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Accountability, Task Characteristics and Audit Judgments

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ABSTRACT

This study attempts to examine the effects of task characteristics and accountability on audit judgment. We found that when the audit task is less structured, such as in analytical reviews, auditors will manifest an attitudinal shift toward the preference of the agent to whom they are accountable. When the audit task is structured such as in internal control evaluations, an attitudinal shift will not occur. We also discuss the implications of our findings for audit review processes and future research.

Keywords: Accountability, Task characteristics.

Data Availability: Contact the first author.



1. INTRODUCTION

Enron and subsequent cases have damaged the public's trust on auditor independence in performing attestation services. Most criticism is centered on how auditors justify their judgments/decisions when auditors and clients are not in agreement on accounting treatments (e.g., Chang and Hwang 2003) or opinion types (e.g., Nelson, Elliott and Tarpley 2002). Concerning the control over audit quality, the audit profession has mandated the review process in the Generally Accepted Auditing Standards (GAAS) to hold auditors accountable not only to their clients but also to their supervisors when rendering their professional judgments/decisions (Emby and Gibbins 1988; Gibbins and Newton 1994; Libby and Luft 1993; Messier and Tubbs 1994; Solomon 1987). However, as suggested by Tetlock (1983a) and Tetlock, Skitka and Boettger (1989), this process may induce an auditor to behave in a dysfunctional manner. For example, the auditor may experience an attitudinal shift toward the preference of his/her supervisor when the supervisor's preference is known to the auditor. Such a shift may jeopardize the auditor's independent judgment and professional skepticism, particularly when the supervisor gives credence to the client's explanation about unexpected account balance fluctuations (Peecher 1996; Turner 2001). Given this concern, our study examines how auditors reach professional judgments/decisions when they are held accountable to supervisors with known preferences.

Peecher (1996) found that auditors' assessments of client-provided explanations for unusual account balance variations were influenced by their reviewers' attitudes towards the client. Furthermore, Turner (2001) found that auditors, when being held accountable to a reviewer with a known credence preference of a client, examined fewer evidence items and followed a more client-prompted search than those who faced reviewers with skepticism and unknown preferences. Since the empirical evidence in these studies casts doubt on auditors' independence and professional skepticism, it is important to clarify, across various audit tasks, whether or not auditors' judgments are influenced by the preference of their reviewers.

Prior research has shown that task characteristics may influence audit judgments (see Libby and Luft 1993; Nelson and Tan 2005 for reviews). These studies examine the direct effect of task type (e.g., Kerr and Ward 1994) or joint effect of task complexity and experience/knowledge (e.g., Abdolmohammadi and Wright 1987; Simnett 1996; Trotman and Wright 1996) on audit judgments. Prior research directly related to this study investigates how accountability may interact with task complexity (jointly with experience, knowledge or ability) to affect audit

judgments (e.g., Chang, Ho and Liao 1997; Tan and Kao 1999). Chang et al. (1997) indicate that accountability does not interact with task complexity to affect judgments. Conversely, Tan and Kao (1999) suggest an interaction effect between these two factors and conclude that accountability does improve auditors' performance if the task complexity, auditors' knowledge and problem-solving ability are high. However, none of them examines how auditors' judgments are influenced by their supervisors' known preference under different task structure.

Compared with unstructured audit tasks, structured tasks have clearly-specified guidelines and well-defined alternatives (Abdolmohammadi 1999; Abdolmohammadi and Wright 1987; Simon 1960) and thus leave an auditor limited discretion for justifying a favored position towards a client's aggressive reporting (e.g., Cuccia, Hackenbrack and Nelson 1995; Hackenbrack and Nelson 1996; Nelson et al. 2002). Compared to analytical procedures, internal control evaluation is a more structured audit task (Abdolmohammadi 1999; Libby 1985). Thus, auditors may be less inclined toward their reviewer's preference in assessing clients' internal controls, even when the reviewer gives credence to the client's explanations. The current study adds to the literature by examining whether auditors' internal control evaluations also conforms to their reviewers' known preferences, as suggested in prior research in which auditors performed only analytical procedures.

This study contributes to both the audit literature and practice. First, it extends the understanding of the effect of accountability (with known reviewer preferences) on audit judgment by incorporating task characteristics as a moderating variable. In addition, the findings of this inquiry may have implications for the accounting profession as to audit quality. If auditors conform to their reviewers' preferences in performing analytical reviews but not in assessing internal controls, concerns about auditor independence and professional skepticism may be lessened, since there are audit programs to verify the results of analytical reviews and auditors are found to be conservative when using the results of an analytical review (see Biggs, Mock and Watkins 1988; Cohen and Kida 1989). Conversely, if auditors still conform to their reviewers' preferences in making internal control assessments, we will have serious doubts about audit quality, since internal control evaluation determines the depth and breadth of subsequent substantive tests, including analytical reviews (see Cohen and Kida 1989). Consequently, the audit profession may need to reconsider the effectiveness of review processes.

In addition to the moderating role of audit task characteristics, methodologically, this paper extends prior research (Peecher 1996 in particular) in measuring auditors' judgment. Prior research employs auditors' judgments per se as

the dependent measure. These prior studies assumed that auditors' initial judgments are constant across all treatment groups, which is questionable. In fact, Gibbins and Newton (1994) suggest that the initial position of the auditors in the "accountable" group is an important variable.¹ To rule out the possible confounding effect of the initial belief, the current study adopts a two-stage procedure by first asking auditors to express their initial judgment and then their final judgment after being aware of the reviewer's preference for a client on a specific audit task. The difference between the first and second judgments serves as the dependent measure in our study.

One hundred thirty-six auditors participated in our study. The results indicate that auditors' analytical review judgments are affected by their reviewers' preferences. The effect is particularly significant when the preference of the reviewer is credence as opposed to skepticism. However, the reviewer's preference does not affect the auditor's internal control evaluation.

The next section reviews prior research and develops research hypotheses. The third section presents research methods, which are followed by results and discussions. The final section provides conclusions and limitations, with implications for further research.

2. PRIOR RESEARCH AND HYPOTHESES DEVELOPMENT

Audit settings are characterized by, among other things, the review process in which an auditor is accountable to his/her supervisor for the judgments he/she has made (Emby and Gibbins 1988; Gibbins and Newton 1994; Rich, Solomon and Trotman 1997; Solomon 1987). Psychology research suggests that individuals who are to be held accountable will search for more information and will perform more complex information processing (Tetlock 1983a; Tetlock and Kim 1987) that may even lead to better decisions (Tetlock 1985; Tetlock and Kim 1987). However, it also suggests that when the position of the person to whom they are accountable (i.e., the accountability source, such as a reviewer) is known to the individuals, they will demonstrate a strategic attitudinal shift toward the position of the accountability source (Tetlock 1983b; Tetlock et al. 1989).

Accounting researchers also found that accountability improves auditors' decision performance (Ashton 1990; Cloyd 1997; Johnson and Kaplan 1991; Tan and Kao 1999) and that accountability induces auditors to be more conservative

¹ The importance of initial belief is also documented in other literatures (e.g., Asare 1992; Hogarth and Einhorn 1992; Joyce and Biddle 1981; Tversky and Kahneman 1974).

(Lord 1992; Hoffman and Patton 1997; Turner 2001). Except for Turner (2001), the above-mentioned accounting studies used a setting in which the preference of the reviewer was unknown to the auditors. However, in reality, auditors perform audit procedures with team members, including their supervisors or reviewers (Rich et al. 1997; Tan and Jamal 2001), so they often have an idea about their reviewers' preferences of different audit judgments/decisions through daily interactions, such as first-hand observations and conversations among members. Buchman, Tetlock and Reed (1996) found that auditors, given a client's litigation contingency situation, chose an unqualified opinion when they were accountable to their client and when they were aware of the client's preference. However, the auditors chose a qualified opinion when they were accountable to a firm partner known to prefer a qualified opinion.

Peecher (1996) directly tested the influence of reviewer preferences on auditors' likelihood assessments of clients' explanations of income-increasing account balance fluctuations. The subjects were randomly assigned to three treatment groups. In the credence-inducing condition, subjects were induced to utilize the client's insights to increase audit efficiency. In the objectivity-inducing condition, subjects were induced to be objective in considering the evidence. In the skepticism-inducing condition, subjects were induced to maintain a sufficient degree of professional skepticism. Peecher also manipulated client integrity using a within-subject design at two levels: high and low. When the client's integrity level was high, the subjects in the credence condition gave higher assessments to the plausibility of the client's explanations than were given by those in the objectivity and skepticism conditions. Conversely, when the client's integrity was low, the subjects in the skepticism condition did not give lower assessments than were given by those in the credence and objectivity conditions. Nevertheless, Peecher's within-subjects design may have sensitized subjects to attend to differential client integrity (Pany and Reckers 1987).

Turner (2001) examined differences in auditors' search behaviors associated with reviewer preferences and the nature of the response mode (belief versus action) in the context of an accounts receivable collectibility review. She reported that auditors in the credence-preference condition examined fewer evidence items and followed a more client-prompted search (i.e., a search for evidence that follows directly from the client's explanation) than those in the skepticism-preference condition and those in the unknown-preference condition. Further, auditors in the action conditions examined fewer evidence items and spent less time per evidence item than those in the belief-expressing condition. Additional analyses also indicated that auditors who were held accountable to a reviewer with an unknown preference generally responded as if the reviewer maintained a skepticism preference.

The finding that auditors conform to the view of the person to whom they are accountable has implications about the function of the review process, the maintenance of professional skepticism and auditor independence. The review process is a costly mechanism designed to assure audit quality (Rich et al. 1997). If auditors under accountability relationships do not exert more cognitive efforts and just conform to the reviewer's preferences in performing audit tasks, auditors' independence and maintenance of professional skepticism may be seriously compromised. In other words, the review process may not be effective in controlling audit quality. However, before considering how to revamp the review process, it is important to examine whether this pattern of dysfunctional behavior of auditors exists only in a few types of audit tasks for which compensatory audit procedures may be applied.

We apply the notion of task characteristics to investigate this issue. Psychology and auditing studies have suggested that tasks' characteristics are important factors that can affect judgments (e.g., Chang et al. 1997; Libby and Luft 1993; Murphy 1994; Tan and Kao 1999). Previous studies examine audit judgment performance as a function of either task type per se (e.g., Kerr and Ward 1994), or interactions of auditor's experience/knowledge and task complexity (e.g., Abdolmohammadi and Wright 1987; Bonner 1990; Trotman and Wright 1996) without considering the effect of auditor's interactions with others (e.g., supervisors/reviewers). Regarding the latter, prior research investigates the role of either joint effects of task complexity and auditors' general experience (Chang et al. 1997) or three way interactions of task complexity, ability and knowledge (Tan and Kao 1999) in the relations between accountability and audit judgment. None of them, however, examines how auditors' judgments are influenced by their supervisors' known preference under different task structures.

Structured tasks have well-specified guidelines and a limited number of options; unstructured tasks often deal with ill-defined problems that have many alternative solutions and require considerable professional judgment and insight to make a choice/decision among alternatives (Abdolmohammadi and Wright 1987; Simon 1960). In addition, accounting research has documented that auditors tend to allow their clients' aggressive reporting when the standards are imprecise or vague (Cuccia et al. 1995; Hackenbrack and Nelson 1996; Nelson et al. 2002; Chang and Hwang 2003). Imprecise accounting standards leave room for interpretation and

justification for a favored accounting treatment. Implicit in these studies is that when auditors are held accountable to their clients, they tend to conform to their clients' preference in accounting treatments if the accounting standards are imprecise, though these studies did not explicitly manipulate accountability conditions. In addition, the availability of authoritative guidance affects auditors' decisions on the eventual audit adjustments through constraints on the auditors' discretion imposed by the guidance (Ng and Tan 2003). Salterio and Koonce (1997) suggest, in the absence of authoritative guidance, an auditor's decision to follow a client's position depends on whether the available precedents are consistent or conflicting with each other in suggested accounting treatments. When the precedents suggest the same treatment, auditors apply the available treatment. However, auditors would follow a client's position when the precedents do not suggest the same treatment.

The current study extends prior research by explicitly manipulating accountability conditions in the audit review process while considering the characteristics of audit tasks rather than the precision of accounting standards or the availability of authoritative guidance. We consider audit task characteristics to be a fundamental issue that we first explore. We posit that, for structured audit tasks, the availability of well-specified guidelines and the existence of just a limited number of alternatives leave only limited discretion for auditors to justify a client favored position. Compared to analytical procedures, an internal control evaluation is a more structured audit task (Abdolmohammadi 1999; Abdolmohammadi and Wright 1987). Auditors may thus be less inclined toward reviewer preferences in performing internal control assessments, even when reviewers give credence to clients' explanations. Thus, we conjecture that when performing well-structured audit tasks, auditors' judgments will not be influenced by the known preference of the reviewer. However, based on findings reported in prior accounting research, auditors' judgments will be influenced by the known preference of the reviewer if the audit tasks are not well-structured. Accordingly, we hypothesize that auditors' judgments will be less influenced by the known preferences of the reviewer when they perform an internal control task than when they perform an analytical procedures task.

3. METHOD

3.1 DESIGN AND MATERIALS

This study employs a $2 \ge 5$ between-subjects design. One independent variable is the audit task including analytical procedures and an internal control evaluation.

The other independent variable is accountability, which is manipulated at five levels: no accountability, accountability with unknown reviewer preferences, accountability with credence preference, accountability with objectivity preference, and accountability with skepticism preference. Subjects were randomly assigned to one of the 10 groups. Non-accountability and accountability-unknown preference conditions served as control groups for assessing the effectiveness of manipulations on accountability. Thus, we report only the results on the three treatment groups (i.e., accountability-credence, accountability-objectivity, and accountability-skepticism) in the following section, except for the results on manipulation checks.

Each subject was given a four-part experimental instrument for making judgments. The first part of the instrument is a cover letter stating that the purpose of the study is to understand auditors' judgments. Non-accountability subjects were assured of confidentiality. Accountability subjects were told that their judgments will be reviewed by their manager, who will evaluate the subjects' performance, and that evaluation will, in turn, affect their promotion and compensation. These subjects were also told that a meeting would be called to discuss their judgments in a week. In the meeting, the subjects will be asked to explain how they reached their judgments. Subjects were asked to provide their signatures for the review and justification purposes. The second part of the instrument provides subjects with the background of the audit client, including the industry (semi-conductor), products (memory and logic chips), audit opinions issued in the past years (unqualified opinion), client management competence and integrity (high)², and client lucrativeness (high).

The third part is an audit judgment case. Depending on the treatment condition, subjects performed either an analytical procedure task or an internal control evaluation task. Both audit cases were patterned after Peecher (1996) and were developed based on the materials in the working papers of a Big 4 firm.³ In the

² We chose high client integrity because Peecher (1996) indicated that judgments by auditors in the credence condition differed significantly from those in the objectivity and skepticism conditions when client integrity was high. But, when client integrity was low, judgments by auditors in the skepticism condition did not differ significantly from those in the credence and objectivity conditions.

³ We conducted three pretests using auditors with audit experience similar to that of our subjects in the experiment. In the first pretest, we used Peecher's (1996) instrument to manipulate the three accountability conditions and did not find significant differences in perceived preference of reviewers among the three conditions. We then modified the instrument and conducted the second pretest, but found that the manipulation was still not salient enough for subjects to significantly distinguish among the three kinds of preferences. In the third pretest, we revised the instrument based on real working papers and used 24 auditors with an average of 15 months audit experience to evaluate our instrument. The results showed that our manipulation on all accountability conditions was successful (p = 0.011). Also, subjects felt that the scenarios in the instrument were representative of audit cases. In each pretest, the instrument regarding the accountability conditions was first developed in English and then independently translated into Chinese. The Chinese version was evaluated by two bilingual members of the research team, and wording changes were made in consultation prior to actual use.

analytical review scenario, subjects were told that the client's gross margin ratio has increased rather dramatically in the past year. The client's manager explained that these fluctuations were due to changes in sales mix and to enhancements of process technology. Appendix A provides a sample of the analytical review task. In the internal control evaluation scenario, subjects were asked to perform compliance tests for the controls over the purchase/accounts payable cycle. Subjects were given the information about the controls designed for this cycle. They were also told that two out of 32 purchase orders had been found to have unit-cost discrepancies between the purchase orders and the invoices. Management of the client explained that these discrepancies were due to a price raise made by the supplier after the purchase orders had been issued. Appendix B provides a sample of the internal control task. These scenarios correspond to tests of controls and analytical review procedures in Abdolmohammadi's (1999) taxonomy that suggests the former is more structured than the latter.

After the general description, subjects were given different treatments of accountability. Subjects in the non-accountability and the accountability with unknown preference conditions were given no further information. For subjects in the credence, objectivity, and skepticism conditions, we provided further information similar to what Peecher (1996) used, with modifications to make the setting more realistic and treatments more salient based on the results of our pilot tests. Subjects in the credence condition were provided the information as follows: "Your manager reminds you to finish the audit task on time. He is concerned about the potential for auditors to undertake, without adequate justification, costly investigations when determining the cause of unusual account balance fluctuations (discrepancy from controls). He emphasizes that the information offered by the client is credible and should be adequately utilized to increase audit efficiency. You and your colleagues have also observed that the manager pays particular attention to audit efficiency. Auditors should be prepared to explain to him the necessity for any excessive audit hours. Generally speaking, you believe that the likelihood the manager will accept the client-provided explanation is 80%." See Appendixes A and B for a sample.

Subjects in the objectivity conditions were provided the following information: "Your manager reminds you to be objective and pay attention to audit efficiency, as well as to effectiveness. He is concerned about the potential for auditors to reach, without adequate justification, conclusions regarding the underlying cause of any unusual account balance fluctuations (discrepancy from controls). He emphasizes that in performing analytical review (internal control evaluation), auditors should objectively evaluate the evidence. In other words, auditors should not overly rely on the information provided by the client, nor should they completely ignore the client's explanation."

Subjects in the skepticism condition were told: "Your manager reminds you that the credibility of the client's explanations is low and that he is concerned about the potential for auditors to accept, without adequate justification, client-provided explanations for the cause of any unusual account balance fluctuations (discrepancy from controls). He emphasizes that auditors should maintain professional skepticism in utilizing client-provided explanations. You and your colleagues have also observed that the manager pays particular attention to audit quality. He will go through any details documented in the working papers prepared by his subordinates. Generally speaking, you believe that the likelihood the manager will accept the client-provided explanation is 10%."⁴

Part 4 of the instrument is a post-experimental questionnaire for collecting data on the pressure that subjects perceived, the subjects' familiarity with the tasks, the self-rated efforts that subjects exerted on the task and the degree to which they felt the manager gave credence to the client's explanation. Finally, the subjects provided their demographic information.

3.2 SUBJECTS

Subjects were auditors from a Big 4 firm in Taiwan. Before conducting the experiment, an interview was conducted with a senior partner of this audit firm to ensure the appropriateness of the instrument and to obtain information on the experience level required for performing the experimental tasks. It was determined that one to two years audit experience would be adequate for both the internal control task and the analytical review task. Participating in this study were 136 auditors: 54 in the control groups and 82 in the treatment groups. Overall, these subjects had an average of 1.78 years of audit experience. The means of audit experience for the subjects in the internal control condition and the analytical review condition were 1.71 and 1.88 years, respectively. As to the treatment groups (i.e., accountability-credence, accountability-objectivity, and accountability-skepticism), subjects who performed the internal control task and the analytical review task had an average of 1.70 and 1.97 years audit experiences, respectively. For each task, the

⁴ We carefully controlled the length of the descriptions on the manager's intent in the case materials across the three accountability conditions. To distinguish among the conditions, we emphasized efficiency without mentioning effectiveness in the "credence" condition while stressed both efficiency and effectiveness in the "objectivity" condition. For the "skepticism" condition, we mentioned "quality" as an equivalent to "efficiency and effectiveness". While different labeling may affect the power of manipulation, our data from the post-experimental questionnaire showed that the subjects perceived the case in the predicted manner. Please refer to the manipulation check and preliminary analysis of the result section.

subjects did not differ significantly (p's > 0.10) in audit experiences among the three treatment groups.

Subjects in the three treatment conditions appeared familiar with the audit task in the experiment. They responded on a 1-7 Likert-scale with an average familiarity of 4.43 and 4.6 for the internal control task and the analytical review task, respectively. The difference was not statistically significant (p > 0.10). For each task condition, the subjects' familiarity with the audit task was not statistically different among the three treatment groups (p's > 0.10).

3.3 PROCEDURES

The experiment was conducted during training sessions of the Big 4 firm. The instruments were randomly distributed to the subjects. Although we had distributed equal numbers of the 10-version instruments among the subjects, due to different return rates, the cell size was not identical across the 10 treatment conditions.

After reading the first part of the instrument, the subjects were asked to provide their initial belief, on a 0-100 scale on which 0 represents "definitely no" and 100 "definitely yes," about the likelihood that the client-provided explanation can account for the unexpected account balance fluctuation (discrepancy from controls). They then went through the audit case scenario and provided again their judgment about the likelihood that the client-provided explanation can account for the unexpected account balance fluctuations (discrepancy from controls). Finally, participants completed the post-experimental questionnaire for demographic information.

4. RESULTS AND DISCUSSIONS

4.1 MANIPULATION CHECK AND PRELIMINARY ANALYSIS

In the post-experimental questionnaire, we asked subjects to assess, on a seven-point scale (with 1 = Not at all, 7 = To a Very Large Extent), the degree to which they felt the manager gave credence to the client-provided explanation. ANOVA results indicate that subjects performing the analytical review task (internal control evaluation task) responded differently among the credence, objectivity and skepticism conditions (p's < 0.04), with the mean of 4.92 (4.87), 4.36 (4.38), and 3.58 (4.00), respectively. Pairwise comparisons suggest that, for both tasks, only the difference between credence and skepticism conditions was significant (p < 0.001, and p < 0.03 respectively). We also obtained their responses on a seven-point scale on the degree to which they felt pressure in performing the tasks. ANOVA results suggested that the responses from the non-accountability subjects differed

significantly from those by the subjects in the four accountability conditions for both tasks (p's < 0.01). Responses from non-accountability subjects also differed significantly from those of the subjects in the three treatment conditions for both tasks (p's < 0.01). In addition, subjects in the accountability-unknown preference condition did not differ in the felt pressure from those in the three treatment conditions for both tasks (p's > 0.10). Among the three treatment conditions, perceived pressure did not differ significantly for both tasks (p > 0.10). Pair-wise comparisons indicate similar results (p's > 0.10). Overall, our manipulation on accountability and reviewer preference appears successful.

Panel A: Dependent Measure = Final Judgment-Initial Belief									
Treatment Conditions	<u>A</u>	Analytical Review			Internal Control Evaluation				
	<u>n</u>	Mean	SD	<u>n</u>	Mean	SD			
Accountability-credence	12	7.50	14.22	15	-6.67	12.91			
Accountability-objectivity	11	-2.73	17.37	16	-8.13	17.97			
Accountability-skepticism	13	-8.46	10.68	15	-8.67	10.60			
Panel B: Dependent Measure = Final Judgment									
Treatment Conditions	Analytical Review Internal Control Evalu					valuation			
	<u>n</u>	Mean	SD	<u>n</u>	Mean	SD			
Accountability-credence	12	70.00	9.53	15	65.33	14.07			
		(62.50)*	(14.22)		(72.00)	(8.62)			
Accountability-objectivity	11	64.55	14.40	16	62.50	15.71			
		(67.27)	(11.04)		(70.63)	(6.80)			
Accountability-skepticism	13	64.62	7.76	15	59.33	11.00			
		(73.08)	(8.55)		(68.00)	(6.76)			
* Numbers in parentheses represent subjects' initial belief.									

 TABLE 1
 Descriptive Statistics of Auditors' Judgments

Table 1 presents descriptive statistics of judgments made by subjects in the three treatment conditions. Panel A of Table 1 uses a relative measure of audit judgments by subtracting final judgments from initial belief to control for the effect of initial belief, where Panel B presents the means and standard deviations of the absolute measures of subjects' initial and final judgments. Panel A shows that, in performing the analytical review, subjects in the three conditions judged differently. Credence subjects judged the highest likelihood that the client-provided explanations can account for the fluctuations (with an average of upward adjustment of 7.5), which was followed in descending order by the objectivity (mean = -2.73) and skepticism subjects (mean = -8.46). A similar but less clear pattern occurred for

the internal control evaluation task. Panel B of Table 1 suggests similar findings in Panel A. We also found that the auditors' initial beliefs differed among the three groups for both tasks, but the differences were not significant.

4.2 HYPOTHESIS TESTS

Our hypothesis predicts that auditors' judgments will be influenced by their reviewers' preferences more in an analytical review task than in an internal control task. Using the relative measure of judgments for analysis, Panel A of Table 2 shows that, in the analytical review task, subjects' judgments differed significantly among the three preference conditions (F2, 33 = 4.04, p = 0.027). Pair-wise comparisons show that the judgments by subjects in the credence and the skepticism conditions differed significantly (F1, 23 = 10.173, p = 0.004). A comparison between the credence and the objectivity/skepticism conditions combined also show a significant difference (F1, 34 = 7.102, p = 0.012). The differences between credence and objectivity and skepticism are not significant (p > 0.10).

However, using the absolute measure of final judgments for analysis, Panel B of Table 2 reports that subjects' likelihood assessments in the analytical review task did not differ significantly among the three treatment conditions (F2, 33 = 1.02, p = 0.372). Pair-wise comparisons suggest similar findings (F1, 21 = 1.167, p = 0.292 for credence vs. objectivity; F1, 23 = 2.415, p = 0.134 for credence vs. skepticism). For an additional analysis, we used the initial belief as the covariate and the final judgment in analytical reviews as the dependent measure to conduct an ANCOVA, and we found that the difference between the credence and the skepticism conditions became significant (F = 25.208, p = 0.037). This important finding and the different results of Panels A and B of Table 2 specify the critical role of initial beliefs in making judgments, as suggested in Gibbins and Newton (1994). When we controlled for the possible effect of initial belief, we found that, in performing an analytical review task, auditors' judgments were influenced by their reviewer's preference.

Table 2 also shows the results regarding auditors' judgments on performing the internal control task. The results indicate that auditors' judgments were not influenced by their reviewer's preference, using either the relative or the absolute dependent measure (F2, 43 = 0.079, p = 0.924; F2, 43 = 0.712, p = 0.497, respectively). For both measures, the difference in judgments between the credence and the skepticism conditions is not significant (F1, 28 = 0.215, p = 0.646; F1, 28 = 1.693, p = 0.204, respectively). A similar finding is obtained when comparing the credence condition with the combined objectivity and skepticism



Panel A: Dependant Measure = Judgment - Initial Belief										
	Analytical Review Internal Control Eva									
Source	df	F	Р	$d\!f$	F	р				
credence vs. objectivity vs. skepticism	2, 33	4.038	0.027	2, 43	0.079	0.924				
credence vs. objectivity	1, 21	2.404	0.136	1, 29	0.278	0.602				
credence vs. skepticism	1, 23	10.173	0.004	1, 28	0.215	0.646				
credence vs. objectivity + skepticism	1, 34	7.102	0.012	1, 44	0.150	0.700				

TABLE 2 Effects of the Reviewer's Preference on Auditor's Judgment

Panel B: Dependant Measure = Final Judgment

	Ana	lytical Re	eview	Internal Control Evaluation			
Source	df	F	Р	$d\!f$	F	p	
credence vs. objectivity vs. skepticism	2, 33	1.02	0.372	2, 43	0.712	0.497	
credence vs. objectivity	1, 21	1.167	0.292	1,29	0.067	0.798	
credence vs. skepticism	1, 23	2.415	0.134	1, 28	1.693	0.204	
credence vs. objectivity + skepticism	1, 34	2.102	0.156	1, 44	1.028	0.316	

conditions. ANCOVA also indicates similar results. The above results support the notion that the influence of reviewer preference on auditors' judgments depends on the structure of audit task.

In addition, we also conducted ANOVAs for each treatment condition with audit task as the independent variable and the relative measure as the dependent variable (see Table 3). For the subjects in the credence group, their judgments were significantly different in performing the two tasks (F1,25 = 7.338, p = 0.012). This suggests that when the reviewer's credence preference was known to the auditors, auditors would be more likely to take the client's explanation when performing the analytical review task (mean = 7.50) than when performing the internal control task (mean = -6.67). For the objectivity condition, auditors' likelihood judgments tended to be higher in the analytical review task (mean = -2.73) than in the internal control task (mean = -8.13). But, the difference is not significant (p > 0.10). A similar finding was found for the skepticism condition. If we use the absolute measure as the dependent variable to conduct the above ANOVAs, there are no significant results. These combined findings confirm our hypothesis that auditors' judgments are less influenced by the known preferences of the reviewer when they perform an internal control task than when they perform an analytical procedures task. Furthermore, auditors' initial belief is a critical factor when they make professional judgments.

Task		Accountability- Credence	Accountability- Objectivity	Accountability- <u>Skepticism</u>
Analytical Review	n	12	11	13
	Mean	7.50	-2.73	-8.46
	SD	14.22	17.37	-10.68
Internal Control	n	15	16	15
	Mean	-6.67	-8.13	-8.67
	SD	12.91	17.97	-10.60
Analytical Review vs. Internal Control	F	7.338	0.604	0.003
	P	0.012	0.444	0.960

TABLE 3 Effects of Audit Task on Auditors' Judgment

5. CONCLUSIONS AND LIMITATIONS

Prior literature has suggested that auditors conform to the position of an accountability source, such as their supervisor or a reviewer, when the position of the accountability source is known to the auditors. The current study contributes to the literature by examining the moderating role of task characteristics in the relationship between audit judgment and accountability incorporating reviewer's preferences. In addition, we also take into account the effect of initial beliefs, which is critical but has not been controlled in studies for this line of research (e.g., Peecher 1996; Turner 2001).

The results of our experiment with 136 auditors are consistent with our predictions. When auditors perform an analytical review task (less-structured), their judgments on the likelihood that the client-provided explanations can account for the unexpected account balance fluctuations are influenced by their reviewer's preference. However, when they evaluate a client's internal controls (more-structured), their judgments on the likelihood that the client-provided explanation can account for the discrepancy from the controls are not influenced by the reviewer's preference. We also find that auditors in the credence condition, when performing an analytical review, tend to make higher likelihood judgments than those in the objectivity and skepticism conditions, a result consistent with the findings reported by Peecher (1996). However, for an internal control assessment, this pattern of behavior does not occur. Our findings suggest that auditors do not always conform to their reviewer's preference in the review process.

The results and conclusions found in this study should be considered in light of its limitations. First, we developed the audit judgment instrument based on the



materials in the working papers of a Big 4 firm. Nevertheless, it is still a simple representation of audit tasks. Future studies could use more realistic case scenarios to conduct a field study to examine the effect of accountability. Second, the current study was conducted in Taiwan; there could be a possible national culture effect on the subjects' behavior. A cross-culture study will enhance the generalizability of the current findings. Third, the current study used audit judgments/decisions as the dependent variable; future research may consider the amount of audit work (e.g., information search effort and strategy) as an alternative dependent variable to examine how these two types of dependent variables are aligned with each other (cf. Hunton and McEwen 1997; Wilks 2002). Fourth, auditors are held accountable to multiple accountability sources (Gibbins and Newton 1994; DeZoort and Lord 1997). This study focuses on the situations where auditors are accountable to their reviewers. Future research may consider multiple accountability-source relationships to make the experimental setting more realistic. In addition, it is imperative to scrutinize situations where the reviewer has a tendency to trust the client's explanation. In this case, not only does the reviewer lack professional skepticism, but so do his/her subordinate auditors, since staff auditors are influenced by their reviewer's preference. Audit firms may consider redesigning the review process to prevent such an unintended effect of the review process when the reviewer's preference is known or can be inferred by their subordinates. Rich et al. (1997) indicated a trend towards simplification of documentation in the review process by asking auditors to focus on the unexpected results when preparing working papers. This change might force auditors to document implausible interpretations provided by clients for the unexpected fluctuations in account balances even when they are aware of the reviewer's preference. Other alternatives may include asking auditors to provide counter explanations (Koonce 1992) or balanced justification memos (Agoglia, Kida and Hanno 2003). Whether these alternatives provide a more effective audit review requires future research.

Finally, there are various approaches to extending the current study. For example, will other audit task characteristics (e.g., task type, task complexity, and task familiarity) moderate the effect of accountability in making audit judgment? Examining this issue may help scrutinize the effect of task characteristics on audit judgment. Second, will a firm-specific culture and/or specific audit approach interact with accountability to affect audit quality? Examining such issues will contribute to the knowledge regarding the interface between organizational factors and individual factors as well as their impact on audit judgments. Similarly, how does the nature of audit team setting interact with accountability (with known reviewer's preference) to influence audit decisions? Investigating this issue may

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have implications for audit firms since audit work is usually performed in a team setting.

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APPENDIX A

Analytical Review Task/Credence condition (Parts 2 and 3)

Assume that you are in charge of the annual audit of a high-tech company. This company has been a client of your firm in past years, during which no material misstatement has been found and an unqualified opinion has been issued.

The client company was founded six years ago and is a publicly held semi-conductor company. At present, its capital is 600 million dollars, with the research and development, design, manufacturing and marketing of DRAM as its primary business. Two years ago, it also started to engage in the OEM business of logic chips.

Twenty-five partners at your firm have evaluated this and other clients and have come to the following conclusions about this client:

Client's management competence	high
Client's management integrity	high
Client lucrativeness	high

Assume that you are performing preliminary analytical procedures and find that compared to the year before, the gross margin of the year under audit experienced dramatic fluctuation. The gross margin increased from 21 million dollars to 129.2 million dollars, with the change of 108.2 million dollars (514%). The gross margin ratio also increased from 5% to 22%. Below is information related to sales, cost of goods sold, and gross margin:

Annual amount	Last year	This year	This year	This year
(Thousand dollars)	(Total)	(Total)	(DRAM)	(OEM)
Net sales	394,752	581,732	382,508	199,224
Cost of goods sold	373,724	452,558	305,644	146,914
Gross margin	21,027	129,173	76,863	52,310
Gross margin ratio	5%	22%	20%	26%
Percentage of salesthis year		100%	66%	34%
Percentage of saleslast year	100%		97%	3%

Industry analysis shows that the average gross margin ratio of this industry is 14% for the last year, and 19% for this year. You asked the controller of the client about the fluctuation of its gross margin during the past year. He answered, "The dramatic increase in gross margin was due to changes in sales mix and enhancement in manufacturing process. The OEM business as a percentage of total sales increased from 3% to 34%. Enhancement of the manufacturing process in the past year has resulted in decreases in unit cost, which in turn increased the gross margin ratio from 5% to 22%."

In performing the annual audit, your manager reminds you to finish the audit task on time. He is concerned about the potential for auditors to undertake, without adequate justification, costly investigations when determining the cause of unusual account balance fluctuations. He emphasizes that the information offered by the client is credible and should be adequately utilized to increase audit efficiency. You and your colleagues also have observed that the manager pays particular attention to audit efficiency. Auditors should be prepared to explain to him the necessity for any excessive audit hours. Generally speaking, you believe that the likelihood the manager will accept the client-provided explanation is 80%.

Now, attend to the increase in the gross margin ratio and the explanation provided by the client's controller. Please assess the likelihood the client's explanations for the fluctuation accounted for what caused substantially all the fluctuation (at least 85% of the causes). Remember that your manager will review your assessment and that he will ask you for a justification in a week. He will evaluate your performance, which will ultimately affect your promotion and compensation.

Please make your judgment on the following scale by circling a number. The larger the number you circled, the more likely that you assess the client's explanation can account for the fluctuation in gross margin ratio.

 0
 10
 20
 30
 40
 50
 60
 70
 80
 90
 100

 Definitely no
 Definitely yes



APPENDIX B

Internal control task/Credence condition (Parts 2 and 3)

Assume that you are in charge of the annual audit of a high-tech company. This company has been a client of your firm in past years, during which no material misstatement has been found and an unqualified opinion has been issued.

The client company was founded six years ago and is a publicly held semi-conductor company. At present, its capital is 600 million dollars, with the research and development, design, manufacturing and marketing of DRAM as its primary business. Two years ago, it also started to engage in the OEM business of logic chips.

Twenty-five partners at your firm have evaluated this and other clients and have come to the following conclusions about this client:

Client's management competence	high
Client's management integrity	high
Client lucrativeness	high

Assume that you are performing compliance test of the client's internal controls over purchase/accounts payable cycle. The designed controls are as follows:

- A. Purchase requisition, purchase order, and inspection document are approved by the authorized personnel.
- B. Purchase requisition, purchase order, inspection document, and invoice are consistent with one another in the description and specification of goods purchased.
- C. Purchase requisition, purchase order, inspection document, and invoice are consistent with one another in the quantity of goods purchased.
- D. The amount on the invoice is correct, and it is consistent with the amount on the bookkeeping voucher.
- E. The lag between the inspection date and the shipping date is reasonable.
- F. Bookkeeping vouchers are approved by the authorized personnel, and the account title and timing of recording are correct.
- G. Disbursement vouchers are approved by the authorized personnel, and the account title and timing of recording are correct.
- H. The amount paid is consistent with the amount in accounts payable subsidiary ledger or remittance slip.

P.O. dollars amount (in thousands)Authorized personnelBelow 3.03Assistant Manager, Purchasing Department3.03 – 121.21Manager, Purchasing Department121.21 – 303.03Director, Material Management Division303.03 – 909.09Vice presidentAbove 909.09President

Below are the client's authorized personnel for purchasing:

In a sample of 32 transactions, you have found two transactions of which the unit cost shown on the purchase orders was not consistent with that on the invoice. Below is the information about these two purchase transactions (amounts are all in thousand dollars):

Items		Pu	rchase ord	Invoice				
	Date	No.	Quantity	Unit cost	Total	Quantity	Unit cost	Total
Wafer	4/27	04211	2,000	0.10	200.0	2,000	0.11	220.00
Photo resist	9/14	09121	1	519.90	519.90	1	551.52	551.52

stripper

You asked the division director about the reasons for differences between purchase orders and invoices. He answered, "Due to the price raise requested by the vendors after the purchase orders were sent, the amounts shown on the purchase orders and those on the invoice differed."

In performing the annual audit, your manager reminds you to finish the audit task on time. He is concerned about the potential for auditors to undertake, without adequate justification, costly investigations when determining the cause of unusual account balance fluctuations. He emphasizes that the information offered by the client is credible and should be adequately utilized to increase audit efficiency. Also, you and your colleagues have observed that the manager pays particular attention to audit efficiency. Auditors should be prepared to explain to him the necessity of any excessive audit hours. Generally speaking, you believe that the likelihood the manager will accept the client-provided explanation is 80%. Now, attend to the discrepancy between the purchase orders and the invoices and assess the explanation provided by the client's division director. Please assess the likelihood the client's explanations for the discrepancy account for what caused substantially all the discrepancy (at least 85% of the causes). Remember that your manager will review your assessment and that he will ask you for a justification in a week. He will evaluate your performance, which will ultimately affect your promotion and compensation.

Please make your judgment on the following scale by circling a number. The larger the number you circled, the more likely that you assess the client's explanation can account for the discrepancy in internal controls.

0	10	20	30	40	50	60	70	80	90	100
Defi	nitely 1	no								Definitely yes

