acts in the processing stage. Specifically, the doubtful debt task pertains to a single company and requires participants to perform a risk assessment relating to changes in client’s credit granting and monitoring policies, and a simple variance analysis on sales and bad debts fluctuation. In the processing stage, the task presents the participants with two alternatives (adequacy of footnote disclosure vs. need for additional allowance), and thereby minimizes the processing complexity in terms of the number of steps to be executed in reaching the decision. On the other hand, the inter-company hedging task involves an assessment of the client’s accounting treatment of the exchange differences in the holding company’s accounts. In order to assess this, the participants need to evaluate the transactions undertaken between three related companies, namely the holding company, subsidiary and associate company. Hence, compared to the doubtful debts task that focuses on the transactions of a single company, the higher complexity task requires participants to evaluate the overall substance of the transactions undertaken by the three companies. Furthermore, at the processing stage, a greater number of steps need to be executed to assess the appropriateness of the client’s accounting treatments in the holding company. First, the task does not present the participants with an alternative to the client’s accounting treatment (as in the doubtful debts task), but instead requires them to assess whether they agree or disagree with the client’s accounting treatment in the holding company. In order to make this assessment, the participants have to first determine the overall substance of the transactions undertaken by the group of companies. They need to be able to assess whether an accounting hedge is involved in the transactions between the holding company and the subsidiary; that is, whether the bank loan taken by the holding

2 An alternate way of defining task complexity is as a function of the attributes of the person
company (and subsequently transferred to its wholly owned subsidiary and used by the subsidiary to make an investment in a foreign associate company) can be considered as a hedge of the subsidiary’s investment in the foreign associate company. Second, even if they determine that an accounting hedge is involved, they need to assess whether a holding company can hedge on behalf of its subsidiary. In other words, whether the standards extend to direct as well as indirect investments by the holding company. Third, even if they decide that a holding company can hedge on behalf of its subsidiary, they need to assess whether the investment by the subsidiary in the foreign operation could be classified as investment in a foreign entity vs. investment in an operation that is integral to that of the subsidiary, based on additional information provided on the transactions undertaken by the associate company. Hence, the inter-company hedging task requires greater processing complexity compared to the doubtful debts task.

The cognitive demands placed on the preparers for the higher complexity task are expected to exceed the cognitive demands for the moderate complexity task. Hence, for the higher complexity task, even preparers possessing higher technical knowledge are likely to have difficulty mounting arguments in support of their position whether the reviewer’s preferences are similar or dissimilar, and regardless of their level of tacit managerial knowledge. Hence, the joint effect of accountability (to a reviewer with similar or dissimilar task preferences) and preparers’ tacit managerial knowledge on task performance is expected to be weaker with increasing task complexity. Furthermore, the moderating effect of technical knowledge on the above relationship is also expected to be weaker for the higher complexity task as compared to the lower complexity task.

performing the task (Campbell, 1988).
This prediction that technical knowledge may not mitigate task complexity effects extends that in Tan and Kao (1999), by identifying limits to their prediction of the moderating role of technical knowledge and task complexity. Specifically, Tan and Kao (1999) hypothesize and provide evidence showing that with increasing task complexity, accountability improves performance when the auditors possess the requisite technical knowledge and problem-solving ability. An important aspect of their hypothesis is that the subjects need to possess the requisite technical knowledge to handle the cognitive demands of the task.

In contrast, the hypotheses in the current study are driven by the expectation that the participants will possess less than the requisite technical knowledge to perform the higher complexity task compared to the moderate complexity task. This is due to the following reasons. First, the cognitive demands imposed by the higher complexity task in the current study are expected to far exceed the demands imposed by the most complex task in Tan and Kao (1999). This is because even the most complex task in Tan and Kao (1999) is a ratio analysis task (requiring the identification of likely errors that could have caused the fluctuation in ratios), with a known plausible solution. Furthermore, it is a routine task on all audit engagements. In contrast, both the moderate and higher complexity tasks in the current study are ambiguous tasks with no one single appropriate solution. Such ambiguous tasks are cognitively more demanding. Indeed, the higher complexity task on inter-company hedging is an unusual and highly specialized task requiring substantial technical knowledge to decipher the substance of the task. The task is based on a similar task encountered in Australia, where the then Big-Five public accounting firms were divided on the appropriate accounting treatment of the task (see Chapter III for

3 Unlike Tan and Kao (1999), the current study does not consider the moderating effects of problem-
details). Second, the participants in Tan and Kao (1999) comprise of audit managers, seniors and staff accountants, such that even for the most complex task, even junior staff are expected to possess the requisite technical knowledge to meet the cognitive demands of the task (Abdolmohammadi, 1999). In comparison, the participants in the current study are specifically chosen to include only audit seniors and staff accountants. Although there is expected variation in task specific technical knowledge (low and high technical knowledge) possessed by these participants on the higher complexity task, the level of technical knowledge possessed by even participants with high technical knowledge may not meet the cognitive demands of the task. Discussions with the technical manager in a public accounting firm indicate that the high complexity task in the current study is considered highly specialized requiring a great deal of expertise to decipher the substance of the transaction. This suggests that the higher complexity task in the current study is a significantly a more complex task than that in Tan and Kao (1999).

Based on the above discussion, for the moderate complexity task, both accountability and tacit managerial knowledge are anticipated to jointly influence task performance, and this relationship is expected to be moderated by preparers’ technical knowledge. Hence, when the preparers possess high levels of technical knowledge, the effect of tacit managerial knowledge on task performance is expected to be higher when preferences are dissimilar between the preparers and the reviewer than when preferences are similar. In contrast, for the higher complexity task, the above relationship is expected to be weaker. Based on the above discussion, the following hypotheses are developed for the moderate and higher complexity tasks:

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*4* Furthermore, in both Tan and Kao (1999) and the current study, the participants are required to rate the complexity of the task on a scale of 1 (not at all complex) to 9 (extremely complex). The solving ability, as the tasks in the study do not require forward and backward reasoning.
Moderate Complexity Task

**H1a:** For the moderate complexity task, when preparers possess high levels of technical knowledge, the effect of tacit managerial knowledge on task performance will be greater when preferences are dissimilar between the preparers and the reviewer than when preferences are similar.

**H1b:** For the moderate complexity task, the joint influence of accountability to a reviewer with similar or dissimilar task preferences and tacit managerial knowledge on task performance will be weaker for preparers with lower levels of technical knowledge than for those with higher levels of technical knowledge.

Higher Complexity Task

**H2a:** The extent to which technical knowledge moderates the joint influence of accountability to a reviewer with similar or dissimilar task preferences and tacit managerial knowledge on task performance will be weaker for the higher complexity task than for the moderate complexity task.

The above discussion pertains to the reviewers’ assessment of the quality of the justifications documented by the preparers. The next section discusses how the forms of stylizations documented by the preparers vary as a function of the attributes of the preparers (in terms of their tacit managerial knowledge and technical knowledge), the accountability requirement, and task complexity.

2.4. The effects of accountability (to a reviewer with similar or dissimilar task preferences), preparers’ tacit managerial knowledge, technical knowledge and task complexity on forms of workpaper stylization

Prior research suggests that preparers attempt to frame the “content and format” of audit working papers (that is, stylize audit working papers) to influence reviewers’ judgments (e.g. Rich et al., 1997b; Wilks, 2002). Specifically, audit preparers stylize the working papers to persuade the reviewer of the quality of their work performed, and thereby enhance their reputations in the minds of their superiors. Stylization could be in the form of incompletely documenting audit evidence.

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participants in Tan and Kao (1999) rate the high complexity task 5.28, whereas the participants in the
(Ricchuite, 1999), framing the audit evidence in a manner to suit reviewer preferences (Gibbins and Trotman, 2002), downplaying or under emphasizing evidence inconsistent with the preparers’ conclusion (Tan and Yip-Ow, 2001), focusing greater attention either to conclusion errors or to documentation errors when preparing audit working papers (Tan and Trotman, 2002), and increasing the quantity of justifications (Koonce et al., 1995; Tan et al., 1997). Most of these studies manipulate various forms of preparer stylization and assess reviewers’ sensitivity to these stylization attempts (Tan and Yip-Ow, 2001; Ricchuite, 1999; Tan and Trotman, 2002; Wilks, 2002), while the remaining studies gather information of stylization attempts through surveys (Gibbins and Trotman, 2002), or evaluate the work paper justifications documented by the preparers and assess the variations in the quantity and proportion of justifications documented by specific categories (Koonce et al., 1995; Tan et al., 1997). Koonce et al. (1995) provide evidence suggesting that the anticipation of the audit review (vs. no review) increases the quantity of the justifications, but that there are no differences in the proportion of justifications documented by different categories (e.g., identification of problem, requesting for additional information, procedures to be performed). Furthermore, as the auditors in Koonce et al. (1995) are not held accountable to a reviewer with known task preferences (which may either be similar or dissimilar to the preparers’ task preferences), their study is unable to assess how the forms of stylization by the preparers may differ as a function of the actual preferences of the reviewer. Also, these prior studies do not assess the stylizations inherent in these justifications. Tan et al. (1997) report greater quantity of justifications when the auditors are held accountable to an audience with unknown task preferences than known task preferences. When the auditors are held accountable
to a reviewer with known task preferences, the auditors are informed at the commencement of the study the opinion of the reviewer on the risk of obsolescence of specific inventory items. Due to the experimental manipulation, no insights are provided into whether the views of the reviewer are similar or dissimilar to that of the preparers, and how that would influence the preparers’ stylization attempts. In contrast, the current study manipulates reviewer’s preferences as either similar or dissimilar to the preparers’ task preferences, and evaluates the influence of preparers’ attributes and task complexity on a variety of forms of stylization that preparers may engage in to persuade the reviewer of the quality of their work performed.

For the purposes of this study, workpaper justifications are evaluated in terms of three forms of stylization: net persuasive evidence, breadth of categories, and instances of evidence structuring. These three forms of stylization correspond to some of the more common forms of preparer stylization suggested in the literature. Emby and Gibbins (1988)’s survey on factors contributing to good judgment identify evidence to support decision, and the need to logically develop arguments as being elements of good justifications. Preparers may attempt to persuade the reviewer of the quality of their work performed by documenting more arguments in support of their positions (pro arguments) than arguments that contradict their positions (con arguments). This represents the net persuasive evidence that preparers document to persuade the reviewer of the quality of their conclusions. In the study, the net persuasive evidence is measured as the number of arguments written in support of the preparers’ conclusions (pro arguments) less the number of arguments written against the stated conclusions (con arguments). In addition, preparers may stylize by structuring evidence to be consistent with their documented conclusions (that is, in terms of highlighting evidence consistent with their conclusions and downplaying
evidence inconsistent with their conclusions) with the intent of persuading the reviewer on the quality of their work performed that is, the acceptability of their positions. This is captured in the study in terms of the number of instances where preparers stylize by evidence structuring. Finally, preparers may persuade the reviewers by performing a broad based analysis of the issue, that is, by considering the issue from multiple perspectives. In the study, the multi-dimensional thought process of the preparer is proxied as the breadth of categories elicited in the pro and con arguments (henceforth, breadth of categories).

The accountability requirement facing the preparers, the attributes of the preparers, and task complexity are expected to influence the above forms of stylization that may be adopted by the preparers to persuade the reviewer of the quality of their work performed. When the preparers are held accountable to a reviewer with dissimilar task preferences (vs. similar task preferences), they are more likely to exert greater cognitive effort to analyze evidence in a more thorough manner. Furthermore, preparers with greater tacit managerial knowledge are likely to be aware of the need to manage the reviewer’s impressions when preferences are dissimilar between the preparers and the reviewer, than when preferences are similar. Hence, when preparers possess higher tacit managerial knowledge, and are held accountable to a reviewer with dissimilar (similar) task preferences, they are likely to engage to a greater (smaller) extent in certain specific forms of stylization to persuade the reviewer of the quality of their work performed (that is, the appropriateness of their conclusions).

However, the preparers’ ability to engage in these specific forms of stylizations to persuade the reviewer of the quality of their work performed is likely to be constrained by their technical knowledge and task complexity. For the moderate
complexity task, the joint effect of accountability (to a reviewer with similar or
dissimilar task preferences) and tacit managerial knowledge on the nature and extent
of stylization is expected to be greater when the preparers possess higher technical
knowledge than when they possess lower technical knowledge.

These effects are expected to be weaker for the higher complexity task. This is
because, for the higher complexity task, even preparers with relatively higher
technical knowledge (than others) are expected to possess less than the requisite
technical knowledge to understand and analyse the task (that is, meet the cognitive
demands of the task), and are therefore likely to be constrained by their technical
knowledge to engage in any form of stylization.

The above discussion leads to the following hypotheses:

**Moderate Complexity Task**

**H3a:** For the moderate complexity task, when preparers possess high levels of
technical knowledge, the effect of tacit managerial knowledge on the nature and extent of stylization adopted to persuade the reviewer of the quality of their work performed will be greater when preferences are dissimilar between the preparers and the reviewer than when preferences are similar.

**H3b:** For the moderate complexity task, the joint influence of accountability (to a reviewer with similar or dissimilar task preferences) and tacit managerial knowledge on the nature and extent of stylization adopted to persuade the reviewer of the quality of their work performed will be weaker for preparers with lower levels of technical knowledge than for those with higher levels of technical knowledge.

**Higher Complexity Task**

**H4a:** The extent to which technical knowledge moderates the joint influence of accountability (to a reviewer with similar or dissimilar task preferences) and tacit managerial knowledge on the nature and extent of stylization adopted by the preparers to persuade the reviewer of the quality of their work performed will be weaker for the higher complexity task than for moderate complexity task.
As discussed above, the attributes of the preparers (in terms of their tacit managerial knowledge and technical knowledge) interact with the accountability requirement facing the preparers (in terms of preference similarity or dissimilarity between preparers and reviewer), as well as task complexity to influence the various forms of stylization behaviors by the preparers. In turn, the various forms of stylization attempts by the preparers influence the reviewer’s evaluation of the quality of the justifications documented by the preparers. However, little is known of the effects of the specific forms of stylization (in terms of the net persuasive evidence, breadth of categories, and structuring evidence to be consistent with their conclusion) on reviewers’ evaluation of the actual assessed quality of the justifications, while controlling for the effects of preparers’ attributes, and accountability requirements. The current study attempts to shed some light on this issue.

2.5. Effects of forms of stylization on evaluated performance

The reviewers’ evaluation of the quality of the justifications documented by the preparers is likely to be influenced by what they perceive to be the characteristics of good justifications. Emby and Gibbins (1988)’s survey results suggest that having evidence to support the decision, and presenting analysis to show how the decision is arrived at logically are two important criteria for evaluating the quality of the justifications. Hence, evidence of preparers presenting more arguments in support of their positions (pro arguments) than arguments against their positions (con arguments) would be a reflection of having adequate evidence to support their decisions. As a result, it is expected that the greater the net persuasive evidence (that is, the number of pro less con arguments) documented by the preparers, the higher would be the evaluated quality of the justifications. With regard to the breadth of categories documented by the preparers in developing the pro and con arguments, greater
breadth of categories indicates that the preparers are considering the issue from multiple perspectives. Hence, reviewers’ evaluated quality of the justifications is expected to be higher with greater breadth of categories. Finally, successful structuring of evidence by the preparers in a manner to persuade the reviewers of the acceptability of their conclusions (by highlighting evidence consistent with their conclusions and downplaying evidence inconsistent with their conclusions) should result in higher performance evaluations.

The above effects are expected to be moderated by task complexity. As discussed earlier, preparers are less likely to engage in stylization behaviors for the higher complexity task compared to the moderate complexity task. Hence, the above effects are expected to be weaker for the higher complexity task compared to the moderate complexity task. The above discussion leads to the following hypotheses.

**Moderate complexity task**

**H5a:** For the moderate complexity task, reviewer’s evaluation of the quality of preparers’ justifications will be more positively influenced by the nature and extent of stylization adopted by the preparers to persuade the reviewer of the quality of their work performed, controlling for the effects of preparers’ tacit managerial knowledge, technical knowledge and task preference similarity between the preparers and the reviewer.

**Higher complexity task**

**H6a:** The above effects will be weaker for the higher complexity task than for the moderate complexity task.
Chapter 3: Research Method

3.1. Participants

One hundred and fifteen auditors from two Big-Four firms participate in this study. They comprise of 60 year 1 audit staff and 55 year 3 audit seniors. Each auditor performs both the moderate and higher complexity tasks. For the moderate complexity task, 112 of the responses are usable, while for the higher complexity task, 111 of the responses are usable.\(^5\)

3.2. Independent Variables

The study employs four independent variables: accountability (to a reviewer with similar or dissimilar task preferences), technical knowledge, tacit managerial knowledge, and task complexity. The first variable, accountability, is a between subject variable manipulated at two levels. Participants are assigned to a reviewer-manager with a preference that is either similar or dissimilar with their initial task preferences on both tasks.\(^6\) For example, for a participant who favors the need for additional allowance for the moderate complexity task, and disagrees with the client’s accounting treatment of the exchange differences in the holding company’s accounts for the higher complexity task, the participant is assigned either to a condition where the reviewer-manager favors additional allowance for the moderate complexity task, and disagrees with the client’s accounting treatment for the higher complexity task (preferences are similar between preparer and reviewer); or to a reviewer who prefers a footnote disclosure for the moderate complexity task, and agrees with the client’s

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\(^5\) For the moderate (higher) complexity task, three (four) participants’ decisions change from Stage I to Stage II of the experiment, although these participants are held accountable to a reviewer with similar task preferences. These participants’ responses are uninterpretable and their responses are omitted from the analysis.

\(^6\) This is done to minimize any confusion the participants may face if the reviewer agrees with their opinion on one of the tasks and disagrees with their opinion on the other task. In such a situation, the participants may inadvertently match the reviewer’s opinion to the wrong task.
accounting treatment for the higher complexity task (preferences are dissimilar between the preparer and the reviewer).

The second independent variable, *technical knowledge*, is a measured variable. The technical knowledge test contains ten multiple-choice questions and two open-ended questions that capture the participants’ knowledge on assessing the adequacy of doubtful debts allowance (six questions), and accounting for foreign currency transactions in inter-company transactions (six questions). The questions are adapted from past CPA exams. Technical knowledge required for the moderate complexity task (doubtful debts task) is measured using the questions related to assessing the doubtful debts allowance, and the knowledge required for the higher complexity task (inter-company hedging task) is measured using the questions related to accounting for foreign currency transactions. Technical knowledge for each of the tasks is measured in terms of the number of correct responses.

The third variable, *tacit managerial knowledge* is measured using two-work related audit scenarios. These are adapted by reference to Wagner and Sternberg (1985) and Tan and Libby (1997). The two work-related scenarios relate to auditors’ perceptions on the relative importance of specific strategies or attributes in: (1) managing relationships with superiors, and (2) managing immediate superior’s impressions. Eight options are presented under each scenario, and the rating for each option is on a 9-point scale (1: extremely unimportant; to 9: extremely important). Twelve partners (mean experience = 18 years) from the two participating firms complete the tacit managerial knowledge instrument. The partners’ responses serve as the benchmark against which the preparers’ tacit managerial knowledge is measured. To ensure that the items selected for inclusion in the tacit managerial knowledge measure has substantial agreement among the partners with regard to their level of
importance, the partners’ responses to the 16 items are first evaluated, and only items that have a range of 5 or less are selected. This results in the selection of 10 items. These items have, on average, lower standard deviation (1.19) and skewness (−0.80), than the remaining 6 items (s.d. = 2.07, skewness = −1.39). This approach is similar to that adopted in Tan and Libby (1997). Tacit managerial knowledge is measured as the sum of the squared deviations of a participant’s ratings from the mean ratings of the panel of partners. Hence, the lower the deviation, the better is the participant’s tacit managerial knowledge.

Finally, task complexity is manipulated as a within-subject variable. The moderate complexity task is a doubtful debts task adapted from Hackenbrack and Nelson (1996), and is further modified to enhance task realism. The doubtful debt task is set in the context of an audit client, Innovate. The company specializes in producing sound cards for personal computers and has been a client of the audit firm for the past five years. The company is very growth-oriented and relies primarily on bank loans to fund its operations. The company is in need of additional funds to meet its operating needs and the bank requests for a copy of the audited financial statements before discussing the terms of the new loan. During the second quarter of the past year, the company adopts a more liberal credit policy in an attempt to meet its sales target. In order to manage the risk from its new credit policy, the company hires two experienced “credit agents” to monitor the collectability of the accounts. Hence, the controller feels strongly that no additional allowance for doubtful debts is needed. However, he is willing to provide a footnote disclosure of the change in marketing policy, credit management, and monitoring activities undertaken by the company to manage the increased risks. Participants are provided with the profit and loss account with details on sales, cost of sales, gross margin, bad debt expenses and other
expenses for the current and prior years, and the debtors’ ageing analysis for the current year.

The higher complexity task is set in the context of a parent company (Educomp) and its wholly owned subsidiary (Link). The case is based on the accounting issues that arose in a Television Network group of companies in Australia in 1998/1999. At that time, the then Big-Five accounting firms in Australia were divided on the acceptability of the accounting treatment adapted by the network. The current case is a simplified version of the actual case, but draws upon the main issue that was in contention. Educomp is described as obtaining a bank loan in foreign currency units (FCU) and transferring the funds (in dollar equivalent) to its wholly owned subsidiary. The subsidiary uses the funds to acquire 25% equity of a foreign company (Time) in Foreign Currency Units (FCU). The management intends to hold the loan as long as the investment in Time is held. This suggests that management designates the transaction as a hedge. The client classifies Time as a foreign entity. Time’s activities are described to create ambiguity as to whether the acquired company is to be considered a foreign entity or a foreign operation that is integral to the operations of the subsidiary. Further, at year-end, the exchange differences arising on the foreign currency liability are taken to the foreign exchange reserves account by the holding company. The case tests the participants’ knowledge of three aspects of group accounting: (a) whether the transaction undertaken by the parent company can be considered a hedge; (b) whether the investment by the subsidiary in the foreign operation is indeed an investment in a foreign entity, and (c) whether the holding company has appropriately accounted for the exchange differences that arise on the foreign currency liability undertaken to hedge the foreign currency exposure to the net investment made by the wholly owned subsidiary.
International Accounting Standard 21 (IAS 21) distinguishes between a foreign operation that is integral to the operations of the reporting enterprise and a foreign operation that is a foreign entity. In the U.S., FAS 52 draws a similar distinction between foreign operations that are self-contained (equivalent to international accounting standard’s foreign entity) and foreign operations that are integral to the operation of the parent company. Both IAS 21 and FAS 52 distinguish between the accounting of exchange differences that arise on translating the financial statements of a foreign operation that is integral to the operations of the reporting enterprise and that of a foreign entity. In the former case, the exchange differences are to be recognized as income / expense in the period in which they arise (IAS 21, Para 15; FAS 52, Para 12) and in the latter case, they are to be classified as equity (IAS 21, Para 30; FAS 52, Para 13). Furthermore, with respect to hedging activities, the standard states that, “exchange differences arising on a foreign currency liability accounted for as a hedge of an enterprise’s net investment in a foreign entity should be classified as equity in the enterprise’s financial statements. ...” (IAS 21, Para 19). Similar pronouncements are evident in FAS 52 (Para 129) and FAS 138 (Para 42). Both the international accounting standards and the U.S. standards are open to interpretation as to whether the “net investment in a foreign entity” pertains to a direct or indirect investment by the enterprise in a foreign entity. Therefore, the scenario depicted in the case provides room for alternative viewpoints.
3.3. Dependent variables

The dependent variable for Hypothesis H1a, H1b, H2a, H5a and H6a is the evaluators’ assessment of the quality of the justifications documented by the preparers on a scale of 0 to 10 (low to excellent quality). Evaluators of these memos have extensive experience as audit managers, and comprise of two audit managers (with experience in either the training or technical department), and two academics with significant prior experience in the Big-Four accounting firms (mean experience = 14.5 years). In addition, to further ensure that the evaluators specifically evaluate the quality of the justifications documented by the preparers, the evaluators are given explicit instructions to consider the quality of the justifications documented by the preparers in support of their conclusions. To ensure consistency, and that the memo quality is unaffected by the legibility of the preparers’ handwriting, the justification memos are converted into type written form.

Each evaluator first evaluates the case details pertaining to both the tasks and makes an initial decision on the appropriateness of the client’s accounting treatments on each of the tasks. Subsequently, two evaluators, with opposing initial opinions on the appropriateness of the client’s accounting treatment, are selected to serve as the reviewers for each of the two tasks. In other words, in the doubtful debts task, one of the evaluator’s initial decision favors footnote disclosure, while the other requires additional allowance. Likewise, in the inter-company hedging task, one evaluator agrees with the client while the other disagrees with the client’s accounting treatment. As a result, the memo of a preparer held accountable to a reviewer with a given task opinion is evaluated by a reviewer holding that opinion, for example, the memo of an audit preparer held accountable to a reviewer favoring additional allowance for doubtful debts task is evaluated by an evaluator sharing a similar opinion. Likewise,
the memo of an audit preparer held accountable to a reviewer favoring footnote disclosure is evaluated by an evaluator holding the same opinion. By doing so, preparers’ justifications are evaluated by the reviewer to whom they are held accountable (a reviewer with similar or dissimilar task preferences). The evaluated performance scores are standardized to control for inter-rater leniency effects.

The dependent variable for H3a, H3b, and H4a are the specific forms of work paper stylization that may be used by the audit preparers to persuade the reviewer of the quality of their work performed. The justifications are evaluated in terms of the following likely forms of stylization: the net persuasive evidence (that is, the number of arguments written in support of the preparers’ conclusions [pro arguments] less the number of arguments written against the preparers’ stated conclusions [con arguments]), the multi-dimensional thought processes of the preparers (measured in terms of the breadth of categories elicited in the pro and con arguments), and the number of instances of evidence structuring towards the preparers’ conclusions (e.g., highlighting evidence consistent with their conclusions and downplaying evidence inconsistent with their conclusions). Appendix A, panels A and B, provide examples of the various forms of stylization for the moderate and higher complexity tasks, respectively.

In determining the breadth of categories, consideration is given to the dimensions that can be considered by auditors in justifying their chosen position in a doubtful debts task (moderate complexity task), and the inter-company hedging task (higher complexity task). For e.g., for the moderate complexity task, the breadth of categories includes issues relating to internal control and risk assessments, financial statement analysis, client-related factors and industry-related factors. In addition, these issues are identified as important based on a pilot study with two (four)
academics for the moderate (higher) complexity task, and the de-briefing meeting with the memo evaluators. Appendix B, panels A and B provide a description of the breadth of categories.

The author and an independent coder with three years of audit experience in a Big-Four accounting firm coded the data. Disagreements were resolved through discussion. The inter-rater agreement (kappa coefficient) is as follows for the moderate complexity task (pro statements: 0.958, p = 0.000; con statements: 0.872, p = 0.000; breadth of categories: 0.929, p = 0.000; instances of structuring evidence to be consistent with the conclusion: 0.877, p = 0.000), and the higher complexity task (pro statements: 0.882, p = 0.000; con statements: 0.844, p = 0.000; breadth of categories: 0.882, p = 0.000; instances of structuring evidence to be consistent with the conclusion: 1.00, p = 0.000).

3.4. Procedure

The experiment consists of two stages, and is administered during in-house training sessions conducted by the participating firms. During all the administrations, a training manager is always present to introduce the researcher, and to request for the auditors’ participation. The participants are requested to write their names and contact numbers on the research instrument so as to track the participants across the two stages. In addition, this is done to induce a sense of accountability and motivation among the participants.” In Stage I, the participants are presented with two sets of materials placed in separate sealed envelopes to ensure that the participants perform the task in the intended sequence. The first envelope contains the two tasks in counter balanced order. Assuming that the first task is the doubtful debts task (moderate

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7The training manager in one of the audit firms did not want the researcher to known the identities of the participants. She assigned a code to each of the participants, and the participants wrote these codes on the research instrument. The code number is then used in tracking the participants across the two experimental stages.
complexity) and the second task is the inter-company hedging task (higher complexity), participants first read the case details of the doubtful debts task, assess their agreement with the client’s accounting treatment on a scale of 1 (definitely insist on additional allowance) to 11 (definitely agree with footnote disclosure), make a decision on whether to insist on additional allowance or permit a footnote disclosure, and then indicate their confidence in the decision. Next, the participants proceed to the inter-company hedging task where they assess their agreement with the client’s accounting treatment of the exchange differences in the holding company’s books on a scale of 1 (strongly disagree) to 11 (strongly agree), make a decision on whether they agree or disagree with the client’s accounting treatment, and indicate their confidence in their judgment. After that, the participants proceed to the second envelope containing the problem-solving ability questions (based on Tan and Kao, 1999) and the debriefing questionnaire.

Stage 2 of the experiment is conducted at least a day later to clear the participants’ memories.’ In Stage 2, the participants are presented with two sets of materials placed in separate sealed envelopes. The covering sheet on the first envelope informs the participants that an audit manager has agreed to participate in the exercise by acting as the audit manager in charge of the audits of Innovate, as well as Educomp and its subsidiary. They are then informed of the need to write a memo to the manager, at the end of the exercise, justifying their decision on the accounting treatment to be used by the client for each of the two audit tasks. Finally, the instructions state that, as in an audit review an audit manager will review the memos. The first envelope contains the two tasks, with the reviewer’s task preferences (i.e., whether the reviewer agrees or disagrees with the client’s accounting treatment)
indicated on a separate sheet prior to each of the tasks. The participants first read the reviewer’s task preferences, re-assess the appropriateness of the client’s accounting treatment with the knowledge of the reviewer’s task preferences (on the same scale as that used in Stage 1), and indicate their decisions on the appropriateness of the client’s accounting treatment. Subsequently, they write a memo to the reviewer on a separate sheet justifying their decision. The same process is repeated for the second task. The case materials are included in the envelope for their reference.

Next, the participants proceed to envelope 2 that comprises four sections. Section A contains two questions assessing the manipulation of superior’s task preferences on each of the tasks. Participants indicate whether the judgment of the audit manager on each of the tasks agrees or disagrees with the client. Section B contains one question assessing the accountability manipulation and six questions assessing the task complexity manipulation. To assess the accountability manipulation, participants indicate the extent to which they expect the memos to be reviewed by an audit manager (1: strongly disagree; 9: strongly agree). To assess the task complexity manipulation, the participants rate each of the tasks on its complexity (1: not at all complex; 9: extremely complex), their familiarity (1: not at all familiar; 9: extremely familiar), technical knowledge required for the tasks (1: extremely low; 9: extremely high), the extent to which each of the tasks has an obvious answer (1: extremely low; 9: extremely high), and the amount of mental effort required for the tasks (1: extremely low; 9: extremely high). They also assess their knowledge on each of the tasks (1: extremely poor; 9: extremely good). Section C contains the tacit managerial knowledge questions, while Section D contains the technical knowledge questions.

*All* participants are administered Stage 2 of the study one day after Stage 1, except for one of the
On average, the participants take 20 minutes to complete Stage 1 of the experiment, and about 40 minutes to complete Stage 2 of the experiment (Appendix C presents the instrument).
Chapter 4: Results

4.1. Preliminary analyses and manipulation checks

The analyses are aggregated across firms, as the results do not vary by firm (p > 0.643). For the moderate complexity task, 54 (52.9%) of the participants’ initial decision favor the sufficiency of footnote disclosure, while 48 participants (47.1%) favor the need for additional allowance. For the higher complexity task, 54 (52.4%) participants’ initial decision are to agree with the client’s accounting treatment, while 49 (47.6%) disagree with the client. There is no moderating effect of decision type on the analyses (p > 0.651). Hence, the analyses are aggregated across decision types.

The manipulation check assesses the participant’s understanding of the reviewer’s initial task opinion on each of the andit tasks. The responses of ten (eight) participants who failed the manipulation check on the moderate (higher) complexity task are excluded from the analyses. Hence, the final sample consists of 102 usable responses for the moderate complexity task, and 103 usable responses for the higher complexity task.

The mean rating for the accountability manipulation is 7.35, indicating that these participants strongly agree that they expect the memos to be reviewed by an audit manager. The task complexity manipulation is also successful as participants assess the moderate complexity task to be less complex (means of moderate and higher complexity tasks in parentheses) (4.46 vs. 6.68), more familiar (5.93 vs. 3.94), requiring lower technical knowledge (5.50 vs. 7.11), and requiring lesser mental effort (5.48 vs. 6.96). Participants also indicate that they possess higher knowledge on the moderate complexity task (5.81 vs. 3.96) as compared to the higher complexity task, all p-values < 0.000. At the same time, the ratings for the moderate complexity task
reveal that even though it is considered less complex than the higher complexity task, the complexity level is perceived to be moderate and not low. Furthermore, although the moderate complexity task is perceived as having a more obvious answer (mean = 4.78) compared to the higher complexity task (mean = 4.20, p = 0.040, two-tailed test), the rating for both the tasks is below the mid-point scale (5), suggesting that both the tasks are perceived by the participants as being ambiguous or ill-structured.

Finally, the performance of the participants in the moderate complexity task is significantly higher than their performance in the higher complexity task (means = 5.25 and 2.72, respectively, p = 0.000). This is consistent with earlier findings that task performance decreases with increasing task complexity (Simnett, 1996).

As expected, problem-solving ability does not moderate the results for the moderate and higher complexity tasks (p > 0.628).

Cronbach's alpha for the knowledge tests relating to the moderate complexity task is 0.24. This is fairly low, but comparable to the reliability scores observed in prior studies (e.g., Tan and Kao (1999) report cronbach alphas of 0.43, 0.42 and 0.19 for the low, moderate and high complexity tasks, respectively). For the higher complexity task, the cronbach's alpha is 0.09. Although this is low, it could be due to the fact that the knowledge construct for the higher complexity task encompasses multiple dimensions (Bonner and Walker, 1994). Indeed, two of the questions pertain to the reporting of foreign exchange differences arising on purchasing transactions, while the remaining four questions pertain to the nature of foreign operations and the accounting of inter-company transactions. The cronbach alpha for the four questions is 0.32 and that of the other two questions is 0.11.

Cronbach's alpha for the tacit managerial knowledge questions is highly reliable (0.78).
4.2. Tests of H1a and H1b – Moderate complexity task

H1a and H1b pertain to the moderate complexity task. H1a predicts that for preparers with high levels of technical knowledge, the effect of tacit managerial knowledge on task performance will be greater when preferences are dissimilar between the preparers and the reviewer than when preferences are similar. H1b predicts weaker joint effects of accountability and tacit managerial knowledge on task performance for preparers with lower levels of technical knowledge than those with higher levels of technical knowledge. Results of the regression are shown in Table 1, with performance (as evaluated by the reviewers) as the dependent variable.9

\[\text{INSERT Table 1 here}\]

Consistent with the predicted three-way interaction, Table 1, shows a significant interaction effect \((p = 0.004, \text{ one-tailed test})\). In addition, a negatively significant main effect of accountability is observed \((p = 0.046, \text{ two-tailed test})\). In the regression analyses, accountability is coded 1 when preferences are similar between the preparers and the reviewer, and 0 when the preferences are dissimilar. Hence, the significantly negative slope for the main effect of accountability suggests that performance is higher when preferences are dissimilar between the preparers and the reviewer than when they are similar. This is in line with expectation.

To specifically test hypotheses H1a and H1b, separate regression analyses are run at high (1 standard deviation above the mean of technical knowledge) and low levels (1 standard deviation below the mean of technical knowledge) of technical knowledge, with accountability, tacit managerial knowledge and the interaction term

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9 Both technical knowledge and tacit managerial knowledge are centered on their means to avoid multicollinearity with their interaction terms (Aiken and West, 1991). The evaluated performance score is standardized to control for rater leniency.
of accountability and tacit managerial knowledge as the independent variables. Results of the regression are shown in Table 2, panels A and B, respectively.

As predicted in H1a, at high levels of technical knowledge, Table 2, panel A shows a marginally significant interaction between accountability and tacit managerial knowledge (p = 0.040, one-tailed test). To further analyze the nature of the interaction, the simple slopes of tacit managerial knowledge on performance is run for each level of accountability – when preferences are similar and preferences are dissimilar between the preparers and the reviewer. Tests of the simple slopes are shown in Table 3, panel A.

Consistent with expectation, Table 3, Panel A, shows that the slope is significantly negative when preferences are dissimilar between the preparers and the reviewer (p = 0.019, one-tailed test), and not significant when preferences are similar (p = 0.435, one-tailed test). These results are consistent with H1a in that when technical knowledge is high, and preparers are held accountable to reviewers with dissimilar task preferences, preparers with higher tacit managerial knowledge perform better than those with lower tacit managerial knowledge (note that there is an inverse relationship between the tacit managerial knowledge score in the regression analysis and tacit managerial knowledge, such that higher tacit managerial knowledge scores denote lower tacit managerial knowledge), whereas when technical knowledge is high and preferences are similar between the preparers and the reviewer, there is no effect of tacit managerial knowledge on task performance.
At low levels of technical knowledge, Table 2, panel B shows a marginally significant interaction between accountability and tacit managerial knowledge ($p = 0.065$, one-tailed test). To further probe the nature of the interaction observed at low levels of technical knowledge, as before, the simple slopes of tacit managerial knowledge on task performance are run at the different levels of accountability. Table 3, panel B shows the tests of the simple slopes.

The results show that the slope is not significant when preferences are dissimilar between the preparers and the reviewer ($p = 0.307$, one-tailed test). This is consistent with H1b and suggests that when preparers possess low levels of technical knowledge and are held accountable to a reviewer with dissimilar task preferences, tacit managerial knowledge does not influence task performance. However, the slope is negative and marginally significant when preferences are similar ($p = 0.090$, two-tailed test). This suggests that when preparers are held accountable to a reviewer with similar task preferences, as tacit managerial knowledge increases, task performance increases (note that there is an inverse relationship between the tacit managerial knowledge score in the regression analysis and tacit managerial knowledge). This is unexpected. It is, however, possible that for a moderate complexity task, when preparers are held accountable to a reviewer with similar task preferences, preparers’ tacit managerial knowledge compensates for their lack of technical knowledge. This is because the awareness of the need to manage superior’s impressions may drive individuals with higher tacit managerial knowledge to stylize and frame their memos accordingly. Since the reviewer’s preference is similar with their preference, and the task is of moderate complexity (where the cognitive demands of the task are not very high), even preparers with lower technical knowledge may be able to gather relevant evidence to support their position. On the other hand, when preferences are dissimilar
between the preparers and the reviewer, the performance of preparers with higher tacit managerial knowledge may be constrained by their lack of technical knowledge, as preparers may require an even greater extent of technical knowledge to mount arguments in support of their final decision.\(^{10}\)

### 4.3. Test of H2a – Higher complexity task

H2a pertains to the higher complexity task. H2a predicts that the moderating effects of technical knowledge on the joint influence of accountability and tacit managerial knowledge on task performance will be weaker for the higher complexity task as compared to the moderate complexity task. Results of the regression analyses are shown in Table 4, with task performance as the dependent variable and accountability, technical knowledge, and tacit managerial knowledge, and their interaction terms as the independent variables.

\[\text{INSERT Table 4 here}\]

The three-way interaction between accountability, technical knowledge, and tacit managerial knowledge is not significant (\(p = 0.198\), one-tailed test).\(^{11}\) The absence of a three-way interaction for the higher complexity task is consistent with the expectation of weaker findings for the higher complexity task compared to the moderate complexity task. Although, Table 4 shows a significant positive effect of technical knowledge on task performance (\(p = 0.048\), two-tailed test), suggesting the influence of technical knowledge on task performance, the lack of a three-way interaction...
interaction suggests that as the participants possess less than the requisite technical knowledge to meet the cognitive demands of the task, technical knowledge is unable to compensate for the increasing task complexity.

4.4. Tests of H3a, H3b, and H4a

H3a and H3b pertain to the moderate complexity task in terms of how the specific forms of stylization adopted by the preparers vary as a function of the accountability requirement and the attributes of the preparers. H3a predicts that for preparers with high levels of technical knowledge, the effect of tacit managerial knowledge on the nature and extent of stylization adopted to persuade the reviewer of the quality of their work performed will be greater when preferences are dissimilar between the preparers and the reviewer than when preferences are similar. H3b predicts weaker joint effects of accountability and tacit managerial knowledge on the nature and extent of stylization for preparers with lower technical knowledge than those with higher technical knowledge. H4a pertains to the higher complexity task, and predicts the moderating effects of technical knowledge on the joint influence of accountability and tacit managerial knowledge on the nature and extent of stylization to be weaker for the higher complexity task compared to the moderate complexity task.

4.4.1. Moderate complexity task: Descriptive statistics on forms of stylization

Three specific forms of stylization are identified to capture stylization attempts by the preparers to persuade the reviewers of the quality of their work performed, namely the net persuasive evidence (proxied as the number of pro less con arguments), the multi-dimensional thought process of the preparers (proxied as the breadth of categories), and instances of evidence structuring (proxied as instances of highlighting evidence consistent with their conclusions and downplaying evidence
inconsistent with their conclusions). Table 5, panels A and B, present the descriptive statistics on each of these forms of stylization, for the moderate and higher complexity tasks, respectively. As can be seen from Table 5, panel A, for the moderate complexity task, preparers in general document greater pro arguments than con arguments (means = 2.26 and 0.52, respectively, p = 0.000, two-tailed test). In addition, the breadth of categories ranges from 0 to 6 categories, with an average of 2.16 categories. Finally, there is on average about 0.41 instances of structuring evidence to be consistent with their conclusions.

To specifically test H3a and H3b, separate regression analyses are run for each of the three specific forms of stylization. Table 6, panels A to C, presents the results of the regression analysis for each of the three forms of stylization.

4.4.2. Moderate complexity task: netpersuasive evidence

Table 6, panel A, shows a marginally significant 3-way interaction of accountability, tacit managerial knowledge, and task complexity on the net persuasive evidence (p = 0.078, one-tailed test). To analyze the nature of the three-way interaction, separate regression analyses are run at both high (1 standard deviation above the mean technical knowledge) and low levels of technical knowledge (1 standard deviation below the mean technical knowledge). At low levels of technical knowledge, no significant interaction effect of accountability x tacit managerial knowledge is observed (p = 0.435, one-tailed test). However, at high levels of technical knowledge, there is a significant interaction effect between accountability and tacit managerial knowledge (p = 0.048, one-tailed test). The two-way interaction is analyzed at low and high levels of tacit managerial knowledge. At low levels of
tacit managerial knowledge (and when technical knowledge is high), there is no effect of accountability on the net persuasive evidence ($p = 0.454$, one-tailed test). However, at high levels of tacit managerial knowledge (and when technical knowledge is high), there is a significant negative effect of accountability on the net persuasive evidence ($p = 0.013$, one-tailed test). Accountability is coded as 1 when preferences are similar between the preparers and the reviewer, and coded as 0 when preferences are dissimilar. Hence, the negatively significant slope suggests that the preparers document more pro arguments than con arguments when the reviewer’s preferences are dissimilar (that is, the preparers try to convince the reviewer of the appropriateness of their position) than when they are similar. These effects are not observed when the preparers possess lower levels of technical knowledge. Hence, the preparers’ application of tacit managerial knowledge is likely to be constrained by their technical knowledge.

Further analyses are conducted to ascertain the effects of accountability, tacit managerial knowledge and technical knowledge on the number of pro statements and the number of con statements. A significant 3-way interaction of accountability, tacit managerial knowledge, and technical knowledge is observed on the number of pro statements ($p = 0.020$, one-tailed test). To analyze the nature of the three-way interaction, separate regression analyses are run at both high (1 standard deviation above the mean technical knowledge) and low levels of technical knowledge (1 standard deviation below the mean technical knowledge). At low levels of technical knowledge, no significant interaction effect of accountability $\times$ tacit managerial knowledge is observed ($p = 0.164$, one-tailed test). However, at high levels of
technical knowledge, there is a marginally significant interaction effect between accountability and tacit managerial knowledge ($p = 0.056$, one-tailed test). The two-way interaction is analyzed at low and high levels of tacit managerial knowledge. At low levels of tacit managerial knowledge (and when technical knowledge is high), there is no effect of accountability on the number of pro statements ($p = 0.359$, one-tailed test). However, at high levels of tacit managerial knowledge (and when technical knowledge is high), there is a significant negative effect of accountability on the number of pro statements ($p = 0.010$, one-tailed test). Accountability is coded as 1 when preferences are similar between the preparers and the reviewer and coded as 0 when preferences are dissimilar. Hence, the negatively significant slope suggests that the preparers document more pro statements when the reviewer’s preferences are dissimilar than when they are similar. These results suggest that when the preparers possess high levels of technical knowledge, those with higher tacit managerial knowledge document more pro statements when the reviewer’s preferences are dissimilar (than when they are similar) so as to convince the reviewer of the acceptability and appropriateness of their position. These effects are not observed when the preparers possess lower levels of technical knowledge. Hence, the preparers’ application of tacit managerial knowledge is likely to be constrained by their technical knowledge.

The results of the logistic regression analysis on the presence or absence of con statements shows no significant interaction effects of accountability, tacit managerial knowledge, and technical knowledge ($p = 0.290$, one-tailed test). Furthermore, there are no significant main effects ($p > 0.783$, two-tailed test) or two-

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12 As 92.2% of the participants had either 0 or 1 con statement (see table 5, panel A for further details), a logistic regression analysis is run instead of a multiple regression analysis. The dependent variable is coded 1 for the presence of a con statement (that is, either 1 or greater than 1) and 0 for the absence of
way interaction effects ($p > 0.190$, two-tailed test). This suggests that the effects observed for the net persuasive evidence (that is, the number of pro less con arguments) are driven by the number of pro arguments.

4.4.3. Moderate complexity task: breadth of categories

Table 6, panel B, presents the results of the regression analysis on the breadth of categories. A significant three-way interaction of accountability, tacit managerial knowledge and technical knowledge ($p = 0.042$, one-tailed test) on the breadth of categories is observed. To analyze the 3-way interaction, separate regression analyses are run at both high (1 standard deviation above the mean technical knowledge) and low (1 standard deviation below the mean technical knowledge) levels of technical knowledge. No significant interaction effect of accountability x tacit managerial knowledge is observed at both the high ($p = 0.125$) and low ($p = 0.163$, all $p$-values are one-tailed) levels of technical knowledge. Hence, the 3-way interaction is analyzed at low and high levels of tacit managerial knowledge. At low levels of tacit managerial knowledge, there is a marginally significant interaction effect of accountability x technical knowledge ($p = 0.067$, one-tailed test). However, none of the tests of simple effects is statistically significant ($p > 0.133$, one-tailed test).

On the other hand, at high levels of tacit managerial knowledge, a significant interaction effect between accountability and technical knowledge is observed ($P = 0.001$, one-tailed test). To probe into the nature of the significant 2-way interaction, separate regression analyses are run at different levels of accountability. When preferences are dissimilar between the preparers and the reviewer, there is a significantly positive effect of technical knowledge on the breadth of categories ($p = 0.005$, one-tailed test). This suggests that when preparers possess high levels of tacit
managerial knowledge on managing reviewers' impressions, the preparers may
document greater breadth of categories to convince the superior of the appropriateness
of their position (and hence, the quality of their work performed) when the reviewer's
preference is dissimilar, and they are able to do this to a greater extent when technical
knowledge is higher. When preferences are similar between the preparers and the
reviewer, a significantly negative effect of technical knowledge on the breadth of
categories is observed (p = 0.014, one-tailed test). The above results suggest that
when preparers possess higher tacit managerial knowledge and are held accountable
to a reviewer with similar preferences, these preparers are likely to be aware that there
is less of a need to convince the reviewer of the appropriateness of their conclusion
(as compared to when preferences are dissimilar). Hence, even though they may
possess high levels of technical knowledge they may not document greater breadth of
categories in support of their position.

4.4.4. Moderate complexity task: structuring evidence to be consistent with
  conclusion

Table 6, panel C, presents the results of the logistic regression analysis on the
presence or absence of statements structuring evidence to be consistent with the
conclusion (by highlighting evidence consistent with their conclusions and
downplaying evidence inconsistent with their conclusions). Contrary to expectation,
no significant 3-way interaction effect of accountability x tacit managerial knowledge
x technical knowledge is observed (p = 0.278, one-tailed test). A marginally
significant 2-way interaction between accountability and tacit managerial knowledge
is observed (p = 0.065, two-tailed test). To probe into the 2-way interaction, separate

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number of con statements), similar results are obtained.

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A logistic regression is used instead of multiple regression, as only 1 participant documented greater
than 1 instance of evidence structuring. Hence, the dependent variable is coded as 1 (for presence of
evidence structuring statement) and 0 (for absence of evidence structuring statement). When the
analyses are repeated using ANOVA (with the dependent variable being the instances of evidence
structuring), similar results are obtained.
logistic regression analyses are run at the different levels of accountability. When preferences are dissimilar between the preparers and the reviewer, there is no effect of tacit managerial knowledge on the structuring of evidence to be consistent with judgment conclusion ($p = 0.937$, two-tailed test). However, when preferences are similar, there is a significantly negative effect of tacit managerial knowledge on the structuring of evidence ($p = 0.026$, two-tailed test) (note: a lower tacit managerial knowledge score indicates an individual with higher tacit managerial knowledge). Hence, the results suggest that when preparers are held accountable to reviewers with similar task preferences, they are more likely to engage in this form of stylization as their tacit managerial knowledge increases.

4.4.5. Moderate complexity task: summary of forms of stylization

In summary, the above analysis on the effects of preparers' attributes (in terms of their technical knowledge and tacit managerial knowledge) and accountability requirement (accountability to reviewer with similar or dissimilar task preferences) on the nature and extent of stylization adopted by the preparers to persuade the reviewer on the quality of their work done, provides evidence suggesting that when preparers are held accountable to reviewers with dissimilar task preferences (and they possess high levels of tacit managerial knowledge), they attempt to persuade the reviewers of the appropriateness of their position (and the quality of their work) by documenting greater net persuasive evidence (that is, number of pro less con statements) as well as a greater breadth of categories. However, even though they may possess the necessary tacit managerial knowledge, their ability to engage in these forms of stylization is constrained by their technical knowledge. On the other hand, when preparers are held accountable to reviewers with similar task preferences, preparers with higher levels of tacit managerial knowledge attempt to stylize their justifications by structuring
evidence to be consistent with their conclusions. These results suggest that preparers do engage in stylization attempts to persuade the reviewers of the acceptability of their conclusions. The above results provide some support to H3a and H3b, in that the expectations are supported for two out of the three forms of stylization examined in this study. Specifically, the expectations are supported for the net persuasive evidence (number of pro less con statements), and the breadth of categories, but for instances of structuring evidence to be consistent with the conclusion only a 2-way interaction of accountability x tacit managerial knowledge is observed.

4.4.6. Higher complexity task—Descriptive statistics on forms of stylization

As with the moderate complexity task, the preparers generally document greater pro than con arguments (means = 0.35, and 0.06, respectively, p = 0.000, see Table 5, panel B). However, the mean number of pro arguments is significantly lower than in the moderate complexity task (means = 2.25, and 0.35, for moderate and higher complexity tasks respectively, p = 0.000). In addition, very few participants engage in evidence structuring compared to the moderate complexity task (means = 0.41, and 0.05 for moderate and higher complexity tasks, respectively). This provides additional evidence on the successful manipulation of task complexity. Furthermore, it is consistent with the differences in the average evaluated performance across the two tasks (mean evaluated performance = 5.25 and 2.72, for the moderate and higher complexity tasks, respectively, p = 0.000).

4.4.7. Higher complexity task: Tests of H4a

Logistic regression analyses are not run for the effects of accountability, tacit managerial knowledge and technical knowledge on the net persuasive evidence (that is, the number of pro less con statements). This is because only 9 participants out of the 52 (17%) held accountable to a reviewer with dissimilar task preferences
document at least one pro statement (83% document no pro statements). Only 5 participants document at least one con statement (95% document no con statements). Hence, meaningful statistical analysis could not be conducted on the number of pro less con statements.

Likewise, separate regression analysis are not run for the remaining two forms of stylization, namely the breath of categories and the structuring of evidence to be consistent with the conclusion. This is because very few participants engage in evidence structuring (only 4 participants cited 1 or more statements, refer to Table 5, panel B for details). With regard to the breadth of categories, only 9 participants out of the 52 (17%) held accountable to a reviewer with dissimilar task preferences document at least one category (83% do not document anything).

In summary, unlike for the moderate complexity task, for the higher complexity task, a large number of participants are unable to document at least one pro or con argument. Likewise, they are unable to engage in evidence structuring. This indicates that preparers are less able to engage in stylization attempts as they are constrained by their lack of technical knowledge in the higher complexity task.

4.5. Tests of H5a and H6a

H5a pertains to the moderate complexity task. It predicts that reviewer’s evaluation of task performance will be more positively influenced by the nature and extent of stylization adopted by the preparers to persuade the reviewer of the quality of their work performed, controlling for the effects of accountability, preparers’ tacit managerial knowledge and technical knowledge. H6a pertains to the higher complexity task, and predicts weaker effects for the higher complexity task compared to the moderate complexity task.
4.5.1. Moderate complexity task: tests of $H_5a$

Table 7 shows the effects of the forms of stylization on evaluated performance while controlling for the effects of accountability, tacit managerial knowledge and technical knowledge.

As expected, all three forms of stylization are explanatory of evaluated performance. Specifically, the net persuasive evidence (that is, the number of pro less con statements) and the breadth of categories are positive at a marginally significant level ($p = 0.087$, and 0.051, respectively), while evidence structuring is positive and statistically significant ($p = 0.017$).\(^\text{14}\) This lends support to $H_5a$.

4.5.2. Higher complexity task: tests of $H_6a$

Tests of $H_6a$ could not be conducted as very few participants engaged in any form of stylization (see Table 5, panel B).

4.6. Supplementary Analysis: Factors influencing preparers’ decision change towards reviewer’s decision

Prior studies provide some evidence suggesting that auditors’ cognition and judgments are influenced by the opinions of reviewers or clients (e.g. Hackenbrack and Nelson, 1996; Peecher, 1996; Salterio and Koonce, 1997). Peecher (1996) reports that the effect of justifiee preferences on auditors’ likelihood assessments of client provided explanations for income increasing fluctuations is moderated by the integrity of the client, in that auditors respond to the preferences of the accounting firm when client integrity is higher. Hackenbrack and Nelson (1996) report that auditors respond more towards client’s preferences when engagement risk is moderate as opposed to

\(^{14}\) Similar results arise when the regression analysis is run with the dependent variable being evaluated performance and the independent variables being the three forms of stylization.
high. Likewise, Salterio and Koonce (1997) report a greater influence of client preferences when accounting precedents are mixed rather than consistent. These studies capture the auditors’ opinion only once, specifically, after the auditors are informed of the preferences of their firm or client. Hence, there is no direct evidence on their proclivity to shift their final opinion (from their initial opinion) towards the reviewer’s preferences. The current study provides insights into this issue by capturing the participants’ preferences twice, both before and after they have knowledge of the reviewer’s preferences. In addition, the current study considers the moderating effects of auditor cognitive characteristics, hitherto unexplored, on their likelihood to change their initial opinion towards that of the reviewer.

Consider a situation where an audit preparer is held accountable to a reviewer with dissimilar task preferences. What factors would influence the preparer to align his opinion with that of the reviewer? One factor would be the preparers’ perception of whether alignment with the reviewer’s opinion would obtain the approval and acceptance of his superior. In the current study, a panel of twelve audit partners indicated their views on forms of behaviour that is considered important for career progression by subordinates (please see Chapter III for details, and Appendix D). The partners’ gave the highest rating (mean rating = 7.58, on a scale of 1-extremely unimportant to 9-extremely important) to the ability of the subordinates to justify and defend their chosen position, compared to the subordinates’ being receptive to the superiors’ work styles (mean rating = 6.17), being receptive to superior’s preferences (mean rating = 6.08), adjusting working papers to suit reviewer styles and preferences (mean rating = 5.42), and devoting a great deal of attention towards obtaining a favorable performance evaluation from the superior on every audit engagement (mean rating = 5.58); p < 0.075. Hence, the partners’ responses indicate that they are likely
to respond less favorably towards a preparer who merely aligns his opinion with that of the reviewer, compared to another who is able to defend his chosen position. In the current study, the preparers’ awareness of how to manage superior’s impressions is captured as their tacit managerial knowledge (see Chapter III for details). Hence, it is anticipated that preparers possessing higher levels of tacit managerial knowledge would be less likely to change their initial opinion towards that of the reviewer (as compared to preparers with lower levels of tacit managerial knowledge) as they are likely to be aware that the reviewer would less favorably view the former behavior. At the same time, the tacit managerial knowledge-decision change relationship is expected to be moderated by the preparers’ technical knowledge.

Preparers with higher technical knowledge are likely to have greater confidence in their judgments, compared to preparers with lower technical knowledge (Glenberg and Epstein, 1987; Kardes et al., 1994; Trafimow and Sniezek, 1994). The lack of confidence may lead preparers with lower technical knowledge to more readily align their opinions towards the opinions of the reviewers, compared to preparers with higher technical knowledge. Although preparers with higher tacit managerial knowledge are likely to be aware that maintaining their original opinions is likely to be viewed favorably by the reviewers, they may, at the same time, be constrained by their lack of technical knowledge to present compelling arguments to convince the superiors of the acceptability of their position (as opposed to the reviewers position). Hence they may have a greater tendency to embrace the reviewers’ position, as the reviewers are less likely to question the basis for the preparers’ position in this instance.

Thus, audit preparers with higher levels of tacit managerial knowledge (that is, those with smaller tendency to change their opinion to align with the reviewers’
favored opinion), are expected to align their opinions towards their reviewers' opinion to a greater extent when they possess lower (vs. higher) levels of technical knowledge.

On the other hand, the moderating role of technical knowledge on the tacit managerial knowledge-decision change relationship is expected to be weaker for preparers with lower levels of tacit managerial knowledge. This is because, preparers with lower levels of tacit managerial knowledge are likely to perceive that aligning their opinions with that of their reviewer will obtain the reviewer's approval. Hence, even if the preparers possess high levels of technical knowledge and thus have high confidence in their initial opinion, they may still change their opinion towards that of the reviewer. Hence, for a moderate complexity task, tacit managerial knowledge will influence decision change to a greater extent when technical knowledge is lower than when it is higher.

For a higher complexity task, however, the cognitive demands are far greater than for the moderate complexity task. Hence, among preparers with higher tacit managerial knowledge (who are likely to be aware that shifting position towards that of the reviewer will not be viewed favorably by the reviewer), even preparers with high technical knowledge may recognize the greater cognitive effort required, and be less confident in being able, to successfully convince a reviewer holding dissimilar task preferences. Hence, compared to the moderate complexity task, technical knowledge is expected to have a weaker moderating effect of the tacit managerial knowledge-decision change relationship for the higher complexity task.

Table 8, panels A and B, present the results of the logistic regression analysis on the effects of technical knowledge and tacit managerial knowledge on the decision
change of preparers held accountable to a reviewer with dissimilar task preferences, for the moderate and higher complexity tasks, respectively.\textsuperscript{15}

\textsuperscript{15} The analyses are limited to participants held accountable to a reviewer with dissimilar task preferences. Hence, only two-way interactions between tacit managerial knowledge and technical knowledge are expected. Decision change is coded as 1 for changing decision towards reviewers'...

For the moderate complexity task, there is a marginally significant interaction effect of technical knowledge and tacit managerial knowledge on the likelihood of decision change ($p = 0.092$, one-tailed test). At low levels of tacit managerial knowledge, there is no effect of technical knowledge on decision change ($p = 0.495$, one-tailed test). However, at high levels of tacit managerial knowledge, a marginally significant negative effect of technical knowledge on decision change is observed ($p = 0.068$, one-tailed test). That is, when preparers possess high levels of tacit managerial knowledge, they are more likely to align their decisions towards that of the reviewers if they possess lower levels of technical knowledge. The above results are consistent with the expectation for the moderate complexity task.

For the higher complexity task, as expected, Table 8, panel B, shows no significant interaction effect of tacit managerial knowledge x technical knowledge ($p = 0.348$, one-tailed test). In addition, no significant main effect of tacit managerial knowledge is observed ($p = 0.426$, two-tailed test). The latter result is contrary to expectation.

Overall, the study provides some evidence suggesting that the cognitive attributes of the preparers (in terms of their tacit managerial knowledge and technical knowledge) and task complexity jointly influence the likelihood of preparers' aligning their decision towards that of the reviewers.

The analyses are limited to participants held accountable to a reviewer with dissimilar task preferences. Hence, only two-way interactions between tacit managerial knowledge and technical knowledge are expected. Decision change is coded as 1 for changing decision towards reviewers'...
Chapter 5: Discussion and Conclusion

This study examines how the joint influence of accountability (to a reviewer with similar or dissimilar task preferences) and preparers’ tacit managerial knowledge on task performance is moderated by the preparers’ technical knowledge and task complexity. In addition, the study also examines how work paper stylization is influenced by the joint effects of the above-mentioned factors.

Results show that for the moderate complexity task, the joint influence of accountability and preparers’ tacit managerial knowledge on task performance is moderated by the preparers’ technical knowledge. Specifically, higher technical knowledge leads to better performance when the preparers are held accountable to a reviewer with dissimilar (vs. similar) task preferences, and the preparers possess higher levels of tacit managerial knowledge. The results are generally weaker for preparers with lower technical knowledge. Performance on the higher complexity task is driven solely by the preparers’ technical knowledge.

One implication of these findings is that when a reviewer communicates a dissimilar task preference to the preparer, he/she may induce the preparer to engage in greater cognitive processing of available information. Also, the preparer may attempt to manage the superior’s impressions by engaging in work paper stylization, so as to convince the superior of the acceptability of his position, however, it may not result in improved performance unless the preparer possesses the requisite technical knowledge to perform the task. Work paper stylization need not be dysfunctional as it may pertain to presenting evidence in a convincing manner so that the final decision is logically justifiable, a crucial aspect of audit judgment. Hence, audit firms should consider properly matching the task to the knowledge level of the individual assigned opinion and as 0 for not changing decision. Technical knowledge and tacit managerial knowledge are
to perform the task. Furthermore, when there is a match between the preparers’ knowledge and the assigned task, then reviewers need to be aware of the consequences of communicating their task preferences to the preparers early in the audit process.

Second, the study measures the preparers’ tacit managerial knowledge pertaining to managing superior’s impressions, and demonstrates the importance of tacit managerial knowledge on task performance, together with technical knowledge and accountability. This is in contrast to prior studies that assume that rank is related to tacit managerial knowledge (Jamal and Tan, 2001; Tan and Jamal, 2001). These studies examine issues relating to performance evaluation (Tan and Jamal, 2001) or knowing the preferences of peers and subordinates (Jamal and Tan, 2001). Tacit managerial knowledge is a dimension of knowledge not imparted through formal classroom training sessions or instructions. Audit superiors, in their frequent interaction with their subordinates, could attempt to communicate to their subordinates the attributes that are valued by the audit firm for progression up the career ladder, so that the subordinates can internalize and manifest these attributes in practice. Likewise, subordinate auditors need to be aware of the importance of tacit managerial knowledge on task performance, and the forms of behavior valued by the audit firm.

Overall, the results from this study add to the literature on the effects of accountability on task performance. Tan and Kao (1999) demonstrate that accountability to a reviewer with unknown task preferences (on tasks with known solutions) enhances the performance of the auditors, when the auditors possess the requisite technical knowledge and ability to perform the task. The current study adds centered on their means to avoid multi-collinearity with their interaction terms.
to this stream of literature by showing that accountability to a reviewer with known task preferences (specifically, similar or dissimilar task preferences) together with tacit managerial knowledge jointly influence task performance (on ambiguous tasks with no one single appropriate solution), and that this relationship is moderated by the preparers’ technical knowledge and task complexity.

The results from this study also add to the literature on preparer stylization effects. It is one of the first studies to demonstrate that stylization attempts by preparers to persuade the reviewer of the quality of their work performed may differ across tasks of varying complexity, preparer attributes, and accountability requirements. It is also one of the first studies to consider the relationship between the various forms of stylization (as it occurs in practice), and reviewers’ evaluation of preparers’ performance. By considering this relationship, the study demonstrates that the forms of stylization examined in this study are effective in convincing the superiors of the appropriateness of the preparers’ favored position.

The study has the following limitations. First, the current study examines subordinate auditors’ accountability to their immediate superior on the audit engagement. However, in practice, auditors are accountable to multiple parties such as their immediate superiors, team members, clients and third parties (for example, investors, regulators, etc.). Each of these parties may have conflicting preferences on the treatment of specific ambiguous accounting issues with no one single appropriate solution. In such a situation, the audit subordinates’ compliance or non-compliance with the preference of a specific source of accountability may be driven by their incentives (for example, the need to seek approval, promotions, pay rises, etc.) as well as their views on the professional obligations of auditors in society (Gibbins and Newton, 1994). This complex and wider notion of accountability is not captured in

63
the current study. Second, the reviewers in the study are unaware of the identity of the preparers documenting the justification memos. Knowledge of preparers’ identity has been shown to influence reviewers’ assessments of the quality of work performed by the preparers, regardless of the actual quality of the justifications documented by the preparers (Tan and Jamal, 2001). Hence, in contrast to what is observed in this study, the reviewers’ evaluation of the quality of the preparers’ justifications may differ in actual audit teams. Likewise, as the preparers in this study are unaware of the identity of the reviewer, the impression management tactics adopted by the preparers may also differ in natural team settings. Third, the participants are restricted to staff auditors and seniors, but not managers. Managers may have more sophisticated ways of stylizing working papers, or responding to reviewers’ preferences than do the participants in the current study. Fourth, although preparers may stylize their working papers in numerous ways to persuade the reviewer on the quality of their work performed, the current study examines only three specific forms of stylization in the preparers’ work paper justifications. The forms of stylization, however, may differ across other contexts. Fifth, in this study, participants’ technical knowledge is measured through knowledge questions. Alternatively, participants’ expertise could have been captured by having audit participants designated as experts and non-experts (with respect to the specific accounting issues examined in the study) by their audit firms. Finally, tacit managerial knowledge is captured by using two audit-related scenarios, where the participants are required to indicate how important each of the listed factors are in managing their immediate superior’s impressions. The participants’ responses to these questions may, however, differ from their actual behavior or action in that specific situation. This is not captured in the study. These limitations, however, pave the way for future research.
REFERENCES


### TABLE 1
Regression results of effects of accountability, preparers’ technical knowledge, and tacit managerial knowledge, on preparers’ task performance on moderate complexity task (n = 102)

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.164</td>
<td>0.134</td>
<td>1.221</td>
<td>0.225</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.389</td>
<td>0.192</td>
<td>-2.022</td>
<td>0.046</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>0.026</td>
<td>0.099</td>
<td>0.261</td>
<td>0.794</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>-0.007</td>
<td>0.006</td>
<td>-1.023</td>
<td>0.309</td>
</tr>
<tr>
<td>Accountability x Technical knowledge</td>
<td>0.056</td>
<td>0.159</td>
<td>0.350</td>
<td>0.727</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>-0.000</td>
<td>0.008</td>
<td>0.017</td>
<td>0.986</td>
</tr>
<tr>
<td>Technical knowledge x Tacit managerial knowledge</td>
<td>-0.008</td>
<td>0.004</td>
<td>-2.245</td>
<td>0.027</td>
</tr>
<tr>
<td>Accountability x Technical knowledge x Tacit managerial knowledge</td>
<td>0.013</td>
<td>0.005</td>
<td>2.698</td>
<td>0.004*</td>
</tr>
</tbody>
</table>

Accountability is manipulated between subjects and is coded as 1 when preferences are similar between preparers and the reviewers and 0 when dissimilar. Preparers’ technical knowledge and tacit managerial knowledge are measured variables. Technical knowledge is measured as the number of correct responses scored by the participants on the knowledge test, while tacit managerial knowledge is measured as the sum-of-squared deviations of participants’ ratings from the mean ratings of the panel of partners, on the tacit managerial knowledge questions. Hence, the lower the deviation, the higher is the participants’ tacit managerial knowledge. Both technical knowledge and tacit managerial knowledge are centered on their means to avoid multicollinearity with their interaction terms (Aiken and West, 1991). Preparers’ task performance is the reviewer’s evaluated quality of the justification memos documented by the preparers, on a scale of 0 (low quality) to 10 (excellent quality). The scores are standardized to control for reviewer’s rating leniency. Moderate complexity task is the doubtful debts task where participants assess the adequacy of the client provided allowance for doubtful debts (need for additional allowance vs. sufficiency of footnote disclosure on credit granting and monitoring policies) $R^2 = 0.127$; Model significance: 0.071.

* one-tailed test
### TABLE 2
Regression results of effects of accountability and tacit managerial knowledge on preparers’ task performance on moderate complexity task, at different levels of technical knowledge (n = 102)

#### Panel A: At high levels of technical knowledge

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.196</td>
<td>0.182</td>
<td>1.076</td>
<td>0.285</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.319</td>
<td>0.277</td>
<td>-1.149</td>
<td>0.253</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>-0.017</td>
<td>0.008</td>
<td>-2.137</td>
<td>0.035</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>0.016</td>
<td>0.009</td>
<td>1.778</td>
<td>0.040*</td>
</tr>
</tbody>
</table>

#### Panel B: At low levels of technical knowledge

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.131</td>
<td>0.183</td>
<td>0.716</td>
<td>0.476</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.459</td>
<td>0.277</td>
<td>-1.656</td>
<td>0.101</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>0.004</td>
<td>0.008</td>
<td>0.505</td>
<td>0.615</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>-0.016</td>
<td>0.011</td>
<td>-1.531</td>
<td>0.065*</td>
</tr>
</tbody>
</table>

* one-tailed test

Preparers’ technical knowledge and tacit managerial knowledge are measured variables, and both are centered on their means to avoid multicollinearity with their interaction term (Aiken and West, 1991). Moderate complexity task is the doubtful debts task where participants assess the adequacy of the client provided allowance for doubtful debts.
### TABLE 3

Tests of simple slopes of tacit managerial knowledge on preparers’ task performance on the moderate complexity task at different levels of accountability, and at different levels of technical knowledge (n = 102)

<table>
<thead>
<tr>
<th>Panel A: At high levels of technical knowledge (1 standard deviation above mean technical knowledge)</th>
<th>Magnitude of simple slope</th>
<th>Standard error</th>
<th>t-value</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferences dissimilar between preparers and reviewer (n = 53)</td>
<td>-0.017</td>
<td>0.008</td>
<td>-2.148</td>
<td>0.019*</td>
</tr>
<tr>
<td>Preferences similar between preparers and reviewer (n = 49)</td>
<td>-0.000</td>
<td>0.005</td>
<td>-0.166</td>
<td>0.435*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: At low levels of technical knowledge (1 standard deviation below mean technical knowledge)</th>
<th>Magnitude of simple slope</th>
<th>Standard error</th>
<th>t-value</th>
<th>p-value (one-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferences dissimilar between preparers and reviewer (n = 53)</td>
<td>0.004</td>
<td>0.008</td>
<td>0.508</td>
<td>0.307*</td>
</tr>
<tr>
<td>Preferences similar between preparers and reviewer (n = 49)</td>
<td>-0.012</td>
<td>0.007</td>
<td>-1.735</td>
<td>0.090</td>
</tr>
</tbody>
</table>

* p-values are one-tailed
TABLE 4
Regression results of effects of accountability, preparers’ technical knowledge, and tacit managerial knowledge, on preparers’ task performance on higher complexity task

\( (n = 103) \)

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.156</td>
<td>0.147</td>
<td>-1.062</td>
<td>0.291</td>
</tr>
<tr>
<td>Accountability</td>
<td>0.325</td>
<td>0.208</td>
<td>1.563</td>
<td>0.121</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>0.255</td>
<td>0.127</td>
<td>2.001</td>
<td>0.048</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>0.001</td>
<td>0.007</td>
<td>0.108</td>
<td>0.914</td>
</tr>
<tr>
<td>Accountability x Technical knowledge</td>
<td>-0.141</td>
<td>0.172</td>
<td>-0.818</td>
<td>0.415</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>-0.002</td>
<td>0.008</td>
<td>-0.221</td>
<td>0.825</td>
</tr>
<tr>
<td>Technical knowledge x Tacit managerial knowledge</td>
<td>0.006</td>
<td>0.007</td>
<td>0.868</td>
<td>0.388</td>
</tr>
<tr>
<td>Accountability x Technical knowledge x Tacit managerial knowledge</td>
<td>-0.008</td>
<td>0.009</td>
<td>-0.855</td>
<td>0.198*</td>
</tr>
</tbody>
</table>

Accountability is manipulated between subjects and is coded as 1 when preferences are similar between the preparers and the reviewers and 0 when dissimilar. Preparers’ technical knowledge and tacit managerial knowledge are measured variables. Technical knowledge is measured as the number of correct responses scored by the participants on the knowledge test, while tacit managerial knowledge is measured as the sum-of-squared deviations of participants’ ratings from the mean ratings of the panel of partners, on the tacit managerial knowledge questions. Hence, the lower the deviation, the higher is the participants’ tacit managerial knowledge. Both technical knowledge and tacit managerial knowledge are centered on their means to avoid multicollinearity with their interaction terms (Aiken and West, 1991). Preparers’ task performance is the reviewer’s evaluated quality of the justification memos documented by the preparers, on a scale of 0 (low quality) to 10 (excellent quality). The evaluated performance scores are standardized to control for rater leniency. Higher complexity task refers to the inter-company hedging task where participants either agree or disagree with the client’s accounting treatment of the exchange differences in the holding company’s books.

\( R^2: 0.090; \text{ Model significance: } 0.240 \)

* p-values are one-tailed
Table 5: Forms of Stylization on Moderate and Higher Complexity Tasks

Panel A: Moderate complexity task (n = 102)

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of pro statements</td>
<td>0</td>
<td>6.00</td>
<td>2.26</td>
<td>1.02</td>
</tr>
<tr>
<td>Number of con statements</td>
<td>0</td>
<td>3.00</td>
<td>0.52</td>
<td>0.67</td>
</tr>
<tr>
<td>Breadth of categories</td>
<td>0</td>
<td>6.00</td>
<td>2.16</td>
<td>1.01</td>
</tr>
<tr>
<td>Instances of structuring evidence to</td>
<td>0</td>
<td>2.00</td>
<td>0.41</td>
<td>0.51</td>
</tr>
<tr>
<td>be consistent with conclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 100 (98%) participants cited 1 to 6 pro arguments, 2 (2%) cited 0 pro arguments.
2. 1 (1%) participant cited 3 con arguments, 7 (6.8%) cited 2 con arguments, 36 (35.3%) cited 1 con argument while 58 (56.9%) cited 0 con arguments.
3. same as in 1.
4. 1 (1%) participant had 2 instances of evidence structuring, 40 (39.2%) participants had 1 instance, while 61 (59.8%) had 0 instances.

Panel B: Higher complexity task (n = 103)

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of pro statements</td>
<td>0</td>
<td>2.00</td>
<td>0.35</td>
<td>0.55</td>
</tr>
<tr>
<td>Number of con statements</td>
<td>0</td>
<td>2.00</td>
<td>0.06</td>
<td>0.27</td>
</tr>
<tr>
<td>Breadth of categories</td>
<td>0</td>
<td>2.00</td>
<td>0.38</td>
<td>0.61</td>
</tr>
<tr>
<td>Instances of structuring evidence to</td>
<td>0</td>
<td>2.00</td>
<td>0.05</td>
<td>0.25</td>
</tr>
<tr>
<td>be consistent with conclusion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. 4 participants (3.9%) cited 2 pro arguments, 28 participants (27.2%) cited 1 pro argument, while 71 (68.9%) cited 0 pro arguments.
2. 4 participants (3.9%) cited 1 con argument, 1 participant (1%) cited 2 con arguments, while 98 (95.1%) cited 0 con arguments.
3. 25 participants (24.3%) documented 1 breadth category, 7 participants (6.8%) documented 2 breadth categories, while 71 (68.9%) cited 0 breadth of categories.
4. 3 participants (2.9%) had 1 instance of evidence structuring, 1 participant (1%) had 2 instances of evidence structuring, while 99 (96.1%) did not engage in this form of stylization.
TABLE 6
Regression results of the effects of accountability, preparers' technical knowledge and tacit managerial knowledge on forms of work paper stylization for moderate complexity task (n = 102)

Panel A  Dependent variable: Net persuasive evidence (number of pro less con statements)

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>1.804</td>
<td>0.162</td>
<td>11.130</td>
<td>0.000</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.133</td>
<td>0.233</td>
<td>-0.570</td>
<td>0.570</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>0.280</td>
<td>0.119</td>
<td>2.347</td>
<td>0.021</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>-0.001</td>
<td>0.008</td>
<td>-0.106</td>
<td>0.916</td>
</tr>
<tr>
<td>Accountability x Technical knowledge</td>
<td>-0.350</td>
<td>0.192</td>
<td>-1.825</td>
<td>0.071</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>0.008</td>
<td>0.009</td>
<td>0.876</td>
<td>0.383</td>
</tr>
<tr>
<td>Technical knowledge x Tacit managerial knowledge</td>
<td>-0.007</td>
<td>0.005</td>
<td>-1.608</td>
<td>0.111</td>
</tr>
<tr>
<td>Accountability x Technical knowledge x Tacit managerial knowledge</td>
<td>0.008</td>
<td>0.006</td>
<td>1.430</td>
<td>0.078*</td>
</tr>
</tbody>
</table>

Panel B: Dependent variable: Breadth of categories

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>2.165</td>
<td>0.136</td>
<td>15.872</td>
<td>0.000</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.006</td>
<td>0.196</td>
<td>-0.023</td>
<td>0.982</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>0.266</td>
<td>0.100</td>
<td>2.643</td>
<td>0.010</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>-0.003</td>
<td>0.007</td>
<td>-0.474</td>
<td>0.637</td>
</tr>
<tr>
<td>Accountability x Technical knowledge</td>
<td>-0.540</td>
<td>0.162</td>
<td>-3.344</td>
<td>0.001</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>0.000</td>
<td>0.008</td>
<td>0.015</td>
<td>0.988</td>
</tr>
<tr>
<td>Technical knowledge x Tacit managerial knowledge</td>
<td>-0.005</td>
<td>0.004</td>
<td>-1.270</td>
<td>0.207</td>
</tr>
<tr>
<td>Accountability x Technical knowledge x Tacit managerial knowledge</td>
<td>0.009</td>
<td>0.005</td>
<td>1.750</td>
<td>0.042*</td>
</tr>
</tbody>
</table>
### Panel C: Dependent variable: Instances of structuring evidence to be consistent with the conclusion

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>wald</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.438</td>
<td>0.287</td>
<td>2.337</td>
<td>0.126</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.115</td>
<td>0.462</td>
<td>0.062</td>
<td>0.803</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>0.032</td>
<td>0.211</td>
<td>0.023</td>
<td>0.881</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>-0.002</td>
<td>0.014</td>
<td>0.012</td>
<td>0.913</td>
</tr>
<tr>
<td>Accountability x Technical knowledge</td>
<td>-0.008</td>
<td>0.375</td>
<td>0.000</td>
<td>0.983</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>-0.045</td>
<td>0.024</td>
<td>3.414</td>
<td>0.065</td>
</tr>
<tr>
<td>Technical knowledge x Tacit managerial knowledge</td>
<td>0.003</td>
<td>0.008</td>
<td>0.133</td>
<td>0.715</td>
</tr>
<tr>
<td>Accountability x Technical knowledge x Tacit managerial knowledge</td>
<td>0.009</td>
<td>0.016</td>
<td>0.349</td>
<td>0.278*</td>
</tr>
</tbody>
</table>

* one-tailed test
### TABLE 7
Regression results on the effects of forms of stylization on evaluated performance for moderate complexity task \( (n = 102) \)

<table>
<thead>
<tr>
<th></th>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.754</td>
<td>0.251</td>
<td>-2.997</td>
<td>0.004</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.382</td>
<td>0.178</td>
<td>-2.144</td>
<td>0.035</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>-0.075</td>
<td>0.095</td>
<td>-0.785</td>
<td>0.435</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>-0.006</td>
<td>0.006</td>
<td>-0.950</td>
<td>0.345</td>
</tr>
<tr>
<td>Accountability x Technical knowledge</td>
<td>0.229</td>
<td>0.155</td>
<td>1.474</td>
<td>0.144</td>
</tr>
<tr>
<td>Accountability x Tacit managerial knowledge</td>
<td>0.002</td>
<td>0.007</td>
<td>0.243</td>
<td>0.809</td>
</tr>
<tr>
<td>Technical knowledge x Tacit managerial knowledge</td>
<td>-0.007</td>
<td>0.004</td>
<td>-1.898</td>
<td>0.061</td>
</tr>
<tr>
<td>Accountability x Technical knowledge x Tacit managerial knowledge</td>
<td>0.010</td>
<td>0.005</td>
<td>2.117</td>
<td>0.037</td>
</tr>
<tr>
<td>Net persuasive evidence</td>
<td>0.149</td>
<td>0.109</td>
<td>1.369</td>
<td><strong>0.087</strong>*</td>
</tr>
<tr>
<td>Breadth of categories</td>
<td>0.207</td>
<td>0.125</td>
<td>1.659</td>
<td><strong>0.051</strong>*</td>
</tr>
<tr>
<td>Structuring evidence to be consistent with conclusion</td>
<td>0.509</td>
<td>0.235</td>
<td>2.161</td>
<td><strong>0.017</strong>*</td>
</tr>
</tbody>
</table>

* one-tailed test
TABLE 8
Logistic regression results of the effects of tacit managerial knowledge and technical knowledge on the likelihood of preparers changing their initial opinion towards the reviewer’s task opinion: at different levels of task complexity

Panel A  Moderate complexity task (n = 53)

<table>
<thead>
<tr>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>Wald</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-1.025</td>
<td>0.324</td>
<td>9.995</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>0.009</td>
<td>0.015</td>
<td>0.320</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>-0.241</td>
<td>0.240</td>
<td>1.010</td>
</tr>
<tr>
<td>Tacit managerial knowledge x technical knowledge</td>
<td>0.012</td>
<td>0.009</td>
<td>1.777</td>
</tr>
</tbody>
</table>

Panel B: Higher complexity task (n = 52)

<table>
<thead>
<tr>
<th>Regression Coefficient</th>
<th>Standard Error</th>
<th>Wald</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.821</td>
<td>0.304</td>
<td>7.273</td>
</tr>
<tr>
<td>Tacit managerial knowledge</td>
<td>0.011</td>
<td>0.014</td>
<td>0.663</td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>0.101</td>
<td>0.258</td>
<td>0.155</td>
</tr>
<tr>
<td>Tacit managerial knowledge x technical knowledge</td>
<td>-0.005</td>
<td>0.012</td>
<td>0.153</td>
</tr>
</tbody>
</table>

* p-values are one-tailed

The analysis is limited to participants held accountable to a reviewer with dissimilar task preferences. Decision change (dependent variable) is coded as 1 for changing decision towards the reviewer’s opinion, and as 0 for not changing decision. Tacit managerial knowledge and technical knowledge are centred on their means to avoid multicolinearity with their interaction terms.
Appendix A
Examples of forms of stylization on moderate and higher complexity tasks

Panel A Moderate complexity task

Preparers’ conclusion: Require additional allowance for doubtful debts

Pro arguments:
- Management is liberalizing its credit policy to smaller companies with lower credit ratings; this indicates higher risk of debts not being able to be recovered.
- Comparing the ageing report of 1999 and 2000, 2000 sees an increase in the debts between 0-90 days.
- We are governed by the prudence concept and we do not want the client to overstate its assets

Con arguments:
- Hired two experienced “credit agents” to monitor collectability
- Per the aged listing, debts from 0-60 days at 31/12/00 is comparable to previous year (1999: 86.75% vs. 2000: 87.7%)
- No known bad debts (from new customers)

Preparers’ conclusion: Footnote disclosure sufficient

Pro arguments:
- Sales to new companies only constitute about 5% of total sales, impact not big.
- Client has implemented additional controls to deal with the change in credit policy
- There are no known bad debts from new customers

Con arguments:
- The credential of new debtors has decreased since they are smaller companies with lower credit ratings. Thus, risk of unrecoverability increases correspondingly.
- Bad debts expense has increased slightly from prior year
- Ageing for accounts receivable for 61-90 days has increased by $19,490 exceeding the 31-60 days credit limit.

Structuring evidence to be consistent with conclusion (by highlighting evidence consistent with the conclusion and downplaying evidence inconsistent with the conclusion):
- A more liberal credit policy to companies that have lower credit ratings. Despite the mitigating factor of using 2 experienced “credit agents”, these companies have a higher tendency of going bankrupt.
- Despite the increased sales and relaxed credit policy, the client has shown that the recoverability of debts is not a problem.
- The company modified its marketing policy and has since extended credit to smaller companies with lower credit ratings. We should thus expect a possible increase in bad debt expense. However, the company has made considerable efforts in response to the increased credit risk by hiring experienced “credit agents” whose responsibilities are to ensure prompt payment by new customers.
- The company has increased its credit management and monitoring activities to offset the increased risk associated with new customers.
**Panel B: Higher complexity task**

Preparers’ conclusion: Agree with client’s accounting treatment

Pro arguments:

- The foreign exchange loss should be included in the foreign exchange reserves since this is a long term loan
- Reasonable treatment: balance sheet hedging is done by the client (through maintaining the loan)
- Exchange loss of $125,000 is immaterial/ insignificant based on the profit of $2.65 million.

Preparers’ conclusion: Disagree with client’s accounting treatment

Pro arguments:

- The foreign investment is only hedged from a consolidated viewpoint as the loan is taken out by the holding company whereas the investment is made by the immediate subsidiary
- Monetary assets and liabilities have to be re-valued at balance sheet rate at year-end. Any gains and losses arising from this must be brought to the profit and loss account.
- The benchmark treatment is to take all exchange differences to profit and loss account

\[1\] As there is very few instances of con arguments or instances of evidence structuring, the examples pertain to only the pro arguments.
Appendix B – Breadth of categories on moderate and higher complexity tasks

Panel A: Moderate complexity task

- Internal control and related risk assessment factors (e.g., the liberal credit granting policies and the associated risk; the hiring of credit agents)
- Client related factors (factors pertaining to relationship with client and client motivation to inflate accounting figures)
- Financial statement analysis (variance analyses of figures in the ageing analysis, sales, bad debts expenses etc.)
- Industry related factors (e.g., state of the industry, industry norm)
- Issues pertaining to generally accepted accounting principles (e.g., concept of prudence, purpose of financial statement disclosures)
- Materiality issues
- Engagement risk related factors and others (such as lack of information).

Panel B: Higher complexity task

- Issues relating to the concept of an accounting hedge (e.g., whether there is an accounting hedge in existence; that is, whether the foreign currency liability by the holding company is a hedge of the enterprises' net investment in the foreign entity where net investment could relate to direct as well as indirect holding in foreign entity)
- Issues relating to the identification of a foreign entity (whether the investment in the associate company (Time) is to be considered as an investment in a foreign entity or an operation that is integral)
- Issues relating to the treatment of exchange differences that arise on the long-term loan by the holding company (e.g., exchange differences can be charged to the foreign exchange reserves account if the loan is considered a hedge of a net investment in a foreign entity or if the loan is considered a long term monetary item\(^\text{16}\), exchange differences could be charged to the profit and loss account of the holding company as the benchmark treatment or if the loan is viewed as a short-term monetary item)
- Materiality issues
- Issues relating to generally accepted accounting principles (e.g., the concept of prudence, issues relating to the substance over the form of the transaction)
- Client related factors (encompassing client relationship factors and client motivation)
- Others

\(^{16}\) This was an allowed alternative under the Singapore Accounting Standards (SAS 20) at the time the study was conducted. However, from April 2002, it is no longer an allowed alternative (consistent with the international accounting standard, IAS 21).
APPENDIX C

RESEARCH INSTRUMENT
STAGE I OF THE STUDY
Thank you for participating in this study. This study is designed to understand the audit judgments made by the auditors. The results of this study could help to improve audit practice.

Instructions

You are given 20 minutes to complete the two tasks in envelope 1. The two tasks are independent and unrelated. Allocate equal time to each of the tasks.

It is advised that you keep to the recommended time for each task. However, feel free to revise your answers if you finish before time.

Please complete envelope 1 before proceeding to envelope 2. You are given 10 minutes to complete the questions in envelope 2.

The partners of your firm would like you to treat the tasks seriously. Please kindly provide us with your name and contact number below, so that we could seek any clarification on your responses in order to avoid any misinterpretation.

Name: ..................................................

Contact Number: ........................................

Thank you for your cooperation!!!
CASE MATERIALS

TASK I
Innovate Corporation

STATE THE TIME YOU BEGIN: ________________

Assume that you are currently involved in the audit of a manufacturing client called Innovate Corporation.

Innovate Corp. is a private company that specializes in producing sound cards for personal computers. Innovate has been a good client of your firm for the last 5 years, and relies on your firm for general business and tax advice. The company is very growth-oriented, and has relied primarily on loans from a local bank to fund its operations. The company requires additional financing to meet its operating needs and has approached the Bank for an additional loan. The Bank has requested a copy of the audited financial statements before discussing the terms of the new loan. The Financial Controller wants the audit completed by January 31, 2001 so that the audited financial statements can be submitted immediately to the bank. One key issue identified during the audit that needs to be resolved is the adequacy of the allowance for uncollectible accounts.

All sales by the company are made on credit. Due to the nature of the procurement/payment systems in this industry, payments are usually received within 31-60 days. In October 2000, management adopted a more liberal credit policy by selling to smaller companies with lower credit ratings at higher prices (industry average margins for sales to large companies = 25% of sales). The Company has historically experienced bad debt writeoffs of approximately 0.5% of sales. In order to manage the risk from its new credit policy, the company hired two experienced “credit agents” whose task is to monitor accounts receivable collections and make sure these new customers pay their bills promptly. Due to these improved collection efforts, the company has not made any change in its method of estimating the allowance accrual required.

The Controller is very confident about the company’s new strategy, and feels strongly that no additional accrual for bad debt is required. The Controller thus expects that you will concur with his judgment that no additional allowance is required, and will complete the audit on a timely basis so that the new financing can be arranged with the Bank. He is willing to provide the following note to the financial statements (and is receptive to suggestions for modifying this note) explaining the company’s credit policy:

“As of October 2000, the Company modified its marketing policy and began extending credit to smaller companies who have lower credit ratings than our traditional customers. The Company also increased its credit management and monitoring activities to offset the increased credit risk associated with these new customers. Total sales of $375,000 were made to these new customers in 2000, and at year-end there were no known bad debts from these new customers. It is management’s opinion that due to the effectiveness of the new credit monitoring activities, no change is required in the method of estimating the allowance for bad debts.
# INNOVATE CORPORATION

## Income Statement

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2000 (unaudited) $</th>
<th>December 31, 1999 (audited) $</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>6,445,652</td>
<td>5,915,402</td>
</tr>
<tr>
<td><strong>Cost of Goods Sold</strong></td>
<td>(4,511,949)</td>
<td>(4,308,866)</td>
</tr>
<tr>
<td><strong>Gross Margin</strong></td>
<td>1,933,703</td>
<td>1,606,536</td>
</tr>
<tr>
<td><strong>Interest expense</strong></td>
<td>(617,775)</td>
<td>(588,288)</td>
</tr>
<tr>
<td><strong>Bad debt expense</strong></td>
<td>(33,836)</td>
<td>(30,168)</td>
</tr>
<tr>
<td><strong>Other operating expense</strong></td>
<td>(882,950)</td>
<td>(665,830)</td>
</tr>
<tr>
<td><strong>Operating Income</strong></td>
<td>399,142</td>
<td>322,250</td>
</tr>
</tbody>
</table>

## Aged Account Receivable

<table>
<thead>
<tr>
<th>Aged Group</th>
<th>December 31, 2000</th>
<th>December 31, 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30 days</td>
<td>387,390</td>
<td>375,000</td>
</tr>
<tr>
<td>31-60 days</td>
<td>340,120</td>
<td>225,000</td>
</tr>
<tr>
<td>61-90 days</td>
<td>79,490</td>
<td>60,000</td>
</tr>
<tr>
<td>91-120 days</td>
<td>18,000</td>
<td>25,000</td>
</tr>
<tr>
<td>&gt;120 days</td>
<td>4,560</td>
<td>6,583</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>829,560</td>
<td>691,583</td>
</tr>
</tbody>
</table>
(a) Please indicate the extent to which you agree with the client that a footnote disclosure is sufficient for the year ended December 31, 2000. Circle one of the numbers below.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely insist on additional provision</td>
<td>Neutral</td>
<td>Definitely agree with footnote disclosure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Definitely insist on additional provision
Neutral
Definitely agree with footnote disclosure

(b) What is your decision on the accounting treatment to be used by Innovate for the allowance for doubtful debts for the year ended December 31, 2000? (please tick one space)

- [ ] Require footnote disclosure
- [ ] Require additional allowance for doubtful debts

(c) How confident are you of the above response? Please use a number between 0 (not at all confident) to 100 (extremely confident).

I am _______% confident in my response above.

STATE THE TIME YOU COMPLETE:
CASE MATERIALS

TASK II
Assume that you are currently involved in the audit of Educomp and its subsidiary, Link. Both companies are locally incorporated.

Educomp and its subsidiary (Link) have a December year-end and have been clients of your firm for ten years. Educomp is involved in the development and marketing of educational software. Link, a wholly owned subsidiary of Educomp, is involved in the trading of local area network software and hardware and the provision of maintenance and network linking services. Link has been expanding rapidly to cater to the emerging generation of internet users.

On October 1, 2000, Educomp obtained a bank loan of 2,500,000 Foreign Currency Units (FCU). The dollar ($) equivalent of the loan was transferred by Educomp to Link on October 1, 2000. On the same day, Link used the funds obtained from Educomp to acquire 25% equity of a foreign company (Time) at its book value which was equal to the fair value. The net assets of Time at acquisition was 10,000,000 FCU. The management intends to maintain the foreign currency bank loan as long as the investment in Time is held. Link’s management classified Time as a foreign entity (self-contained operation) rather than as a foreign operation that is integral to the operations of Link. The investment in Time is accounted for using the cost method in Link’s separate financial statements and the equity method in Educomp’s consolidated financial statements. Time did not declare any dividends for the year ended December 31, 2000. Hence, no adjustments are made in the profit and loss and investment accounts of Link. In addition, Link’s proportionate share of the changes in the net assets of Time between the date of acquisition and year-end is not material. Hence, no adjustments are made to the consolidated profit and loss and investment accounts of Educomp for the year ended December 31, 2000.

Time is a market leader in the development, manufacture and sale of computer products and peripherals and is well known for its strong research and development culture. Time purchases its component parts from both home and foreign suppliers with a larger percentage from foreign suppliers. To date, Time has concentrated its efforts in acquiring a greater share of its home market. However, it has plans to expand its sales to foreign countries.
Besides the above-mentioned transactions, Educomp and Link have no other foreign exchange transactions. The FCU appreciated against the dollar resulting in a foreign exchange loss of $125,000 in the holding company’s accounts (i.e. the Educomp’s unconsolidated statements) and a gain of $125,000 in Educomp’s consolidated accounts as at year-end. The foreign exchange gains or losses in the unaudited profit and loss accounts and the foreign exchange reserves accounts of Educomp and Link for the year ended December 31, 2000 are shown in the table below.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Link</th>
<th>Educomp (unconsolidated)</th>
<th>Educomp (consolidated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit and Loss Accounts</td>
<td>No foreign exchange gain/loss</td>
<td>No foreign exchange gain/loss</td>
<td>No foreign exchange gain/loss</td>
</tr>
<tr>
<td>Foreign exchange reserves account</td>
<td>No foreign exchange gain/loss</td>
<td>Foreign exchange loss of 125,000</td>
<td>Foreign exchange gain of 125,000 and loss of 125,000</td>
</tr>
</tbody>
</table>

For the year-ended December 31, 2000, the unaudited financial statements of Link reflect a profit of $400,000 and the unaudited financial statements of the holding company (i.e. Educomp’s unconsolidated accounts) reflect a profit of $2,650,000.
(a) Please indicate the extent to which you agree with the client’s accounting treatment of the exchange differences in the holding company’s accounts (i.e., Educomp’s unconsolidated statements) for the year ended December 31, 2000 (Please circle one of the numbers below):

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Neutral</td>
<td></td>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td></td>
</tr>
</tbody>
</table>

(b) What is your decision on the client’s accounting treatment of the exchange differences in the holding company’s accounts (i.e., Educomp’s unconsolidated statements) for the year ended December 31, 2000? (Tick one of the boxes below)

- [ ] Agree with client
- [ ] Disagree with client

(c) How confident are you of the above response? Please use a number between 0 (not at all confident) to 100 (extremely confident).

I am ________ % confident in my response above.

STATE THE TIME YOU COMPLETE: ______________

THANK YOU FOR YOUR PARTICIPATION
PROBLEM SOLVING ABILITY QUESTIONS
**Please help us validate some questions on problem solving**

1. How many flowers do I have if all of them are roses except for two, all of them are Carnations except for two, and all of them are orchids except for two? ______

2. In a certain city, 0.05% of the people are totally deaf. Shortly before an election, a local political party contacted 10,000 people by phone and reminded them to vote. How many of these people can be expected to be totally deaf? ______

3. A bottle of tonic cost ten dollars. The tonic is worth nine dollars more than the bottle. How much is the bottle worth? ______

4. Since it was founded in 1860, the sales of Harwood Pte. Ltd. has doubled every twenty years. In 1980, its sales were $4,000,000. In what year did it have half as much sales as it did in 1980? ______

5. Mark the arguments which reflect good reasoning with a plus (+), and those which reflect bad reasoning with a minus (−). As you are required only to examine the logic of the arguments, the subject matter has intentionally been made unusual and different from everyday meaning. Take note! You judge only the logic of the conclusion. e.g.

   + All apples are typewriters. All typewriters are oranges. Hence, all apples are oranges

   − (A) Since all thimbles are geraniums, the most ferocious thimble must be the most ferocious geranium

   − (B) Some lagoons are hilltops, and all hilltops are hungry; hence all lagoons are hungry
Debriefing Questionnaire

1. What is your present position in the firm?

2. How long have you been in the present position?
   Years and Months

3. How many years and months of auditing experience do you have?
   _________ Years and _________ Months

4. What percentage of your auditing experience is in manufacturing?

5. What percentage of your auditing experience is in the electronics industry? (specifically computers and peripherals)

6. In the past one year, for what percentage of audit engagements were you directly involved in assessing the adequacy of the provision for doubtful debt?

7. In the past one year, for what percentage of audit engagements were you directly involved in assessing the appropriateness of the clients’ accounting treatment for foreign currency transactions?

8. In the past one year, for what percentage of audit engagements were you directly involved in the audit of consolidated accounts with foreign operations?

THANK YOU VERY MUCH
FOR PARTICIPATING IN THIS STUDY
STAGE II OF THE STUDY
Thank you once again for participating in the second part of the study.

An audit manager has agreed to participate in this exercise by acting as the manager-in-charge of the audits of (I) Innovate, and (II) Educomp and its subsidiary (Link). At the end of this exercise, you will be required to write a memo to the manager justifying your decision on the accounting treatments to be used by the clients. As in an audit review, the memos will be reviewed by the manager.

You are given 20 minutes to complete the tasks in this envelope.
TASK 1

INNOVATE CORPORATION

Recall that the client (Innovate Corporation) is confident that no additional allowance is needed for doubtful debts. Instead, the client feels that a footnote disclosure explaining the company's credit policy is sufficient.

The audit manager has briefly reviewed the case details of Innovate and made a preliminary judgment. **The audit manager agrees with the client.**

OR

The audit manager has briefly reviewed the case details of Innovate and made a preliminary judgment. **The audit manager disagrees with the client.**
(a) Please indicate the extent to which you agree with the client that a footnote disclosure is sufficient for the year ended December 31, 2000. Circle one of the numbers below.

```
1 2 3 4 5 6 7 8 9 10 11
```

- Definitely insist on additional allowance
- Neutral
- Definitely agree with footnote disclosure

(b) What is your decision on the accounting treatment to be used by Innovate for the allowance for doubtful debts for the year ended December 31, 2000? (please tick one space)

- [ ] Require footnote disclosure
- [ ] Require additional allowance for doubtful debts

(c) How confident are you of the above response? Please use a number between 0 (not at all confident) to 100 (extremely confident).

I am ________% confident in my response above.

On the following page, write a memo to the manager in charge of this engagement to justify your decision above.
Recall that the client (i.e. the holding company, Educomp) accounted for the foreign exchange differences by including it in its foreign exchange reserves accounts.

The audit manager has briefly reviewed the case details of Educomp and its subsidiary (Link) and made a preliminary judgment. The audit manager agrees with the client’s accounting treatment.

OR

The audit manager has briefly reviewed the case details of Educomp and its subsidiary (Link) and made a preliminary judgment. The audit manager disagrees with the client’s accounting treatment.
STATE THE TIME YOU BEGIN ________________

(a) Please indicate the extent to which you agree with the client’s accounting treatment of the exchange differences in the holding company’s accounts (i.e. Educomp’s unconsolidated statements) for the year ended December 31, 2000. (Please circle one of the numbers below):

1 2 3 4 5 6 7 8 9 10 11

Strongly Disagree Neutral Strongly Agree

(b) What is your decision on the client’s accounting treatment of the exchange differences in the holding company’s accounts (i.e. Educomp’s unconsolidated statements) for the year ended December 31, 2000? (Tick one of the boxes below)

Agree with client

Disagree with client

(ii) How confident are you of the above response? Please use a number between 0 (not at all confident) to 100 (extremely confident).

I am ________ % confident in my response above.

On the following page, write a memo to the manager in charge of this engagement to justify your decisions above.
MEMO TO MANAGER

Prepared by: ______________________ (your name)

EDUCOMP AND LINK (Y/E 31 DECEMBER 2000)

STATE THE TIME YOU COMPLETE ________________

103
Instructions

This part of the study comprises of four sections. You are given 20 minutes to complete all the questions in this envelope.

YOUR RESPONSES WILL BE KEPT STRICTLY CONFIDENTIAL

THANK YOU FOR YOUR COOPERATION
SECTION A

1. What was the judgment of the audit manager on the doubtful debt task (Innovate corporation)?
   (Circle one response).
   (a) The manager agrees with the client
   (b) The manager disagrees with the client

2. What was the judgment of the audit manager on the accounting of foreign exchange differences in the holding company's accounts (i.e. Educomp's unconsolidated accounts)?
   (Circle one response)
   (a) The manager agrees with the client
   (b) The manager disagrees with the client
SECTION B

Please answer the following questions pertaining to the tasks you have just performed by circling an appropriate number along the scale provided:

1. I expect the memos to be reviewed by an audit manager

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Moderately Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

2. Rate the complexity of each of the tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Not at all complex</th>
<th>Extremely complex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2a. Rate the familiarity with each of the tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Not at all familiar</th>
<th>Extremely familiar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2b. Please rate the extent of technical knowledge required for the tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Extremely low</th>
<th>Extremely high</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2c. To what extent do each of the tasks have an obvious answer

<table>
<thead>
<tr>
<th>Task</th>
<th>Extremely low</th>
<th>Extremely high</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2d. How much mental effort did each of the tasks require of you?

<table>
<thead>
<tr>
<th>Task</th>
<th>Extremely low</th>
<th>Extremely high</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2e. Please assess your knowledge on each of the tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Extremely poor</th>
<th>Extremely good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>
SECTION C
TACIT KNOWLEDGE
Please help us validate some questions on factors leading to success in public accounting

Directions for completing the task
On this task, we are interested in your views on matters pertaining to the work of an auditor. Please note that the options listed after each question are neither intended to be exhaustive, nor do they necessarily represent the most important options. Your task is simply to rate each option according to its merits.

In answering the questions, please try to use the entire range of the scale. You are encouraged to briefly scan the options of a given question before responding to get an idea of the range of importance of the options. There are, of course, no right or wrong answers. Remember, you are being asked to give ratings you would personally assign to each of the items. Please do not discuss the questions with anyone completing this form. Please answer all options.
1. In auditing, there are often several people who are very successful in enhancing their reputations in the minds of their superiors by successful completion of their assigned audit tasks. Rate how important each strategy or attribute is in managing the immediate superiors’ impressions.

Importance Ratings

____ a. Ability to predict superior’s preferences or wishes for task accomplishment
____ b. Being receptive to the work styles of the superiors.
____ c. Being receptive to the preferences of the superiors.
____ d. Adjusting the presentation or documentation of the working papers to suit reviewer style (e.g., increased use of graphics, change file structure to incorporate planning throughout, providing minimal or detailed documentation).
____ e. Adjusting the audit work done to suit the reviewer’s preferences (e.g., focusing on areas considered important by the reviewer)
____ f. Learning the preferences and styles of the superior from prior interactions or through other staff who had previously worked with the superior
____ g. Knowing that some audit procedures need to be performed because the superior values them for defensibility than diagnostic purposes
____ h. When making decisions, give a great deal of weight to the way the superiors like things to be done

2. Rate the importance of the following strategies for interacting with your superiors (that is, your immediate reviewer on an audit assignment) according to how important you believe they are in enabling you to progress up the firm hierarchy:

Importance Ratings

____ a. Keep superiors informed of the progress on an audit through regular verbal or written reports
____ b. Stick with the superiors’ convictions on how things need to be done even if it does not match their own convictions
____ c. Interact with superiors in non-work related environments (games, country clubs etc.)
____ d. Find ways to make sure the superiors are aware of their important achievements.
____ e. Take on assignments that potentially may bring their work to the attention of their superiors in the firm
____ f. Have the ability to promote ideas and convince superiors of the worth of their work
____ g. Take every opportunity to obtain feedback from superiors on the ways to deal with certain judgmental accounting or auditing issues
____ h. Devote a great deal of attention towards obtaining a favourable performance evaluation from their superiors on every audit engagement
3. On your audit engagements, you may sometimes encounter situations where the audit issues are judgmental / subjective. Assume that an audit manager to whom you report has expressed his / her opinion on such issues. Below are some reasons why you would agree with you audit manager. To what extent does each of the following options contribute towards your agreement with the supervisor.

**Extent of Contribution**

a. ___ The audit manager is more knowledgeable

b. ___ Agreeing with the audit manager could lead to favourable performance evaluations from him/her

c. ___ I would like to avoid possible reprisals from the audit manager

d. ___ The audit manager is more experienced

e. ___ Disagreeing with the audit manager could deprive me of challenging job assignments and career advancements

f. ___ I agree with the audit manager with respect to what he / she wants

g. ___ The audit manager is the one who has ultimate responsibility for the work performed and the conclusions reached on the audit engagement

h. ___ The audit manager is justified in expecting cooperation from me in work-related matters
SECTION D

TECHNICAL KNOWLEDGE
**PLEASE HELP US VALIDATE SOME AUDITING QUESTIONS**

Please circle only one answer for each question:

1. Once a **CPA** has determined that accounts receivable have increased due to slow collections in a “tight money” environment, the CPA would likely to
   (a) increase the balance in allowance for bad debt account
   (b) review going concern ramifications
   (c) review credit and collection policy
   (d) expand tests of collectability

2. **In** evaluating an entity’s accounting estimates, an auditor most likely would concentrate on key factors and assumptions that are
   (a) consistent with prior periods
   (b) similar to industry guidelines
   (c) objective and not susceptible to bias
   (d) deviations from historical patterns

3. For the financial statement errors given below, rank the errors in order of how frequently you think the errors occur for **manufacturing clients**. Use 1 to indicate the **most frequent** error, and use 3 to indicate the **least frequent error**.

   - Bad debt expense and allowance not recorded or under-recorded
   - Accrued expenses and payables not recorded or under-recorded
   - Payments on account recorded but not made

4. How would an auditor assess the adequacy of the client’s **specific provision** for doubtful debts? Briefly explain.

5. Select the **error** that you believe occurs most frequently for **manufacturing clients**
   (a) sales recorded but goods not shipped
   (b) wrong period credited for sale
   (c) goods shipped to fictitious customers

6. On October 1, 2000, Mild Co., a U.S. Company, purchased machinery from Grund, a German Company, with payment due on April 1, 2001. If Mild’s 2000 operating income included no foreign exchange transaction gain or loss, then the transaction could have
   a. resulted in an extraordinary gain
   b. been denominated in U.S. dollars
   c. caused a foreign currency gain to be reported as a contra account against machinery
   d. caused a foreign currency translation gain to be reported as a separate component of stockholder’s equity

---

1 The identification of the most and least frequent error is coded as responses to two questions.
7. At December 15, 20X0, the purchase of goods by ABC was denominated in a foreign currency. The transaction resulted in a payable that was fixed in terms of the amount of foreign currency, and was paid on the settlement date, January 20, 20X1. As at year end, the foreign currency appreciated against the local currency resulting in a loss that should:
(a) not be reported until January 20, 20X1
(b) be included as a separate component of stock holder’s equity at December 31, 20X0
(c) be included as a deferred charge at December 31, 20X0
(d) be included as a component of income from continuing operations for the year 20X0.

8. Provide at least one characteristic to distinguish a foreign operation (e.g., subsidiary, associate) that is a foreign entity and a foreign operation that is integral to the operations of the reporting enterprise?

9. A foreign subsidiary is considered as a foreign entity (self-contained) to the operations of the parent company. The weighted average rate for the current year would be the appropriate exchange rate for translating:

<table>
<thead>
<tr>
<th></th>
<th>Sales to customers</th>
<th>Wages expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>(b)</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>(c)</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>(d)</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>

10. The exchange differences resulting from translating the financial statements of a foreign operation considered as integral to the operations of the reporting enterprise should be included as:
(a) a separate component of stock holder’s equity
(b) deferred credit
(c) component of income from continuing operations
(d) extraordinary item

11. Assume that a reporting enterprise (incorporated locally) acquires a 30% interest in a foreign company in Foreign Currency Units (FCU). The reporting enterprise classifies the investment in the foreign operation as a foreign entity. The reporting enterprise borrows funds in FCU to hedge the foreign currency exposure from the net investment in the foreign entity. How should the reporting enterprise report the exchange differences arising on this foreign currency liability, which is accounted for as a hedge of the reporting enterprise’s net investment in the foreign entity?
(a) a separate component of the stock holder’s equity
(b) deferred credit
(c) component of income from continuing operations
(d) extraordinary item
APPENDIX D

TACIT KNOWLEDGE INSTRUMENT ADMINISTERED TO THE PARTNERS
Please help us validate some questions on factors leading to success in public accounting

Directions for completing the task

On this task, we are interested in your views on matters pertaining to the work of an auditor.

Please note that the options listed after each question are neither intended to be exhaustive, nor do the necessarily represent the most important options. Your task is simply to rate each option according to its merits.

You are encouraged to briefly scan the options of a given question before responding to get an idea of the range of importance of the options. There are, of course, no right or wrong answers. Please do not discuss the questions with anyone in completing this form.

You can be assured that the responses you provide will be strictly confidential, and not be released to anyone else. Responses will be analyzed only in the aggregate, and not individually.

Thank you for your time.

Please state the total number of years of your audit experience:_________ years.
1. In auditing, there are often several people who are very successful in enhancing their reputations in the minds of their superiors by successful completion of their assigned audit tasks. **Rate how important each strategy or attribute is in managing the immediate superiors’ impressions.**

![Importance Ratings](chart)

- **Importance Ratings**
- **extremely unimportant**
- **neither important nor unimportant**
- **extremely important**

   a. Ability to predict superior’s preferences or wishes for task accomplishment
   
   b. Being receptive to the work styles of the superiors
   
   c. Being receptive to the preferences of the superiors.
   
   d. Adjusting the presentation or documentation of the working papers to suit reviewer style (e.g., increased use of graphics, change file structure to incorporate planning throughout, providing minimal or detailed documentation).
   
   e. Adjusting the audit work done to suit the reviewer’s preferences (e.g., focusing on areas considered important by the reviewer)
   
   f. Learning the preferences and styles of the superior from prior interactions or through other staff who had previously worked with the superior
   
   g. Knowing that some audit procedures need to be performed because the superior values them for defensibility than diagnostic purposes
   
   h. When making decisions, give a great deal of weight to the way the superiors like things to be done

The following are some strategies that subordinates adopt when interacting with their superiors (i.e., the immediate reviewers on an audit assignment). **Please rate these strategies according to their importance for career progression in your firm. The subordinates should:**

![Importance Ratings](chart)

- **Importance Ratings**
- **extremely unimportant**
- **neither important nor unimportant**
- **extremely important**

   a. Keep superiors informed of the progress on an audit though regular verbal or written reports
   
   b. Stick with the superiors’ convictions on how things need to be done even if it does not match their own convictions
   
   c. Interact with superiors in non-work related environments (games, country clubs etc.)
   
   d. Find ways to make sure the superiors are aware of their important achievements.
   
   e. Take on assignments that potentially may bring their work to the attention of their superiors in the firm
   
   f. Have the ability to promote ideas and convince superiors of the worth of their work
   
   g. Take every opportunity to obtain feedback from superiors on the ways to deal with certain judgmental accounting or auditing issues
   
   h. Devote a great deal of attention towards obtaining a favourable performance evaluation from their superiors on every audit engagement