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CLIENT CONTROL ENVIRONMENT EVALUATIONS

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The Pennsylvania State University

The Graduate School

Department of Accounting and
Management Information Systems

Client Control Environment Evaluations

A Thesis in

Business Administration

by

Mark Eugene Haskins

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy

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Mark Eugene Haskins

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ABSTRACT

The professional auditing literature identifies the need for a client control environment evaluation prior to the design of an auditor's internal control tests. The purpose of this study is to determine what specific client attributes comprise a client's control environment and to investigate auditor perceptions regarding the importance of these attributes. In addition, auditor insights regarding the attributes' relation to various notions of control and risk is explored.

Interviews and questionnaires were used in order to investigate the importance of various control environment concepts for specific audit engagements. A total of 146 auditors, from all the "Big 8" CPA firms, responded to the questionnaires. Partners in both practice and Executive offices of several "Big 8" firms were interviewed.

Research results indicate a consistent ranking of the control concepts across various auditor partitionings. Moreover, it was found that the more important control concepts were consistently labeled as "accounting control" and "control risk" related while the least important control concepts were viewed as "administrative control" and "inherent risk" related. It was also found that auditors believed that more audit attention should be focused on these client attributes than was actually being given. Another major finding indicated that firm affiliation, years of audit experience, audit firm client specialty, management structure of the client, and client

total assets exhibited some of the strongest associations with the various auditor responses.

It was found that the AICPA accounting/administrative control dichotomy is not a useful notion to auditors. Moreover, it appears that auditors do not distinguish between inherent and control risk elements. It was also concluded that differences in the control concepts' importance ratings existing along client demographic variables can be interpreted as an appropriate tailoring of the audit. However, differences in ratings along auditor and audit firm demographic variables could portend a potentially dangerous lack of consensus among auditors and audit firms.

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CHAPTER I

AN OVERVIEW OF THE RESEARCH

The financial statements of business enterprises reflect the assertions of management concerning that enterprise's results of operations, financial condition, and changes therein. Independent auditors, whose task is to render an opinion on these financial statements, gather and evaluate evidence in order to form an opinion concerning the fairness of these assertions taken as a whole. The third standard of field work expressly states that, "Sufficient competent evidential matter is to be obtained . . . to afford a reasonable basis for an opinion regarding the financial statements under examination" [AICPA, 1983a, pp. 7-8]. In addition, when auditors ultimately render their opinion in their standard short form report the statement is made that, "Our examination was made in accordance with generally accepted auditing standards. . . ." [AICPA, 1983a, p. 302]. One such standard that represents an important source of competent evidential matter is the second field work standard which states that:

> There is to be a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted. [AICPA, 1983a, p. 7]

Thus, it is evident that the review of a client's internal controls is an integral part of any independent audit.

The typical audit, which encompasses a review of internal control, is portrayed in Figure 1. This representation reflects the sequencing

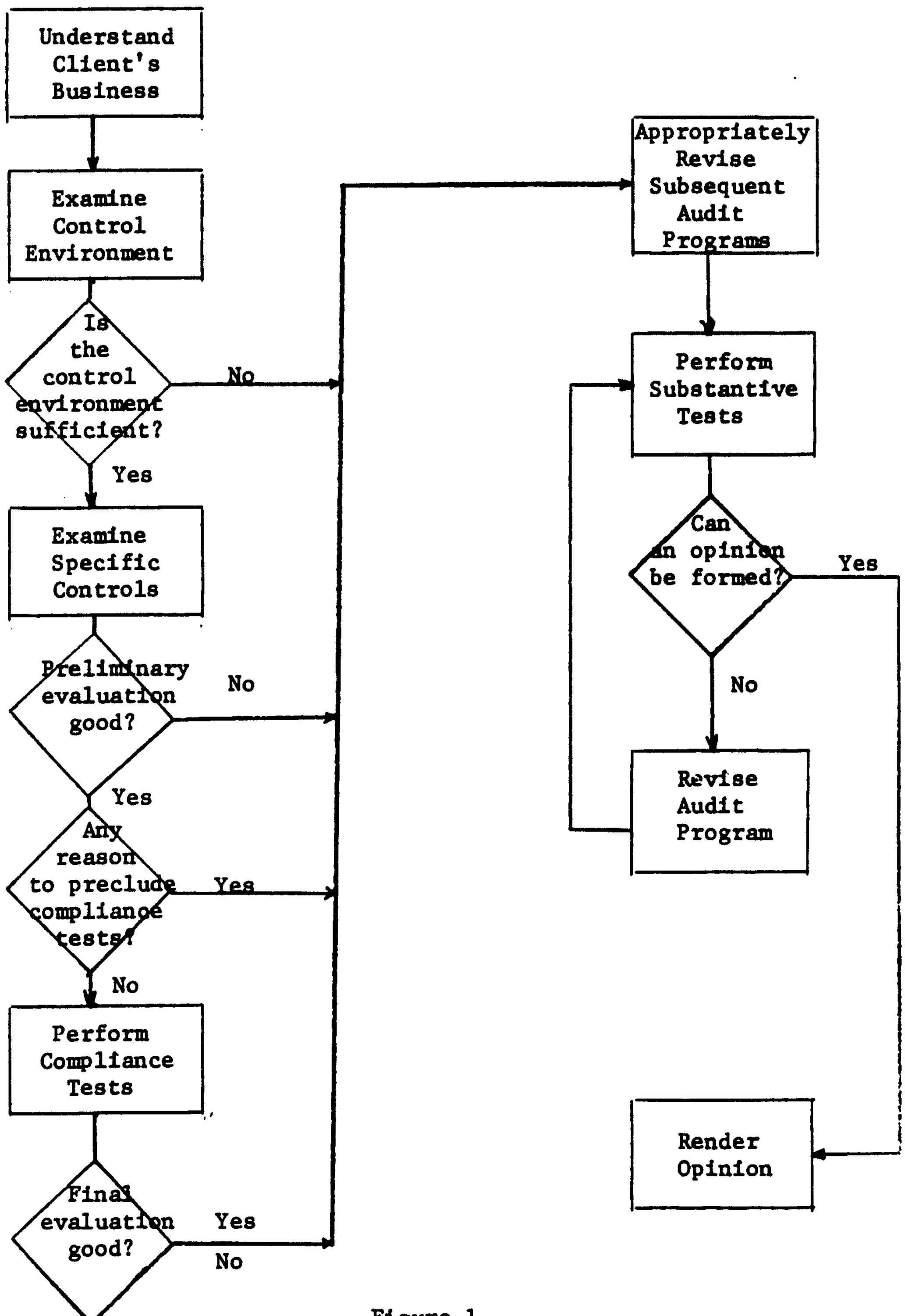

Figure 1

Audit Process
(Adapted from: Nanni [1981])

of events as espoused by the professional literature and by other researchers (see for example Martin [1980], and Biggs and Mock [1980]). The entire left side of the figure deals with the client's internal control.

Audit Impact of the Control Environment

Notice that the first decision point on Figure 1 requires that a decision be made as to the sufficiency or acceptability of the client's control environment (referred to as the "environment for controls" by the SEC [1979]). If it is not acceptable, no further internal control work should be performed by the auditor and subsequent substantive tests will have to be altered accordingly. Kinney [1975], Martin [1980], and Lambert and Lambert [1979] also depict such a link as does the AICPA's Special Advisory Committee on Internal Accounting Control when they state:

> Internal accounting controls cannot be evaluated in a vacuum. The committee believes that an overall evaluation of a company's internal accounting control environment is a necessary prelude to the evaluation of control procedures and techniques.
>
> A poor control environment would make some accounting controls inoperative for all intents and purposes because, for example, individuals would hesitate to challenge a management override of a specific control procedure. On the other hand, a strong control environment, for example, one with tight budgetary controls and an effective internal audit function, can significantly complement specific accounting control procedures and techniques.
>
> Although it is possible for accounting control procedures and techniques to be working in a company that has a poor control environment, the committee believes it is unlikely that management can have reasonable assurance that the broad objectives of internal accounting control are being met unless the company has an environment that establishes an appropriate level of control consciousness. [AICPA, 1979, p. 12]

In a review of twenty-seven (27) of the most recent, significant audit failures discussed in the SEC's Accounting Series Releases, Eisenschmeid and Haskins [1983] note that in fourteen (14) of them, the SEC concluded that the auditors failed to adequately evaluate a client's internal controls and/or link their evaluations to subsequent audit procedures. In regards to this latter point, a number of empirical studies (see for example, Arens [1970] and Morris and Anderson [1976]) have also found that the theoretical link that is supposed to exist between internal control evaluations and the resultant audit programs, does not necessarily exist. Not only should there be a link between the results of an auditor's internal control tests with subsequent substantive tests but there should also be a link between an auditor's review and evaluation of the client's control environment with subsequent compliance and substantive tests.

Willingham and Parks [1982, p. 28], in discussing the Peat, Marwick, Mitchell & Co. SEADOC approach, refer to the control environment as those "general control features of the company that can influence the performance of control responsibilities." Arthur Young & Co. [1980] explicitly identify a client's control environment as a part of all internal accounting control systems. Warren [1979] and Holstrum and Kirtland [1982] similarly note that the environment in which clients exercise specific controls is important to the auditors evaluation of audit risks. Price Waterhouse & Co. [1979, p. 15] believe that the desirable characteristics of a proper control environment are ". . . awareness (the communication of what [management] expects), attitude (the existence of incentives to exercise control), and discipline (the assurance that activities are controlled)." Nicholas [1982, p. 58] asserts that these desirable characteristics are the results ". . . of the combined effect of the organization's, 'charter', its policies, operating procedures and style of management, and the reactions and expectations of the people within the organization as a whole." The assessment of a control environment's overall impact is important in predicting the pervasiveness and effectiveness of the client's financial reporting process in achieving control and even in achieving organizational integrity [Collins, 1982].

The Need For This Study

The first significant appearance in the professional literature of the notion of a control environment, and the audit concerns it warrants, was not until the 1979 report of the Special Advisory Committee on Internal Accounting Controls. At that time their report concluded that, ". . . there is not sufficient empirical knowledge of how extensively control procedures and techniques are employed, in what combinations, in which industries, in companies of what size, and so forth" [AICPA, 1979, p. 27]. In specifically addressing research on control environments, Felix and Kinney [1982, p. 251] note the same conclusion:

> Background literature that would allow the researcher to understand the current practices [in this regard] . . . is relatively sparse.

Moreover, they also note that research describing or classifying the cues that auditors use to plan the audit and to develop beliefs concerning the "state of the auditee's affairs" is nonexistent. Likewise, Wright

[1982, p. 1-3] states that research on the impact of a client's control environment is greatly needed because;

> . . . we have virtually no empirical results to address the following important issues:
>
> 1. Do auditors actually rely heavily on environmental factors in practice? and if so, which ones are most heavily utilized?
>
> 2. How are these factors incorporated with other audit evidence in making decisions?
>
> 3. Is the reliance on various environmental factors beneficial or harmful? Research on the effect of environmental factors is, thus, greatly needed. The environmental factors deal with the setting in which the audit takes place.

The insights into control environment concerns that do exist, have been only at a conceptual level (e.g. AICPA [1979], Lambert and Lambert [1979], Cook and Kelley [1979]), or at a very micro level (e.g. Mock and Turner [1981] and Abdel-khalik, Snowball and Wragge [1983]). Felix [1981] believes that broad-based state descriptive research is needed that investigates how auditors identify important controls and what combinations of strengths and weaknesses are acceptable. Cushing and Loebbecke [1983, p. 68] note in their review of firms' auditing practices, that the preliminary phase of internal control evaluation exhibits some of the "greatest diversity among the firms." Hylas and Ashton [1982] also call for more research into the "less rigorous audit procedures" that are performed prior to determining the extent of reliance to be placed on internal controls and prior to determining the amount of detailed testing to perform. In the same vein, Mock and Watkins [1980, p. 2] believed "additional research is needed regarding . . . the way in which [auditors] weight various informational, organizational, and behavioral cues. . . ." Therefore, because "survey research on the evaluation of internal control and use of the evaluations in audit planning has not been common" [Felix, 1981, p. 9] and because as Tabor [1983, p. 348] states, "I know of no other research that addresses both internal control evaluation and the subsequent audit program planning decision in the same experimental task," there appears to be a research void concerning what auditors do in regards to control environment evaluations, how these evaluations affect subsequent audit activity, and what factors account for differing audit approaches in this area.

There is no doubt that control environment evaluations represent a subjective, ill-structured decision task as defined by Mintzberg et al. [1976]. Yet, the importance of making such evaluations is not diminished by these facts [Defliese et al., 1984]. It appears that researchers have shied away from investigating how auditors perform this task and how it might be improved. Bamber and Bylinski [1982, p. 35] state that ". . . [audit] context has been given little thought in audit information processing research. Furthermore, ill-structured problems have not been investigated in auditing." This study represents a first step, embarking along the unexplored paths pointed to by all these authors.

Overview of Existing Research

Joyce and Libby [1981] note three research paradigms relevant to internal control audit judgments. They refer to them as policy-capturing, probablistic judgment and predecisional behavior paradigms. The type of research represented by this study falls into the third category where auditors are faced with an ill-defined information search task, in unstructured contexts. The best examples of accounting research conducted in this vein are Mock and Turner [1981] and Biggs and Mock [1980]. Verbal protocols from four auditors were collected in a field experiment and analyzed. The auditors' protocols concerned their review and evaluation of an internal control system to determine scope revisions for subsequent audit programs. These studies found a great deal of variability among auditors' decisions and that they focused on a much greater proportion of the available information than they actually reported.

The policy-capturing paradigm of research attempts to mathematically reflect the judgment policies of auditors. Much research in this area has employed the Brunswick Lens Model and used various regression or ANOVA techniques. Much of this work is typified by Ashton [1974] and Joyce [1976]. Ashton's study involved a factorial design in soliciting auditor evaluations of a payroll control system's strength. He found there was a fairly high level of auditor consensus. Joyce on the other hand, investigated differing man-hour allocations for auditing of accounts receivable based upon different levels of control strengths and weaknesses. He found less auditor consensus than did Ashton.

Solomons and Wilson [1980] provide a good example of the probabilistic judgment paradigm, as it applied to internal control research. They investigated audit team consensus concerning prior probability distribution judgments in six cases. Their primary finding was that audit team judgments were less variable than the judgments of individual auditors. In another study, Joyce and Biddle [1981] explored anchoring and adjustment heuristics (see Tversky and Kahneman [1974]) that possibly mitigate belief in the Bayes' Theorem as descriptive of human judgment. They found that auditors do, at times, make judgments in violation of Bayes' Theorem but these violations could not always be explained by anchoring or adjustment heuristics. Instead, a contingent adjustment strategy was used where the auditors made large substantive test adjustment recommendations when internal controls were weak and only small adjustments as the controls became stronger.

These prototypical studies exhibit a variety of results across artificial contexts and thus it is difficult to make generalizations. However, the following inferences seem warranted:

1. No known study has directly investigated an <u>actual</u> client's control environment.

2. No known study has directly investigated auditors' identification of specific environmental attributes as <u>sources</u> of audit evidence (previous studies look at <u>evaluations</u> of evidence provided by the researcher and its <u>impact</u> upon subsequent audit procedures); and

3. No known study has directly investigated the opinions of <u>actual</u> audit teams in regards to evidence concerning clients' control environment.

Most of the research that has been done on organizational environments has been in the organizational behavior field. Downey and Ireland [1979] review most of this literature and conclude that the most fruitful means of studying environments is by focusing on actual environmental attributes as they exist in a real world context in a qualitative fashion, as opposed to assessing a few attributes with highly precise, quantitative methods in artificial settings. Konrath [1971] and Amey [1979] both discussed a similar view, albeit from a systems viewpoint. They suggested that no system (e.g., internal accounting control) can be properly reviewed and evaluated if taken out of context of the larger system (e.g., management control) of which it is a part.

The Research Objectives

A significant finding of human information processing (HIP) studies suggests that decision makers do not adhere to normative decision models in complex settings [Wright, 1982]. As an example, Tversky and Kahneman [1974] found that people use "rules of thumb" in order to simplify their decision tasks in complex settings. Research in auditing has also found this to be the case (see Libby [1981]). Thus, given that there are a multitude of factors, with numerous interactions, that auditors could and should consider in their assessments of client control environments, which ones do they select? Do their selections differ across clients and audit teams? According to Ashby's Law of Requisite Variety (see Konrath [1971]), the factors used by auditors should not be a simplified set of just a few cues across different client settings, but should be varied enough to match the variety represented by a diversity of clients. In fact, slightly modifying the labels of the axes in Daft and Wiginton's [1979] depiction of the relationship between language variety and organizational reality, Figure 2 suggests that the incongruous matching of the variety of audit approaches with the degree of complexity of the situation at hand, can result in erroneous audit approaches from the outset.

Client Reality

Audit Control		Simple	Complex
	Low Variety	Appropriate 1	2 Error (Oversimplification)
	High Variety	3 Error (Overkill)	4 Appropriate

Figure 2

Control and Reality

The obvious point to be made is that cells 2 and 3 should be avoided and cells 1 and 4 represent appropriate audit approaches.

Because the task of evaluating a client's control environment is very important and given the fact that most auditor internal control judgment research has not been concerned with the comprehensive, pre-decisional behaviors of auditors regarding these evaluations, this study has the following objectives:

1. Identify auditor <u>choices</u> of different control environment <u>attributes</u> used as audit evidence, identifying the demographic factors associated with differing ratings of importance;

2. Ascertain whether auditors believe that more attention should be focused on these attributes than is now being given;

3. Investigate the impact of evaluations of control environment attributes (i.e., favorable vs. unfavorable) on the nature, timing and extent of subsequent audit programs; and

4. Determine which client control environment attributes are identified by auditors as influencing their assessments of inherent risk and control risk and whether an accounting vs. administrative control dichotomy parallels auditors' rankings of the various control environment concepts.

Each of the objectives is pursued within the context of an actual engagement and the auditor insights solicited are those of the actual audit team performing the current (or latest) audit. The demographic factors solicited will be grouped according to individual auditor, audit practice office, and client characteristics. There are no a-priori hypotheses. Since no known work has explored the auditor's concern with a client's overall control environment in an actual engagement setting emphasizing the identification of pertinent sources of evidence, this exploratory study's value is in its descriptive contribution and in expanding knowledge in the broader control sphere. To paraphrase Mautz and Sharaf [1961], the purpose of this study is to better understand auditing by analyzing the way in which it functions.

Research Methodology

Daft and Wiginton [1979, p. 186] suggest that effective research into the complex aspects of organizations (e.g., their control environments) would most likely reflect the following characteristics:

1. It would focus on general patterns rather than on specific details;

2. It would rely on some type of human observation of the system, and human thought processes would be used to form the observations into a model of the system;

3. Many potential explanatory variables would be left unmeasured;

4. Imprecision would characterize measured variables and relationships among measured variables; and

5. The research process would rely heavily on language of high variety rather than on mathematics or statistics.

In the auditing research context of this study, the above points are relevant. For any initial model building effort where state descriptive or exploratory research is required, ". . . an array of research techniques which are based on high variety language . . . are required" [Daft and Wiginton, 1974, p. 187]. More specifically, Felix and Kinney [1982] suggest that in auditing studies where existing research is sparse, there are two possible approaches offering promise. One approach is aimed at gathering information on what auditors do. They admit that the structure for data collection may have to be crude. Examples of legitimate data sources in this regard would be auditor work papers (which are for the most part unavailable to researchers), interviews with auditors, audit manuals, and litigation files.

The second approach they suggest solicits "structural descriptions" by auditors of what they do (in the context of this study it would be in regards to their client control environment assessment). They believe that a prime data source in this regard is a mail opinion survey which has ". . . the advantage of focusing on extant practices as the auditor recalls them and not on a documentation of practices" [Felix and Kinney, 1982, p. 253]. Paralleling this view, Felix [1981, p. 10] believes that:

> Survey research on new and developing topics in internal control evaluation is certainly useful. In addition, survey based knowledge of standard evaluation practices may be practical and could contribute to testable descriptive theory of internal control evaluation.

This study employs both approaches suggested above. Interviews of Big Eight personnel along with a thorough review of their in-house literature on control environments provided the basis for formulating the questionnaire that addresses this study's stated research objectives in detail, using actual clients and their respective audit teams. In trying to employ ". . . data collection techniques that take advantage of natural language" [Daft and Wiginton, 1979, p. 187], Likert scaled responses are used on the questionnaire. These authors suggest such an approach is "high in variety" because the ". . . language-based labels are used to classify the various values which the variable may assume" [p. 187]. Projecting these values into a numeric scale for analysis purposes will facilitate the use of statistics as a further descriptive tool. However, such structure may also reduce the "variety" of the language based labels. Because "the concern for precise calculation can inhibit insight [and because] novel, insightful ideas can be hard to prove" crosstabulated contingency tables will be used [p. 187]. Such an approach uses data in its nominal form without imposing simplifying structural compromises.

This study is entirely pre-theoretical. No hypotheses are tested. As Glaser and Strauss [1967] argue, exploratory, state-descriptive research is necessary, since testable hypotheses must be derived from theories that are grounded in real world data. It is anticipated that testable hypotheses will <u>result</u> from this exploratory study.

Organization of the Thesis

The remainder of the thesis is divided into six chapters. Chapter II reviews that portion of the organizational behavior control literature applicable to audit control environment concerns. This chapter also reviews the recent accounting literature that has adopted a behavioral rather than an economic orientation in addressing the concept of control.

Chapter III narrows the focus reflected in Chapter II. Chapter III reviews the accounting internal control literature from an historical perspective. Specifically, the definitional problems encountered by the profession are discussed in light of the varying responsibilities implied by the different definitions. Also, the notion of "control environment" is reviewed as is the relevant empirical research on auditors' internal control judgments.

The scope of the thesis is briefly restated in Chapter IV and then a detailed description of the data collection process is presented. Chapter IV discusses the design of the questionnaire, the solicitation of participants, and the administration of the questionnaire.

Chapters V and VI present the data analysis. Chapter V deals exclusively with the debriefing questions completed by the respondents. The main purpose for this analysis is to determine the existence of any unacceptable biases or mitigating factors that would necessitate the omission of a particular questionnaire from the primary data analysis. Chapter VI discusses the results of the primary data analysis which was designed to achieve the four research objectives stated earlier.

The last chapter summarizes the study's limitations and findings and provides a discussion of the potential implications for the profession arising from those findings. Also included are some suggestions for further research.

CHAPTER II

LITERATURE REVIEW: ORGANIZATIONAL CONTEXTS

As mentioned in Chapter I, most of the research that has been done on organizations' internal environments has been by researchers with organizational behavior or sociology interests and backgrounds. Therefore, this chapter discusses the parts of that literature that can be linked to the audit notion of a client's control environment. The first section briefly discusses the insights of several organization theorists, highlighting the macro concerns of management in achieving a proper level of control that encourages initiative and performance conducive to the organization's goals. This linkage to goals is crucial because an auditor's concern with a client's control environment is only warranted to the extent that a favorable control environment results in an increased audit confidence that specific internal accounting controls are not being overridden and are achieving the goals for which they were established.

The second section presents the accounting control theorists who focus many of these organizational concerns onto the role that accounting plays in the exercise of control. These perspectives are necessary in order for auditors to understand their clients' sources of control, conflicts of power, interplay of conflicting self-interests, monitoring of behaviors, and the attitudes of client personnel regarding each of these issues.

Organizations and Control

Weber on Control

Max Weber's [1947] classic work on the rational, bureaucratic organization dealt extensively with the issue of control. Weber was not so much concerned with organizations as rational instruments to achieve goals but rather with the seemingly ironic reality of rational organizational behavior resulting in quite irrational consequences [McNeil, 1978]. Therefore, his notion of a rational bureaucracy is a concern for achieving efficiency of control as a means of achieving efficiency of results.

Weber purports that control should be based on the creating and monitoring of rules within a hierarchy of authority. The flow or exercising of control within such an environment would thus be vertical in direction and would be "control over" (Boland [1979]) members of the organization. Moreover, close control via rules would supposedly enhance the reliability and predictability of behaviors from the organization's members [Mouzelis, 1968]. Logically, once a particular administrative layer of the organization becomes more efficient and rational through the imposition of rules, then the implementation of rules at lower levels in the organization can take place in order to achieve similar efficiency and rationality.

Dornbusch and Scott on Control

Dornbusch and Scott [1975] conceptualize the execution of control from the perspective of an ex-post evaluation process. They identify four crucial elements of the evaluation process, and hence the control process, as being: allocating, establishing criteria, sampling, and appraising. From a control perspective, operationalizing these elements involves assigning a task to a participant, establishing the criteria by which the task performance is to be evaluated, determining the sample of task performances or associated results that are to be evaluated, and appraising the task performance based upon the preceding allocation, criterion setting, and sampling.

In discussing their evaluation processes, several important environmental factors arise. First, the more complex the member's task, the more complex the evaluation process should be. Secondly, consistent with Drucker [1964], performance measures should reflect "real goals." Such a point is subtle, yet if not recognized, output may parallel that of Russian workers' when evaluated on tonnage of nails produced . . . they made only railroad spikes! Third, multiple goals must be given relative weighting in the evaluation process (this coincides with one of Steers' [1975] suggestions). Fourth, increased difficulty of evaluation arises when outcomes are the results of combined efforts of more than one member of the organization. Such a point is a major concern of other control researchers such as Van de Ven et al. [1976], Thompson [1967] and Ouchi [1977, 1978] when they discuss interdependencies and ambiguity of cause and effect relations. Lastly, Dornbusch and Scott write of the frequency of communicated evaluations. In essence, the more frequent the communication, the greater the perception of close and tight control.

This last point appears worth noting because it hints at the need for including time horizons and time preferences within a control concept. Smith [1979] suggests that as decisions or evaluations become more politically based as opposed to economically based, there is a tendency for greater emphasis on short-run satisfactions and results. Agency theorists [Wallace, 1980] believe that such managerial behaviors and tendencies result in one of the primary demands for auditors . . . monitoring and deterring this type activity. Notice that these behaviors are derivatives of environmental forces (i.e. political decisions and political evaluations) which leads to the conclusion that to fulfill this demand for auditing, auditors need to be concerned with the organization environment and climate.

Thompson on Control

J. D. Thompson's [1967] view of "organizations in action" examines uncertainty as a major control environment issue requiring managerial attention. In the face of externally created uncertainties, organizational concerns focus on achieving self-control through "norms of rationality." Organization managers attempt to cope with uncertainty by creating certain parts of the organization specifically to deal with uncertainty or by creating suborganizations which operate at near certainty levels. The only way for an auditor to be sensitive to these external forces and the managerial reactions to them would be to fully understand the client's business environment [McAllister, 1980] and to then use that insight to understand the client's internal environment.

Internal uncertainties create similar concerns and arise from the interdependencies among organizational components. Depending upon the organization's interdependencies, certain means of control and coordination are more appropriate than others. Thompson identifies interdependent relationships to be either pooled, sequential, or reciprocal (see Figure 3). As the interdependency relations progress

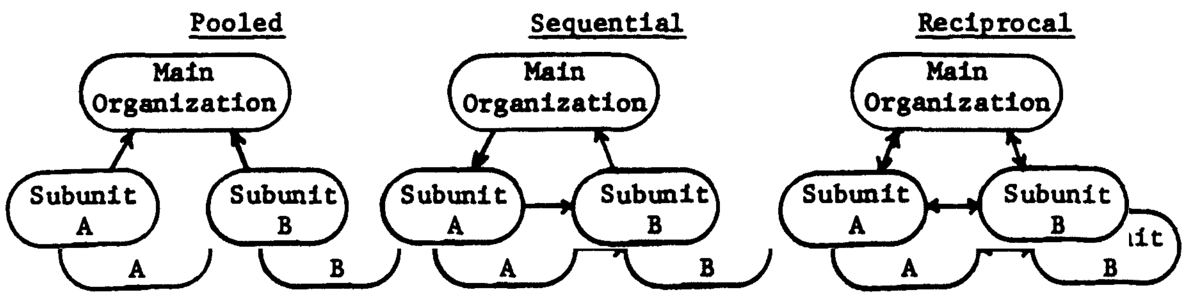

Figure 3

Thompson's Interdependent Relations

from pooled to reciprocal, cause and effect relations tend to become less and less clear. Likewise, there may be greater and greater ambituity concerning desired outcomes which, together creates less precise assessment situations.

A large part of a manager's control task is to implement the appropriate assessment mechanism given the nature of organizational interdependencies, desired outcomes, and cause and effect relations. Such a task translates into strategies suggested in Figure 4. As an organization's setting and situation progresses from cell 1 towards cell 4, there is an increasing burden placed on the information system to provide qualitative, in addition to quantitative, data. Auditors need to be aware that managers continually seek to bring certainty to

		Preferences Regarding Possible Outcomes	
		Certain	Uncertain
Beliefs About Cause/Effect	Certain	Computational Strategy 1	2 Compromise Strategy
	Uncertain	3 Judgmental Strategy	4 Inspirational Strategy

Figure 4

Types of Decision Models
[Thompson, 1967]

uncertain situations and one of the ways to do this would be to focus an inordinate amount of effort on trying to concretize cell 4 conditions. Likewise, auditors themselves must be careful not to approach their client control environment evaluations, a highly fuzzy task, with inappropriate, concretized, programmed approaches.

Arrow and Evans on Control

Arrow [1964] suggests that organizational control has two aspects: (1) the choice of operating rules for instructing members of the organization how to act; and (2) the choice of enforcement rules to persuade or compel organization members to act in accordance with the operating rules. In essence, Arrow is suggesting two separate systems that can be categorized as the operating system and the other being the incentive system.[1] This dichotomy is helpful because the first system can be viewed as the context (i.e., the environment) in which control exists and it is determined by an organization's technology and command over resources [Pfeffer and Salancik, 1978]. The second system is dependent upon information systems that define objectives and measure performance. In addition, the incentive system is dependent upon determinations of the relationship between information indices and ultimate rewards.

Evan's [1975] approach is a little less economically oriented. He views control as the means of securing effective compliance from subordinates just as Arrow does. However, according to Evans, effective compliance has a major reliance upon a cognitive and a motivational aspect. In other words, organizational members must understand what is being asked of them and they must be willing to do it. Furthermore, central to this notion is the flow of information up and down the hierarchy. Effective top-down flow implies comprehensible orders or instructions. Effective bottom-up flow of information should increase motivation of the subordinates.

Evans and Arrow parallel Dornbusch and Scott in the importance given to evaluations within a control system and neither give as much attention to environment and technology as does Thompson. Arrow's two parallel systems idea is insightful as is Evans' two-directional information flows approach. The concerns for auditors would thus be incentive systems and organizational structure.

---

[1]Besides the Dornbusch and Scott [1975] discussion of incentives, see also Clark and Wilson [1961] for an excellent essay on the role of incentive systems.

Ouchi on Control

"Control is not the same thing as structure" [Ouchi, 1977, p. 95]. Rather, control is an evaluation process based on the monitoring and evaluation of behavior or of outputs and the dissemination of rewards. It is, thus, a process highly dependent upon the communication of reliable and valid information. According to Outchi, there are only two phenomena which can be observed, monitored, and counted; they are behaviors and outputs.

"Behavior control is exerted when means-ends relations are known and appropriate instruction is possible" [Ouchi and Maguire, 1975, p. 559]. Furthermore, the application of behavior controls not only requires knowledge of means-ends relations but also agreement. Ouchi continues by suggesting that the greater the task interdependence, and the manager's knowledge of the tasks performed by his/her subordinates, the greater the emphasis on behavior type controls. Ouchi [1978] elaborates on this by suggesting that behavior control is normally more subtle, more flexible, and richer than output controls.

On the other hand, in using output control, the transformation process need not be known at all, but instead, a reliable measure of the desired outputs must be available [Ouchi, 1977] (similar to Arrow's highlighting of indices). The use of output measures is a result of a need for quantifiable, simple indices used by managers many times to defend their position [Ouchi and Maguire, 1975].

In considering the control system as consisting of a set of conditions that govern the particular control to be used (i.e., the control environment), Ouchi suggests the relationships as reflected in Figure 5 [Ouchi, 1977, p. 98].

Availability of Output Measures		Knowledge of Transformation Processes: Perfect	Knowledge of Transformation Processes: Imperfect
	High	Behavior or Output Control (Tin Can Plant)	Output Control (Life Insurance Co.)
	Low	Behavior Control (a baseball double-play)	Ritual Control (U. S. Foreign Service)

Figure 5

Ouchi's [1977] Control Types

The resulting generalizations that follow are numerous. First, the more nonroutine and unanalyzable the task, the less appropriate behavior control. Second, task homogeneity reduces the need for output measures. Third, the more complete the set of formalized rules and procedures to specify behavior, the less the need for output control. Lastly, behavior control can be tailored to the needs of individual departments, whereas output control can be maintained by a central office. Auditors should be sensitive to these dimensions of their clients and tailor their internal control queries accordingly.

A precaution that Ouchi and Maguire [1975] are quick to insert is the necessity for avoiding double-binds (see Bateson [1972] for a thorough discussion of double-binds). In a control context, such a situation could occur when organizational members are rewarded on output measures and are asked to perform behavioral duties that detract from the time and attention they can devote to tasks that would increase output. One final comment by Ouchi [1978] claims that as one rises in the hierarchy, the amount of behavior control received decreases while the amount of output control received increases due to means-ends relations becoming less clear.

Most of Ouchi's observations are an outgrowth of his study of a large retail institution. In later works, he progresses from this baseline to explore production institutions. These later works reveal a more macro view towards control as indicated in the following:

> Design of organization control systems must focus on achieving cooperation among individuals who hold partly divergent objectives. Such a collection of people can be moved towards cooperation through: (1) market mechanisms which precisely evaluates each person's contribution and permits each to pursue non-organizational goals, but at a personal loss of reward; (2) a clan mechanism which attains cooperation by selecting and socializing individuals such that their individual objectives substantially overlap with the organization's objectives; and (3) a bureaucratic mechanism which does a little of each--it partly evaluates performance as closely as possible, and it partly engenders feelings of commitment to the idea of legitimate authority in hierarchies. [Ouchi, 1979, pp. 845-846]

The information requirements for each type of control are prices, rules, and traditions for markets, bureaucracies, and clans, respectively. A market is a very efficient form of control but the most demanding on information systems. A clan is the most demanding in regard to social underpinnings but the least dependent on a formal information system. In reality, if the pricing mechanisms required for a market are unavailable or inappropriate and the social conditions for a clan are nonexistent or not pervasive enough, then the bureaucratic mechanism becomes the preferred approach. In truth, Ouchi believes all organizations exhibit some aspects of all three type mechanisms, although the bureaucratic mechanism appears to dominate regardless of context.

Paraphrasing Ouchi [1979], people must either be able to trust each other or to closely monitor one another if their desire is to participate in cooperative endeavors. Weber would suggest that for any sort of goals to be realized or progress achieved, rules and monitoring take precedence. The other authors discussed, as well as Ouchi, would say that it depends. For Ouchi, it depends on the clarity with which preferences can be assessed (similar to Thompson's cause/ effect dimension) and the degree of goal incongruence (similar to Thompson's clarity of preferences notion). Implicit in Ouchi is the conclusion that organizations approach control from a continuum perspective. Market mechanisms are put in place; where they do not fit clan possibilities are considered; and when neither totally provides the needed control as perceived by managers, bureaucratic modes are instituted. Ouchi ultimately ties his micro and macro views together by simply asserting that output and behavior control techniques are applicable within bureaucratic or market models. Ritual and behavioral approaches are applicable for clan models.

Clearly, the role of accounting in these models is informational in nature. To varying degrees, accounting can aid in the market model (e.g., transfer prices) and in the monitoring and evaluating aspects of the other two. Collins [1982] discusses Ouchi's market, clan, and bureaucracy types of control as they relate to management accounting information systems. Collins suggests accounting as useful in communicating role expectations, providing motivation, and communicating organizational climate. These items are almost exactly identical to the professional auditing literature's elements of a control environment. The AICPA [1979] identifies clients' communication of performance standards, monitoring of performance, and organizational policies and procedures as comprising, in part, their control environment which should be a concern of auditors.

Intermediate Summary

The preceding discussion provides distinctively different, yet in many ways, similar views of the processes or means by which a person or group of persons influences what another person or group of persons will do (this is an intentionally vague definition of control as given by McMahon and Ivancevich [1976]). It is dangerous to equate domination to notions of good or bad and control should not be thought of as good or bad. At particular times, in certain situations, and from different perspectives, domination is the most legitimate course of action. In fact, domination as opposed to adaptation, may truly be the real means by which organizations deal with (or control) their internal and external environments [McNeil, 1978].

Tuggle and Saunders [1979] provide an easy framework from which to assess an organization's particular control network(s). Schematically their framework is depicted in Figure 6.

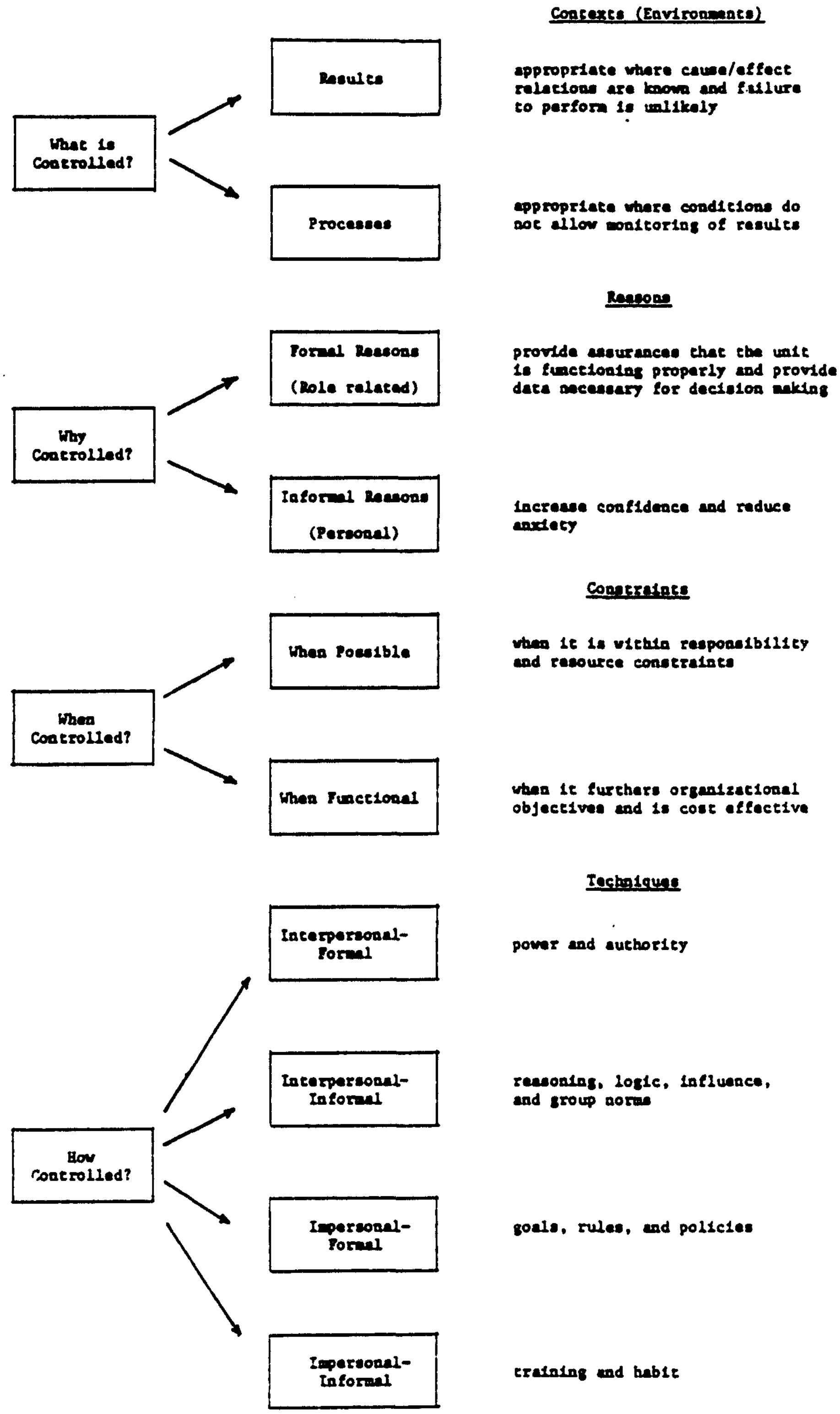

Figure 6

Crucial Control Network Questions

With these key questions in mind, how might the writers discussed in the prior pages be summarized? Flamholtz and Tsui [1980] provide the following summations in Figure 7 (liberty has been taken in partially amending their summarizations). From the Figure 7 summarizations, the diversity as well as the similarity of control conceptualizations can be seen. There is no question that "certain management control activities can have functional, dysfunctional, and non-functional effects on different elements of the organization all at the same time" [Mouzelis, 1968, p. 74] no matter what view of control is adopted.

Organizationally Contextualized Accounting Foundations of Control

An organization has a desired state of affairs that are explicit in its goals. The basic control process that takes place is much like a thermostat. The organization's desired state is compared to its actual state, and if there are significant differences, corrective action is taken. One of, if not the primary, vehicles by which this control process is executed, involves accounting information and accounting systems [Anthony and Dearden, 1976].

Having highlighted some of the general control concerns as isolated and discussed by organizational theorists, the next section discusses some of the accounting control theorists' views. Specifically, their views pertaining to how control is achieved via accounting and the potentially functional and dysfunctional consequences of using accounting in this way are presented. The recognition of an accounting/organizational behavior interaction is

Proponent	Control Definition	Basis or Mechanism of Control	Auditing's Control Environment Concerns
Weber [1947]	Creating written rules and monitoring them through a hierarchical authority	Rules, hierarchy of authority, standardized procedures	The hierarchical authority systems and the existing superior/subordinate relationships
Arrow [1964]	Choosing operating rules and enforcement rules to maximize the organization's objective function	Rules	The clarity and appropriateness of the rules and effectiveness with which they are communicated and enforced
Dornbusch and Scott [1975]	Monitoring, evaluating, and providing feedback	Standards, measurements, evaluation, feedback, rewards	Goals, task complexity and task interdependencies as well as the compatibility of evaluation devices given each of these
Evans [1975]	Motivation to perform jobs regardless of reward or punishment (i.e., self-control)	Intrinsic reward, commitment	Organization members' cognitions, motivations and self-interests
Thompson [1967]	Accomplishing coordination	Dominant coalition, decision premises	Organizational uncertainties, standards of desirability, beliefs about cause and effect, perceptions of seriousness of errors, preferences regarding outcomes, and interdependencies
Ouchi [various]	Monitoring and evaluating behavior or output, for the purpose of coordinating activities of individuals and obtaining cooperation among a collection of individuals or units who share only partially congruent objectives	Supervision, output, measurement, feedback, markets, bureaucracies, clans	Task interdependencies, task homogeneity, availability of task output measures, and awareness of social norms

Figure 7

Organization Theorists Control Summaries important if auditors are to understand the nuances, subtleties and seemingly irrational behaviors stimulated by certain uses (or misuses) of accounting information for the achieving of control. It has to be remembered that the most basic, yet most important ingredient of any control system, are the people controlling and the people controlled.

Anthony and Dearden on Control

Anthony and Dearden [1976] suggest that control within organizations involves the planning and coordinating of activities, and the communicating, processing and evaluating of information in order to influence peoples' behaviors. These control activities can be segregated into three categories: (1) strategic planning, (2) management control, and (3) operational control. All of these involve the organization's information system. In particular, the management control system relies most heavily on financial measures and assessments.

As can be seen from Figure 8, the management control process encompasses a number of environmental (e.g., goals, strategies, plans and action) and accounting information concerns (e.g., measurement, communication, revisions, and comparisons).

Even though auditors are primarily concerned with the overall fairness of the resulting financial information, they should be aware of the nature of the rules [Weber, 1947, and Arrow, 1964], the standards of measurement [Dornbusch and Scott, 1975, and Ouchi, 1977, 1978], and the originations of control [Thompson, 1967, and Ouchi, 1979] that influence the execution of the control process from which the financial statements spring. Without any assurances and knowledge of this sort,

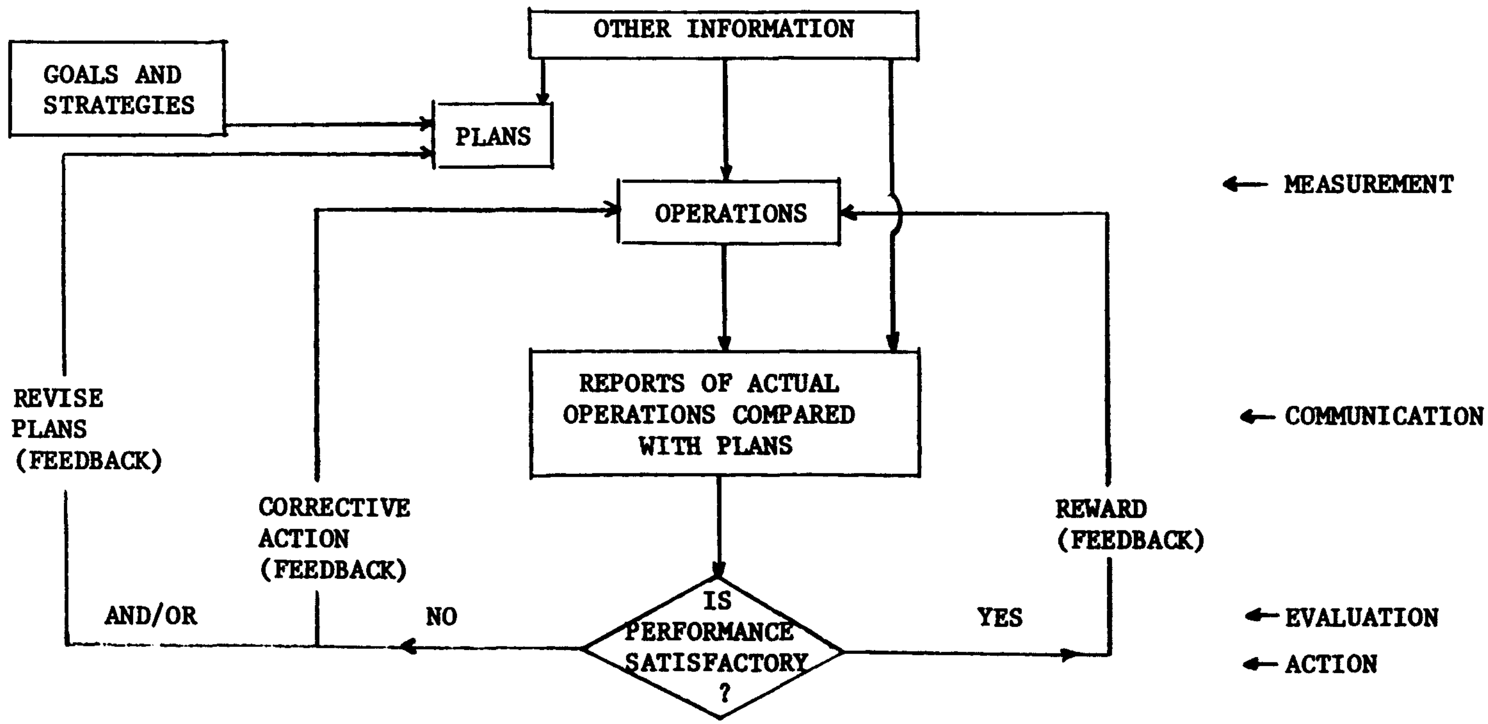

Figure 8

The Control Process
[Anthony and Dearden, 1976, p. 102]

the ending financial statement results are sterile and any evaluations of them are being done in a vacuum.

Boland on Control

As most accounting writers do, Boland [1979] adheres to an information systems perspective for addressing the issue of control within organizations. Briefly, information systems provide a process and an environment for legitimation, sense-making, and the context for social interactions. According to Boland, accounting has the potential to provide information and insights in all three arenas.

Much of auditing's focus on internal controls has been a search for and evaluation of what Boland would call the "controls over" the financial reporting process. If organizations are truly loosely coupled [Weick, 1979], or comprised of clans [Ouchi, 1979] or rely upon myths, ceremony and rituals [Feldman and March, 1981], then it is important for auditors to be just as sensitive to the client's processes referred to by Boland as "control with." Such an audit concern orientation would focus on the motivations of managers, superior/subordinate relationships, the impact of the informal organization structure, etc. These sort of environmental or contextual issues have received only passing attention in the professional auditing literature to date.

Otley and Berry on Control

Otley and Berry [1980] stipulate that management's primary function is to effect organizational control, where control is defined as monitoring activities, and then to take action in order to ensure that desired ends (output and/or behavior) are attained. Moreover, the function of control mechanisms is to provide the dissemination of rewards within the environment of competing interest groups. Borrowing from Skinner's [1953] notion of operant conditioning, control may be achieved in part by the design of reward structures which influence individuals to act in an agreed upon manner by pursuing their own self-interest. This emphasis on rewards ties neatly to Dornbusch and Scott's [1975] emphasis on evaluation. One way in which to conceive of all this is to view the control process as setting boundaries on peoples' tasks but yet making those boundaries dynamic and inspirational. Otley and Berry suggest that accounting is important in formulating objectives and identifying reasonable regions of activity (i.e., inspirational boundaries). They are quick to add, however, that accounting is not totally sufficient for these purposes.

In another vein, these two authors adhere to the belief that control involves feedback and feedforward information flows, which result in the unavoidable linking of planning to control. From Bogart's [1980] perspective, there is an obvious omission in the feed processes suggested by Otley and Berry . . . feed<u>within</u>. These feed processes are tantamount to a system designed to communicate organizational expectations and the monitoring of actions. Such a system has to be viewed as relevant within the wider concept of internal control.

Accounting is but one of the integrative devices available to organizations. However, as suggested previously, it is not a totally sufficient information source for the needs of affecting control. This is the case because one of the most crucial conditions necessary before a process can be controlled is the existence of a predictive model within the system being controlled. A comprehensive predictive model, out of necessity, would contain variables that are outside the scope of traditional accounting. This prerequisite implies that traditional accounting information systems are needlessly restricted. Moreover, if auditing is viewed as a control and monitoring device [Wallace, 1980], then auditing needs to incorporate a predictive model too. Because as Defliese et al. [1984, p. 285] state, "the conditions permitting control are more important than specific control procedures," it is feasible to conclude that the predictive model (i.e., the basis on which to infer the current and continued acceptability of a client's internal controls) should be based on the conditions of control (i.e., the control environment).

Hofstede on Control

Hofstede [1981] believed that control includes the presuppositions of a target; that outputs can be identified and compared to targets; that control efforts can be redirected if targets are not met; and that repetitive activities allow learning to occur. Inherent in these premises is the belief that no matter how ambiguous the cause and effect relations might be, there is still the need for some statement concerning objectives. Obviously, these objectives may be simply stated, such as an accounting clerk being told to update his/her vendors' listing weekly. The point is that there must be a benchmark for evaluation purposes, that have operational characteristics specified in order for the measurement process, either qualitatively or quantitatively, to take place.

Depending on the circumstances, one of six different control mechanisms will be most appropriate. Hofstede's six types of control are: routine, expert, trial and error, intuitive, judgmental, or political. It is important to realize that different control modes may apply to different activities within the same organization (a similar caveat was expressed by Ouchi). Therefore, auditors who have a static mental set concerning the types of controls they want and expect to see operating at their clients, may erroneously mis-evaluate any one or all of the above.

The other note on Hofstede is concerned with learning. Learning is based upon history, both perceived and recorded. Perceived history is tantamount to Weick's [1979] enactment → selection → retention process. Recorded history certainly encompasses accounting information. The idea of learning as a control element leads to the concern for change. As Nelson [1981, p. 100] states, "It is unpredicted change that opens the question of what an organization should do, thus complicating the question of what are the appropriate [control modes now]." Thus, learning how to control implies learning about the organization's people, tasks, goals, and potentialities for change all of which are environment related.

Amey on Control

In regard to the central notion of most of the control theorists' use of open systems typologies is that of a cybernetic, self-controlling imagery. However, Amey [1980, p. 130] argues that the "general cybernetic model of the error-controlled feedback system is a closed system."

In a particular vein, Amey [1980] suggests that a classic budgetary control system is primarily a cybernetic system based on the principle of feedback to provide mechanisms for goal-seeking and self-controlling behavior. As he further notes, the empirical evidence suggests that in practice they do not control effectively. Because every system is a part of a larger system, external standards, not internal ones as in budgetary control, should provide the control. Comparisons of observed results (he obviously believes all actions result in observed results) with external standards, highlighting relationships between controlled variables and uncontrolled variables, is a proper performance evaluation approach. How well any system performs (e.g., an individual or complex organization) can only be judged relative to the objective of the larger system of which it forms a part [Amey, 1980].

The main thrust of Amey's views as they pertain to internal control issues is that a notion of self-contained control has to be secondary to the reality of external control from the next larger system's vantage point. Thus, once again the belief that the control environment is more important than the specific controls, is asserted. Moreover, there are such huge differences between social and biological systems that an equilibrium-seeking objective is not even appropriate for the former [Amey, 1980]. Nelson [1981] also hints at the folly of steady-state views for organizations by suggesting that once equilibrium is established, the interpretation is that all that is then required is what has been done today be repeated tomorrow. Recognizing this fact, auditors should become especially concerned with both the internal and external forces (e.g., competition, scarcer resources, higher goals, etc.) exerting their influence upon the desirability of adherence to specific controls by the client's personnel. Such forces should result in a dynamic execution of control that would require a fresh and critical review every year.

Intermediate Summary

The five accounting perspectives on control just discussed are summarized in Figure 9. Many of these writers draw upon the earlier works of Argyris [1952] and Hopwood [1973] who dealt extensively with the behavioral implications of accounting control. Relevant to this study, and increasing in popularity, is the view that control is a dynamic process within organizations that predominantly relies upon human cognitions and organizational contexts as opposed to some universally applicable set of imposed and regulated actions. In the ensuing chapters, such insights provide the context within which auditors are assumed to operate and evaluate a client's control environment. That is to say, for controls to be effective, they require behavioral relevance (the identification of all relevant behaviors or goals required by the organization), behavioral validity

Control Theorists	Control Definition	Basis for Control	Auditing's Control Environment Concerns
Boland [1979]	Control "over"	Related to hierarchically structured, bureaucratically operated processes with rules and orders	The information system, attributions of people, social interactions, and types of causality
	Control "with"	Related to shared realities	Same as above
Otley and Berry [1980]	Monitoring activities and taking action to ensure desired ends	Reward structures, predictive models, objectives and choices	Competing interest groups, information flows, goals, coordination and change
Hofstede [1981]	Accomplishing organizational objectives	Routine, expert, trial and error, intuitive, judgmental, or political	Ambiguity of objectives, measurability of outputs, knowledge of the effects of interventions, and repetitiveness of the activity
Anthony and Dearden [1976]	Any system designed to maintain a desired state or condition	Detector, selector, effector, and communication	Management planning
Amey [1979, 1980]	Autonomous, learned behavior	External standards, open system, maximizing of adaptability	The "larger" system in which the control system functions

Figure 9

Organizationally Contextualized Accounting Control and Environment Summaries (must lead to the behavior or outputs to which it purports to lead) and behavioral reliability (must repeatedly produce the same behavior or output) [Flamholtz and Tsui, 1980].

Controls in Business Organizations

Attesting to the integrated view set forth above (i.e., the merging of organization behavior and current accounting insights) was a study sponsored by the Financial Executives Research Foundation (FERF) [1980]. This study represents a major effort to identify existing control techniques within the large U.S. corporations.

In general, controls were found to be contingent on five items:

(1) organizational structure;

(2) performance appraisal and reward systems;

(3) formal and informal performance measures;

(4) data processing; and

(5) independent performance reviews.

These items represent nothing new except the confirmation of what the previous writers have stressed. Thompson's [1967] technology and boundary discussions, or Weber's [1947] hierarchy deal with item one. Dornbusch and Scott [1975] deal extensively with item two whereas Amey [1980] supports item five. The data processing element simply encompasses information systems aspects while item three is a recognition of the dual nature of control, vis-á-vis the cognitive and formal aspects that Weick [1979] and Ouchi [1977, 1978, 1979] recognized. Figure 10, from the FERF, illustrates numerous examples of control modes found in all organizations. For the auditor, it is

Formal Controls	Informal Controls
Policy manuals	Shared values and philosophy of top management
Procedures manuals	Selecting honest people
Chart of accounts	Personal monitoring
Reports	Follow-up
Forms	Spontaneous meetings
Authorization limits	"Build rules into people" (e.g., training)
Regular meetings	Engendering control consciousness
Decision guidelines	Observe operations
Regular reviews	"Poking around"
Systems (e.g., inventory)	Example set by top management
Documentation	"Know your people"
MBO	Daily involvement
Accounting rules	Experienced judgment
Reward systems	Peer pressure

Figure 10

FERF [1980] Control Modes

not so much a question of which one or two will be exhibited by their clients, but rather, knowing that they probably all exist with differing emphases at different times, under different conditions.

The listing in Figure 10 is interesting to the extent that many of these items also appear in many of the Big Eight firms' in-house literature on the control environment of a client. One of the primary purposes of this study is to investigate the perceptions of auditors concerning such control environment attributes.

Summary

San Miguel [1977, p. 181], concluded in his review on the accounting control literature, that:

> Too often cost standards and budgets are based on idealized models of economic behavior that conflict with the complex realities of behavior in large organizations. For example, cost standards and budgets require efficient, machine-like compliance of workers and managers. This assumes that workers and managers as physiological machines, can be controlled through basic drives and emotions.

Cooper et al. [1981] reach a similar conclusion when they suggested that just as standard operating procedures encourage imitative behavior and are coercive by nature, so too are most accounting systems. These two views typify much of the "new" accounting literature on control.[2]

On the other hand, accounting contributes in important ways to the identification, implementation, and operation of controls. Cooper et al. [1981, p. 186] believe that "accounting systems facilitate commitment, satisfaction and . . . internalization of values." Just how this is accomplished is not quite clear except possibly in the way proposed by Shields et al. [1981] when they view accounting information as useful for making inferences concerning causality. Cooper and his associates continued, by further suggesting that accounting systems are a significant aspect of the power system in an organization. Regardless of the theory of control subscribed to, issues concerned with, power and authority inevitably arise. Control is an outgrowth of power structures or at the very least, control results in conflicts between the formal power structure and

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[2]The word "new" is used to describe the recent literature on accounting that are attempts at integrating it with recent theoretical developments in the organizational behavior, administrative science, and sociology literature.

the informal power bases and such interactions create a client-specific atmosphere (environment) in which specific control procedures must be executed.

In conclusion, Burns and Stalker's [1971] method of generalization is as good as any. Controls, in their view, can be either "mechanistic" or "organic." Mechanistic controls are appropriate for organizations in stable contexts. They are hierarchical in form and are inherent in functional job definitions and can also be established via instructions and decisions from superiors. On the other hand, organic controls are appropriate for changing conditions. They comprise a network structure and are derived from a community of interest. Most, if not all organizations, exhibit both types of control. The important point is that <u>together</u> they comprise the control system of an organization. The "organic" controls are not secondary in importance nor appearance. In the next chapter the auditors historical lack of concern for the "organic" types of controls is noted and the current trend redirecting audit efforts in this regard is reviewed.

CHAPTER III

AUDITING LITERATURE REVIEW: INTERNAL CONTROL AND THE CONTROL ENVIRONMENT

This second and final phase of the literature review continues to narrow the focus of the control contexts presented in Chapter II by discussing the relevant auditing literatures on internal control and a client's control environment. The chapter concludes with a review of the recent research dealing with internal control and highlights the fruitful research area and variables that are the focus of this study.

Auditors, Systems and Sensors

From a macro view, the rendering of an audit opinion involves the joint assessment of piecemeal evidence collected on the various aspects of a clients' financial reporting process. The system generating the financial information is a logical place to begin such an assessment. Auditors have typically focused on the "controls" comprising the system(s) and have not found it necessary to dwell on the organizational "control" (to use Drucker's [1964] distinction) that is or is not achieved. The identification, review and evaluation of relevant "controls" has the purpose of providing evidence in regards to only financial statement assertions, not the propriety of the decisions underlying those statements. In this regard, auditors define and delineate internal control systems conducive to <u>their</u> ends. In essence, they make "self indications of organizationally relevant objects that are meaningful [to them], and interpret(ing) those objects [in light of their] interaction with others" [Boland, 1979, p. 266].

Over the years, the notion of control has acquired numerous meanings.[1] The meaning most consistent with the original French term is reflected in the concepts of regulation and monitoring [Otley and Berry, 1980]. It is in this sense that auditors are concerned with internal control systems. Audit assurance can be partly achieved by confirming that adequate regulating and monitoring procedures exist and operate within a client's financial reporting process.

An important point to note is that the internal controls of concern to auditors generally reflect a systems perspective. A system can be thought of as "a collection of objects united by some form of interaction or interdependence" [Amey, 1979, p. 247]. The objects or characteristics comprising a system involve:

> 1. flows (of information, materials, money, etc.);
> 2. structure (referring to physical and geographical aspects, organizational design, etc.);
> 3. procedures (the pre-planned activities which affect the flows and structure); and
> 4. controls (centers on the prevention and correction of deviations . . . from standards). [Brown, 1966, p. 319]

These elements comprise all control systems whether they are related to asset control, personnel control, cost control, equity control, production control, market control, division control, economic control, supplier control, etc. Moreover, Ackoff, as quoted by Amey [1979, p. 247], asserts,

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[1]Rathe [1960] lists "57 varieties."

> [A system's] behavior is more than the sum of the behaviors of its elements. The system cannot be broken down into independent subsystems and performance of the whole depends critically on how well the parts fit and work together, not merely on how well each performs when considered independently.

Konrath [1971, p. 54] elaborates by suggesting:

> The question which arises here is whether any of these control [groupings or systems] can be dealt with in isolation. Of much greater concern [than artificially delineating and then reviewing a particular internal control system--accounting or otherwise] is the degree to which the various systems interact--that is, the extent to which the variables of one set of controls affect the state of another set.

The cautions expressed above are pertinent to auditors' reviews and evaluations of clients' internal control systems. Typically, the systems which are isolated for review are very small subsystems (e.g., cash disbursements) of the larger effort on the part of management to control their organizations. However, auditors tend not to be primarily concerned with the overall notion of organizational control, but rather with only these limited accounting control aspects. One of the more effective ways to mitigate the shortcomings of such subsystemization is to implant within the isolated subsystem <u>and</u> the review processes that address the subsystem, some sort of "sensor element." A sensor element is any monitoring device that "perceives environmental changes which affect the [particular] system" under consideration [Konrath, 1971, p. 54].

Such a concern is directly encompassed in the notion of a client's control environment. The control concepts comprising the control environment could just as easily be labeled sensor items. It appears imperative that auditors acknowledge and utilize these sensor items (i.e., control environment attributes) in assessing the impact and significance of a particular system's interactions, interdependencies, dynamics, and limitations in executing the financial reporting process which auditors evaluate as one of their primary audit objectives.

Historical Perspective of Internal Control

One of the earliest indications of internal control being a concern to those involved in commerce, can be found in the Mesopotamian Empire around 3500 B.C. [Lee, 1971]. At that time, there is evidence of a concern for the separation of accounting duties. Other early evidence involves the use of test checking in Hellenic Egypt, internal auditing in Persia, and the auditing of collections by the Hebrews. During the Greek and Roman Empires there are clear indications of distinguishing between the person who imposes taxes and the person collecting them. Likewise during this era, auditors were used extensively to review the public accounts of government officials. With the advent of the Dark Ages came the use of tally sticks (the concept being very similar to current cash-imprest systems), vouchers and subsidiary ledgers. Lee [1971] highlights other early evidences of internal control, such as: Pacioli's double-entry bookkeeping being a control device as well as a recording procedure; Columbus being accompanied by an auditor who represented Queen Isabella; and the appearance of a book Verrechning Van Domeine in 1604 describing the state of the art of internal control concepts.

Auditor concern with internal controls arose in the U.S. during the mid-1800's with the expansion of railroads. This was indicative of the changing economic climate of U.S. commerce as companies were establishing geographically dispersed operations and thus, there was a growing separation of ownership from management.

> By 1857, internal auditor[s were] regularly reconciling bank balances and verifying all stock issues. Auditor[s were also] express[ing] the need for segregation of duties, voucher system[s] and [other] control [issues] [Bookholdt, 1983, p. 78].

An early article in the Journal of Accountancy professing the potential of independent audits, opens with the introduction:

> It is unfortunate that our country and city governments are not yet awake to the benefits of accounting and for the most part call on accountants only when a defalcation is suspected or is known to exist. However, the call for such a service is greater than many people realize. It of necessity falls to the lot of the accountant to serve the public, and the man who is called upon in a case of defalcation should possess in the highest degree tact, integrity and accounting ability. [Crawford, 1915, p. 112]

In 1909, "internal check" was being discussed in conjunction with audit programs [Byrne, 1957]. It was not until 1947 that the American Institute of Accountants (AIA), the predecessor of the AICPA, published a Tentative Statement of Auditing Standards stating that there must be a study of internal control as a basis for determining subsequent audit tests. Two years later, the AIA attempted to further develop the notion of internal control. Their definition was (see [Byrne, 1957, p. 41]):

> Internal control comprises the plan of organization and all of the co-ordinate methods and measures adopted within the business to promote operational efficiency, and encourage adherence to prescribed managerial policies; to check the accuracy and reliability of its accounting data; and to safeguard assets.

For a number of years, the consensus was that every area of business (e.g., sales, production, engineering, etc.) had a counterpart in accounting, and that this internal control definition incorporated these tangential areas [Williams, 1952].

In 1957, a series of articles appearing in the Journal of Accountancy debated the above definition and the role of auditors in relation to internal control. Byrne [1957] viewed the above definition as suggesting three different types of control: internal administrative control ("the plan of organization and all the other co-ordinate methods . . . to encourage adherence to prescribed managerial policies"), internal accounting control (those related to "accurate and suitable recording and summarization of authorized financial transactions"), and internal check (controls aimed to "safeguard assets"). Byrne's contention was that the independent auditor's concern did not include internal administrative control because "its presence or absence [does not] affect his audit program" [p. 46].

Levy [1957], a lawyer, sided with Byrne and suggested that if auditors embrace the broader notion of internal control, a change in the legal liability dangers encountered by auditors would arise. He asserted that the audit function is not responsible for attesting to things such as management efficiency, effectiveness of operating policies and competency and faithfulness of employees, all of which are encompassed in the larger notion of internal control as defined in 1949.

In May of that year, Grady [1957] asserted that the narrower view of internal control espoused by Byrne and Levy was not a sound position for the profession to take. Grady [1957, p. 37] asked three basic questions (the forerunners to some of this study's questions):

> 1. Would the narrower view of internal control increase the effectiveness of our work . . .?
>
> 2. Is it possible or feasible to compartmentalize the examination and evaluation of internal control in auditing practice?
>
> 3. Is a narrow concept of responsibility for investigation and evaluation of internal control compatible with the present stature and future potentialities of public accounting?

A fourth question implicitly posed by Grady was:

> 4. Would a client's internal administrative controls have a bearing on the independent auditor's selection of the appropriate auditing procedures and his determination of the extent of the tests to which such procedures are restricted?

Grady's answers are "no" to questions 1, 2, and 3 and "yes" to number 4. He contended that:

> . . . it would be the height of futility for the auditor to spend his time checking the clerical aspects of accounting records when the validity of the basic information shown in them is dependent on the controls exercised and the decisions made in other departments. [p. 39]

Question number 2 portended some of the issues raised by Konrath [1971]. The third question addresses the notion of audit risk which he believed can be lessened by taking on greater responsibilities. So, in Grady's mind, the interactions of the various control segments within a business should not be arbitrarily separated, and the "whole" must be considered jointly by the auditor.

The last view in this debate was espoused by Mautz and Schlossen [1957], who failed to take an explicit stand on internal control but who supported the position that internal control cannot be compartmentalized. Moreover, in regards to "safeguarding of assets," they suggested that a number of vitally important intangible assets fall under this notion such as the company's credit rating and reputation for honesty and fair dealing. In protecting these assets, no distinction is made between accounting and administrative controls, so why should it be distinguished in regards to tangible assets?

Internal Control and Generally Accepted Auditing Standards (GAAS)

The debate concerning the 1949 definition of internal control and the concomitant responsibilities of auditors has continued to the present day. On numerous occasions the profession has tried to clarify and resolve various differences of opinion. Statement on Auditing Procedure (SAP) No. 29, issued in 1958 and entitled Scope of the Independent Auditor's Review of Internal Control was an attempt to clarify the auditor's involvement.

> Internal control, in the broad sense includes, controls which may be characterized as either accounting or administrative as follows:
>
> a. Accounting controls comprise the plan of organization and all methods and procedures that are concerned mainly with, and relate directly to, the safeguarding of assets and the reliability of the financial records. They generally include such controls as the systems of authorization and approval, separation of duties concerned with record keeping and accounting reports from those concerned with operations or asset custody, physical controls over assets, and internal auditing.
>
> b. Administrative controls comprise the plan of organization and all methods and procedures that are concerned mainly with operational efficiency and adherence to managerial policies and usually relate only indirectly to the financial records. They generally include such controls as statistical analyses, time and motion studies, performance reports, employee training programs and quality controls (quoted from AICPA [1972, p. 234]).

SAP No. 33 in 1963 went on to state that:

> The independent auditor is primarily concerned with the accounting controls . . . . If the independent auditor believes, however, that certain administrative controls may have an important bearing on the reliability of the financial records, he should consider the need for evaluating such controls (quoted from AICPA [1972, p. 235]).

For all practical purposes, administrative controls were still covered by the definition of accounting controls when it could be established that they had a bearing upon financial statement reliability. In 1972, the profession once again found it necessary to publish a revision in the form of SAP No. 54 entitled, The Auditor's Study and Evaluation of Internal Control.

> Administrative control includes, but is not limited to, the plan of organization and the procedures and records that are concerned with the decision processes leading to managements' authorization of transactions. Such authorization is a management function directly associated with the responsibility for achieving the objectives of the organization and is the starting point for establishing accounting control of transactions.
>
> Accounting control comprises the plan of organization and the procedures and records that are concerned with the safeguarding of assets and the reliability of financial records and consequently are designed to provide reasonable assurance that:
>
> a. Transactions are executed in accordance with managements' general or specific authorization.
>
> b. Transactions are recorded as necessary (1) to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements and (2) to maintain accountability for assets.
>
> c. Access to assets is permitted only in accordance with managements' authorization.
>
> d. The recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. [AICPA, 1972, p. 239-240]

These definitions currently remain intact as the authoritative view on internal control and appear in Statement on Auditing Standards (SAS) No. 1.

In a slightly different vein, SAS No. 30, issued in 1980 and entitled, Reporting on Internal Accounting Control dichotomizes internal accounting control into:

> Primary control procedures . . . are applied at points where errors or irregularities could occur in the processing of transactions and the handling of assets. [AICPA, 1980, p. 9]
>
> Secondary control procedures include any administrative controls or other management functions that achieve, or contribute to the achievement of, specific control objectives and thus are comprehended in the definition of internal accounting control. [AICPA, 1980, p. 9]

The effect of this differentiation appears to be to label accounting controls as primary controls. Similarly,

> it appears that secondary controls refer to those administrative controls which, as discussed in SAS No. 1 . . . may be used for accounting control purposes as well as for administrative purposes. Thus, it seems that secondary controls refer to that subset of previously defined administrative controls which impact upon the reliability of financial statements. [Arrington and Pany, 1981, p. 367]

The most recent pronouncement dealing with internal control, SAS No. 43 [AICPA, 1982], still asserts that administrative controls are not within the province of the auditors' review of internal control, thus making virtually no substantial change from the 1958 SAP Statement.

The elaborations above are important because they never preclude the possibility that auditors should be concerned with a client's control environment. For example, SAS No. 3 entitled, The Effects of EDP in the Auditor's Study and Evaluation of Internal Control discusses internal control within an EDP environment. According to Jancura and Lilly's [1977] interpretation of SAS No. 3, the distinction between accounting and administrative controls is minor and administrative controls often have a substantial impact on the reliability of financial statements. In fact, the auditors' responsibilities as defined in SAS No. 3,

> . . . include most of the typical EDP controls; paragraphs 6 through 9 [of SAS No. 3] indicate that when a computer is being used, many of the controls normally associated with computer center operations are actually EDP accounting rather than administrative controls. This is true regardless of whether these procedures are performed in the EDP department or in a user department. [Jancura and Lilly, 1977, p. 71-72]

Where or how should auditors draw the line between accounting and administrative controls? Johnson and Jaenicke [1980, p. 9] assert that establishing that boundary "has more than only conceptual or semantic significance." For example, the Special Committee established to investigate the landmark fraud at Equity Funding [AICPA, 1975, p. 27], states that:

> . . . it appears that internal accounting <u>and administrative controls</u> at Equity Funding were so weak as to raise concern about the reliability of the accounting records. (Emphasis added)

Another example of where the auditor's concern for client controls should transcend the AICPA's dichotomy can be found in the SEC's <u>Accounting Series Release No. 209</u> [CCH, 1981] where Tidal Marine Corporation's administrative controls were mentioned as a contributing factor to the general audit risk that the company posed. Couple these disastrous experiences with the belief by some parts of the profession that both types of controls "are directed at reducing exposure to possible losses of an accounting or financial nature" [Johnson and Jaenicke, 1980, p. 7] and the possible answer to the question of where should the line be drawn between accounting and administrative controls is that maybe there should not be one.

Brown [1966] believed that the boundaries of any control system should not be drawn to conform with organizational structure simply because that structure exists. Thus, it appears that auditors should not be defining relevant controls from an audit perspective as only those existing within a client's accounting department. Gilmore [1982, p. 343-344] reports that, "The emergent cognitive perspective on organizations asserts that boundaries are socially constructed, taken vs. given, and imposed vs. discovered." Auditors appear to be guilty of this, too.

If auditors are to avoid the sort of pitfalls noted at Equity Funding and Tidal Marine, what should be the means by which to delimit their involvement with client controls? One answer espoused in <u>A Statement of Basic Auditing Concepts</u> [AAA, 1973, p. 5] suggests that:

> In practice, the auditor's <u>competence</u> and the existence of <u>operational criteria</u> dictate the boundaries of the subject matter to be investigated by the audit process.

And yet this really does not help auditors determine relevant from irrelevant controls. The answer rests upon individual auditor <u>judgments</u> in regards to what client factors impinge upon the financial reporting process, not upon only those factors that can be measured and those the auditor feels comfortable with. The criteria used to determine which client controls should be a part of the audit review process should be client specific not auditor specific. In this regard, the Special Committee on Equity Funding [AICPA, 1975, p. 38] summarized this belief in their report:

> Absolute certainty is no more an attainable goal of auditing than it is of any other professional endeavor. What is sought is a reasonable degree of assurance; and what is applied to achieve such reasonable assurance is and must be a professional judgment as to how far inquiry should go. The necessity for such a judgment reflects the fact that there is no ultimate stopping place: each new level of test offers yet another choice between reliance or still a further test.

Recently the SEC's Chief Accountant, Clarence Sampson, conceded that there is "difficulty in pinpointing auditor association and the scope and definition of internal control" [Berton, 1981, p. 28]. Such a statement reflects the fact that many past efforts, at the profession level, to delineate audit boundaries have been futile and that individual auditor judgment is the final determinant.

The following summary of the official auditing pronouncements dealing with internal control by Bailey et al. [1980] is offered:

a. Establishment and supervision of internal control systems is a management responsibility;

b. Absolute assurance of effectiveness is probably not cost effective; thus reasonable assurance is acceptable;

c. Concepts of internal control are independent of the data processing mechanism (this applies to computer processing as well as manual processing of transactions);

d. Any system of control may be compromised by error, collusion, management override or deterioration in compliance;

e. Competent personnel of high integrity are essential to good internal control;

f. Segregation of functions implies that those in position to perpetrate "errors" not also perform functions making it possible for them to conceal these "errors." For instance, those who control assets should not also control the accounting for assets;

g. There is a need to generate independent evidence supporting valid authorization, approval and performance of actions;

h. Proper documentation as to the recording of authorized and approved transactions must be maintained;

i. Access to assets must be limited to authorized personnel;

j. Periodic comparisons of recorded amounts to actual assets and a follow-up of the deviations is essential to good internal control.

Internal Control and the FCPA

The Foreign Corrupt Practices Act of 1977 (FCPA) represents a congressional response to the investigations and voluntary disclosures received by the SEC concerning the questionable or illegal payments made by U.S. corporations. The provisions of the FCPA, in addition to dealing with questionable payments to foreign officials, also cover the record-keeping and internal accounting controls of companies. These latter two areas were a direct response by Congress in regards to the "revelation that records were falsified and off-the-books funds were maintained to facilitate the questionable payments" [Maher, 1981, p. 753]. The original intent of the Senate committee dealing with this Act was for the accounting control provisions "to operate in tandem with the anti-bribery provision" [Maher, 1981, p. 754]. However, SEC enforcement of the Act suggests that the accounting control provisions may not be enforced in <u>only</u> this dual fashion. Actually, it appears that they may be applied to the broader scope of the law that addresses corporate accountability [Maher, 1981].

The section of the Act dealing with accounting control, adopts the AICPA term "internal accounting control" along with its definition.

However, a great deal of ambiguity and uncertainty has ensued from this adoption [FERF, 1980, pp. 309-310]. In fact, prior to the Act's final wording, the Senate committee stated:

> We do not believe that the existing auditing literature, prepared to guide auditors in determining the scope and nature of examinations of financial statements, provides sufficient guidance to enable registrants to determine the adequacy of a system of internal accounting control as contemplated by the proposed rule. (From U.S. Senate Hearings, quoted in Maher [1981, p. 755])

Moreover, nowhere in the Act is there any reference to the existence and role of administrative controls. In their discussion of the FCPA, Cook and Kelley [1979] assert that in reality, there are very few administrative controls that do not impinge upon accounting controls and therefore to ignore the one, weakens the validity of the other.

Other discussions of the FCPA also make similar statements. Martin and Johnson [1978] believe that a specification of only accounting controls should not have been made. In regards to the FCPA, and auditing in general, they feel that there should be no concern with classifications of internal controls other than those controls related to and those controls unrelated to financial reporting processes. Likewise, Noxon [1980] believes that no distinction between accounting and administrative controls should be made. In trying to provide some guidance to auditors as to what controls are "related to" vs. "unrelated to," Mautz and White [1979, p. 15] suggest, in their study of managers' views of the FCPA, that:

> . . . those measures designed to remind personnel throughout the company of their duties, to encourage efficiency, prudence, and loyalty, and to provide for timely discovery of errors

> resulting from inadvertent lapses and deliberate irregularities [should be the concern of auditors and managers].

White (in [FERF, 1980, Chpt. 6]) interprets the accounting control provisions of the FCPA in a two dimensional fashion. He believes that the implied relationship in the FCPA, between formality and effectiveness of control is a direct relationship. That is to say, as the formality of control mechanisms increases, the effectiveness of the control exerted will also increase. However, an outgrowth of his research concerning managers' views of control, lead him to hypothesize that there are formal (mechanisms of control) <u>and</u> informal (control environment) approaches to control and the relationship that exists is not quite the one suggested by the FCPA. In particular, Figure 11 is from White (see FERF [1980, p. 342]) and serves to illustrate this point.

Within the business sector, few organizations "approximate the 'pure types' represented by cells 1 and 3" [p. 342]. In reality, most organizations are therefore typified by cells 2 or 4. Applying the implied logic of the FCPA (i.e., more formal controls lead to more effective control) would suggest that cell 2 organizations would be characterized by effective control whereas cell 4 organizations would have ineffective control. Yet, White quickly points out that [FERF, 1980, p. 343]:

> Japanese organizations, though quite informal (cell 4), are notoriously well-controlled. And, several U.S. corporations embarrassed by significant breakdowns in recent years appeared to be representative models of large, well managed companies with rather elaborate formal controls (cell 2).

		Control Environment (Informal): Strong	Control Environment (Informal): Weak
Control Mechanisms (Formal)	High	#1 High Effectiveness	High or Low #2 Effectiveness
	Low	#4 High or Low Effectiveness	#3 Low Effectiveness

Figure 11

Formal and Informal Approaches to Control And Control Effectiveness

The point of this position is that in order to achieve effectiveness of control, it is necessary for managers to be equally concerned with both the formal (mechanisms) and informal (control environment) approaches to control. In specifically addressing the control environment aspect, Mautz et al. [FERF, 1980] stated the following:

> [The internal control environment] begins with the example set by the chief executive officer and other members of top management and the emphasis they are seen to put on high standards of personal performance in all they do. It extends to factors influencing employee morale such as standards for training and promotion, the existence of desirable leadership within the employee group, a company reputation for satisfactory treatment of employees, including rewards for good performance and punishment of those guilty of infractions, and finally, a monitoring program constantly alert to personnel failure [p. 343-394].
>
> Gradual erosion of control occurs in the absence of on-going management attention to, and effort and investment in, control systems and the control environment. [p. 395]

Client Control Environments

This section elaborates further the nature and role of a client's control environment in an audit context.

> To borrow a phrase, "internal control is people." A system of internal control is made up of people and procedures, procedures in which people are expected to perform and report in a normal fashion. But unknown to the reviewer, the pressures which motivate the people in the "system" may change sufficiently that they cease to act in an expected fashion, whereupon the internal control procedure loses its effectiveness. . . . There are so many events and relationships which can work to offset the most effective internal control measures and which at the same time would be neither apparent to nor necessarily discoverable by the independent auditor that acceptance of responsibility for the review and evaluation of internal control is hazardous at best. [Mautz and Sharaf, 1961, p. 145]

Mautz and Sharaf's position points to the dynamics of an auditing concern for the amorphous nature of an organization's system of internal controls while also noting the importance of auditor involvement, nevertheless. The very fact that people are the main components of internal control systems gives rise to many of the concerns discussed in Chapter II. In fact, Bower and Schlosser [1965] emphasized the fact that internal control relates to the actions of individuals as opposed to some inorganic system's component.

Since organizations are themselves dynamic and because they also face dynamic external environments, appropriate internal control systems should be fluid enough to enable the organization to remain viable. It is this fluidity and personnel element that creates a demand for auditor internal control reviews and evaluations to be more than mere programmatic processes . . . they must also be subjective and organic (see Dirsmith and McAllister [1982]).

Collins [1982] notes four general facets of an organizational system that dictate the pervasiveness and effectiveness of a particular managerial accounting system. He points to the importance of social contexts, the socialization processes of organization members, the organizational climate's congruency and external influences. The intangibleness of these four items make them no less influential in the ultimate outcome of a specific control's effectiveness. In reality, the previous definition of the control environment given by Mautz et al. [FERF, 1980] can be thought of as a specification of Collins' four general notions. Reinforcing Collins' belief, as well as Mautz and Sharaf's [1961], Lambert and Lambert [1979, p. 26] assert that "it is the internal accounting environment that largely determines whether the controls, procedures, and techniques [of a financial reporting system] will operate effectively."

The first significant effort on the part of the accounting profession to discuss the importance and nature of a clients' control environment was contained in the <u>Report of the Special Advisory Committee on Internal Accounting Control</u> [AICPA, 1979]. Although this report does not specifically define the term, there is a great deal of discussion of it (the best definition of the control environment was the previously quoted one from Mautz et al. [FERF, 1980]). The Report states that an evaluation of a client's internal accounting control environment "is a necessary prelude to the evaluation of control procedures and techniques" [p. 12]. Mock and Turner [1981], Biggs and Mock [1980], AICPA [1982], Martin [1980] and numerous other researchers have since espoused the importance of an evaluation of the control environment prior to performing other audit procedures.[1] Generally, the reason cited for such a step is that a poor control environment would most likely undermine the implementation of any specific controls [Martin, 1980].

The Report of the Special Committee described the control environment by discussing the more significant factors that shape it. The Report identified organizational structure as a pervasive concern and then detailed the important factors as [AICPA, 1979, pp. 13-17]:

> Organizational structure (i.e., reporting relationships, subunit functions, and authority, responsibilities and limitations of key positions)
>
> 1. personnel (i.e., control is highly dependent upon the competence and integrity of the organization's employees);
> 2. delegation and communication of responsibility and authority (i.e., those who need to be informed are and there are effective reviews of decisions);
> 3. budgets and financial reports (i.e., provide goals and thus enables managers to identify appropriate actions, provide means for evaluation of personnel, etc.);
> 4. organizational checks and balances (i.e., financial control and internal audit); and
> 5. EDP (i.e., may influence the organization structure and the control techniques most appropriate for the situation).

Miotto [1980, p. 16] stated that the above areas are important in creating an acceptable "atmosphere in which data is produced, processed, reviewed, and accumulated." Voicing the same concern, Holstrum and Kirtland [1982, p. 13] believed that:

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[1]Based upon the discussion of the ambiguity of an accounting/administrative control dichotomy, no such distinction will be made in regards to a client's control environment. The phrase "control environment" will simply refer to <u>any</u> aspects relevant to a client's financial reporting process.

> The control environment provides us with a general knowledge of the methods used by the entity to communicate responsibility and authority; of management's supervision of the system, including the existence of an internal audit function, if any; and of the competence of the personnel.

Also, SAS No. 22 [AICPA, 1983a, Sec. 311.06] in discussing audit planning and supervision, implicitly referred to the control environment as:

> . . . conditions under which accounting data are produced, processed, reviewed and accumulated within the organization.

Johnson and Jaenicke [1980, p. 24], in a similar vein, suggested that it is important for auditors to evaluate a client's control environment because it establishes,

> Conditions under which the system of internal accounting and operational [administrative] controls can operate efficiently and, in part, monitors performance of the accounting system through reporting and analyzing the results it produces.

Lending additional credibility and emphasis to these notions, the SEC [CCH, 1981] (release No. 34-15772, dated April 1979 with an amended version No. 278 dated June 1980) expressed some of the same concerns. The SEC noted that a control environment was highly dependent upon the careful exercise of management judgment and that responsibility for a proper control environment usually starts with the audit committee of a board of directors. In two subsequent articles, Rappaport [1980] described how auditors might aid corporate directors in obtaining the information that they need to fulfill this role. Also, Cohen and Pearson [1981] discuss the importance of auditing the numerous client's judgments that impact financial reports as well as the financial reporting process. These authors mentioned such client factors as personnel, planning systems, political and social environments, management judgment processes and management motivations as areas that should be receiving new or increased audit attention.

A few years earlier, the Commission on Auditors' Responsibilities (CAR) report [AICPA, 1978] discussed the "condition of the controls over the accounting system" [p. 62]. This is perhaps one of the earliest professional references to the control environment. In their report, CAR recognized the fact that administrative controls are a part of that environment. However, in describing auditor's roles in this regard, their report still precludes auditors getting involved with assessing administrative controls although there may come a time in the "evaluation of the audit function" when it will be appropriate to do so. As a point of interest, Pomeranz [1980] contends that the profession is already moving in that direction and he calls for "preemptive audits"--reviewing transactions <u>before</u> they are consummated.

<u>Why Audit a Control Environment?</u>

Much of this heightened concern can be traced to a post Watergate, FCPA, consumerism ethos calling for greater accountability on the part of all business organizations. Couple this with the economic pressures of recent times, and it is perhaps evident that the motivation to override or reduce the enforcement of controls exists. In fact, St. Pierre and Anderson [1982] report that the Commission on Auditors Responsibilities found that in those situations where management was not totally trustworthy, it was unlikely that a valid independent audit could be performed. Neumann [1981] reports that most of the questionable or illegal acts of business that have recently come to light have not been the result of poor control procedures, but of the circumvention of those procedures through management override or collusion. He prescribed increasing the role and responsibilities of corporate audit committees and the institution of codes of conduct. The Report of the Special Advisory Committee on Internal Accounting Control [AICPA, 1979], as do Hylas and Ashton [1982], points out that collusion and circumvention of control procedures can occur simply as a result of misunderstanding of instructions, mistakes of judgment, and carelessness as well as intentional misconduct. Romney et al. [1980], in their discussion of fraud, believe the relevant factors to be situational pressures, opportunity, and personal characteristics. Continuing in identifying possible concerns for auditors in assessing the environment in which specific control procedures exist, Romney and Albrecht [1979] note that conflicts of interest, personnel policies and consumer and vendor histories may be important.

In a study on management fraud, Jack Katz [1979], an organization behavioralist, presented a paper to a conference sponsored by Peat, Marwick, Mitchell & Co. on some commonalities that underlied such cases as General Electric, Equity Funding, B.F. Goodrich, Homestake Oil, Gulf Oil, National Student Marketing and others. He pointed to such things as obedience by subordinates and respect for "expertise" to be factors permitting frauds and cover-ups to attain some level of success. In fact:

> Complex organizations are based on expectations of ignorance which separate occupants of different ranks and specializations and separate insiders from outsiders. [p. 296]
>
> Both superordinates and subordinates and insiders and outsiders have common interests in limiting the knowledge each obtains about the other. In what are often quite tacit ways, bargains are struck as to what each will require the other to know. [p. 297]

Accepting the fact that all of the above-mentioned factors possibly exist, there is a need to ascertain their impact upon a financial reporting system. Borrowing from Miller (quoted in Brown [1966, p. 323-324]), the following results could arise:

1. omission (simply not processing information that should be processed);
2. error (processing information but not correctly and without subsequent adjustment);
3. queuing (delaying the processing of information);
4. filtering (systematic omission or modifying of information); or
5. approximating (processing less accurate information).

Any of these situations could arise as a result of the previously mentioned forces or circumstances. Any of these situations could be due to willful, negligent or unknowing behavior. Any of these situations could result in materially false or misleading financial statements. Any of these situations could render the most ideally designed control system inept. Therefore, all of these situations should be of concern to auditors and would require that auditors review and evaluate a client's control environment along with their other reviews and evaluations.

Benefits from Auditing Control Environments

One theme articulated by Mautz and Sharaf [1961] is that auditing is an investigatory activity based on a need for evidence in arriving at an opinion on a set of financial statements. Therefore, it can be inferred that "audit procedures are the actions that obtain evidence" [Loebbecke, 1981, p. 26]. The auditor's review and evaluation of a client's internal controls is a part of the evidence gathering process and is deemed by the profession (as noted in the second standard of field work) as necessary in order to determine the nature, extent and timing of subsequent audit procedures.[2] Borrowing and modifying Kinney's [1975] portrayal of the relationship that exists, Figure 12 reflects the routes to an audit opinion.

Notice that the whole process should theoretically start with an evaluation of the control environment. Even the best designed internal control system cannot be relied upon if the propensity for management override or collusion is great. In that case, an audit opinion would be pursued by extensive testing of account balances at year end. On the other hand, if the control environment is favorable, the route to an audit opinion then depends on the auditor's decision concerning the design of the system. Since assessing a client's control environment is the initial phase of an audit, it can be assumed that it impacts the nature, extent and timing of both substantive tests and compliance tests (AICPA, 1983b].

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[2]See Weber [1978] and Morris and Anderson [1976] for a discussion of the literature and a study of this audit relationship. Evidence suggests that it may not be a clearcut relation.

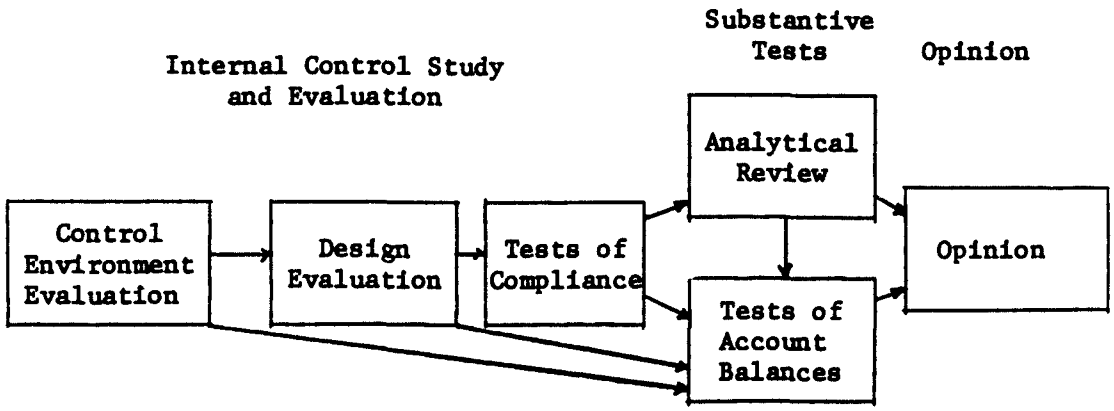

Figure 12

Route to an Audit Opinion

The nature of this impact is twofold. One is as discussed at the end of the previous section. That discussion noted several results that could occur in regards to a financial reporting system when intentional or unintentional circumventing behavior exists. The second way in which control environment assessments impact subsequent audit tests and planning stems from its link with audit risk. Warren [1979, p. 66] defined audit risk as the "probability of issuing an inappropriate opinion on financial statements because material errors or irregularities, if they exist, will not be detected." Some of the major determinants of audit risk are, according to Warren, the integrity of management, the internal accounting control system (referred to as "control risk" in AICPA [1983b]) and the economic condition of the organization under audit (a part of the AICPA's [1983b] notion of "inherent risk"). These areas are very much in accord with the facets of a control environment that were previously presented.

Using some of the logic presented by Brumfield et al. [1983], the relevancy of the client's control environment can be extended to include having an impact on the auditor's business risk where business risk is defined as "the probability that an auditor will suffer a loss or injury to his professional practice" [p. 60]. These authors believe that audit risk and business risk are related. In essence, audit risk (rendering an inappropriate opinion) can be an important factor in the events that lead to a realization of business risk and business risk can influence to some extent the auditor's evaluation of acceptable audit risk.

Research Potential

The audit process is concerned with auditors' judgments concerning sources of audit evidence, the evaluation of audit evidence and the ramifications of audit evidence. However, in regards to internal control:

> The most studied aspect of auditor judgment has been auditor evaluations of internal control quality and the audit program planning implications thereof. Because objective criteria for determining the true quality of an internal control system or the appropriate amount of audit work to perform in a subsystem do not exist, judgmental consensus or agreement among auditors has been the focal point of this research. [Joyce and Libby, 1982, p. 105].

As this statement implies, there has been little research in regards to the <u>sources</u> of audit evidence. This is partly due to the fact that internal control work has traditionally been viewed as very routine, programmatic and clearly delineated. However, upon introducing the notion of a control environment, all three facets of auditor judgment (sources, assessments, and ramifications of evidence) are fertile areas for research. If the auditor's judgment process is viewed as involving the evaluation of numerous pieces of information, necessitating trade-offs amongst multiple criteria [Biggs and Mock, 1983], then investigating numerous potential sources of evidence related to assessments of a client's control environment should provide some insights into these trade-offs.

Most of the research that has been undertaken concerning auditor internal control judgments can be typified by the following studies. Ashton [1974] and Ashton and Brown [1980] studied different auditors' evaluations of the quality of an internal control system. Their results indicated a rather high consensus among the different auditors' evaluations. Joyce [1976], Biggs and Mock [1983], Joyce and Biddle [1981], and Mock and Turner [1981] investigated the consensus of auditors in regards to audit program and sample size choices based upon certain internal control circumstances. In general, they found there to be considerable differences in the auditor choices.

In terms of the independent variables investigated in these, and similarly related studies, the following represent the most frequently mentioned. Ashton [1973] hypothesized that audit experience and firm affiliation might bear upon differing auditor judgments. He found mild support in this regard. Joyce [1976] found CPA firm affiliation to affect decision weights. Mock and Turner [1981] discovered no evidence of years of audit and non-audit experience, the type of clients assigned to, and specialized/ advanced training to have any significant effect upon auditor judgments.

Nanni [1984], however, did find that the auditor's firm, his/her position, and audit experience may influence internal control judgments. Lewis [1980] also found a difference amongst firms in a study on audit materiality judgments. Likewise, Bamber and Bylinski [1982] note that auditors differed in their beliefs concerning the purpose and conduct of audit reviews. They found these differences to exist amongst firms, offices within a firm, and individuals. In another context, Gibbins and Wolf [1982] found that auditors believed the design stage of an audit to be dependent upon such things as client profitability and the client's business. And lastly, Wright [1982] suggests that client size, industry growth trend, the length of the audit association with the client, and auditor education are not primarily related to auditor judgments but are best described as intermediary or secondary influences.

From a purely a-priori standpoint, a number of researchers have advocated many of the above variables as being relevant for providing insights into differing auditor judgments and approaches. In a non-auditing context, Tracy and Azumi [1976] suggest organizational size, task variability, and automaticity of the client's operations as influencing the type of administrative control exercised.[3] They hypothesize that size is positively correlated with the extent to which formalized control mechanisms (rules, procedures, etc.) are utilized to preprogram behaviors whereas greater task variability and automaticity should be negatively correlated.

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[3]It is appropriate in this context to view administrative control as somewhat analogous to control environment.

Along a similar line, Dirsmith and McAllister [1982] suggest that the level of task uncertainty faced by and the amount of task interdependence within a work unit influences the specific control practice employed. They suggest (based upon Van de Ven et al. [1976] and Thompson [1967]) that as task uncertainty increases the personal mode of control (as opposed to rule oriented) will increase. Also, as interdependencies get more complex, there should be a greater emphasis upon more elaborate control approaches. McAllister and Dirsmith [1982] more generally suggest, and found, that the greater the client's environmental uncertainty, the greater the audit concern in assessing it.

Anderson et al. [1970] assert that the nature and size of the client's operations, the audit team, along with several other factors determine the kind and amount of evidence necessary to render an audit opinion. More specifically, Rappaport [1980] hints that a client's customer profile, trends in the client's financial condition, types of new products being introduced, changes in competition, and other such environmental issues could influence an auditor's approach to evaluating a client's internal controls.

In regards to individual audit team and team member variables, Mock and Watkins [1980] hypothesize that years of audit experience, specialist status, level of audit training courses completed, commercial experience, and client mix may be associated with differing audit judgments. Cheney and Fuerst [1978] also suggest such individual characteristics as age, education level, and years of experience.

Lastly, Brumfield et al. [1983] and the FERF [1980] suggest a number of factors potentially affecting the auditor's business risk. They again point to the client's economic environment, industry, management philosophy, previous audit history, financial performance, business reputation and location as possibly affecting an auditor's assessment of their business risks and thus affecting their audit approach.

Although these variables have been and will continue to be referred to as independent variables, this is perhaps a misnomer. For the purposes of this study, it is more appropriate to regard them as dimensions along which auditors may change their views or disagree on the source, evaluation and ramifications of audit evidence pertaining to a client's control environment. In subsequent discussions of the research methodology, a number of these variables will again be highlighted.

Summary

This chapter has reviewed and discussed the audit profession's evolving view of internal control. One of the currently evolving audit concerns was identified as dealing with a client's control environment. This, too, is exhibited in the professional literature, official pronouncements, and in other circles of concern (e.g., the FCPA, the SEC, and CAR). A brief discussion of the link between internal control audit work and the rest of the audit was provided, which led to the discussion of the most recent research regarding auditor judgments as they relate to internal control issues. The chapter ended by identifying the fertile research ground exposed by the previous discussions, suggesting a number of dimensions along which client control environment evaluations might differ.

CHAPTER IV

EXPERIMENTAL DESIGN AND PROCEDURE

This chapter describes the research procedures and design of this study. The following sections provide an introduction and a discussion of both phases of the research effort. Phase I deals with the identifying of control environment attributes while Phase II is concerned with investigating auditors' evaluations of these attributes in a real-world audit setting.

Introduction

A number of Big Eight firms address some of the concerns of this study in their preliminary internal control audit work. They have developed control environment (e.g., Peat, Marwick, Mitchell & Co. and Ernst & Whinney), general control (e.g., Coopers & Lybrand), or special risk (e.g., Deloitte, Haskins & Sells) evaluation checklists to assist their auditors in assessing these audit issues. The underlying assumption in the design of most of these forms is that they need to be equally applicable to a variety of clients. As a result, there are usually only a few specific issues addressed on these checklists. The exploratory nature of this study and, indeed, the nebulous characteristics of the task under examination, make the sketchiness of these instruments inappropriate for application here. Moreover, these prepackaged aids are inappropriate for this study because they incorporate ". . . assumptions that their designers have already identified the organizational and environmental properties deserving attention" [Hedberg et al., 1976, p. 53]. The purpose of this study is to consider a wide variety of control environment attributes within a variety of client contexts.

Phase I

Because of the piecemeal approach taken in identifying control environment attributes in both the organizational behavior and accounting literatures, this study's initial objective was to determine what attributes potentially comprise or have an impact on a control environment. In other words, what attributes can be described as contributing to or constituting a client's control environment?

Step 1

The first step taken in compiling an appropriate listing of control environment attributes involved interviewing auditors. At least one practice office auditor (most often a partner), from each of the Big Eight firms was interviewed. All interviews took place during April and May 1983 and were conducted in person. The particular auditors were chosen based upon their affiliation with The Pennsylvania State University. Figure 13 depicts the profile of auditors interviewed in this initial step.

Prior to the interviews, each of the auditors was sent a brief description of the research questions that constituted this study. They were told that the purpose of the interviews was to provide a brainstorming session in order to generate specific notions and

Rank	Firm	City
Partner	Touche Ross	Philadelphia
Partner	Deloitte, Haskins & Sells	Philadelphia
Partner	Peat, Marwick Mitchell	Philadelphia
Partner	Price Waterhouse	Philadelphia
Partner	Coopers & Lybrand	Philadelphia
Supervisor	Ernst & Whinney	Columbus
Partner	Arthur Andersen	Pittsburgh
Principal	Arthur Young	Philadelphia

Figure 13

Auditor Profile in Step 1 Interviews

descriptions of relevant control environment attributes. None of the auditors were given a preliminary listing of possible control environment attributes.

Step 2

In order to complement and revise the findings from Step 1, an analysis of all relevant literature was conducted. A number of the firms represented in Step 1 not only provided their publicly available literature related to the topic but also provided some in-house, proprietary material (e.g., audit questionnaires, audit manuals, etc.). In total, the literature sources that were used are listed below. Combined with Step 1, the Step 2 results helped generate a detailed listing of items potentially identified as control environment attributes.

(1) Publicly available Big Eight literature

(2) In-house, proprietary Big Eight literature (5 of 8 firms provided this information)

(3) Several major auditing textbooks

(4) Several recent Accounting Series Releases from the SEC (the particular ASRs were identified by a national office partner in one of the Big Eight; see also Eisenschmeid and Haskins [1983])

(5) Several AICPA committee reports

(6) Several GAO reports

(7) Relevant sections from the Auditing Standards Board's Statements on Auditing Standards

Fifty-five (55) potential attributes were identified as a result of performing Steps 1 and 2.

Step 3

The final step of Phase I was performed for the purpose of evaluating, reviewing and revising this preliminary list of potential control environment attributes. It was important to determine the validity, completeness , relevance and understandability of the list. In order to do this, interviews with Big Eight auditors were once again undertaken. However, partners were chosen from the Executive Offices of the respective firms. The reason for this is that these partners would be more concerned with the normative question of should these items enter into an auditors' client control environment evaluation.

In total, five such interviews were conducted during July 1983. The profile of interviewees is shown in Figure 14.

Once the partners involved agreed to review the listing, they were provided with a brief discussion of the research study, along with a listing of the 55 items. A week or two later the interviews were conducted, focusing on this list. As a result of this step,

Rank	Firm	City
Partner	Coopers and Lybrand	New York
Partner	Price Waterhouse	New York
Partner	Peat, Marwick Mitchell	New York
Partner	Arthur Young	New York
Partner	Arthur Andersen	Chicago

Figure 14

Auditor Profile in Step 3 Interviews

a final listing of forty-eight (48) attributes was derived (see Appendix A).

Most of the comments made by the partners were suggestions concerning the combining of items, elaborations and clarifications that were needed. Some of their conjecture was that if the control concept did not appear on an internal control questionnaire, then it would not get much, if any, audit attention. They also made the distinction that understanding the nature of a particular control concept as it affects a client does not necessarily mean that the auditor had to test and evaluate it. In general, they believed that the more "business oriented thinking" the auditor did, the better the client service he/she could provide which would go well beyond anything required for a financial statement opinion and would include a number of the control environment concepts identified in this study.

Phase II

Questionnaire Development and Pilot Test

Phase II of the research task involved the development of the research instrument--a questionnaire. Having established the research objectives of interest (see Chapter III) and having compiled a list of potentially relevant control environment attributes (Appendix A), a preliminary questionnaire was developed. The questionnaire contained four sections. Three of the sections solicited information related to the independent variables discussed in Chapter III. These sections involved client profile, audit firm, and participant profile questionnaires. This demographic data will be used to categorize responses during the data analysis process (Chapter V provides a summary of the number of respondents by each demographic variables' categories). The fourth section dealt directly with auditor opinions concerning the 48 control environment attributes. Each of the four research objectives, as presented in Chapter III, were translated into a question. Therefore, for each of the 48 potential control environment attributes, the same four questions were asked, each one addressing a different research objective. In addition to developing the preliminary questionnaire, relevant introductory remarks, cover letters, instructions and examples were developed.

The pertinent materials for conducting the study were then pilot tested. The profile of the participants in the pilot test are reflected in Figure 15.

Rank	Location
Partner, CPA	Arthur Andersen, Chicago
Partner, CPA	Peat, Marwick & Mitchell, New York
Manager, CPA	Touche Ross, Philadelphia
Professor, CPA	University of Utah
Associate Professor, CPA	Pennsylvania State University
Assistant Professor	Boston University
Graduate Student, CPA	Pennsylvania State University

Figure 15

Pilot Test Participant Profile

It should be noted that none of the pilot test participants were participants in the final administration of the questionnaire nor involved in the preliminary interviews. The pilot test was conducted from mid August through mid September, 1983. Detailed responses were obtained from all participants and the research instrument was modified accordingly.

Final Questionnaire

Five important changes in the questionnaire design resulted from the pilot study. First of all, it became obvious that an unacceptable level of ambiguity existed in regards to certain terminology. As a result, definitions for the following terms were provided in the instructions accompanying each of the final questionnaire booklets: control environment, administrative control, accounting control, audit risk, inherent risk, and control risk.[1] The final set of instructions to the participants is included in Appendix E.

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[1] The definitions provided were from official AICPA announcements.

Secondly, the participants found that making estimates of audit time devoted to evaluating each control environment attribute was an inappropriate means of evaluating the degree to which the attributes were deemed to be important. Therefore, unlike Joyce [1976] who used audit hour allocations and Mock and Turner [1979] who used planned sample sizes to assess the relative importance of the internal control setting they presented, this questionnaire elicited evaluations of importance along a five-point Likert-type scale. One end point indicated "no" importance and the other reflected "a very great" deal of importance. Some psychologists have shown that decision makers cannot accurately reflect their attitudes or judgments on a continuous scale when subjected to multiple stimuli [Doyle, 1977]; thus the use of the nominal scales [in this case ordinal]. Also, in regards to the scale, it should be noted that a "standard" Likert scale involves seven nominal categories ranging from strongly agree to strongly disagree with the mid point being a neutral category. Having already established the fact that all 48 of the attributes contained in the questionnaire were relevant in certain settings via performance of Phase I activity, the relevant opinions to solicit in the final administration of the questionnaire were more appropriately directed towards assessing the degree of relevance. Therefore, the labeling of the discrete categories available for auditor responses deviated from the standard Likert categories and they were labeled as shown in Appendix E.[2] Additional justification for only five

[2]The labeling of the five response categories was identical to that used by McMahon and Ivancevich [1976] in their study of control in a manufacturing firm and similar to the five point scale used by Clancy and Collins [1979].

response categories, rather than the traditional seven, has been presented by Kerlinger [1973]. Moreover, many firms and auditing textbooks accustom auditors to think in terms of five levels in their overall internal control evaluations by rating internal controls as unreliable, poor, fair, good, and excellent (see for example Robertson and Davis [1982]). It thus seems reasonable to evaluate control environment attributes similarly.

A third outgrowth of the pilot test was the recommendation to streamline the instrument itself. In other words, the questions should each be written and presented in a parallel fashion in order to reduce confusion and increase the ease and speed with which they could be addressed. Appendix E reflects the way in which this was achieved.

The fourth recommendation implemented was to "anchor" the evaluations of the control environment attributes, i.e., provide a reference point. This could be accomplished in two ways. One way would be to provide a case scenario depicting a hypothetical, real-world client. Most internal control research utilizes this approach (see for example Nanni [1981], Mock and Turner [1981]). This approach was not chosen due to the belief that the control environment evaluations of auditors depend upon the varietious, personal context of an actual audit. Therefore, the second alternative was adopted which asked the auditors to respond in regards to a specific client which they were currently auditing or had recently completed.

The last major pilot study recommendation was a suggestion that respondents be given the opportunity to provide explanations for their answers in certain instances. Appendix E reflects the way this recommendation was incorporated.

Final Administration

Subjects

Practicing auditors were the subjects requested to complete the questionnaire. Due to the length of the instrument (the average time to complete all materials during the pilot test was approximately one and a half hours) it was important to recruit one principal liaison at each of the Big Eight offices participating. Contacts were mainly the people who had been consulted on the project from its inception and any other people (either partners or managers) that expressed an interest to help. It was up to the contact person to select the audit team(s) that would be given the questionnaires. Likewise, it was also up to the contact person to select the audit engagement to be used as the audit teams' reference point. Detailed verbal and written instructions were given to the contact people along with the appropriate number of questionnaires for the auditors they had selected. The only restrictions placed upon the choices of engagements made by the contacts were:

(1) the client(s) should be publicly traded;
(2) the client(s) should not be a holding company;
(3) their office should be the principal auditors of the client;
(4) each team member, comprised of one junior, senior, manager and partner, should be given a questionnaire to be completed in the context of the designated engagement;
(5) the team members should not collaborate in completing the questionnaire; and
(6) no duplication of audit team members should exist.

The selection of participants was not random nor were there any monetary incentives offered to the participants. The extent of care exercised by the participants as well as the number of questionnaires returned was largely a function of the commitment and conscientiousness with which the contact person executed his role. Therefore, a great deal of time was devoted to cultivating these particular people. There was no direct communications with individual participants. Figure 16 depicts the relevant facts concerning the distribution of the questionnaire.

	Philadelphia	Pittsburgh	New York	Other
Ernst & Whinney	X	X		Columbus
Arthur Andersen	X	X		Washington,DC, Houston
Arthur Young	X	X	X	
Coopers & Lybrand	X	X	X	Columbus, Chicago
Deloittle, Haskins & Sells	X	X	X	Atlanta*
Price Waterhouse	X	X	X	Houston
Peat, Marwick, Mitchell	X	X	X	Washington, DC
Touche Ross	X	X	X	

*This contact also recruited a team at Greensboro.

Figure 16

Firm and Location of Contacts

As can be seen from Figure 16, there were 30 people who agreed to serve as contact people with 31 different Big Eight offices. Of the thirty contact people, twenty agreed to recruit two audit teams each, seven agreed to recruit only one audit team, and three agreed to recruit three teams. In total, 228 questionnaires were distributed. Each of the contact people were responsible for the disseminating, collecting, and returning of the questionnaires.

Sequence of Events

The timing of the distribution of the questionnaires was orchestrated to generally coincide with the completion of the interim work of the selected engagement if it was a December 31 client. This was viewed as optimal due to the topic of the study but was not a precondition for the selection of audit teams.

Prior to the mailing of any questionnaires, the contact person was called. No questionnaires were mailed until the contact person had been personally informed that they would be put in the mail the next day and any last minute instructions or questions were communicated. The first group of questionnaires were mailed October 17, 1983, and the last ones were mailed November 2, 1983.

For any questionnaires that had not been returned within three weeks of their mailing, a second request letter was sent to the contact. After another three weeks elapsed, any contact people who had not returned questionnaires were called and reminded of the need to follow-up with their audit teams. The first group of completed questionnaires was received on November 18, 1983, and the last ones were received February 3, 1984.

Questionnaire Booklet

The questionnaires sent to each contact person were organized in groups of four, one for each audit team member. Each questionnaire was bound individually to form a booklet. All of the questionnaires contained the same three sections: instructions to the participant, the control environment attribute section, and a participant profile section. However, one out of each four booklets contained an additional fourth and fifth component. These additional sections were a client profile and audit firm questionnaire. It was only necessary that one member from each audit team provide this information since the other three members would only be duplicating it. The manager or partner of the engagement was the one to receive the booklet with these two additional sections. The client, audit firm and participant profile sections are contained in Appendix E along with the primary questionnaire. Together they represent an entire questionnaire booklet.

The purpose of the instructions section in the front of each booklet was to introduce the study, define key concepts, familiarize the participant with the remaining sections in the booklet, and to instruct the participant on how to properly indicate their responses to the questions. The cover letter attached to each booklet, Appendix D, was for the purpose of personalizing the research request and conveying the importance of their contribution.

The control environment attribute section followed the instructions. Each page in this section presented a different one of the 48 attributes derived from Phase I of the study. For each attribute, the same four questions were asked. The pages were duplicated back to back and the first sheet contained two examples of how to properly mark responses. The ordering of the control environment attributes was randomized in each booklet. The sheets (each sheet having two pages and thus two attributes) were randomized by blocks. There were seven blocks each representing a grouping of related attributes.

In order to perform the randomization, each block was assigned a number. A table of random digits taken from Robertson and Davis [1982, p. 280] was used. A seven-digit number with digits one through seven was derived. The blocks of control environment attributes were then sequenced in each booklet according to the order of the digits appearing in the random number.

The third section common to all booklets (it actually was placed last in the booklets), was designed to gather demographic data from each of the auditors. Eight items of information were requested along the dimensions discussed in Chapter III concerning independent variables. The items solicited were:

(1) Firm affiliation
(2) Years of audit experience
(3) Position title
(4) Office location
(5) Prior professional experience
(6) Client mix experience
(7) Types of specialized audit training
(8) Academic degree(s)

In addition, this section contained a short debriefing questionnaire. Participants were asked to provide information in regards to:

(1) Interest in the exercise
(2) Clarity of the instructions
(3) Comprehensiveness of the control environment attributes presented
(4) Time taken to complete the exercise
(5) Any other relevant comments

This information was used to determine, in part, if unacceptable response biases existed.

The fourth section (only appearing in one team member's booklet), asked for client information. The information sought was general enough to allay the concerns of the auditors regarding client confidentiality. In particular the information sought was related to:

(1) Client industry
(2) Management Strategy
(3) Turnover
(4) Total assets
(5) Change in total assets
(6) Total debt to total assets ratio
(7) Change in net income
(8) Type of information system
(9) Dispersion of operating facilities
(10) Management structure
(11) Predictability of financial performance
(12) Control ethic of accounting management
(13) Control ethic of management in general

This data represents potential dimensions along which auditor assessments of the importance of certain control environment attributes might differ. Chapter III contained a discussion of these potential independent variables.

The fifth section (also only appearing in one team member's booklet), dealt with certain audit firm characteristics. The information requested pertained to:

(1) Years affiliated with client
(2) Existence of specialization in this client's industry
(3) Number of auditing professionals in the office
(4) Change in number of auditing professionals
(5) Changes in audit team assigned to this client

These factors represent the operationalization of the audit firm independent variables discussed in Chapter III.

<u>Other Materials</u>

Several other materials were used in administering the questionnaire. First of all, a separate set of instructions to the contact people was necessary in order to inform them of their role and responsibility. Appendix C contains these instructions. A cover sheet was also sent to the contact people, one for each booklet they received. This cover sheet is also contained in Appendix C and provided the means by which they could instruct the participating auditors regarding the:

(1) Client engagement referent
(2) Date to be completed
(3) Where to return the completed booklet

In some cases these cover sheets were removed prior to their return for confidentiality reasons but other labelling guaranteed that booklets pertaining to the same client were identifiable. Appendix B contains an example of the cover letter sent to all contact people which accompanied the booklets for them to distribute.

Lastly, forms (a copy is presented at Appendix F) were sent to each contact person that could be used for participants to:

(1) Request a copy of the study's results
(2) Provide a listing of relevant references that they would recommend

Also, a self-addressed return envelope, large enough for all of their booklets was sent to each contact person.

Controls

The primary means of control placed upon the execution of the research task by the participating auditors, consisted of using managerial level contact people and providing the participants with an actual, recent client context. The questionnaires were personally distributed to the audit team members at their respective offices by either an audit manager or partner. These contact people provided an introduction to the task as well as the due dates and their endorsement. This approach is similar to the normal way that audit assignments would be communicated.

One important concern in any research focusing on participant attitudes or opinions is whether or not the research instrument evokes the participant's true attitude. Cook and Selltiz [1964] assert that an attitude cannot be directly measured but that it has to be inferred from some sort of behavior such as self-reporting in questionnaires. It should be noted that as Chein [1978] states, attitudes involve perceptions and motivations, and because of certain attitudes a person may perceive objects differently from someone else. Chein also warns that specific behaviors cannot reliably be predicted from information on someone's attitudes because in some cases people may act contrary to their attitudes. Such an observation has also been noted in the accounting literature (e.g., Dirsmith and Lewis [1982]). In order to be as successful as possible in eliciting realistic attitudes, the entire questionnaire used in this study required that the auditors use, as a reference point, a specific client engagement that they were currently performing or had recently completed. The particular engagement was specified for each engagement team by the contact people. It is assumed that such a control increases the likelihood of acquiring rich, descriptive data concerning what auditors actually do rather than asking them, in artificial settings, what they would do.

One other concern involves reactive bias or what is sometimes referred to as experimental demand. Runkel and McGrath [1972] suggest that participants' perceptions of and attitudes toward such a study and toward the researcher, may effect their responses. However, the subject matter of this study is one that is acquiring more visibility and discussion within the professional literature so it should not have been viewed as offensive, irrelevant or trivial. In fact, as some firms move more towards a judgmental rather than programmatic evaluation approach regarding internal controls (see for instance Dirsmith and McAllister [1982], Nanni [1984] and Cushing and Loebbecke [1983]) the concerns raised in this study are exactly some of those being dealt with by these firms. Moreover, there are only a few instances where the participants knew the researcher and the anonymity of the participants was easily maintained if they so desired. An analysis of the debriefing questions, presented in the next chapter, also offers one means by which these potential concerns can be evaluated.

Summary

The sections above discussed the two phases of this research study. In particular, the derivation of the control environment attributes, the modifications prompted by the pilot study, and the administering of the final questionnaire were each described. Details concerning the study's participants and a preliminary data analysis were deferred to the next chapter.

CHAPTER V

PRELIMINARY DATA REVIEW

This chapter reviews the results of administering the questionnaire described in Chapter IV. The purpose of this review is to provide a background for the detailed analysis of the participants' responses presented in Chapter VI.

It should be recalled that the research strategy employed is one of self-reporting by auditors with a sample survey instrument. Typically, such an approach is useful when:

> . . . the researcher does not believe it crucial to design a special setting in which to collect data from the actor. . . . [Runkel and McGrath, 1972, p. 83]

However, it should be recalled that auditor responses were elicited within a specific client context. Therefore, the setting of a particular client is important but it is a setting beyond the creation and control of the researcher. Because both the actors and the settings are factors of interest in this study, a number (24) of demographic variables were obtained. There will be no attempt to generalize the findings of this study to all the populations represented by these demographic variables. Rather, the findings of this study constitute facts related to the sample and they will serve to raise issues and concerns that should possibly be addressed within the larger sphere of auditing.

The next section provides a summary of the demographic variables acquired via the returned questionnaires. The second section of this chapter assesses the likelihood that the participants' responses might be differentially affected due to four potentially mediating attitudes. This debriefing part of the questionnaire solicited responses regarding the respondents' attitudes concerning the instructions and the completeness of the exercise as well as their interest in completing the questionnaire. Also, they were given a question concerning the length of time they took to complete the questionnaire. Based upon these indicators, and the comments made on an open-ended question at the end of the questionnaire booklet, no returned booklet was deemed unacceptable for inclusion in the data base. This chapter concludes with a summary of the demographic data for participants and an assessment of the data's quality.

Demographics

As discussed in Chapters III and IV, three forms of demographic information were collected because one of the primary purposes of this study is to determine if participant responses differed according to auditor, audit firm, and/or client demographic characteristics.

Auditor Variables

Auditors with different years of audit experience normally have different responsibilities on an engagement. In order to investigate if differing levels of experience influence auditors' control environment evaluations, auditors from the four primary ranks found in most Big Eight firms were utilized. The audit teams participating in this study consisted of one assistant, one senior, one manager and one partner (the terminology may differ across firms but the levels and functions do not).

The final sample was comprised of thirty-six audit assistants, forty-three seniors, twenty-two managers, and forty-five partners. It should be noted that the actual data acquired was in terms of years of experience rather than ranks. However, assistants are assumed to have two years or less of experience while seniors normally have three to five years of experience. Managers are viewed as having six to eight years of audit experience while partners have nine or more.

Prior work experience was also deemed to be a potentially relevant factor. Only twenty-six of the final sample of 146 had other professional work experience prior to joining their respective accounting firms. The type experience noted was generally financial in nature and minimal in duration.

Forty-two of the participants labeled themselves as having an audit specialty of some type. A specialty was arbitrarily defined as spending fifty percent or more of one's chargeable audit time on clients in one particular industry.

In terms of specialized training and academic degrees, the final sample was again varied. Twenty-seven auditors had formal computer audit training, while thirty-four had some sort of specialized industry training. Sixteen participants had both types of training, and sixty-nine had neither type. Academic training characteristics were a little less varied as only thirty auditors had degrees beyond the bachelor's level.

Audit Firm Variables

It is possible that an auditor's firm affiliation and geographic locale might influence his assessment of a client's control environment. This could be possible due to differing firm philosophies and local "cultural" expectations. Eight different firms in eight different cities comprised the final sample. Table 1 reflects the subjects' disperson across firms and cities as well as indicating the respective response rates to the questionnaire. In total, responses from forty of the original fifty-seven audit teams were received. The final auditor-participant response rate was 64%.

Table 1

Response Rates by Firm and City of Subjects
(response rate noted only if other than 100%)

Firm	PHIL	PITT	NYC	DC	COLS	HOUS	ATL	CHIC	Total
A	11(92)	8		8		8			35
B	3(75)	8	0						11
C	4(50)	8	7(88)		0			8[a]	19
D	6(75)	12	0				10(63)		28
E	8	3(38)			4				15
F	3(38)	4	0	3(75)					10
G	0	8	0			7(88)			15
H	7(88)	2(25)	4(50)						13
Total	42	53	11	11	4	15	10		146

[a]Eight questionnaires were returned from this office, but they were received too late to be included in the detailed data analysis.

As can be seen from Table 1, most respondents were from the Philadelphia or Pittsburgh offices. This may not be enough of a geographic dispersion to highlight differing local cultural expectations. It should also be noted that not all of the Big Eight were solicited in every city depicted. Contact people were utilized only in those cities with an entry in the table (zero values and the others). The New York City practice offices tended not to respond due to the research contact person being in the Executive Offices and therefore not having the direct line to an audit team in the field. From looking at Table 1 and seeing that all of the Big Eight firms participated, it may be assumed that there is no firm response bias.

In general, firms that originally agreed to participate and then later withdrew returned their materials within three to four weeks. A typical negative response of this sort was received with a cover letter such as those portrayed in Figures 17 and 18 (letterheads and signatures have been deleted).

The completed materials, from those teams who did participate, were generally returned within a three- to nine-week period. In reviewing those that were the latest ones returned, they had still been completed during the internal control phases of the respective engagements, albeit the latter stages of that area of audit attention. In general, if the materials were not returned prior to the first part of December, they were not returned until mid or late January. The typical reason for the delay was due to the holidays. It should also be noted that no authoritative pronouncements from the AICPA, the SEC, etc., pertaining to

November 16, 1983

Mr. Mark E. Haskins
409 Business Administration Bldg.
Pennsylvania State University
University Park, PA 16802

Dear Mr. Haskins:

I am sorry that I was not successful in following through with your survey. Apparently it was poor timing. Our people are extremely busy at this time gearing up for the year end.

After reviewing the material in your survey it seems that it would not be practical to expect them to take on this additional burden at this time. It is difficult to find each member of a team, who worked on a particular engagement together, that is not heavily involved in client matters at this time of the year. Therefore, completing the survey for all levels would take some time.

I am returning your materials, and again I am sorry it is not complete. Good luck with your work and perhaps at some future time I can be of more help.

Sincerely,

Figure 17

A Negative Response to the
Research Participation Request

December 2, 1983

PERSONAL

Mr. Mark E. Haskins
409 Business Administration Building
The Pennsylvania State University
University Park, PA 16802

Dear Mark:

Unfortunately, it is our decision not to participate in your study. This decision is largely based on the fact that our people are extremely busy and will continue to be through the next four months. It is unrealistic at this time for us to ask them to take the time that the proper completion of your survey requires.

Sincerely,

Figure 18

A Negative Response to the
Research Participation Request

internal controls, were issued during the period over which the materials were outstanding. Therefore, there is no such external stimulus differentially influencing the early vs. late respondents. Typical positive response letters from contact people are exhibited in Figures 19 and 20.

Another pair of audit firm variables dealt with the length of time the firm had audited the particular client which the respondents used as their reference, and whether or not the office was a specialist in the industry of that particular client. The length of tenure of the firm with the selected clients was segregated into four categories. Twenty-five of the respondents were on engagements that their office had held for five years or less. Twenty-nine respondents were on client engagements that had been with their office for six to ten years. Firm/client relationship tenures of eleven to fifteen years and sixteen or more years involved twenty-seven and sixty-five auditors, respectively. Moreover, of the 146 respondents, sixty-six were referencing client engagements that would be considered an industry specialty of their respective offices. Industry specialty was assumed if over 20% of that office's chargeable audit hours were on clients in that particular industry. There appears to be an adequate dispersion across these variables so that differences in responses might cleave along the different categories.

The last pair of audit firm demographic variables categorizes the dynamic nature of the offices' and the audit teams' staffing. Fifty-eight auditors were affiliated with offices that had grown slightly over the past three years. Forty-six respondents indicated

December 14, 1983

Mr. Mark Haskins
Instructor of Accounting
Pennsylvania State University
409 Business Administration Building
University Park, Pennsylvania 16802

Dear Mark:

I am enclosing the completed packets for your doctoral dissertation study. You certainly have undertaken a challenging area to evaluate. I am looking forward to seeing the results of your study.

I apologize again for any inconvenience it might have caused you from the delay in returning these packets. We have been very busy in our Washington, D.C. office, and your patience has been appreciated. Please let me know if there is anything further that I might assist you with.

Sincerely,

Figure 19

A Positive Response to the
Research Participation Request

November 21, 1983

Mr. Mark E. Haskins
Ph.D. Candidate
The Pennsylvania State University
409 Business Administration Building
University Park, Pennsylvania 16802

Dear Mark:

At long last we are returning the eight questionnaires that you mailed to us weeks ago. We have opted for the approach of not identifying the company names for either set of questionnaires and thus we have simply coded them Company A and Company B. In both cases the questionnaires were completed for an audit in process for the year ended December 31, 1983.

We are all interested in a summary of your results when they become available and you should coordinate distributing copies of your survey through me. We have, therefore, avoided the completion of eight request forms that you had previously sent us.

Having talked to most of the individuals who completed the questionnaires, I think it is safe to say that participating in this project was thought provoking and interesting. Admittedly, it took about twice as long to complete the questionnaires than most of us had anticipated when we first skanned them. I hope we have added some meaningful information to your overall process.

Best of luck in completing your dissertation.

Very truly yours,

Figure 20

A Positive Response to the
Research Participation Request

that their offices had grown a great deal, while thirty-eight indicated no substantial shrinkage or growth in their offices. Only four auditors responded that their office had declined slightly.

In regards to audit team staffing, several situations existed. Individual changes that respondents noted involved four partner-only changes, seven manager-only changes, and seventy-five of the 146 returned booklets were from auditors on engagements with a senior-only change.[1] Four booklets reflected a partner <u>and</u> senior change while eighteen indicated a manager <u>and</u> senior change on the audit team. There were a total of thirty-eight returned booklets that reported no change in the audit team profile from the previous year.

<u>Client Variables</u>

Several different types of information describing the unique aspects of the clients referenced by the auditors was acquired. In many instances, these variables were closely related but no formal measurement of this association was deemed crucial to the study (e.g., total assets may be related to the client's debt ratio).

Three types of descriptors were solicited. The first category involved objective, nonfinancial data. Comprising this category was information concerning the clients' industry, the client's personnel turnover over the last three years and its information system. Table 2 depicts the categorizations along these lines.

---

[1]Note that if all members of a particular audit team returned their booklets and the team had experienced a senior-only change, it would register as such in all four booklets.

Table 2

Distribution of Respondents by Client Industry, Turnover and Information Systems

Industry

Manufacturing	Utilities	Wholesale/ Retail	Financial	Other	Total
70	8	16	29	23	146

Client Turnover

Top Mgmt. Only	Acctg. Only	EDP Only	Acctg. & Any other Group	Other 2-way Combination	Any 3-way Combination	No Turnover	Total
22	23	15	15	23	14	34	146

Information Systems

Changed from Manual to EDP	Remained EDP	Remained Manual	Total
20	102	24	146

A second category of client demographic information can be characterized as objective, financial descriptors. The four variables in this category were: total assets, change in total assets, total debt divided by total assets, and change in net income. Table 3 reflects the dispersion of respondents over these variables' categories.

The final category of client descriptors can be viewed as subjective and nonfinancial. These are descriptions of the client based upon the perceptions of one member of the audit team (either the manager or partner). Included in this category were the following: management's business focus, the diffusion of the client's operating structure and management structure, the predictability of the clients' financial performance, and the control ethic of the client's accounting management and top management. Table 4 summarizes the number of respondents affiliated with each category of these client variables.

Representativeness of Potential Explanatory Variables

All of the demographic variables (24 in total) were discussed at length in Chapter III. The foregoing summarization has been provided in order to depict the distribution of respondents across these variables' categories, leading to the subjective conclusion that their distribution pattern will not bias, a-priori, any particular outcome. It should be noted also, that in the analysis detailed in Chapter VI, the demographic variables that contain sparse counts in certain categories (e.g., the "highly decentralized" category of the variable "management structure"), are in most instances, combined

Table 3

Distribution of Respondents by Client Financial Demographic Variables

Total Assets (000,000's)

≤$100	>$100	Total
38	108	146

Change in Total Assets

Decrease		Increase		No Change	Total
>5%	<5%	≥15%	≤14%		
26	22	39	56	3	146

Total Debt/Total Assets

≤40%	>40%	Total
110	32	142

Change in Net Income

Decrease		Increase			
≥30%	≤29%	≥30%	29%-20%	≤19%	Total
18	25	49	30	24	146

Table 4

Distribution of Respondents by Client Focus, Structure, Predictability and Control Ethic

Top Managements' Focus

Internal	External	Balanced	Total
39	20	87	146

Operation's Structure (five point scale)

Highly Diffused				Highly Localized	Total
34	44	15	23	30	146

Management Structure (five point scale)

Highly Decentralized				Highly Centralized	Total
4	23	18	43	58	146

Predictability (five point scale)

Unpredictable				Predictable	Total
8	20	19	59	40	146

Accounting Managers' Control Ethic (five point scale)

Too Little		Appropriate		Too Much	Total
0	14	110	22	0	146

Top Managements' Control Ethic (five point scale)

Too Little		Appropriate		Too Much	Total
4	28	92	22	0	146

with the adjoining category. This provides less potentially discriminating cleavage points but it strengthens the statistical basis for the analysis of the remaining categories.

Debriefing Data

The final page of the questionnaire booklet contained four debriefing questions designed to determine questionable subject involvement leading to possible response biases. The ensuing discussion focuses on these items. Immediately following this discussion is a brief conclusion regarding the implications of the debriefing results.

Table 5 summarizes the auditors' responses to the debriefing questions by firm and by years of audit experience. The participants' attitudes pertaining to their interest in the task of completing the questionnaire, the clarity of the task's instructions, and the comprehensiveness of the forty-eight control concepts in depicting a control environment were solicited along a seven-point scale (the higher the rating, the more favorable the response). The final debriefing question asked for the time spent, in minutes, to complete the questionnaire booklet.

In general, the respondents found the task somewhat dull as the mean responses were below the mid-point of 3.5. The respondents all rated the clarity of instructions above the mid-point, suggesting they understood what they were to do. Also, they all rated the comprehensiveness of the concepts above the mid-point indicating that the 48 control concepts were viewed as a fairly complete set of control environment cues.

Table 5

Debriefing Data

(Mean response/standard deviation)
(1 = lowest, 7 = highest)

Firm	Interest in Task		Clarity of Instructions		Comprehen-siveness		Minutes to Complete	
A	3.1	1.2	3.6	1.5	4.2	1.5	127	47
B	2.8	1.8	4.9	1.3	4.7	1.7	116	45
C	3.2	1.5	3.9	1.7	5.0	1.4	131	47
D	2.8	1.5	4.8	1.3	4.6	1.6	125	53
E	2.6	1.4	4.5	1.9	4.5	1.7	134	58
F	3.6	1.6	4.5	1.5	5.2	1.5	132	84
G	3.0	1.3	4.5	1.9	5.0	1.6	139	58
H	2.4	.9	5.2	1.3	4.8	1.5	104	47
Auditor <u>Years of Experience</u>								
≤2	3.4	1.4	4.9	1.8	5.2	1.3	135	59
3-5	3.0	1.4	4.4	1.5	4.1	1.6	133	57
6-8	2.9	1.1	4.0	1.6	4.4	1.6	118	45
≥9	2.7	1.4	4.0	1.5	4.9	1.5	117	47
<u>Overall</u>								
	3.0	1.4	4.3	1.6	4.7	1.5	127	53
<u>Ranges</u>								
	1-7		1-7		2-7		20-315	

Table 6 presents the chi-square statistics and product-moment correlations for the appropriate pairings of the debriefing data with firm, city, time to complete and years of experience.

It appears that firm and city affiliation is related to the perception of the clarity of instructions only. The comprehensiveness of the control concepts' listing is not significantly related to any of the debriefing items which adds credibility to its completeness. As can also be seen, there is an inverse relation between years of experience and all the debriefing questions (three of these are statistically significant); this may suggest that the more experience, the more complex and ill-structured things are perceived to be. Also, the "time" debriefing variable was not significantly correlated with any of the other debriefing questions. This suggests that the time spent on the task was not a surrogate for the respondents' interest, understanding or perception of the study's comprehensiveness.

Debriefing Implications

Although the debriefing questions depict a wide range of attitudes, the means appear to be reasonable. The booklets returned by the individual respondents with the lowest scores for each of the four debriefing questions were subjected to a special review. The special review involved an evaluation of the written comments throughout the booklet and a review of responses to the open-ended, final question that directly solicited their comments. In all cases, the booklets were judged to be acceptable and indicative of that respondent's "true" belief regarding the issues presented

Table 6

Debriefing Data Correlations

	Firm (Likelihood Ratio Chi Square)	Auditor Years of Experience (Product-moment Correlations)	City (Likelihood Ratio Chi Square)	Time to Complete (Product-moment Correlations)
Interest in Task	41.16	-.190**	46.89	.001
Clarity of Instructions	55.28*	-.204**	64.61**	-.138
Comprehensiveness	28.21	-.015	21.37	.089
Time to Complete		-.150*		

*Significant at $p \leq .10$.

**Significant at $p \leq .03$.

to him. Therefore, no booklets were discarded based upon any of these debriefing results.

Summary

As a consequence of examining the debriefing data and based upon a review of the diversity of demographic data achieved, only one unanticipated course of action was taken. It was necessary at times, during the detailed data analysis, to combine some of the categories for a particular demographic variable when analyzing its association with certain responses. This was necessary in those instances where the distribution of responses and/or the sparseness of auditors in a particular demographic category resulted in contingency table cell counts that were so small that the statistical calculations were tenuous, even with certain corrections such as the Yates adjustment.

The average time spent by the auditors per booklet was just a little over two hours--judged to be quite long given most predecessor auditing studies. At an average chargeable rate for a Big Eight firm of $65/hour, this represents an investment of time on the part of the 146 professionals, valued at $18,980.[2] This fact alone justifies a close scrutiny of the data and an interest in the results. Chapter VI presents a detailed analysis of these auditors' responses and the demographic variables associated with their

[2] The $65/hour was an average provided by a partner of one of the Big Eight firms.

differing responses. The client demographic variables and their respective shorthand labels are presented in Appendix G.

CHAPTER VI

RESEARCH RESULTS

The purposes of this chapter are to describe the methods used to analyze the research data and to present the results of the analysis.

Data Analysis Methods

The objectives of this study have been discussed previously. These objectives can be succinctly summarized as: (1) to determine the relative importance of each of the forty-eight control concepts; (2) explore the dimensions along which different evaluations of their importance cleave; (3) investigate the potential audit impact of each of the control concepts; and (4) to study their definitional attributes along an accounting vs. administrative control dichotomy as well as an inherent vs. control risk dichotomy. Each of these objectives requires a slightly different form of analysis. The common denominator across all the analysis is the use of the Statistical Package for the Social Sciences X ($SPSS^x$) [Nie, 1983]. Within $SPSS^x$, the NONPAR TESTS, CROSSTABS, FREQUENCIES, AGGREGATE, and NONPAR CORR procedures were utilized.

Objective #1

The first research objective was investigated through the utilization of Kendall's Coefficient of Concordance W, using each of the control concepts' mean ratings as the basis for determining their rank orderings. According to Nie [1983, p. 684],

> This test assumes that each case is a judge or rater. It ranks the k variables from 1 to k for each case, calculates the mean rank for each variable over all the cases, and then calculates Kendall's W and a corresponding chi-square statistic, correcting for ties. W ranges between 0 and 1, with 0 signifying no agreement and 1 signifying complete agreement.

As W approaches one, the chi-square level of significance will approach zero.

In addition, the first objective was also pursued by plotting the control concepts' mean ratings to the question of "how important should the concept be to an audit" versus the respective variances of these means. This provides a way of subjectively determining the control concepts' relative relationships. One other avenue of exploration regarding this objective involved the calculating of 99% confidence intervals around each control concepts' median response as well as each concepts' percentage of responses that were not "no importance". The purpose of this step was to ascertain which of the control concepts were regarded by the participants as not statistically different from "no importance."

Objective #2

The second objective was explored in a three-step fashion. First of all, a k-Sample Median Test was performed across all twenty-four demographic variables, one at a time, for the participants' ratings of how important they perceived each control concept. This test

> . . . determines whether k groups are drawn from populations with the same median. [It] tabulates a 2 x k contingency table

> with counts of the number of cases greater than the median and less than or equal to the median for the k groups. [Nie, 1983, p. 693]

A chi-square statistic level of significance is calculated and provides the basis for determining if the medians differ across the various categories of the particular demographic variable used.

The second step relating to the second objective is very similar but a bit more rigorous. Two-way crosstabulations were calculated using the demographic variables as one axis and the auditors' ratings of importance for the control concepts along the other axis. This involved 1152 (48 x 24) 2-way tables. This analysis retained the five-point response scales for each control concept whereas the Median Test aggregated the responses to a two-point scale (i.e., $\leq$ median and > median). The extent of association between response categories and demographic categories is measured via a chi-square statistic. Such a measure indicates if there is a statistically significant systematic relationship between the two variables.

The third step was performed in order to determine the strength of the associations exhibited by the Crosstabulations test and by the Medians test. Kendalls' Tau b or Tau c measures, along with their significance levels, were calculated for the ordinal demographic variable associations. Because there was no prior directional hypotheses stipulated, two-tailed tests of significance were in order. According to Nie [1983], Tau b is appropriate when the number of rows equals the number of columns in the crosstabulated table, and Tau c is appropriate when the table is rectangular. Both forms of Kendall's Tau range in value from -1 to +1 with 0 reflecting no association. Both Tau b and Tau c assume the two crosstabulated variables are at least ordinal. If either or both of them are nominal, the Tau measures have no meaning [Nie, 1983]. All the response variables and most of the demographic variables are ordinal.[1] For the tables with the seven nominal demographic variables, Lambda is used to indicate the strength of association. Lambda does not result in a significance statistic, but rather generates a measure of the proportional reduction in error. For example, if Lambda is .043, this can be interpreted to mean that, given the values of the demographic variable, the prediction of the response variable improves by 4.3%. Obviously, Lambda will range from 0 to 1.

Objective #3

The third objective of the study, dealing with the audit impact of the control concepts, is investigated by comparing plots of the mean responses to the "how important should this concept be" question, transposed on to a plot of the mean responses to the "how important was it actually to the audit" and "who should have responsibility for evaluating the concept" questions. In order to derive a statistical evaluation focussing on this comparison, the Sign Test was performed to determine if the differences between the normative "should" and positive "actual" questions were statistically significant. The reason for the use of the Sign Test is due to the

[1]The seven variables that are nominal are: CLONE, CLTWOB, CLFOUR, AUDFIVE, ONE, FOUR and SEVEN.

fact that for each of the forty-eight concepts, no more than twenty-five auditors noted a difference in importance to these two questions. According to Nie [1983], a binomial distribution-based test, such as the Sign Test, is most appropriate in such a situation. The interpretation of this test is limited to the extent that most auditors equated their responses to the "should" and "actual" questions and the Sign Test ignores such ties. Therefore, what can be concluded will be that when there are differences, are they statistically significant and in what direction.

The remaining part of objective number three to be explored, deals with the auditors' responses regarding whether audit modifications are in order depending upon the existence of "favorable" or "unfavorable" conditions for each of the particular control concepts. This analysis again begins with a plot of the mean responses to the "to what extent should the nature, extent and timing of audit procedures be modified if favorable conditions exist regarding the control concept" question for all forty-eight control concepts. Also plotted on the same graph are the mean responses to the same question for an "unfavorable" situation. As a matter of additional interest one other line is plotted together with these two: the plot of the mean responses to the original normative question of "how important should this control concept be?" In the same vein, in order to develop some statistical conclusions beyond the ad hoc conclusions derived from simply reviewing the plots, the Wilcoxon Matched-Pairs Signed-Rank Test was performed on the "favorable" vs. "unfavorable" paired responses. This test again ignores ties but the number of response differences exceeded the SPSS^{x} cutoff of twenty-five so the differences can be assumed to be normally distributed rather than binomially distributed as in the Sign Test. Because of this assumption, it is possible to take into account the magnitude of the difference in addition to the direction of the difference. This Wilcoxon test provides a two-tailed, test statistic Z that incorporates these features.

Objective #4

The final objective noted at the beginning of this chapter, is definitional in nature. As noted in Chapter III, the professional accounting literature dichotomizes controls into accounting and administrative and client-related risks into inherent and control. Two sets of questions in the research instrument asked auditors to indicate the extent to which each control concept adhered to the definition of these four notions. Two scatter grams were constructed, one for the control pair of responses and one for the risk pair of responses. The mean ratings for all four notions were used to locate each control concept in the respective two-dimensional plot. As a means of statistically evaluating the displacement of each control concept from the 45-degree diagonal in each scatter gram, the Wilcoxon Matched-Pairs Signed-Rank Test was used. If a control concept was displaced from the diagonal, this simply indicates, for example, that it was viewed as more of an accounting control than an administrative control. The Wilcoxon test depicts if this is a statistically significant difference in labels and because the test also indicates the direction of the difference, the appropriate label is discernible. If these labels were truly dichotomous, the plots would possess an "L" shape.

Data Analysis Results

The results pertaining to each of the research objectives and data analysis methods will now be presented.

Importance of the Control Concepts

The first question (hereinafter referred to as ONEAS) presented for each control concept, asked the auditors how much influence should that particular control concept have upon their assessment of their client's control environment. The mean ratings for each control concept across all 146 respondents were computed. Table 7 depicts these means and their standard deviations. These two descriptive statistics were then used to rank order the control concepts from most important (i.e., the concept with the lowest mean rating) to least important (i.e., the concept with the highest mean rating) and these rankings also appear in Table 7.

Because there was no hypothesized ordering of the forty-eight control concepts, it is important to establish that these rankings are stable and meaningful. In order to statistically determine that these rankings are uniform, mean ratings to ONEAS were determined nine different ways according to aggregations by: (1) years of audit experience of the respondents; (2) those who had prior work experience and those who did not, (3) those auditors who viewed themselves as specialists versus the generalists; (4) the various

Table 7

Rank Order of 48 Control Concepts
Based Upon Mean Responses to Question ONEAS

Rank	Control Concept # in Appendix A	Response		Rank	Control Concept # in Appendix A	Response	
		Mean	Std. Dev.			Mean	St. Dev.
1	10	1.68	.69	25	26	3.10	1.14
2	7	1.70	.76	26	47	3.12	1.24
3	14	1.78	.81	27	9	3.14	.98
4	13	2.03	.94	28	39	3.16	.95
5	23	2.15	.98	29	5	3.17	1.01
6	21	2.16	1.04	30	35	3.20	1.12
7	20	2.17	1.09	31	40	3.27	1.02
8	24	2.20	1.02	32	8	3.29	.93
9	25	2.26	.98	33	45	3.35	1.12
10	32	2.35	1.03	34	41	3.37	1.16
11	33	2.50	1.08	35	1	3.38	1.02
12	19	2.53	1.07	36	17	3.38	1.14
13	34	2.55	1.01	37	16	3.42	1.14
14	18	2.61	.99	38	6	3.42	1.15
15	43	2.62	1.13	39	11	3.46	1.06
16	28	2.68	.94	40	4	3.58	.99
17	42	2.68	1.29	41	36	3.66	1.07
18	12	2.69	.87	42	3	3.67	.97
19	27	2.77	1.01	43	2	3.71	1.03
20	15	2.77	1.19	44	37	3.80	1.02
21	46	2.78	1.06	45	48	3.83	1.02
22	31	2.91	.92	46	38	3.90	.92
23	22	2.92	1.01	47	29	4.15	.96
24	44	3.00	1.10	48	30	4.26	.90

kinds of specialized audit training possessed by the auditors; (5) the various academic degrees held by the respondents; (6) a two-way classification according to the auditors' office locale and their years of audit experience; (7) another two-way categorization according to years of audit experience and firm; (8) the city of the auditor's office; and (9) the auditors' firm. Within each of the nine differently partitioned response sets, the rankings were compared using Kendall's nonparametric Coefficient of Concordance W. W is a measure of agreement among the ranks of the control concepts across each category within each of the nine partitionings. If the rankings, within a partitioning, are totally unrelated, W is zero and the chi-square probability is one. On the other hand, if the rankings are perfectly related, then W is one and the probability that such an occurrence is by chance, is zero.

Table 8 reports Kendall's W and the level of significance for each of the nine differently partitioned responses. As can be seen, when all forty-eight control concepts are ranked, W is very large and very significant. This indicates that the nine different demographic factors used to partition the auditors who are acting as judges in this situation, do not give rise to statistically significant differences of opinions concerning the control concepts' relative importance.

It is possible that these concordances are biased upwardly, due to the number (48) of rankings involved. In order to test for consistency of rankings when a decreased number of rankings is required, the forty-eight control concepts were segregated into five

Table 8

Kendall's Coefficients of Concordance for
Different Partitionings of Auditors

Partitioning of Auditors by: (Demographic Variable)	Cases	Coefficient W for: All 48 Concepts in Appendix A	Groups of Combined Concepts
1. Years of audit experience (TWO)	4	.9467***	.8375*
2. Prior work experience (FIVE)	2	.9803***	.9000
3. Specialist/Generalist (SIX)	2	.9877***	.9000
4. Special Audit Training (SEVEN)	4	.9643***	.9500**
5. Academic Degree (EIGHT)	2	.9789***	.9500
6. Years of audit experience x City (TWO x FOUR)	12	.8124***	.7778***
7. Years of audit experience x firm (TWO x ONE)	16	.7582***	.6025***
8. City (FOUR)	8	.8090***	.6437**
9. Firm (ONE)	8	.8456***	.6687**

Significance based on X^2.

***p <.0001
**p <.005
*p <.01

groups. Table 9 depicts these groupings. The process by which the control concepts were grouped was ad-hoc. Two partners, in the auditing divisions of the Executive Offices of two different Big Eight firms, grouped the concepts according to their perceptions of which ones exhibited a common audit concern. The minor differences between the two were resolved by the researcher. In essence, Group #1 involves control concepts related to the clients' accounting personnel, Group #2 embraces Board of Directors and top management concerns, Group #3 has to do with client organizational structure issues, Group #4 has the common thread of the client's communication of performance expectations, while Group #5 deals with the client's monitoring of performance.

Kendall's W was once again calculated using the rankings of the five groups instead of the forty-eight individual control concepts. The tests were performed with the judges partitioned in the same ways as before. Table 8 also depicts the results for the testing of the five groups' ranks. As that table reflects, the rankings are once again very similar except for those partitionings of auditors which result in dichotomous cases (e.g., variable EIGHT). In these instances, a one place change in a concept's ranking produces a W that is statistically insignificant. However, such an occurrence is considered to be trivial and no cause for concern.

Having established the appropriateness of the rankings as depicted in Table 7, the next step was to ascertain which of the forty-eight concepts were viewed as having a level of importance significantly different from a "no importance" rating. Given the

Table 9

Expert Grouping of 48 Control Concepts

Group 1 Control Concepts	Group 2 Control Concepts	Group 3 Control Concepts	Group 4 Control Concepts	Group 5 Control Concepts
# 1	#15	# 7	# 9	#14
# 2	#16	#13	#10	#26
# 3	#17	#37	#11	#27
# 4	#18	#38	#12	#32
# 5	#19	#40	#24	#33
# 6	#20	#41	#29	#34
# 8	#21	#42	#30	#35
#23	#22	#43	#31	#39
#25		#47	#36	#46
#28			#44	#48
			#45	
Most Consistent Ranking				
4	1	3	5	2

nature of the data, the best way to ascertain this was to construct 99% confidence levels around two different descriptive statistics for each control concept.

The first confidence interval was constructed around the median. Noether [1976, p. 131] provides the following formula:

$$d = 1/2\ (n + 1 - 2.576\sqrt{n}\ )$$

where d is the number of observations to count in from both ends of an ordered listing of the 146 ratings for a particular control concept. This procedure, when applied to each of the forty-eight control concepts, resulted in only two concepts whose confidence intervals, around their respective median responses, encompassed the rating of "no importance". As would be expected, these are control concepts #29 and #30 which are ranked 47th and 48th in Table 7. All of the other concepts can thus be viewed as valid elements of a client's control environment.

This fact is reinforced when confidence intervals were also constructed around the proportion of responses other than "no importance" for each control concept. The 99% confidence intervals around the proportion of these positive ratings were constructed using the following formula suggested by Conover [1980, p. 101]:

$$\frac{Y}{n} \pm (2.576)\sqrt{\frac{Y(n-Y)}{n^3}}$$

where Y is the number of responses other than those of "no importance" and n is the total number of ratings received for the particular control concept. This procedure resulted in none of the concepts having a confidence interval that encompassed 0% and only control concepts #29 and #30 had confidence intervals that included a value of 50% or less.

Importance of Control Concepts: Summary

In reviewing the preceding results, it is logical to conclude that all of the control concepts (except two) are legitimate constructs of a client's control environment. Moreover, the evidence so far suggests that auditors tend to agree on the relative importance of the concepts. However, as the next section shows, there are a number of differences of opinion concerning the absolute importance attributed to the various control concepts.

In order to reflect the ratings of the individual control concepts and the variability/stability of those ratings, Figure 21 is presented. Each control concept's mean rating to the ONEAS question is plotted against the variance of that mean. The figure is then divided into six cells. The vertical divisions relate to the ratings of "Great", "Moderate", and "Low" importance. The horizontal division is made where the variance equals 1.

According to Ijiri and Jaedicke [1966], accounting "fact" or "objectivity" is established via consensus. In regards to Figure 21, this suggests that those control concepts that are rated closest to their true, but unknown level of importance, are those with the smallest variances. Therefore, the three left-hand side cells can be viewed as comprising control concepts whose ratings were quite stable, and thus their ratings can be regarded quite confidently

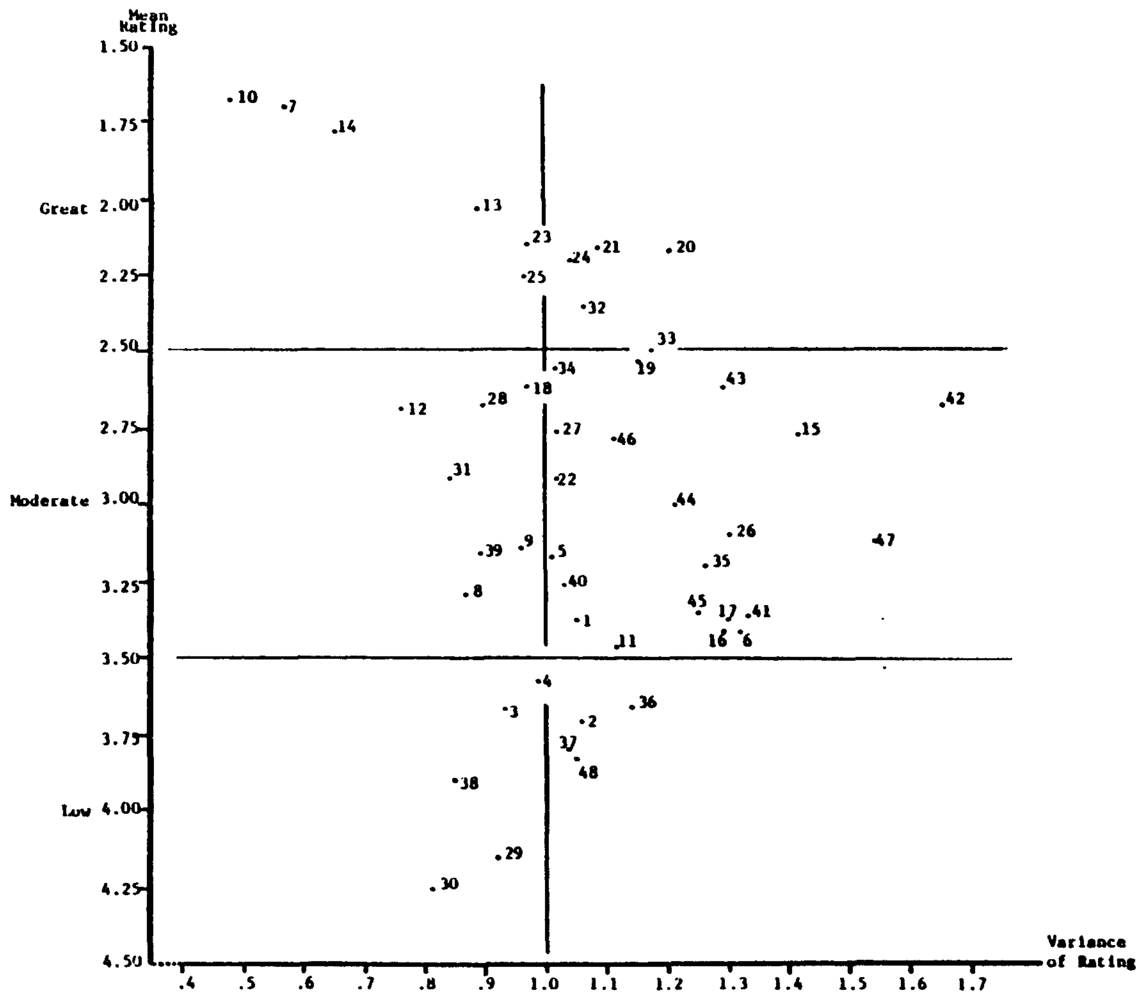

Figure 21

Plot of "Importance" Ratings for all
48 Control Concepts in Appendix A

as indicative of a consensusly derived level of importance.[2] Likewise, the levels of importance indicated for the control concepts appearing in the three right-hand cells must be seen as more volatile and perhaps less indicative of the importance that the profession as a whole might regard them as having. Another interpretation for the right-hand side control concepts is that their levels of importance are dependent upon circumstances, much more than those on the left-hand side. Since a variety of demographic attributes existed within this study, this explanation is probably quite appropriate and will be investigated in the next section.

The control concepts appearing in the upper-left cell are:

- #10 Appropriateness of client's policy concerning the authorization of transactions
- #7 Segregation of duties of client personnel involved in financial reporting
- #14 Effectiveness of client's general EDP controls
- #13 Effectiveness of client's physical safeguards over records and assets
- #23 Appropriateness of client's internal audit staff's duties and lines of reporting
- #25 Controller's knowledge of FASB and SEC guidelines

The responding auditors consistently evaluated these items as as having a great deal of importance to their client control environment evaluations. It is not surprising to find these particular items rated very importantly because they all represent traditional accounting-type concerns.

Those control concepts consistently having little importance are those appearing in the lower-left cell of Figure 21. These

---

[2]Note that confidence levels were not constructed around the means due to the responses on any one control concept not being normally distributed.

control concepts are:

#4 Appropriateness of training programs for new personnel involved in the financial reporting process
#3 Adequacy of client planning for staffing needs in the financial reporting area
#38 Compatability of the client's informal organizational structure with their organizational goals
#29 Appropriateness of the bases used in determining raises and promotions for people involved in the financial reporting process
#30 Appropriateness of the bases used in determining issues and promotion for operations personnel

It is surprising to find #29 and #30 rated so poorly (actually the worst of all the 48). Agency theory (see for example Wallace [1980] or Baiman [1982]) would tend to suggest that auditors, in their monitoring roles, should be concerned with the factors that motivate client personnel. These incentives and motivating factors could be economic or otherwise as discussed by Dornbush and Scott [1965] or Otley and Berry [1982]. Control concept #38's low rating seems to indicate that a client's grapevine [Clancy and Collins, 1979], subculture and internal clans [Ouchi, 1979] are not viewed by auditors as very important to their audits. Control concepts' #3 and #4 low ratings can be interpreted as auditors having only a "here and now" emphasis towards their clients' execution of the financial reporting process. Client personnel execute the financial reporting process and auditors seem to be indicating not much concern for the training of the people that precedes this execution nor the planning for staffing that anticipates future needs and improvements in the execution of the financial reporting process. Perhaps this is consistent with the notion of an audit opinion being limited to a single accounting period. Nevertheless, Hylas and Ashton [1982] indicated that such personnel concerns should be important audit concerns but it appears that such is not the case.

The next section explores the dimensions along which rating differences cleave. Only ratings to the ONEAS question (i.e., the question dealt with in this section) are discussed.

The Dimensions Associated with Differing Ratings

As explained in the beginning of this chapter, the analysis studying the dimensions along which absolute rating differences occurred involves identifying those demographic variables that exhibit a high degree of association with auditors' ratings of importance for each control concept. This section discusses the results of two tests performed to accomplish this task.

A statistically significant k-sample Medians Test indicates that at least two categories of a particular demographic variable, have different medians. Similarly, a statistically significant Crosstabs Test implies a systematic relationship between the demographic variable's categories and the control concept's importance-ratings. Thus, both tests provide indications as to whether a certain response rating is associated with a particular category of the demographic variable under study.

Table 10 highlights the various demographic variables and control concept combinations that resulted in statistically significant associations at $p \leq .05$. The control concepts, in rank order from left to right, constitute the horizontal axis of the table. The twenty-four demographic variables, grouped

Table 10

Crosstabs (0) and Medians Test (X): $p \leq .05$

Demographic Variables			10	7	14	13	23	21	20	24	25	32	33	19	34	18	43	28	42	12	27	15	46	31	22	44	26	47
			Control Concepts (In Rank Order)																									
CLIENT	CLONE	1							X										0				X	X		X		
CLIENT	CLTWOA	2		■	X		0			■			0						■			0						
CLIENT	CLTWOB	3					■		X							0	X				X	0						
CLIENT	CLTHREEA	4			■	X	0			■		X									0							
CLIENT	CLTHREEB	5							0									■	0									X
CLIENT	CLTHREEC	6									X																■	
CLIENT	CLTHREED	7			X						X			X														
CLIENT	CLFOUR	8			■	■	0			■																		
CLIENT	CLFIVEA	9	0					■															X				X	
CLIENT	CLFIVEB	10								X									X		0			0		X		
CLIENT	CLSIX	11			■	■	■	X		■								■	■				■					
CLIENT	CLSEVENA	12																X										
CLIENT	CLSEVENB	13							X								X					0			X			
AUDIT FIRM	AUDONE	14			X	■				0									■								0	
AUDIT FIRM	AUDTWO	15								0						X					X			X				
AUDIT FIRM	AUDFOUR	16							X				X											X				
AUDIT FIRM	AUDFIVE	17								0																		
AUDIT FIRM	ONE	18		0			0		■	■	0								0		■			X			0	
AUDIT FIRM	FOUR	19								X												0			X			
AUDITOR	TWO	20	0	0	■															0								
AUDITOR	FIVE	21							0		0													■				
AUDITOR	SIX	22				0																						
AUDITOR	SEVEN	23					X								0									X				
AUDITOR	EIGHT	24																										
BOTH TOTAL			0	1	4	3	2	1	1	5	0	0	0	0	0	0	0	2	3	0	1	0	1	1	0	0	1	0
MEDIAN TOTAL			0	1	7	4	3	2	5	7	2	1	1	1	0	1	2	3	4	0	3	0	3	6	2	2	2	1
CROSSTAB TOTAL			2	3	4	4	6	1	3	8	2	0	1	0	1	1	0	2	6	1	3	4	1	2	0	0	3	0
GRAND TOTAL			2	4	11	8	9	3	8	15	4	1	2	1	1	2	2	5	10	1	6	4	4	8	2	2	5	1

Table 10 (Cont.)

	Demographic Variables		9	39	5	35	40	8	45	41	1	17	16	6	11	4	36	3	2	37	48	38	29	30	Total for Both Tests
			Control Concepts (In Rank Order)																						
CLIENT	CLONE	1							■															0	1
	CLTWOA	2	■		X					X															4
	CLTWOB	3						X																	1
	CLTHREEA	4								■						■	■					0			5
	CLTHREEB	5		X														X			0			0	1
	CLTHREEC	6					■																		2
	CLTHREED	7				0			X	X															0
	CLFOUR	8					■			■							■				0	0			6
	CLFIVEA	9	0	0						■					0						0		0		2
	CLFIVEB	10								X	0		0		X	■				0					1
	CLSIX	11							0	X					X										7
	CLSEVENA	12							X										0						0
	CLSEVENB	13						X						0					0						0
AUDIT FIRM	AUDONE	14						■		X						■						0			4
	AUDTWO	15									X	0	X	X											0
	AUDFOUR	16						■		X				0											1
	AUDFIVE	17					X									0									0
	ONE	18	■			X		X		X					0	■			0	0					5
	FOUR	19													X						0				0
AUDITOR	TWO	20								■					■		0	0	X	■	■	0	■	0	6
	FIVE	21														X									1
	SIX	22																							0
	SEVEN	23														■									1
	EIGHT	24		0																					0
BOTH TOTAL			2	0	0	0	2	2	1	4	0	0	0	0	1	5	2	0	0	1	1	0	1	0	48
MEDIAN TOTAL			2	1	1	1	3	5	3	11	1	0	1	1	4	6	2	1	1	1	1	0	1	0	110
CROSSTAB TOTAL			3	2	0	1	2	2	2	4	1	1	1	2	3	6	3	1	3	3	5	4	2	3	112
GRAND TOTAL			5	3	1	2	5	7	5	15	2	1	2	3	7	12	5	2	4	4	6	4	3	3	222

according to client, audit firm, and auditor, provide the vertical axis. An "X" indicates a statistically significant Medians Test while an "O" indicates a statistically significant Crosstabs Test. The vertical lines drawn just after control concept #25 and just before #4 have a special meaning. Recall that control concept #25 was the lowest rated of the most important concepts in the upper-left cell in Figure 7 and control concept #4 was the highest rated of the least important concepts in the lower-left cell of Figure 7. These two control concepts are used as cutoffs in Table 10 to segregate the very important and very unimportant concepts from the remaining, moderately important control concepts.

A total of 110 and 112 significant Medians Test and Crosstabs Tests, respectively, resulted. Table 11 summarizes the counts of significant associations by test and by demographic variable category. Because of the differences in the number of categories for the AUDITOR, AUDIT FIRM and CLIENT sections, as well as the three control concepts' subdivisions, Table 11 comparisons are misleading. Table 12 takes these counts of significant associations and scales them to a common denominator enabling valid horizontal and vertical comparisons to be made.

Table 12 is very informative. For all the tests, the differences in ratings for the nine most important control concepts are most often related to client demographic factors. The most frequently appearing type of demographic variable associated with different ratings for the nine least important control concepts

Table 11

Counts and Per Cent of Significant Associations Appearing in Table 10

	First Nine Concepts (#10-#25)		Next Thirty Concepts (#32-#11)		Last Nine Concepts (#4-#30)		Total	
	n	%	n	%	n	%	n	%
CLIENT								
Median Test	23	34	40	59	5	7	68	100
Crosstab Test	18	28	31	48	15	24	64	100
Both Tests	13	43	13	43	4	14	30	100
AUDIT FIRM								
Median Test	6	20	22	73	2	7	30	100
Crosstab Test	9	32	12	43	7	25	28	100
Both Tests	3	30	5	50	2	20	10	100
AUDITOR								
Median Test	2	17	4	33	6	50	12	100
Crosstab Test	6	30	6	30	8	40	20	100
Both Tests	1	12	3	38	4	50	8	100
GRAND TOTALS								
Median Test	31	28	66	60	13	12	110	100
Crosstab Test	33	29	49	44	30	27	112	100
Both Tests	17	35	21	44	10	21	48	100

Table 12

Common Size Counts of Distribution of Significant Relationships Exhibited in Table 10 (Entries are Rounded Off)

	First Nine Concepts (#10-#25)	Next Thirty Concepts (#32-#11)	Last Nine Concepts (#4-#30)
Median Test:			
Client Variables	9	5	2
Audit Firm Variables	5	5	2
Auditor Variables	2	1	6
Total Associations	16	11	10
Crosstab Test:			
Client Variables	7	4	6
Audit Firm Variables	7	3	6
Auditor Variables	6	2	8
Total Associations	20	9	20
Both Tests:			
Client Variables	5	1	1
Audit Firm Variables	2	1	2
Auditor Variables	1	1	4
Total Associations	8	3	7

NOTE: Table 12's three major demographic category counts are scaled to the same number of categories (5) contained in the AUDITOR section. Also, the middle thirty concepts' counts are scaled down to nine categories, the same number contained in the other two concept groups.

involve auditor demographics (again for all three test situations). For the middle thirty control concepts, no generalization can be made.

In reading the rows of Table 12, instead of the columns, another interesting fact surfaces. Generally speaking, most of the statistically significant associations involve the most important control concepts. This is also true when reading each line, except for the auditor variables. Auditor variables are not associated with the important concepts or the middle range concepts nearly as often as they are with the least important control concepts. It should be noted, that even though these generalizations exist, audit firm variables appear significant quite often.

On the surface it appears perplexing to have the greatest number of significant demographic variable associations existing with the most and least important control concepts. Recall that it was these two categories that exhibited the smallest variances (i.e., greatest consensus) in their ratings. An intuitive explanation might be that even though these two categories' ratings are fairly stable over respondents, the differences that do exist are clearly along the different demographic variables' categories. In other words, there may be very little crossover in ratings from a particular demographic variable's categories. Whereas, on the other hand, the middle-range concepts have a wide range of ratings that exhibit no clear-cut cleavage along very many demographic variables' individual categories.

In order to explore this idea, the strength of association was investigated for all the associations appearing significant in both tests. As noted earlier in this chapter, the strength statistics used were Lambda for nominal demographic variables and Kendall's Tau b or c for the ordinal demographic variables.[3] Table 13 reports all these measures for the significant associations occurring for both tests as well as the statistically significant strength measures pertaining to the associations that were highlighted in only one of the two tests.

Of the forty-eight significant associations resulting from both tests, as exhibited in Table 11, fourteen required a Lambda measure of strength. Eight of these fourteen (57%) were greater than .10, meaning that most of the significant associations between the nominal demographic variables and the importance ratings were strong associations. The remaining thirty-four significant associations were analyzed for strength via Kendall's Tau b or c. Slightly over 67% (twenty-three in total) of these had a Tau b or c value that was significant at $p \leq .10$. Thus, in general, the statistically significant associations reflected by both tests (see Table 11), can be regarded as strong associations.

Table 14 summarizes in histogram form the various demographic variables that were significantly associated with the control concepts and were significantly strong in that association.

---

[3]Significance levels for Tau b and c are noted at $p \leq .10$, $p \leq .05$ and $p < .01$. Lambda does not have a probability statistic, so significance is interpreted as Lambda $\geq .10$ which indicates a 10% improvement in prediction is possible, given knowledge concerning the level of the demographic variable.

Table 13

Measures of Strength of Association
Demographic Variables Appearing Significant in both the Medians and Crosstabs Test
<Amounts in brackets are other selected combinations only appearing significant in Medians Test>
(Amounts in parentheses are other selected combinations only appearing significant in Crosstabs Test)

Control	Nominal Demographic Variables (lambda)						Ordinal Demographic Variables (Kendall's Tau)													
Concept	CLONE	CLTWOB	CLFOUR	ONE	FOUR	SEVEN	CLTWOA	CLTHREEA	CLTHREEB	CLTHREEC	CLTHREED	CLFIVEA	CLFIVEB	CLSIX	CLSEVENB	AUDONE	AUDTWO	AUDFOUR	TWO	FIVE
19												(-.125*)								
7				(.256)			.027													
14			.012					-.188**						-.207***					.199**	
13			.022					<-.177**>						-.159**		-.234***				
23		.210		(.222)			(-.130*)	(-.215***)						-.193**						
21												.161**								
20				.105					(.236***)									<.150**>		
24			.026	.273			-.107	-.270***					<.217***>	-.142*						
25										<-.165**>	<-.172**>									(.164**)
32								<-.175**>												
33																		<.124*>		
18		(.138)															<.188**>			
28									.059					.036						
42	(.123)			(.110)			-.170**						<.133*>	-.100		-.093				
27		<.106>		.106				(-.242***)					(.185***)				<.175*>			
15		(.122)																		
46														-.056						
31																	<.205**>	<.188*>		.220***
44													<.183***>							
26										-.226***		<.209***>								
47									<.167*>											
9				.004			-.230***													
39									<.127*>											
40										-.109**										
8			.068												<-.136**>	-.088		.220***		
45	.137																			
41			.167	<.107>			<-.144*>	-.249***			<.188**>	.109	<.218***>			<-.180**>			.236**	
17																	(.229**)			
16													(.151**)				<.212**>			
6																	<.226**>			
11				(.174)	<.163>							(.139**)	<.226***>						-.220***	
4				.161		.058		-.253***					.242***			-.096				<-.159**>
36			.105					-.105											(.154*)	
2				(.163)																
37				(.123)									(.178**)						.385***	
48																			.222***	
38			(.183)					(-.165**)											(.183**)	
22																			.242***	
30																			(.298***)	

*two-tailed p ≤ .10 **two-tailed p ≤ .05 ***two-tailed p ≤ .01

Table 14

Histogram of Demographic Variables with Strength of Association Measures of: Lambda ≥ .10 or Tau p ≤ .10

Client Variables												Audit Firm Variables					Auditor Variables		
Nominal			Ordinal									Nominal		Ordinal			Ordinal		
CLONE	CLTWOB	CLFOUR	CLTWOA	CLTHREEA	CLTHREEB	CLTHREEC	CLTHREED	CLFIVEA	CLFIVEB	CLSIX	CLSEVENB	ONE	FOUR	AUDONE	AUDTWO	AUDFOUR	TWO	FIVE	
C	Bt	B	-Ct	-Bt	Ct	-Mt	-Mt	-Ct	Mt	-Bt	-M	Ct	M	-Bt	M	Mt	-Bt	Ct	
B	C	Bℓ	-B	-Mt	M	-B	M	Bt	M	-Bt		Ct		-M	M	M	B	B	
	M	Cℓ	-B	-Ct	M	-B		M	C	-Bt		Bt			M	M	-B	-Mℓ	
	C		-M	-Bt				C	M	-Bt		Bt			C	B	Cℓ		
				-M					M			C			M		Bℓ		
				-C					C			B			M		Bℓ		
				-B					M			M					Cℓ		
				-Bℓ					Bℓ			C					Bℓ		
				-Cℓ					Cℓ			Bℓ					Cℓ		
												Cℓ							
												Cℓ							Total
2	4	3	4	9	3	3	2	4	9	4	1	11	1	2	6	4	9	3	84

Legend:
- B: Exhibited significant association on both the median and crosstab test.
- C: Exhibited significant association on only crosstab test for association.
- M: Exhibited significant association on only median test for association.
- t: Associated with one of the top nine control concepts.
- ℓ: Associated with one of the lower nine control concepts.

In total, Table 14 depicts eighty-four significantly strong associations, thirty-one originally highlighted by both the Median and Crosstab Tests, twenty-five of the original significant Crosstab-only associations, and twenty-eight from the original Median-only association tests. Also noted on Table 14 is whether the strong association is with a control concept in the top nine, bottom nine, or the middle thirty control concepts.

Recall that in discussing Table 12 it was suggested that the reason for most of the significant associations appearing with the control concepts with the smallest variances in their ratings was that even though differences in ratings for those concepts were small, they might be clearly and strongly along the demographic variables' subcategories. Table 15 supports this conjecture, again adjusting for the different number of items in the six categories as done in Table 12, the common size counts by control concept and demographic variable are shown. The column totals in Table 15 show that most of the strong associations are for the top and bottom two control concept categories.

The other item of interest noted on Table 14 is the direction of the association (note that Table 13 provides the respective control concept numbers).[4] The facts indicate that as the client's total assets increase (CLTHREEA), as the client's TD/TA ratio increases (CLTHREEC), as the predictability of the client's financial performance improves (CLSIX), and as the length of affiliation with

[4]It should be noted that the notion of a directional impact where nominal variables are involved, is not interpretable.

Table 15

Common Size Counts of Distribution of
Significantly Strong Associations Exhibited in Table 14
(Entries are Rounded)

	Top Nine Control Concepts	Middle Thirty Control Concepts	Bottom Nine Control Concepts
Client Variables	6	3	2
Audit Firm Variables	5	4	3
Auditor Variables	2	1	7
	13	8	12

NOTE: Same scaling adjustments used here as explained on Table 12.

the client increases (AUDONE), the importance of certain control concepts decreases. Wright [1982] found similar demographics to be important, mediating effects in auditor judgments.

The final, and most important point to be made from Tables 14 and 15 requires the identification of the demographic variables appearing most frequently as having strong associations with various control concepts. Table 15 indicates that for the top nine control concepts, client factors are most often associated with the control concepts' ratings of importance. Table 14 reflects the fact that just as Hylas and Ashton [1982] discovered, client asset size (CLTHREEA) was important. Another very important relationship appears to also exist between a client's financial predictability (CLSIX). A possible interpretation of why client variables dominate the strongly significant associations with the top nine control concepts is that for the consistently important control concepts, auditors have similar views but that individual client circumstances dictate the proper level of importance. In other words, auditors are tailoring their evaluations of control environments to their particular clients. This has to be viewed as the proper course of action and it is reassuring to see so few auditor variables strongly associated with very important items. (Other studies such as Mock and Turner [1981], Mock and Watkins [1980], Ashton and Brown [1980], and Wright [1982] have also found limited significance attributable to auditor demographics).

One concern does arise in that a number of strong audit-firm associations exist with the top nine concepts. Table 14 reflects the fact that most of these strong associations with the top nine concepts are due to the firm (ONE) variable. Nanni [1984] and Cushing and Loebbecke [1983] also found a great deal of firm variation. In fact, the "firm" variable was strongly significant more than any other single demographic variable. This clearly suggests that there are audit firm differences in philosophy regarding the importance of various client control environment attributes.

The other generalization warranted from reviewing these two tables is that individual auditor variables are very important when the bottom nine, the least important, control concepts are in question. More specifically, the auditors' years of audit experience is the single most dominant auditor variable in this regard. As years of experience increase, so does the importance attributed to these control concepts. Since there were more staff auditors responding to the questionnaire (79 in total) than managerial level (67 in total) auditors, the overall ratings of these bottom concepts is perhaps understated due to this direct relationship. Nevertheless, such a relationship is expected due to the fact that staff personnel are much more concerned with specific controls than the manager and partner who tend to be responsible for assessing the general control environment of the client.

Lastly, the demographic variables that do not appear on Table 14 should be noted. By their absence, the following demographic variables are conspicuous:

1. client accounting management's control ethic (CLSEVENA)
2. the existence of a change in the audit team (AUDFIVE)
3. specialist or generalist auditors (SIX)
4. specialized audit training (SEVEN)
5. academic degree (EIGHT)

It would typically be thought that the control ethic espoused and exhibited by a client's accounting management would have a major impact on auditors' assessments of the importance of clients' control environments (a similar belief was noted by Brumfield et al. [1983]). The reason why this variable does not appear significant (the same can be said for the management in general control ethic variable (CLSEVENB) that was significant only once) is that these notions are perhaps more properly classified as control concepts themselves rather than as factors affecting auditors' views on other control concepts. Or, auditors are not nearly as concerned with what clients say as with what they do.

Auditors would be pleased to see that a change in audit team does not affect the importance ratings. This fact indicates a continuity of approach and audit philosophy. However, this could also be viewed somewhat negatively as all the auditors are conditioned in the same vein that there is no room for or exercise of new perspectives. The lack of many auditor variables being significant also attests to this possibility.

The three other missing variables are all auditor related. Training, neither academic, staff school nor specializations appear to result in differing opinions concerning the importance of a client's control environment profile (Mock and Turner [1981] and Mock and Watkins [1980] found this to be true, also). It could be argued that the notion of a control environment is so general and so global across a variety of clients, that special training does not improve one's insights at such a universal, nontechnical, broad level. It is feasible that training affects the values that auditors bring to bear upon control environment attributes rather than affecting the identification of attributes.

The Dimensions Associated With Differing Ratings' Summary

This section has highlighted those demographic variables that exhibit a statistically significant, strong association with the importance ratings for the relevant control concepts. It was found that on average, client demographic variables (especially total assets and financial predictability) are most important in regards to the most highly rated control concepts while auditor variables (especially years of experience) are most often strongly associated with the lowest rated control concepts. Significant audit firm variables (especially the "firm") are quite apparent and are fairly evenly distributed across all rankings of the control concepts.

The next section discusses the audit impact of the forty-eight control concepts. The first avenue to be explored concerns "how important was the control concept actually to the audit" as compared to the normative question that has been the focus so far. The second avenue leads to a discussion of where the audit impact, if any, should occur.

Audit Impact of Control Concepts-- "Should" vs. "Actual"

The normative question (ONEAS) of "how important should the control concept be" has been the focus thus far. A parallel question (ONEAA) asked "how important was the control concept". A comparison of these questions, highlighting the major differences in the mean responses could signal serious discrepancies between what auditors see being done on the audit and what they believe should be done in the context of client control environment evaluations. As Johnson and Jaenicke [1980] point out, the evaluations of a control environment are non-routinized, highly subjective and there is very little firm or profession guidance available. Therefore, differences between the "should" and "actual" aspects are likely to exist. It would be unusual though, to encounter a situation where the "actual" question is rated more importantly than the "should" question.

Figure 22 depicts the plots of the mean response ratings for the "should" and "actual" importance ratings as well as presenting a plot of who the respondents believed should have primary responsibility on the audit team for assessing the particular control environment attribute. The plots read from left to right with the control concepts arranged in descending rank order of importance.

The first thing to notice is that the "actual" plot never rises above the "should" plot. This signifies that, in the auditors' minds, they are not "over-killing" that particular control concept in their control environment evaluations. On average, auditors believe the control concepts should be given greater acknowledgement and consideration than they see occurring. This situation must be viewed cautiously, because most of the ratings do not differ by very much. In fact, if 145 of the respondents rated them equally and only one of the auditors rated the "actual" question lower, the average rating would then be lower for that control concept. Therefore, only the larger discrepancies should be viewed with any concern.

One other feature of the plots that should be noticed is that the "should" and "actual" lines run fairly parallel. That is to say, the differences in ratings do not tend to increase or decrease as the control concepts ascend or descend in rank order.

Table 16 statistically addresses the reported differences occurring between the "should" and "actual" responses. This table summarizes the results of the Sign Test that was performed to

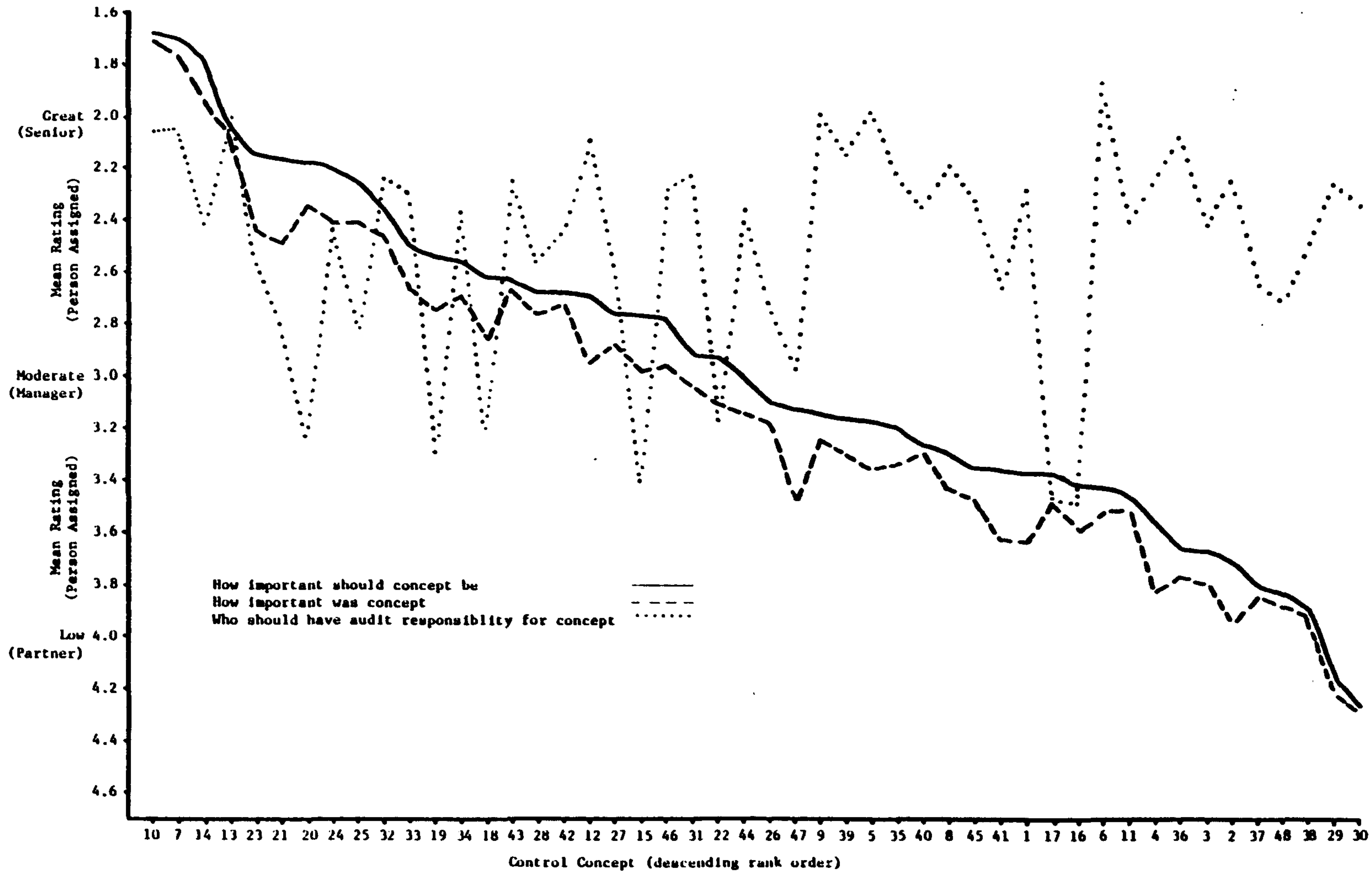

Figure 22

"Should" vs. "Actual" Importance Ratings
(person assigned)

Table 16

Sign Test for Matching of
"How Important Should" vs. "How Important Was" Questions
(criteria: two-tailed significance level p $\leq$ see below)

Control Concept (Rank Order)	$p \leq .01$ Significantly More Important Question	$p \leq .10$ Significantly More Important Question	Control Concept (Rank Order)	$p \leq .01$ Significantly More Important Question	$p \leq .10$ Significantly More Important Question
10			26		"Should"
7	"Should"	"Should"	47		"Should"
14	"Should"	"Should"	9	"Should"	"Should"
13			39	"Should"	"Should"
23	"Should"	"Should"	5	"Should"	"Should"
21	"Should"	"Should"	35	"Should"	"Should"
20	"Should"	"Should"	40		
24	"Should"	"Should"	8	"Should"	"Should"
25		"Should"	45	"Should"	"Should"
32	"Should"	"Should"	41	"Should"	"Should"
33	"Should"	"Should"	1	"Should"	"Should"
19	"Should"	"Should"	17		"Should"
34	"Should"	"Should"	16	"Should"	"Should"
18		"Should"	6	"Should"	"Should"
43			11		"Should"
28			4	"Should"	"Should"
42			36	"Should"	"Should"
12	"Should"	"Should"	3	"Should"	"Should"
27	"Should"	"Should"	2	"Should"	"Should"
15	"Should"	"Should"	37		"Should"
46	"Should"	"Should"	48		"Should"
31	"Should"	"Should"	38		
22	"Should"	"Should"	29		"Should"
44	"Should"	"Should"	30		"Should"

determine if those differences that do exist are significant and to see in what direction the differences lie.

As can be seen from Table 16, all statistically significant differences are with the mean ratings being higher for the "should" question. The distribution of significant differences at the $p \leq .01$ level is fairly constant (i.e., 67%, 70% and 44%, respectively) from the top nine concepts' group, through the middle thirty and lower nine concepts' groups. The control concepts with significant differences from the top tier category are:

#7 Segregation of duties among financial reporting personnel
#14 Effectiveness of general EDP controls
#23 Appropriateness of internal audit staff duties and lines of reporting
#21 Existence of factors that motivate managers to override existing controls
#20 Compulsion of top management for reporting the most favorable financial picture
#24 Effectiveness of internal audit staff in reporting deficiencies

A majority of auditors rated the "should" and the "actual" questions equally for these control concepts. However, it remains curious why such important concepts as these six, would not be unanimously rated equally. Evidently, some auditors believe that not enough audit attention is focussed in these areas. In tracing these six control concepts back to Table 13, the most common demographic variable resulting in a strong association with the "should" importance rating was firm affiliation (ONE). Perhaps this then is a situation where firm philosophies dictate a variety of outlooks concerning these particular six control concepts, and yet some individual auditors harbor the belief that still more should be done with them.

One last item to note concerning Figure 22 centers on the dotted line reflecting which audit team member should have responsibility for assessing the control concept. Conjecture might have led to the expectation that this plot would have started in the lower left-hand corner and risen to the top right-hand corner of the figure. This would have reflected the most important concepts being dealt with by the partners while the least important ones would be relegated to the staff. In actuality, what is reflected is quite appropriate. All of the concepts are apparently viewed, on average, as the jurisdiction of either the senior or manager. These two members of the audit team have the primary operational responsibility of seeing the audit successfully and appropriately performed. Since they are in a position to "get their hands dirty" in the audit, ideally they should be concerned with all those client features that might possibly affect the performance and the nature of the audit. If partners were the team members designated, there would then be the added problem of having them convey their assessments to the primary operational audit team members who, not having first-hand familiarity with the particular issue, must then interpret it and relate it to the audit tasks being contemplated. Also, it would probably be inappropriate to have assistant accountants assigned the assessment task even though they have a great deal of responsibility for the internal control work on most audits. Figure 22 reflects the fact that, on average, staff assistants are never deemed as the proper audit team member for these evaluations, not even for the least important control concepts.

Audit Impact of Control Concepts--
"Favorable" vs. "Unfavorable"

Another pair of related questions was presented to each participant in the study. The auditors were asked to indicate to what degree would "favorable" and "unfavorable" conditions for each of the control concepts affect the nature, timing and extent of subsequent audit tests. These questions were asked because merely rating a control concept as important or as unimportant may not reflect the control concepts' real impact. For the concept to be a vital part of an audit team's deliberations, it would have to influence subsequent audit procedures in at least one of these three ways. Figure 23 presents the plots of the mean ratings for the "favorable" and "unfavorable" questions with the control concepts once again reflected in rank order. Also imposed upon the graph is a plot of the importance ratings shown previously in Figure 22 for the "should" question.

As would be expected, the plots descend as the control concepts become less important in their rank orderings. This indicates that as control concepts are viewed as less and less important, their impact upon the nature, timing and extent of subsequent audit tests also declines. Another facet of the graph to note is that the "unfavorable" line falls rather sharply for the first third of the control concepts and is relatively flat for the remainder of the control concepts. An interpretation of this feature is that only the very important concepts strongly influence audit planning. That is not to say all the rest are unimportant in this regard, but rather,

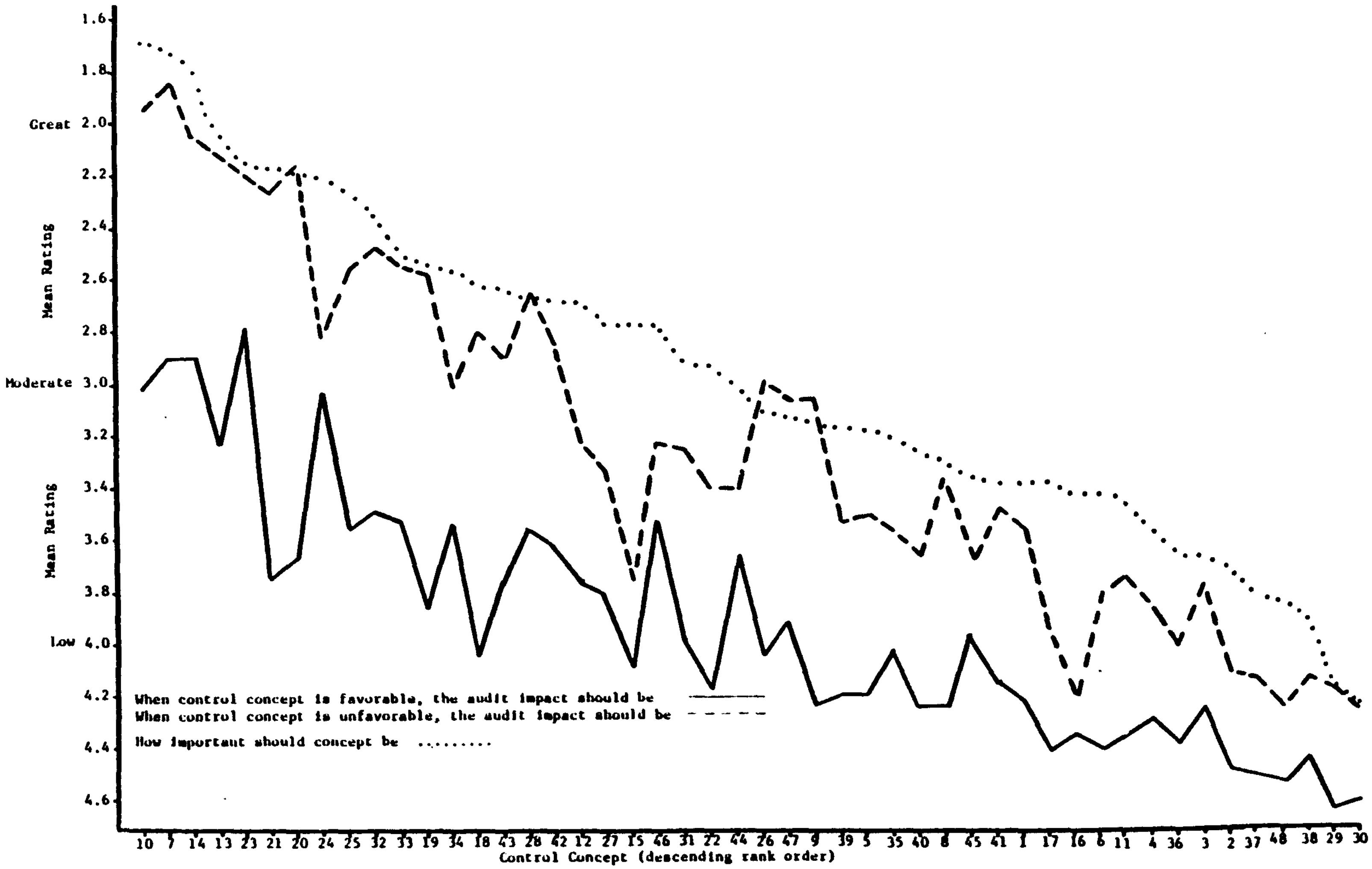

Figure 23

"Favorable" vs. "Unfavorable" Conditions Ratings their level of impact decreases quickly to a plateau of "low" importance. Notice that the "favorable" line, over the length of the chart, is flatter than the "unfavorable" line. This indicates that there are probably certain expectations held by the auditors concerning these control concepts and that only in their absence (i.e., an "unfavorable" condition) are audits impacted. Moreover, "favorable" conditions are not surrogates for other audit procedures, therefore, relatively little impact results from "favorable" conditions. Auditors would, however, derive an added sense of confidence and security from "favorable" conditions. Confirming these notions is the fact that the "favorable" line never rises above the "unfavorable" line.

Which of the control concepts result in a statistically significant difference between the ratings for "favorable" vs. "unfavorable" conditions impacting upon the audit? Table 17 provides the answer. This table is based upon the Wilcoxon Matched-Pairs Signed-Rank Test that takes into account both the direction and the magnitude of the ratings' differences, for each control concept.

As can be seen from the table, at $p \leq .01$, all but three of the control concepts exhibit a significant difference in ratings. Moreover, they all are in the direction of the "unfavorable" question which witnesses the greatest audit impact. This phenomenon supports the contention made by Defliese et al. [1984, p. 285] concerning the attributes of a control environment when they state that auditors ". . . should be especially alert to evidence suggesting their absence [because they] are more important than the specific control

Table 17

Wilcoxon Matched-Pairs Signed-Rank Test Summary
for "Favorable" vs. "Unfavorable" Impact Questions Differences
(Criteria: two-tailed $p \leq .01$)

Control Concept (Rank Order)	Condition With More Audit Impact	Control Concept (Rank Order)	Condition With More Audit Impact
10	"Unfavorable"	26	"Unfavorable"
7	"Unfavorable"	47	"Unfavorable"
14	"Unfavorable"	9	"Unfavorable"
13	"Unfavorable"	39	"Unfavorable"
23		5	"Unfavorable"
21	"Unfavorable"	35	"Unfavorable"
20	"Unfavorable"	40	"Unfavorable"
24		8	"Unfavorable"
25	"Unfavorable"	45	"Unfavorable"
32	"Unfavorable"	41	"Unfavorable"
33	"Unfavorable"	1	"Unfavorable"
19	"Unfavorable"	17	"Unfavorable"
34	"Unfavorable"	16	
18	"Unfavorable"	6	"Unfavorable"
43	"Unfavorable"	11	"Unfavorable"
28	"Unfavorable"	4	"Unfavorable"
42	"Unfavorable"	36	"Unfavorable"
12	"Unfavorable"	3	"Unfavorable"
27	"Unfavorable"	2	"Unfavorable"
15	"unfavorable"	37	"Unfavorable"
46	"Unfavorable"	48	"Unfavorable"
31	"Unfavorable"	38	"Unfavorable"
22	"Unfavorable"	29	"Unfavorable"
44	"Unfavorable"	30	"Unfavorable"

NOTE: With a $p \leq .10$ criteria, only concept number 23 did not exhibit a significant difference.

procedures themselves, since the latter are unlikely to function well without the former."[5]

It is worth noting that two of the three control concepts not exhibiting a significant difference are concepts rated in the top-nine category. Both of them are related to the internal audit function of the client. This situation could be indicative of the fact that the internal audit function is so important to the external audit function that the existence of "favorable" or "unfavorable" conditions impacts the audit equally, albeit in separate directions. Such a contention would be supported by Ward and Robertson [1980]. The distribution of responses, shown below, tend to support this equal weighting notion.

	"Favorable" Question		"Unfavorable" Question	
	Control Concepts			
Audit Impact Importance	#23	#24	#23	#24
Very Great	20	14	20	17
Great	39	32	33	39
Moderate	31	33	38	30
Low	14	16	15	16
None	19	24	17	17

Where is the audit impacted most often when "unfavorable" conditions exist? Table 18 summarizes the number of respondents who said there was an impact when "unfavorable" conditions existed and details where they believed that impact would be experienced.

As can be seen from Table 18, there is a large discrepancy between the number of impacts cited for the most important control concepts

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[5]These authors refer to the control environment as "conditions of control".

Table 18

Area of Audit Impact Due to "Unfavorable" Control Concept Conditions

Control Concept (Rank Order)	Audit Impact Felt: Nature	Timing	Extent	Total[a]	Control Concept (Rank Order)	Audit Impact Felt: Nature	Timing	Extent	Total[a]
10	98	50	120	268	26	63	16	67	146
7	96	60	122	278	47	41	20	43	104
14	96	49	106	251	9	74	20	85	179
13	97	58	106	261	39	50	16	67	133
23	67	33	84	184	5	50	24	70	144
21	90	40	95	225	35	54	8	52	114
20	92	43	96	231	40	50	14	50	114
24	60	27	70	157	8	49	37	66	152
25	82	24	89	195	45	51	12	52	115
32	78	59	102	239	41	48	16	47	111
33	90	44	95	229	1	58	16	49	123
19	89	37	87	213	17	34	8	38	80
34	75	24	82	181	16	23	6	25	54
18	74	34	78	186	6	43	10	48	101
43	73	36	71	180	11	57	5	38	100
28	70	40	92	202	4	44	15	52	110
42	67	22	55	144	36	37	6	32	70
12	60	26	65	151	3	34	26	44	84
27	48	17	57	122	2	28	9	29	66
15	38	9	44	91	37	39	9	28	76
46	57	12	70	139	48	36	3	20	59
31	56	60	54	170	38	36	6	29	71
22	62	16	53	131	29	31	3	27	61
44	64	20	68	152	30	27	6	21	54

[a]These may sum to more than 146 due to multiple responses by some of the participants.

versus the least important ones. Control concepts #23 and #24 (dealing with internal auditors), the only ones ranked in the top nine that did not have a significant difference noted on Table 17, have the least number of citations in the top nine grouping. (The only other non-significant Table 17 control concept was #16 (qualifications of audit committee), which according to Table 18, has the least number of impact citations of all the forty-eight control concepts.) Such relationships hint at the possibility that these three control concepts do not impact audit operations as much as their similarly ranked counterparts. This is plausible because all three of these control concepts pertain to client personnel not centrally involved in the financial reporting process. Internal auditors and audit committee members do not execute the financial reporting process, they are overseers. Since external auditors must achieve their own appropriate levels of satisfaction, it would be nice to rely upon these client overseers to a certain extent but in no way is the inability to do so going to drastically alter the course and approach of an audit. This conjecture would be disputed by Ward and Robertson [1980] and Rappaport [1980].

The other thing to note regarding Table 18 is the relative equality of "nature" and "extent" citations which typically far exceed the "timing" citations. The comments generally made by the respondents reflected the fact that more ("extent") compliance, substantive or analytical review (all being a response indicating "nature") tests would be performed. Detailed audit adjustment suggestions were not provided except by a few auditors, therefore, specific types of audit alterations that would be made are not discussed here.

The last characteristic to note regarding Table 18 is the simple fact that as the control concepts descend in rank order, the total number of "impact" citations decrease. Also, just as the Figure 23 "unfavorable" line declined sharply and then plateaued, the number of "impact" citations, generally speaking, behave the same way. This simply lends additional credibility to the Figure 23 plot.

Audit Impact of Control Concepts: Summary

This section has reviewed the results of two different pairings of audit impact questions. The first pairing was "how important should this concept be" (ONEAS) versus "how important was it" (ONEAA). The ONEAS mean ratings indicated greater normative importance than the ONEAA positive question for all forty-eight concepts. The ratings for these two questions appeared to move in a synchronized fashion as reflected in Figure 22 and attested to by significant positive Kendall and Spearman correlation coefficients at $p \leq .01$ for a two-tailed test.

Observing the ONEBS question, "who should have audit responsibility for evaluating the concept," in conjunction with the ONEAS ratings, on average, seniors or managers tended to be designated as the audit team members who should have primary responsibility for evaluating the particular control concepts. An interesting sidelight is that the correlation of ONEBS with ONEAS resulted in numerous statistically significant ($p \leq .05$) negative correlations with six of the top twenty-four rated concepts (#33, #34, #15, #22, #23, #25). As was discussed, this might indicate a mismatch of important control concepts being assigned to staff rather than managerial level auditors.

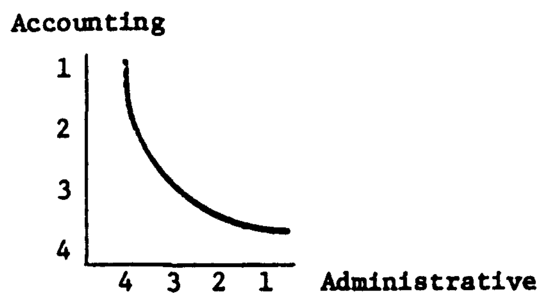
The other major pairing involved the areas of audit impact for "favorable" and "unfavorable" conditions of the control concept. It was seen that "unfavorable" conditions result in much more audit concern and more frequent alterations of the nature, timing and extent of subsequent tests than "favorable" conditions.

Figure 23 reflected the fact that as the relative rankings of the control concepts declined so too did the "unfavorable" audit impact rating. This is further substantiated by Kendall and Spearman correlations that are positive and significant for a two-tailed test of $p \leq .01$. All but one (#18) of the control concepts' correlations had p values $\leq .01$.

Accounting vs. Administrative Control Definitions

As discussed in Chapter III, the profession has dichotomized internal controls into administrative and accounting. Auditors are instructed to give primary emphasis to accounting controls and to only those administrative controls that influence the client's accounting controls. Based upon interviews with auditors, it appears that no such distinction is made in practice. The only distinction made appears to be between those controls that are important and thus receive audit attention versus those that are not and receive no audit attention. This particular section explores the relationship between an accounting/administrative control definitional dichotomy for each of the control concepts and the levels of importance attributed to each.

Figure 24 presents the mean ratings for all forty-eight control concepts along the accounting and administrative control dimensions. If the belief is held that highly important controls would be predominantly labeled as accounting and the least important controls would all be administrative, then Figure 24 should have a shape similar to:



As can be clearly seen, Figure 24 does not reflect such a relationship.

The 45° line separates the administrative from the accounting type controls. An intuitive interpretation would suggest that all the control concepts are viewed as moderately or greatly "administrative" due to the fact that the control concepts are clustered along the administrative axis from about 3.5 to 2.0. On the other hand, the accounting ratings span a wider range of values indicating the control concepts are perceived much more diversely along an accounting dimension. There is also a clustering of concepts in the middle, along the diagonal, that would lead to the conclusion that those control concepts are viewed equally as administrative and accounting. Moreover, there are more control concepts lying below the line

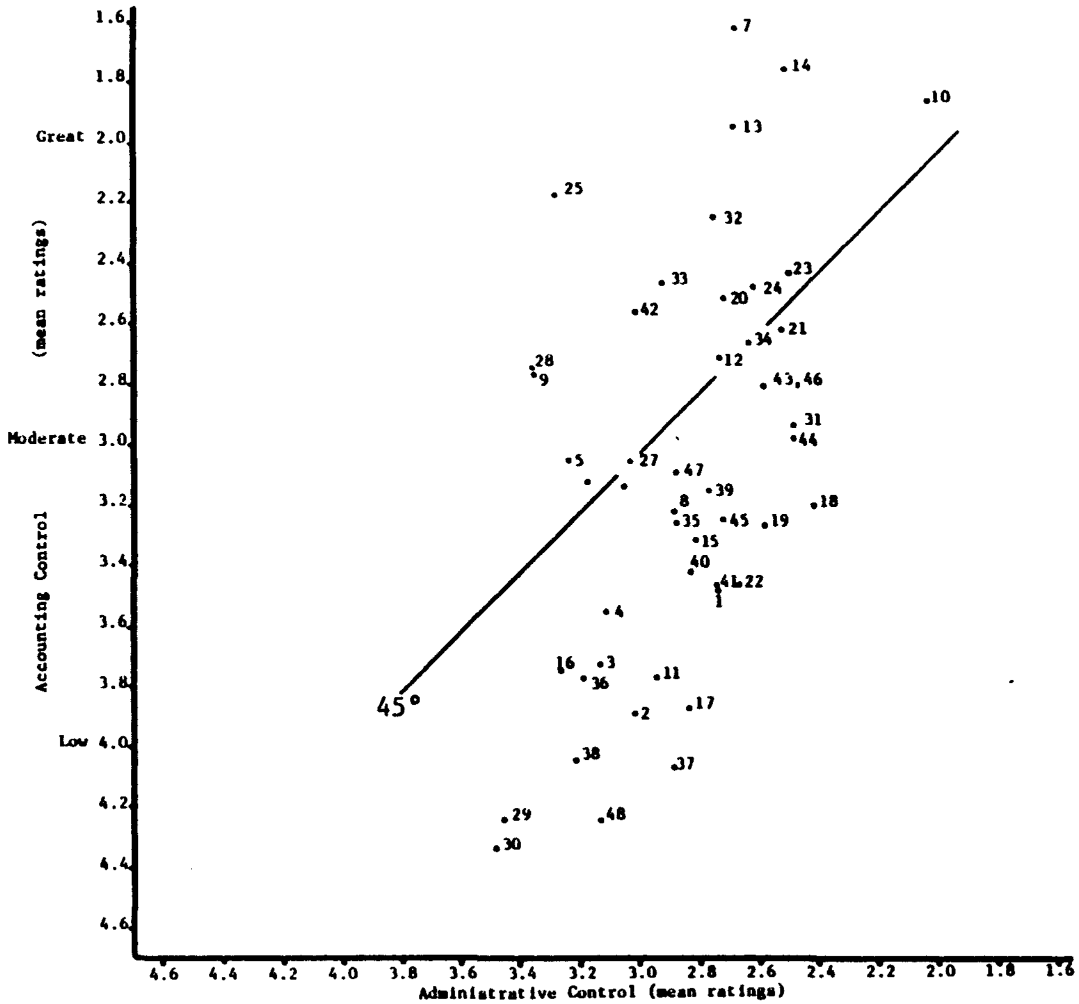


Figure 24

Accounting vs. Administrative Control Perceptions than above, indicating a more extensive administrative control labeling of the concepts.

In order to more confidently label the individual control concepts, a Wilcoxon Matched-Pairs Signed-Rank Test was performed for the control concepts' ratings along these two dimensions. Table 19 presents the results of this test. The results depicted on this table indicate that all of the bottom nine concepts are viewed as administrative in nature whereas those with a statistically significant label in the top nine category are viewed as accounting controls. The middle tier of control concepts exhibit a mix of labelings although "administrative" appears three times as often as "accounting".

Another obvious feature of these results is the relatively large percentage (56%) of the top nine category that did not have significant differentiations between administrative and accounting. Evidently, they are viewed by auditors as equal parts of both. This would support the contention made by Martin and Johnson [1978] that the categorization of controls is not important to auditors in their determination of those issues that should receive audit attention.

All the correlations (Kendall's and Spearman's) between the "accounting" label ratings and the "how important <u>should</u> the concept be" ratings were significant at $p \leq .01$ (two-tailed) and positive for the forty-eight control concepts. This was also the case for "accounting" ratings when paired with the audit impact due to "unfavorable conditions" ratings. Such results indicate a direct, and significant relationship between the degree of the auditor's

Table 19

Wilcoxon Matched-Pairs Signed-Rank Test Summary
for "Accounting" vs. "Administrative" Control Questions Differences
(Criteria: two-tailed $p \leq$ see below)

Control Concept (Rank Order)	$p \leq .01$ Concept Viewed More As:	$p \leq .10$ Concept Viewed More As:	Control Concept (Rank Order)	$p \leq .01$ Concept Viewed More As:	$p \leq .10$ Concept Viewed More As:
10			26		
7	"Accounting"	"Accounting"	47		"Administrative"
14	"Accounting"	"Accounting"	9	"Accounting"	"Accounting"
13	"Accounting"	"Accounting"	39	"Administrative"	"Administrative"
23			5		"Accounting"
21			35	"Administrative"	"Administrative"
20		"Accounting"	40	"Administrative"	"Administrative"
24			8	"Administrative"	"Administrative"
25	"Accounting"	"Accounting"	45	"Administrative"	"Administrative"
32	"Accounting"	"Accounting"	41	"Administrative"	"Administrative"
33	"Accounting"	"Accounting"	1	"Administrative"	"Administrative"
19	"Administrative"	"Administrative"	17	"Administrative"	"Administrative"
34			16	"Administrative"	"Administrative"
18	"Administrative"	"Administrative"	6		
43		"Administrative"	11	"Administrative"	"Administrative"
28	"Accounting"	"Accounting"	4	"Administrative"	"Administrative"
42	"Accounting:	"Accounting"	36	"Administrative"	"Administrative"
12			3	"Administrative"	"Administrative"
27			2	"Administrative"	"Administrative"
15	"Administrative"	"Administrative"	37	"Administrative"	"Administrative"
46		"Administrative"	48	"Administrative"	"Administrative"
31	"Administrative"	"Administrative"	38	"Administrative"	"Administrative"
22	"Administrative"	"Administrative"	29	"Administrative"	"Administrative"
44	"Administrative"	"Administrative"	30	"Administrative"	"Administrative"

labeling of a control concept as "accounting" and the concept's overall importance to the audit.

The same correlations are just as consistent when "administrative" ratings are used instead of the "accounting" ratings. In regards to the "importance" ratings, all correlations were significant and positive at $p \leq .01$. The correlations between the "unfavorable" and the "administrative" labelings were all positive and significant at $p \leq .01$.

Inherent vs. Control Risk Definitions

According to SAS #47 [AICPA, 1983b], the notions of inherent risk and control risk should be crucial concerns of auditors in assessing their overall audit risk on a particular engagement. Chapter III discussed this in detail. Recall that inherent risk and control risk are both client-related. Coopers and Lybrand [1983] refers to them as the "internal control risk" and "situational risk" posed by the client. Control risk can be thought of as the likelihood that a client's internal control systems will not prevent or detect the errors that result from the client's unique situations involving personnel, industry, time pressures, competition, etc. The distinction arises when the auditor's role is contemplated. Auditors can do very little about a client's situational risks but they can tackle the issue of control risk by measuring it (e.g., via compliance sampling) and suggesting ways to reduce it (e.g., management letters). Therefore, the control concepts posed in this study might tend to be segregated by the auditors according to those "beyond our control and ability to assess" (inherent risk items) and those that can be "investigated, measured, and rectified" (control risk items).

However, the results overwhelmingly indicate that auditors do not make clear-cut distinctions between inherent and control risk items. The plot at Figure 25 indicates a very narrow band of control concepts along the 45° diagonal that represents equal ratings for a control concept along these two dimensions. In the upper right-hand corner there are a few control concepts clearly on the "control risk" side of the line and not surprisingly these tend to be the most highly rated control concepts in the original "importance" measures.

This phenomenon, coupled with the fact that the correlations (Kendall's and Spearman's) between the inherent risk and control risk ratings are positive and significant at $p \leq .01$ (two-tailed) for all forty-eight concepts, makes it necessary to seriously question the assumption made in much of the literature that the two risk factors are independent (see Robertson and Davis [1982] for example). On the contrary, it appears that they are not always distinguishable notions. It could be argued that they should move indirectly. That is to say, if inherent (situational) risk is high on a client, then an auditor would want to reduce his control risk (a greater likelihood of preventing and detecting errors) and vice versa. However, the questions asked of the auditors did not directly relate to this issue, they were definitional only, therefore strong assertions in this regard are not warranted.

Table 20 presents the results of applying the Wilcoxon Matched-Pairs Signed-Rank Test to the "inherent" vs. "control" risk ratings.

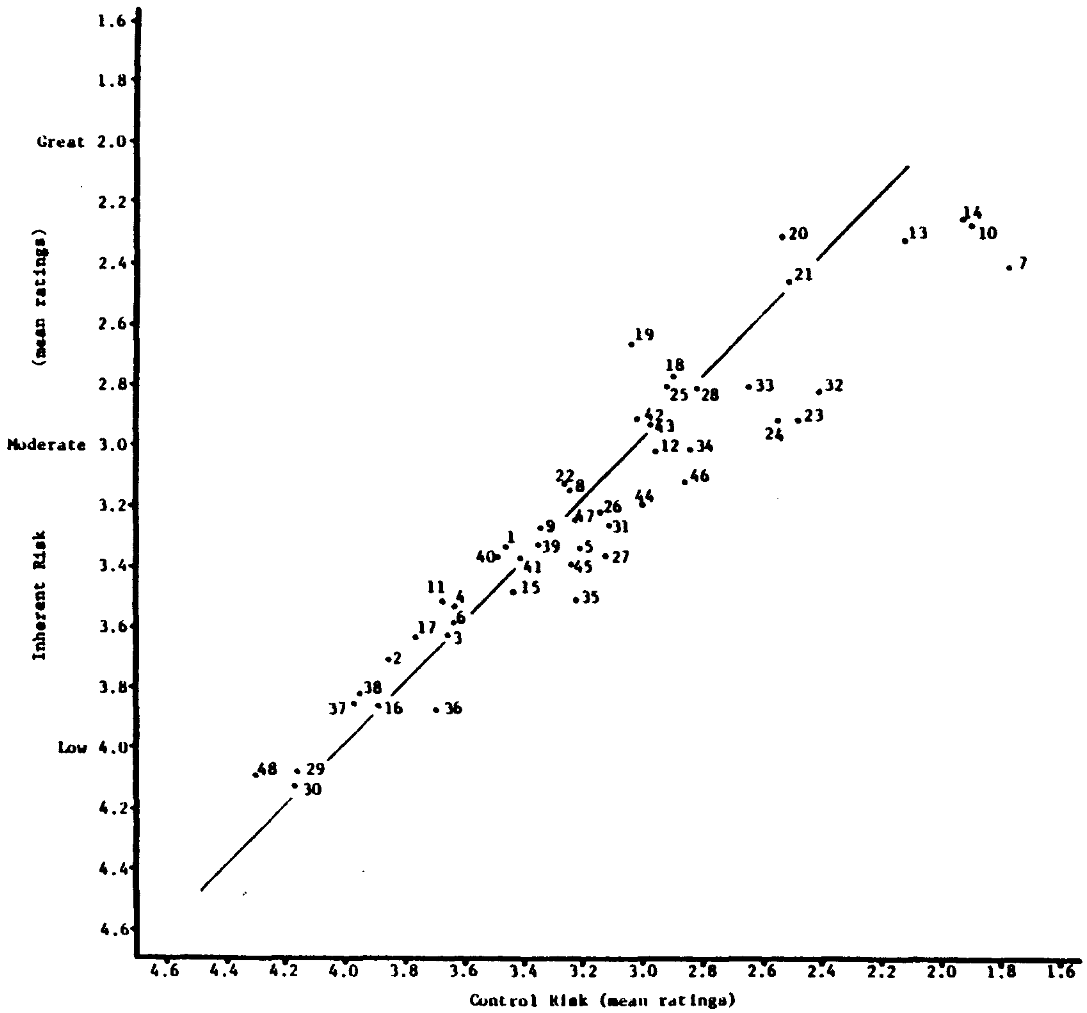


Figure 25

Inherent vs. Control Risk Perceptions

Table 20

Wilcoxon Matched-Pairs Signed-Rank Test Summary
for "Inherent" vs. "Control" Risk Questions Differences
(Criteria: two-tailed $p \leq$ see below)

Control Concept (Rank Order)	$p \leq .01$ Concept Viewed More As:	$p \leq .10$ Concept Viewed More As:	Control Concept (Rank Order)	$p \leq .01$ Concept Viewed More As:	$p \leq .10$ Concept Viewed More As:
10	"Control"	"Control"	26		
7	"Control"	"Control"	47		
14	"Control"	"Control"	9		
13		"Control"	39		
23	"Control"	"Control"	5		
21			35	"Control"	"Control"
20		"Inherent"	40		
24	"Control"	"Control"	8		
25			45		"Control"
32	"Control"	"Control"	41		
33		"Control"	1		
19	"Inherent"	"Inherent"	17		
34		"Control"	16		
18			6		
43			11		"Inherent"
28			4		
42			36		"Control"
12			3		
27	"Control"	"Control"	2		"Inherent"
15			37		
46	"Control"	"Control"	48	"Inherent"	"Inherent"
31		"Control"	38		
22			29		
44		"Control"	30		

The sparseness of significant differences is consistent with the close distribution of the control concepts along Figure 25's 45° line. Nine of the eleven significant differences at the $p \leq .01$ level are in the direction of "control risk". All of the significant differences in the top nine category indicate a "control risk" label. Given the fact that these particular control concepts were deemed most important by the respondents, and that control risk falls within the realm of auditor measurement and suggestions for improvement, such a result would be expected.

It is also worthwhile to note that the lowest ranked control concepts are not clearly labeled as one type of risk or the other. This means that a fairly equal number of auditors rated them in both categories. Therefore, control risk indicators are not always viewed as the more important components of a control environment evaluation.

Definitions Summary

Table 21 presents the findings of this section along with those of the previous section for each of the forty-eight control concepts in rank order. As can be seen, a number of control concepts that the auditors believed should receive greater audit attention are also viewed as primarily administrative in nature. Likewise, a number of those control concepts that would have an impact upon subsequent audit tests, were they found to be unfavorable, are also viewed as administrative in nature. This finding supports the contention stated earlier that auditors do not use an accounting vs. administrative control dichotomy in determining areas of audit inquiry. It should

Table 21

Synthesis of Tables 16, 17, 19 and 20 (p $\leq$ .01)

Control Concept (Rank Order)	"Should" vs. "Actual"	"Favorable" vs. "Unfavorable"	"Accounting" vs. "Administrative"	"Inherent" vs. "Control"	Control Concept (Rank Order)	"Should" vs. "Actual"	"Favorable" vs. "Unfavorable"	"Accounting" vs. "Administrative"	"Inherent vs. "Control"
10		U		C	26		U		
7	S	U	Ac	C	47		U		
14	S	U	Ac	C	9	S	U	Ac	
13		U	Ac		39	S	U	Ad	
23	S			C	5	S	U		
21	S	U			35	S	U	Ad	C
20	S	U			40		U	Ad	
24	S			C	8	S	U	Ad	
25		U	Ac		45	S	U	Ad	
32	S	U	Ac	C	41	S	U	Ad	
33	S	U	Ac		1	S	U	Ad	
19	S	U	Ad	I	17		U	Ad	
34	S	U			16	S		Ad	
18		U	Ad		6	S	U		
43		U			11		U	Ad	
28		U	Ac		4	S	U	Ad	
42		U	Ac		36	S	U	Ad	
12	S	U			3	S	U	Ad	
27	S	U		C	2	S	U	Ad	
15	S	U	Ad		37		U	Ad	
46	S	U		C	48		U	Ad	I
31	S	U	Ad		38		U	Ad	
22	S	U	Ad		29		U	Ad	
44	S	U	Ad		30		U	Ad	

be noted, however, that the higher ranked control concepts tend to be "accounting" labeled while the lower ones are "administrative."

It is also worth noting, albeit just a few cases exist, that all those control concepts viewed as ingredients of control risk were also viewed as being accounting controls (#35 is an exception). Similarly, all inherent risk components were viewed by the respondents as administrative controls. Such a result is intuitively appealing and adds credibility to the complimentary nature of the AICPA's definitions for these four notions.

Another result observable from Table 21 is that, for all but one of the control risk-labeled concepts, auditors believe there should be significantly more audit attention focused on them than is currently being done. Similarly, for the nine accounting control-labeled concepts, auditors believe that five of them should receive greater audit attention. The control concepts singled out in this fashion are listed below.

##7 Proper segregation of duties
#14 Effectiveness of general EDP control
#23 Appropriateness of internal audit staff's duties and lines of reporting
#24 Effectiveness of internal audit staff in reporting detected deficiencies
#32 Promptness with which errors in internal reports are detected and corrected
#33 Potential for errors in internal financial reports
#27 Manner in which recommendations of internal and external auditors are dealt with
#46 Adequacy of the client's analysis of budget variances
#9 Appropriateness of the client's chart of accounts
#35 Extent to which the clients line personnel review internal financial reports

Any future studies designed to investigate these particular concepts should, at a minimum, incorporate the demographic variables highlighted in Table 13 as having a statistically strong association with these concepts. The three demographic variables appearing most frequently across the control concepts listed above are firm affiliation, client total assets, and the predictability of the client's financial performance.

Summary

This chapter was designed to: (1) describe the methods used to analyze the responses to the returned questionnaires, and (2) present the findings of this descriptive study. The four objectives stated at the beginning of this chapter were each dealt with and summaries were presented for each one. Chapter VII discusses the limitations of this study and the implications for auditors and for future research.

CHAPTER VII

SUMMARY AND CONCLUSIONS

The purpose of this chapter is to: (1) discuss the limitations of this research; (2) summarize the major findings of this study; and (3) discuss their implications for future research.

Limitations

The shortcomings and dangers of using questionnaires in empirical research has been discussed extensively in a wide variety of literatures (see for example Deming [1944]). Several classic potential pitfalls are noted below along with a notation as to how the design of the current study attempted to minimize or circumvent them.

Potential Pitfalls	Current Study Design
1. no control over, and possible variability of environments in which participants choose to complete the instrument	1. utilized a partner or manager to disseminate the instrument at their respective offices
2. participant fatigue	2. randomized by blocks the order of presentation of the control related concepts
3. late vs. early responses	3. maintained a record of the date each questionnaire mailed out and returned--also phoned contacts the day of the mailing to alert them to its arrival
4. nonresponse	4. utilization of contact people who have been involved in the study from its inception

Potential Pitfalls	Current Study Design
5. timing	5. mailing coincided, in most cases, with the internal control evaluation phase of the audit for the clients chosen
6. nonrandom sample	6. all of the Big 8 firms are represented in at least three different cities and all auditor ranks are represented--also, contact person at each locale chooses engagement
7. meaning of terms	7. definitions provided for key terms

In spite of these attempts to avoid some of the traditional pitfalls associated with empirical research of this type, validity problems cannot be totally avoided. In regards to internal validity, the potential exists for a reactive bias. Runkel and McGrath [1972] suggest that because respondents know they are the focus of the research, they might respond in a way they think they should. In this study, having a contact person who might be the respondent's superior overseeing the dissemination and collection of the questionnaires, might also create this sort of bias. External validity issues arise due to only using Big Eight auditors and publicly traded clients. Also, allowing the contact people to choose the audit teams and clients may have resulted in a selection bias. However, such a likelihood could not be controlled for in light of the exploratory spirit of this study and generalizations to the audit profession and other clients are not warranted. Subsequent research in this vein could possibly pursue fertile opportunities in controlling for industry and for auditors. Lastly, construct validity issues arise due to problems of terminology and misinterpretations. Definitions were provided for key terms and one of the major purposes of the pilot test was to uncover these difficulties. The other threat to construct validity is due to the possibility that the listing of control environment attributes may not be complete although Phase I of this study was designed to minimize the likelihood of this being true.

Major Findings

The primary objective of this study was to ascertain the important attributes of clients' control environments and to explore the dimensions along which different levels of importance are ascribed to these attributes. In Chapter VI, the research results that addressed this objective were presented along with the results related to the secondary objectives (e.g., definitional interpretations). In this chapter, the generalizations underlying these specific results are highlighted and their possible implications for the auditing profession and for future auditing research are discussed.

The conclusions offered herein were discussed with five auditors (three partners and two senior managers) from three different Big Eight firms. Three of the auditors participated in the study. They were interviewed in order to obtain reactions to the results presented in Chapter VI. These interviews will hereafter be referred to as the "post-study-interviews".

Relative Rankings of Control Concepts

Overall, the auditors interviewed were not surprised by the ranking of the control concepts as depicted in Chapter VI. The control concepts generating the most discussion were those ranked very high or very low. Conclusions related to the most important control concepts are presented first.

Regarding control concept #25 (controller's knowledge of generally accepted accounting principles (GAAP)), the remarks focused on the financial reporting system. It is important that the controller be familiar and comfortable with GAAP, but it must manifest itself in that the financial reporting process incorporates GAAP, generating data that is consistent with GAAP. Auditors repeatedly noted that they would rather audit GAAP-financial numbers as opposed to non-GAAP data that they then have to convert to GAAP. Such a situation is preferable due to the fact that a much "better feeling about the probability of errors in the financial statements" exists.

The subtle distinction between a controller being able to discuss GAAP with the auditors in the context of their financial reports and incorporating GAAP in the design of their accounting systems is important. The latter situation offers opportunities to auditors with each new Financial Accounting Standards Board (FASB) pronouncement, to assist their clients in modifying their financial reporting processes in order to generate data consistent with the new pronouncement. The current situation involving FASB's pension disclosures is a prime example of information, not previously required for financial disclosure nor probably a part of many client accounting data bases, that might have to become a regular part of the client's financial reporting system. Auditors would prefer to see their clients' systems designed to capture and control these additional pension disclosures than have to derive the information at year end from many different sources and thus under the control (or lack of control) of diverse client segments.

Another of the most highly ranked control concepts dealt with the propensity of a client's management to report the most favorable financial picture (#20). The post-study-interviews typified the importance of this notion as being a prime indication of risk to be encountered by the audit team. In general, auditors "feel more comfortable with clients who take a conservative financial reporting posture." Such a view is quite consistent with auditors' own tendencies towards conservatism (e.g., the accounting for loss contingencies versus gain contingencies). The implication of this control concept is that it can be a cue in one area that should "tip-off" auditors in regards to other areas. For example, if a client is hesitant to write-off past due receivables, this should be an audit signal suggesting the possibility of this sort of behavior regarding other assets. It should not be interpreted as a localized issue (i.e., receivables only).

Control concepts #23 and #24 were also highly ranked and they dealt with internal auditing issues. In general, auditors believed that it was important to inquire into the backgrounds of the client's internal audit staff. Moreover, auditors should investigate how the internal auditors perceive their internal audit function. Since the internal auditors execute the internal audit function, it is important to determine if their fulfilling of that role is conducive with the corporate mission assigned to them and whether or not their work complements the independent audit function. If internal auditors fulfill the directives of their job descriptions without the sensitivity implied by those tasks, the likelihood of their effectively overseeing the financial reporting process declines.

Another internal audit concern voiced by the independent auditors was regarding senior management's attitude towards their internal audit staff. Clearly, no matter how effective internal auditors might be in detecting irregularities and recommending improvements, if senior management is not receptive there will be no corrective actions instituted. Discussions with management as well as proof of management's responsiveness to issues raised by their internal auditors are both necessary in order to assess the appropriateness (from an independent auditor's perspective) of management's attitude towards their internal audit function. For any independent audit assurances to rest upon the work of an internal audit staff, that staff has to be more than a symbolic corporate function.

Also receiving a very high ranking was control concept #21 that addressed the existence of factors possibly motivating managers to override specific internal controls. The factors most commonly cited by auditors were bonus plans, debt covenants and other contractual constraints. It was generally believed that it was the audit manager's role to review these areas and determine the financial accounts most likely to be impacted by client behavior aimed at complying with such contracts or attempting to generate additional compensation for themselves. Typically, the accounts most likely to be impacted were described as those dependent upon client judgments as opposed to routine daily processing. Accruals and loss provisions would be examples of accounts of this type.

In the same vein, auditors also expressed a concern for more general motivating influences such as pressure to meet goals, maintain improving trends, etc. The financial statement impact of such general forces are not as easily localized as those resulting from bonus plans or debt covenants. Not only would accounts such as loss provisions and accruals be potentially impacted, but all other accounts could be viewed as candidates for manipulation. Auditors expressed a great deal of concern in this regard and they indicated that ultimately, they had to rely on the client's integrity and the reasonableness of the resultant financial picture.

The remaining, most highly ranked control concepts (#10, #7, #14 and #13), generated little discussion. It was generally believed that their importance was self-evident and universally recognized. Certainly these control notions (authorization of transactions, segregation of duties, safeguards over assets and records, and EDP controls) receive most of the attention in any literature discussing internal controls. In reviewing Table 18, it appears that auditors are not merely conditioned to believe these concepts are important, but that these four control concepts did in fact receive most audit impact notations of all the forty-eight control concepts presented to the respondents.

The thirty control concepts ranked in the middle generated very little discussion during the post-study-interviews. The auditors agreed with the rankings in that these control concepts might be important at times, but not universally nor to a very great extent. Such control concepts as top management turnover (#18), management risk taking (#19), board of directors and audit committee concerns (#17, #16 and #15), and other management related issues (e.g., #47, #40, #8 and #39) were all viewed as "comfort level items". By that, it was meant that these items contributed to a feeling towards the client that the auditor acquired based upon client appearances of competence, integrity, and conscientiousness. Recall that this is in essence the definition of a control environment. Even though these control concepts align very closely with a control environment notion, auditors did not view them as warranting the next level of audit concern--impacting the design of subsequent audit tests. For this reason, they were viewed only as moderately important.

The same scenario is applicable to some of the other middle-ranked control concepts dealing with client internal reporting (e.g., #9, #42, #34, #44, #45, #31, #33, #32, #46 and #35). Even though these control concepts pertain to client monitoring of their financial performance, auditors tended not to view them as very important to the independent audit. The reason given was that independent auditors are much more concerned with the fairness of the ending financial numbers than with the periodic internal financial results. Budgets and forecasts are more a tool for managing, with only an indirect impact upon the yearly external financial statements. However, the infamous Mattel and Itel fiascos should have taught auditors that these issues can have a financial statement impact, directly related to the attest function [Eisenschmied and Haskins, 1983].

The least important control concepts (the bottom nine) generated the most comments during the post-study-interviews. The control concepts dealing with client personnel training, evaluating and planning (#3, #4 and #2) were viewed as incidental to the independent audit. Such concerns were typically viewed as properly under the jurisdiction of the client's internal audit department and not the independent auditor. In essence, independent auditors "don't care who the person is or how they got there, the system in place is more important." All of the interviewees agreed that they "look past the client's people to the data."

At first glance this appears to grossly contradict the notion held by many that "internal control is people" [Mautz and Sharaf, 1961]. The auditors do not disagree. However, they do not audit people to derive financial statement satisfaction; they audit financial statements that generates a byproduct of satisfaction concerning the people. All the training and staff planning in the world does not provide an independent auditor with evidence for formulating a financial statement opinion. The only significant area of audit impact was denoted as possible management letter comments.

It should be noted that one of the interviewees had experienced a major fraud on one of his clients since completing his questionnaire. He voiced the opinion that more personnel-related issues should be of concern to the independent auditor. Any and all avenues of evidence regarding client personnel competence and especially their integrity should be acquired. In his mind, the control function performed by a person is no more important than that person's integrity. Such a concern hints at a void in current audit approaches that should perhaps be rectified by more formalized, more in-depth personnel inquiries.

Some very important concerns were voiced in regards to client's organizational structure. Both control concepts #37 and #38 were ranked very low. Auditors did agree that the formal organization structure (#37) is a very minor audit concern. However, the post-study-interviewees all attributed a great deal of importance to the client's informal organization (i.e., grapevine, subculture, etc.) They agreed that it did not impact their audit program or planning directly and perhaps this accounts for its low rating. On the other hand, they all believed that such a control concept was vital to understanding "who holds the real power" in the client's organization. Likewise, such a concept can provide valuable insights into the issues being discussed by the client prior to the issues becoming a part of the client's formal agenda for decision making. Such advance insights provide independent auditors with the opportunity to become involved in a "preemptive" vein [Pomeranz, 1980], helping to influence the course of how things will be accounted for by the client.

Another context in which informal networks were attributed importance, was that their breakdown serves as a signal to the independent auditors that there may be an undercurrent of turmoil, deceit, hostility, jealousy, etc. among the client's personnel. As one auditor noted, environments with such emotions are fertile for behaviors that deviate from expected levels of integrity and ethics. In his experience, he observed that people are prone to setting aside their personal codes of conduct and adopting the informal organizational mentality that may or may not be conducive to the sound, reliable execution of good internal control. Similarly, Katz [1979] found such situations to be a common thread through most of the fraud cases he reviewed.

One other pair of low ranked control concepts dealt with the <u>appropriateness</u> of information bases used in determining raises and promotions for client personnel (#29 and #30). Auditors rated these concepts much lower than a similar control concept (#21) that addressed the same notion of client rewards but it was phrased so as to focus on the <u>motivational</u> impact resulting from the rewards. The indications from auditors tended to suggest that the way in which raises, bonuses and promotions are determined by a client is irrelevant to the audit. But, if these issues are contextualized in terms of what kind of behavior is likely to be encouraged from the particular structuring of incentives, they become an important audit concern. The equity of and legitmacy of rewards to client personnel do not concern auditors. Therefore, the employee morale and turnover issues that are linked to rewards do not impact internal control in the minds of auditors. These sources of potential internal control impact are much more subtle and routine when compared to the obvious behaviors created by specific bonus plans, contractual restrictions, debt covenants, etc. which auditors do view as important. The auditors interviewed tended to lump control concepts #29 and #30 under the general heading of client personnel concerns which, as has already been mentioned, are purely secondary in importance in the minds of most auditors.

The last control concept downplayed by auditors dealt with the client's monitoring of their competition (#48). Auditors noted that such an issue always interested them from a general business perspective but not as an audit concern. Industry statistics were used by auditors in their analytical reviews, but whether or not the clients performed such analysis did not alter auditors' approach to the audit.

In general, the post-study-interviewees agreed with the study's ranking of the forty-eight control concepts. They tended to agree that the most important items did influence their audit approach whereas the remaining three-fourths only provided a certain feeling of comfort or discomfort that did not necessarily translate into specific audit impacts. It was interesting to note the one interviewee's comments who had experienced a client fraud in the interim. He attributed much more audit importance to client personnel issues than he previously did and more than what was reflected in this study. Such a consciousness-raising experience normally has to occur for auditors, and even for the profession, to discard old notions and embrace new ones.[1] Perhaps it is time for the profession to investigate means of monitoring and measuring the integrity, conscientiousness and competence of client personnel irregardless of the questionnaire results.

It should also be pointed out that much of the importance attributed to various control concepts was due to the auditors' desire to be "on top of things", to take part in the input leading to ultimate client decisions. This was manifested in terms of learning about the clients' informal networks, developing personal relationships with key employees, reviewing client budgets and forecasts, and any other means available to becoming an integral part of the financial process as opposed to being only a year-end attester. This "preemptive" approach is very consistent with the definition of administrative controls presented in Chapter III and perhaps indicates a growing concern in this regard.

Demographic Cleavages

As a focal point for discussing the demographic dimensions along which different importance ratings cleaved for the various control concepts, the post-study-interviewees were given a copy of Table 22. This table depicts the demographic variables which were most often strongly associated with various control concepts. Recall that Tables 13 and 14 highlighted which combinations of demographic variables and control concepts had statistically strong associations. Table 22 also reflects the rankings by demographic categories for all the top and bottom nine control concepts.

[1]Another one of the interviewees termed this phenomenon as "forensic auditing."

Table 22

Rankings of Control Concepts by Demographic Categories (*significantly strong association per Table 13)

Demographics		Control Concepts (Rank Order) 10	7	14	13	23	21	20	24	25	Top Nine * Avg.	Top Nine Avg.	Control Concepts (Rank Order) 33	42	27	31	44	26	9	8	45	41	16	11	Mid 30 * Avg.
Firm: (ONE)	A	5	7*	3	4	4*	5	4*	4*	3	4.5	4		7*	5*							1*		4*	3.5
	B	7	2	5	3	3	8	6	2	6	2.5	5		8	3							7		1	5
	C	3	5	4	2	2	2	3	3	4	2.5	2		1	2							2		3	1
	D	1	1	1	1	5	6	8	5	8	4.5	3		4	7							4		7	7
	E	6	4	8	8	8	7	7	7	7	8	8		5	8							8		8	8
	F	2	3	2	7	1	1	2	1	2	1	1		2	1							6		2	2
	G	4	6	6	6	6	4	5	8	5	7	7		3	4							5		5	3.5
	H	8	8	7	5	7	3	1	6	1	6	6		6	6							3		6	6
Years Audit Experience: (TWO)	≤2	1	1	2*	1	3	3	4	4	2	2	1.5										2*		3*	2.5
	3-5	3	3	1	2	2	4	3	3	3	1	3.5										1		2	1
	6-8	2	4	4	4	4	2	2	1	1	4	3.5										3		4	4
	≥9	4	2	3	3	1	1	1	2	4	3	1.5										4		1	2.5
Mgmt. Structure: (CLF1VEB)	High Dec. 1	1	1	3	1	1	1	1	1*	1	1	1		3*	1*		4*					1*	1*	1*	1
	2	2	4	2	2	4	2	2	4	4	4	2		1	4		1					2	3	3	2.5
	3	5	5	1	5	2	3	4	2	2	2	3.5		2	2		3					3	2	2	2.5
	4	3	2	5	3	3	4	3	3	3	3	3.5		5	3		2					4	5	4	4
	High Cent. 5	4	3	4	4	5	5	5	5	5	5	5		4	5		5					5	4	5	5
Mgmt. Focus: (CLTWOA)	Internal	3	1	2	2	2*	3	3	2	3	2	2.5		3*					3*			3*			3
	External	2	3	3	3	3	2	1	3	1	3	2.5		2					2			2			2
	Balanced	1	2	1	1	1	1	2	1	2	1	1		1					1			1			1
Operations Structure: (CLF1VEA)	High Diff. 1	4*	2	1	1	2	1*	2	1	2	2.5	1						1*						1*	1
	2	5	5	2	5	3	3	3	4	4	4.5	4.5						3						2	2
	3	2	4	3	2	1	2	1	2	1	1	2						4						4.5	5
	4	1	1	4	3	5	4	5	5	5	2.5	3						2						4.5	3
	High Loc. 5	3	3	5	4	4	5	4	3	3	4.5	4.5						5						3	4
Predictability: (CLSIX)	Unpred. 1	2	2	5*	5*	5*	2.5	1	5*	3	5	4													-
	2	4	5	4	3	2	2.5	2	2	1	3	3													-
	3	3	4	3	4	3	4	5	4	5	4	5													-
	4	1	1	2	1	4	5	4	3	4	2	2													-
	Predict. 5	5	3	1	2	1	1	3	1	2	1	1													-
Change in Office Size: (ANDFOUR)	Great +	2	2	2	2	2	1	2*	2	2	2	1	2*			3*				2*					3
	Slight +	4	4	3	4	3	2	1	1	1	1	3	3			2				1					1
	No Change	3	1	4	3	4	3	3	3	4	3	4	4			4				3					4
	Slight -	1	3	1	1	1	4	4	4	3	4	2	1			1				4					2
Years with Client: (ANDONE)	1-5	2	2	4	4*	4	2.5	1	4	3	4	4										4*			4
	6-10	3	3	2	2	2	4	4	3	1	2	3										3			3
	11-15	4	4	1	3	1	1	3	1	2	3	1										2			2
	>15	1	1	3	1	3	2.5	2	2	4	1	2										1			1
Industry: (CLONE)	Mfg.	4	3	4	4	4	3	2	4	4	-	3.5		4*							4*				4.5
	Util.	2	1	1	1	2.5	6	5	1	5	-	2		6							2				4.5
	Whole.	6	6	3	5	2.5	2	4	5	3	-	5		2							5				3
	Retail	1	2	6	3	6	4	6	6	6	-	6		3							1				1.5
	Fin.	3	5	2	2	1	5	3	2	1	-	1		5							6				6
	Other	5	4	5	6	5	1	1	3	2	-	3.5		1							3				1.5

Table 22 (Cont.)

Demographics		Control Concepts (Rank Order) 4	36	3	2	37	48	38	29	30	Bot. Nine & Avg.	Bot. Nine Avg.	All & Avg.
Firm: (ONE)	A	3*	4	2	3*	4*	5	4	6	2	3	3	3
	B	7	7	6	4	6	8	5	7	8	5	7	4
	C	2	3	4.5	2	3	2	2	3	4	2	2	2
	D	4	5	7	5	5	7	7	4.5	5	4	6	5
	E	5	6	3	6	8	4	6	4.5	6	7	5	8
	F	1	1	1	1	1	1	1	1.5	3	1	1	1
	G	6	8	4.5	7	7	3	8	8	7	8	8	7
	H	8	2	8	8	2	6	3	1.5	1	6	4	6
Years Audit Experience: (TWO)	≤2	1	1*	1	1	1*	1*	2*	1*	2*	1	1	2
	3-5	2	2	3	3	2	2	1	2	1	2	2	1
	6-8	3	4	4	4	3	3	4	4	4	4	4	4
	≥9	4	3	2	2	4	4	3	3	3	3	3	3
Mgmt. Structure: C(FIVEB)	High Dec. 1	1*	1	1	1	3*	1	1	1	1	2	1	1
	2	3	3	3	2	1	2	2	4	3	2	3	3
	3	2	2	2	4	2	3	3	2	2	2	2	2
	4	4	4	5	3	4	5	4	5	5	4	4	4
	High Cent. 5	5	5	4	5	5	4	5	3	4	5	5	5
Mgmt. Focus: (CLTWOA)	Internal	2	3	1	3	1	3	2.5	2	3	-	3	3
	External	3	1	2	1	3	2	2.5	3	2	-	2	2
	Balanced	1	2	3	2	2	1	1	1	1	-	1	1
Operations Structure: (CLFIVEA)	High Diff. 1	3	4	4	5	4.5	3	3	2	1	-	4	1
	2	1	3	2	4	2	2	1	4	4	-	2	4
	3	2	1	5	1	1	1	2	3	3	-	1	3
	4	4	2	3	3	3	5	5	1	2	-	3	2
	High Loc. 5	5	5	1	2	4.5	4	4	5	5	-	5	5
Predictability: (CLSIX)	Unpred. 1	4.5	4	3	1.5	5	1	5	3	5	-	4	5
	2	2	1	2	1.5	2	5	2	2	1	-	1	3
	3	3	5	4	5	3	3	1	1	3	-	3	4
	4	4.5	3	5	4	4	4	3	5	4	-	5	2
	Predict. 5	1	2	1	3	1	2	4	4	2	-	2	1
Change in Office Size: (AUDFOUR)	Great ↑	1	1	2	1	2	2	4	1	1	-	1	1
	Slight ↑	3	2	3	2	1	3	1	3	2	-	2	2.5
	No Change	4	3	4	3	4	4	2	2	3	-	4	4
	Slight ↓	2	4	1	4	3	1	3	4	4	-	3	2.5
Years with Client: (AUDONE)	1-5	2	2	1	2	1	4	3	3	2	-	3	4
	6-10	4	4	4	4	4	1	4	4	4	-	4	2.5
	11-15	3	1	2	3	3	2	2	1	1	-	1	2.5
	>15	1	3	3	1	2	3	1	2	3	-	2	1
Industry: (CLONE)	Mfg.	4	3	5	6	4	3	3	4	3	-	5	4.5
	Util.	1	5	6	1	6	5.5	6	2	2	-	4	4.5
	Whole.	2	6	4	4.5	5	2	5	5	5	-	6	3
	Retail	6	2	1	4.5	2	5.5	4	3	6	-	3	1.5
	Fin.	5	1	2	2	1	4	2	6	4	-	2	6
	Other	3	4	3	3	3	1	1	1	1	-	3	1.5

The auditors were quite interested in the firms' rankings as depicted in Table 22. It should be noted that the firms' relative positions were very similar when grouped by the top nine and bottom nine control concepts and by those control concepts for which the firm variable had a significantly strong association. The interviewees were given the names of their individual firm, and in all cases, they were not surprised by their relative ranking on the various control concepts. Such consistent rankings of the firms over the various control concepts does add to the growing body of evidence that challenges the notion that the Big Eight provide an undifferentiated product [Nanni, 1984] [Cushing and Loebbecke, 1983].

The years of audit experience variable was of interest to the interviewees. As depicted in Table 22, for the top nine control concepts, partners and staff assistants hold very similar views while seniors and managers hold similar views. It had not occurred to the interviewees that this might be the case, but upon reflection they believed the "gung-ho" assistants would attribute a great deal of importance to these control concepts while the partner's concern for audit risks would lead him to the same ratings. It was the partner who should be "burdened" with these control issues. The manager and senior tend to be much more concerned with the "administrative audit tasks" than with the audit impact of these various control environment notions. It appears somewhat incongruous that the primary audit operations people (seniors and managers) do not focus on these environmental cues for designing the audit whereas the partner does for purposes of overall risk assessment.

The management structure variable presented no surprises. The interviewees expected the control concepts to acquire greater importance as the management structure became more and more decentralized. Table 22 reflects the fact that this occurred for all the various groupings of control concepts. As a client's organization becomes more decentralized, communication processes increase in importance [Loretta, 1983]. From an audit perspective, this translates into a concern for the conditions under which, and the effectiveness of, communications between the various management segments regarding the execution of financial control.

A similar relationship and concern exists in regards to the diffusion of a client's operating facilities. For the top nine control concepts with significantly strong associations, diffused facilities warranted the most control environment concern whereas localized facilities required the least control environment concern, on average.

In the case of either management or operations structure, caution must be voiced concerning these general tendencies. The only legitimate reason for localized and centralized structures to generate lower relative ratings for the control concepts is that these situations foster a more constant and conscious control setting due to the mere proximity of other related and interested parties within the organization. However, auditors should be cognizant of the fact that effective control can exist with decentralization.

It may, however, warrant more of a conscious scrutiny by auditors, which is what they seem to be indicating.

The management focus variable exhibited rankings inconsistent with the interviewees' expectations. It could be argued that clients exhibiting an externally oriented management focus, should receive greater control environment concern on the part of the independent auditor. This added concern would be to make sure that the external orientation is not at the expense of sound, internal or well-balanced, control philosophies. The Table 22 results do not depict this situation on average, and may therefore, indicate an insensitivity or lack of concern on the part of auditors towards a client's management focus. McAllister [1980] makes a strong case for why such a concern should be important for independent auditors.

The rankings related to the predictability of a client's financial performance were consistent with the interviewees' expectations. On average, as a client's financial performance becomes less and less predictable, a control concept acquires less and less importance. The reasoning is based upon the notion that predictability normally is a function of industry or competency of management. For the more risky industries and for clients with less competent managements, the control concepts' existence cannot compensate for that fact and, therefore, is not important in providing any "level of comfort" to the auditor.

Expectations regarding the impact of changes in the audit office size were also met. For fast growing offices, the control concepts appeared the most important. Since most growth in public accounting firms occurs at the lowest ranks, and since assistants tended to rate the control concepts most highly, it was to be expected that fast growing offices ranked the control concepts highest. Another possible explanation is that growth is due to an expanding number of clients, creating pressures to streamline audit hours. Such streamlining could possibly be forcing auditors to rely more heavily on subjective judgment assessments of controls.

Table 22 also reflects the relationship between the number of years with a client and the control concepts. Across the table, on average, the control concepts are viewed as more important for the long term relationships than for shorter term relationships. As the client/auditor relationship matures, auditors become more keenly aware of the clients subtleties such as informal networks, subcultures, etc. Moreover, auditors also become much more adept at knowing how and where a control, or lack thereof, will impact the client's financial reporting process. This increased familiarity with a client enables the auditor to begin "thinking like" the client. Even though an auditor might view a particular control concept as important, it is only through a long affiliation with the client that his evaluation of that control concept will be verified and its audit impact accurately perceived.

The final demographic variable depicted in Table 22 deals with industry categories. As can be seen, the more stable industries (e.g., financial institutions and utilities) experience the highest importance ratings for the control concepts. This is quite consistent with the earlier discussions pertaining to a client's financial performance predictability.

In general, the demographic and control concept relationships were not surprising to the interviewees. Each of the relationships warrant further study. The auditors did indicate that it would be ideal if some sort of early warning model, rigorously encompassing these relationships, could be devised to stimulate auditor involvement in regards to relevant control environment directions.

Definitional Results

Recall from Chapter VI that, in general, the more highly ranked control concepts were labeled as accounting controls whereas the lower ranked items were typically viewed as administrative controls. According to the post-study-interviewees, this was to be expected. However, they all expressed the opinion, as did auditors during Phase I of this study, that an administrative versus accounting control dichotomy is superfluous. In their minds, the real dichotomy is between those controls that impact the financial reporting process versus those that do not. In fact, several of the interviewees noted that in order to complete that part of the questionnaire, they had to continually refer back to the AICPA definition of the two types of controls because they had never internalized the dichotomy in their own minds. Such a situation seems to indicate that the AICPA effort to dichotomize controls along this dimension is not an aid in operationalizing audit concerns in the internal control area. When queried as to why the AICPA has even bothered to try to dichotomize, one auditor implied that it might be a "defense" to hide behind if auditors were ever questioned as to why certain controls (e.g., administrative types) were not given audit attention. Such a purpose would be consistent with the Feldman and March [1981] notion of the symbolic use of information.

In another vein, interviewee reactions pointed to the pragmatic notion that "no administrative controls are instituted by clients without expecting some bottom line (financial statement) impact." This comment suggests that administrative controls are for the purpose of either reducing errors in the financial statements or for generating cost savings or for both. The first purpose should clearly result in auditor attention while the second purpose may warrant auditor concern depending upon the materiality threshold used to screen any of the other financial statement accounts. Therefore, it could be argued that the only justification for excluding administrative controls from receiving audit attention is in the latter instance when they have a cost savings thrust which is immaterial to the audit. Notice that this is not a decision to ignore administrative controls due to them having no impact upon the financial reporting process. Even though this is a subtle distinction, it is a major change in focus and rationale from what the AICPA literature suggests.

In regards to the inherent versus control risk dichotomy, many of the same contentions were expressed by the interviewees.

Recall from Figure 25 and Table 20 that, for the most part, auditors were unable to clearly define the control concepts as one or the other.[2] SAS #47 [AICPA, 1983b] suggests that auditor assessments of inherent and control risk might be made separately. According to the indications of auditors in this study, it appears that a separate analysis would not be possible or at the least, not warranted. Auditors do not view these two risk notions independently of one another and, therefore, their impact on overall audit risk is a joint assessment. In fact, one of the post-study-interviewees noted that all "important inherent risks are control risks and vice versa".

Moreover, given the fact that a number of the control concepts were rated quite highly as components of one or the other risk elements, a major audit implication arises. None of these control concepts are amenable to quantitative measurement beyond a subjective numerical evaluation. Therefore, the notion that risks are precisely measurable is false and any measuring that occurs still relies upon auditors' subjective, judgmental insights that cannot be supplanted. As most auditors would agree, improvement can and should be made in the direction of providing cues to auditors for the purpose of focusing their attentions, not giving them false or arbitrary measurement standards.

In summary, the AICPA control and risk dichotomies explored in this study generated one clear reaction from the post-study-

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[2]It should be noted that this is not due to the control concepts not being relevant in this regard. SAS #47's [AICPA, 1983b] hints at the relevance of many of this study's control concepts to audit evaluations of inherent and control risks.

interviewees which is also supported by the study's data. The dichotomies are "great in theory, terrible in practice".

Future Research

Joyce and Libby [1982, p. 116] note that:

> . . . a number of public accounting firms have developed what is known in the judgment literature as "expert measurement and mechanical combination models." These models substitute structure for part of the audit judgment process to ensure that all important variables are evaluated and then combined into a decision in a consistent fashion. When employing these models, auditors measure parameters that are most efficiently measured subjectively by experts. Once the parameter estimates have been supplied, they are processed mechanically via the model. One example is the Peat, Marwick, Mitchell & Co. system for sample-size determination in substantive testing. Other firms are applying different expert measurement and mechanical combination techniques that also should achieve higher levels of consensus in audit planning. For example, Deloitte, Haskins, & Sells has developed a system which links evaluation of control components to specific substantive tests, and Touche, Ross & Co. has developed sampling reliability decision tables. At this point, no system directly considers the effect of prior periods' control evaluations, the importance of which is suggested by Joyce and Biddle [1981]. This issue provides a useful direction for further research.

In spite of these modelling attempts, much work and research remains to be done concerning the expert, subjective evaluations necessary as inputs to any useful audit planning decision model. Not only do prior years' control evaluations need to be considered but all of the environmental control concepts highlighted in this study (especially the most highly ranked ones) also need to be incorporated into these models. Of course, such a statement is predicated on the belief that control environment evaluations are ". . . a necessary prelude to the evaluation of [client] control procedures and techniques" [AICPA, 1979, p. 12].

The future of auditing appears to be one encompassing these sort of decision aids. The profession must be careful, however, not to overlook or understate the importance of the qualitative aspects of auditors' decisions en route to the development of more sophisticated, programmatic models designed to assist them in their audit planning processes. This study represents a small attempt to identify the qualitative attributes of a clients' control environment and auditors' perceptions of the attributes' importance. Much more work is needed to refine the listing of control concepts and the insights related to their perceived importance. Utilization of research methodologies, other than the sample survey, might result in additional insights concerning auditors' client control environment evaluations. For example, process tracing methodologies, controlling for any one or any combination of demographic settings, could be used to gain in-depth insights regarding auditors' weightings and usages of the various control environment cues. Additional insights could also be achieved from a study of the audit working papers prepared in connection with the planning stage of the audit.

Besides applying different research methodologies, various other related questions also need to be studied in order to derive a comprehensive body of research addressing client control environment evaluations. For example, the normative question of how <u>should</u> control environment attributes affect audit planning warrants study. There has been only limited research on audit <u>team</u> deliberation processes and much more is needed. The control environment evaluation area is a prime setting for such research efforts due to its audit planning input and subsequent modification of audit plans as new and important control environment cues redirect and refocus auditors' efforts. Another important aspect needing research involves the issue of multiple criteria. No one cue is ever evaluated in a vacuum. Auditors are under the influence of many cues at any one time, even during the control environment evaluation process. In what ways do the control environment cues interact? How do auditors identify compensating strengths and weaknesses in the control environment? What and how are weightings of the cues derived?

In another vein, research is needed to consider the time perspective. Over what time frame do auditors become adept at evaluating and assessing the impact of various control environment cues? Are there staff training implications? Issues concerning the stability of the control concepts' criteria over time also need exploring. Is there a transitory aspect to what are perceived to be favorable versus unfavorable conditions for these environment cues? If there is, are they predictable?

In summary, most research has been done on auditor <u>evaluations</u> of evidence but this study's emphasis on <u>sources</u> of audit evidence should provide some preliminary ideas concerning auditor tendencies within a highly subjective, ill-structured, evidence gathering context. Future researchers interested in this area should benefit from the exploratory nature of this study. Ashton [1974] noted that research was needed in regards to the individual factors, situational factors, and combinations of both that account for differing auditor judgments. This study should contribute towards describing some of those factors. In another vein, the qualitative control concepts used in this study may lend themselves to subsequent research into how they might be more formally reviewed and evaluated by auditors (e.g., introduction of a measurement based approach a lá Mock and Wright [1980] or Mock and Samet [1982], rather than relying on heuristics). Such an effort might represent a significant contribution towards developing a theory of audit cues employed in assessing audit risk and it may be useful in developing audit approaches to evaluate the intangible control consciousness that permeates all clients' financial reporting processes to differing degrees.

In the end, all audits represent pyramids of evidence leading to the audit opinion. Those evidential pyramids are only as sound as their foundations. One of the cornerstones of that foundation is the control environment evaluation which warrants and needs continued research.

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APPENDIX A

CONTROL ENVIRONMENT CONCEPTS

CONTROL CONCEPTS
(Not Rank Ordered)

1. extent to which the client investigates the backgrounds and references of new employees whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

2. existence of client programs for on-going evaluation of employees whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

3. adequacy of client planning for staff needs in regards to employees whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

4. appropriateness of client training programs for new or promoted employees whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

5. appropriateness of client policies and practices of required vacations and rotation of duties for employees whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

6. extent of client bonding of all employees who handle cash, securities, etc.

7. proper segregation of duties among client employees whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

8. manageability of the workloads of client personnel whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

9. appropriateness of the client's chart of accounts

10. existence of an appropriate policy for the authorization of transactions

11. effectiveness of a client's communication of formal codes of conduct.

12. effectiveness of the client's policies and procedures manuals in regards to the financial reporting process.

13. effectiveness of physical safeguards over records and assets

14. effectiveness of general EDP controls

15. conscientiousness of the audit committee in the execution of their duties and responsibilities

16. qualifications of the members of the audit committee

17. qualifications of the members of the Board of Directors

18. extent of turnover in the client's top, executive management positions and the reasons for it

19. reputation of the client's top, executive management for taking unusual business risks

20. compulsion on the part of the client's top, executive management for reporting the most favorable financial picture

21. existence of factors that might motivate managers to circumvent or override existing controls (e.g., tight credit, low working capital, bonus plans, need to meet forecasts, decaying industry, etc.)

22. extent to which the client's top, executive management is dominated by one or a few individuals

23. appropriateness of the internal audit staff's assigned duties, responsibilities, and lines of reporting

24. effectiveness of the internal audit staff in reporting detected deficiencies

25. extent of knowledge on the part of the client's controller concerning FASB and SEC (where appropriate) guidelines

26. appropriateness of the client's actions in response to the Foreign Corrupt Practices Act of 1977

27. manner in which recommendations of internal and external auditors have been dealt with in the past

28. inferences that can be drawn concerning the relationship between prior audit adjustments and the competence of the relevant personnel

29. appropriateness of the information bases used in determining raises and promotions for the client's employees (management and staff) whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

30. appropriateness of the information bases used in determining raises and promotions for the client's employees (management and staff) whose work can be categorized as operations related

31. timeliness with which financial managers receive the information that they need

32. promptness with which errors in internal financial reports are detected and corrected

33. potential for errors in internal financial reports

34. effectiveness of internal financial reports in adequately highlighting, identifying, or isolating problems

35. extent to which the client's line (i.e., operations) personnel review internal financial reports

36. relevance of an internal financial report to the person receiving it

37. compatability of the client's <u>formal</u> organizational structure with their organizational goals

38. compatability of the client's <u>informal</u> organizational structure with their organizational goals

39. accessibility of supervisors to employees, both of whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

40. congruency of responsibility with authority for the client's employees whose work is related to the financial reporting process (e.g., financial management, EDP, accounting, and internal audit personnel)

41. incompatability (if any) of centralized client management over decentralized operations

42. appropriateness of separate accounting systems for each of the client's diversified business endeavors (e.g., a client might have a mining division and a banking division)

43. effectiveness of coordination among related functions for financial reporting purposes (e.g., sales, accounting, and production

44. adequacy of the client's budgetary process in covering all units or functions

45. adequacy of the process by which operating budgets are revised

46. adequacy of a client's analysis of budget variances

47. extent to which native personnel managing the client's foreign operations, are allowed to exercise their discretion in financial reporting decisions

48. extent of a client's monitoring of their competition

APPENDIX B

COVER LETTER TO CONTACT PERSON

THE PENNSYLVANIA STATE UNIVERSITY
409 BUSINESS ADMINISTRATION BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

College of Business Administration
Department of Accounting and
Management Information Systems

October 21, 1983

Dear :

It was again a pleasure to talk with you on the phone and hear of your continued interest in, and willingness to participate in, my dissertation research. I am sure that you are aware of the fact that you play a key role in this important phase of my dissertation. Your selection of audits and their respective audit teams is the only way in which individuals are being recruited for this study. Likewise, your endorsement, prodding and collection efforts are also crucial. I guess there really isn't any other way to express it other than to emphasize that your support is immensely needed and sincerely appreciated.

This packet includes: an instruction sheet for you (please excuse the fact that in the materials you are affectionately referred to as the "contact person"); enough cover sheets so that there is one for each questionnaire booklet; a self-addressed return envelope; and 4 questionnaire booklets which is a sufficient number for the 1 audit teams you agreed to recruit (4 booklets for 1 audit team consisting of 4 auditors). By the way, it is perfectly OK if you choose an audit engagement, and thus audit team, that results in your being one of the participants. In fact, I would guess that such a choice would be logical.

Please read the sheet entitled <u>Instructions to Contact Person</u> before doing anything with the materials. I trust that those instructions will answer your questions. However, if anything is unclear, please do not hesitate to call me.

I do not know if there is a best time or manner to distribute the items. It seems that Mondays might be bad as might the end of the week. However, your <u>personal</u> delivery of the items to each participant is likely to increase their sense of the importance of the task. As far as my timetable is concerned, I am at your convenience; but I would hope for about a two week turnaround.

Thanks again for your agreeing to help and I look forward to getting all the responses and finding some interesting, insightful results. There is no doubt in my mind that this study will enrich my teaching of auditing and will be of interest to other academics and practitioners. I trust that you will find your participation enjoyable and not too much of an inconvenience.

Most sincerely,

Mark E. Haskins
Ph.D. Candidate
(814) 865-1809 [Office]
(814) 234-2111 [Home]

MEH/lmr

Enclosures

APPENDIX C

INSTRUCTIONS TO CONTACT PERSON

CLIENT CONTROL ENVIRONMENT EVALUATIONS

Instructions to Contact Person

Enclosed are a number of blank cover sheets that you should complete according to the clients and audit dates chosen. One completed cover sheet should be attached (e.g. staple or paste) to the inside cover of each booklet which should then be disseminated to the appropriate team members. As we discussed on the phone, it is important that each participant know the specific client and audit date to use as a reference point in answering the questionnaires. One of the novel features of this study is the use of actual audit teams. Therefore, it is important that for the clients chosen, a partner, manager, senior, and junior from the actual audit team assigned, each be given a questionnaire booklet. However, note that one out of four of the booklets has a set of blue sheets in it. These blue sheets ask for some information that I need from only one, well-informed audit team member. Only the partner or the manager on the team should be given that booklet. In selecting the two or three clients and their respective audit dates, I recognize that participant availability is an important consideration on your part. Moreover, the selection of a client currently undergoing an audit might make the most sense from your standpoint and would also be the best from my standpoint. If you select a client and audit date representing a completed audit, it may be harder to orchestrate the audit team members, and, from my point of view, it may be somewhat tenuous to get them to adopt that client and audit date as their point of reference. The restrictions that I need to place on your choices are (1) the clients should be from different industries, (2) there should be no duplication of audit team members selected, (3) the clients should be publicly held, (4) the clients should not be a holding company, and (5) your practice office must be the principal auditors of the client if there are subsidiaries or multi-divisions involved.

If it is important that I not know the clients' names, as the completed questionnaire booklets are returned to you, simply remove the cover sheet and code all the booklets related to one client with the letter "A" on the booklet cover and for the second set of booklets pertaining to the next client, code their covers with the letter "B" and so on. I have intentionally requested publicly held clients and have asked for very general data on them, believing that this would alleviate the need for this slightly increased effort on your part. However, if you feel it necessary to remove the client name and code the booklets as suggested, I certainly will respect that desire. I simply need to know: that an actual audit team participated; that they had the same client and audit date as a point of reference; and which booklets pertain to the same client.

Once you have received all the completed materials, please send them to me via first class mail in the enclosed, self-addressed envelope. If at any time you have questions please call me immediately at either of the two numbers below:

(814) 865-1809 office
(814) 234-2111 home

Your efforts in this regard are greatly appreciated!

COVER SHEET

The information below should be read carefully before answering the questionnaire items.

The client which is to serve as your point of reference in responding to this questionnaire booklet is:

____

The particular audit of this client which is to serve as a further point of reference in responding to this questionnaire booklet is:

audit for the year ending __________ and represents: an audit in progress? ____ a completed audit? ____

Your timely and conscientious completion of this questionnaire is requested. Please return all materials completed to me by:

____

Thank you,

____

Contact person for the administering of this research study

APPENDIX D

COVER LETTER TO PARTICIPANT

THE PENNSYLVANIA STATE UNIVERSITY
409 BUSINESS ADMINISTRATION BUILDING
UNIVERSITY PARK, PENNSYLVANIA 16802

College of Business Administration
Department of Accounting and
Management Information Systems

October 14, 1983

Dear Participant:

Please excuse the anonymity of the greeting, but ____________ is serving as my contact person as well as yours. In essence, using a "middle man" like this makes the administration of this questionnaire more efficient. However, it does impede the personalizing of my request for your conscientious participation as well as your learning about me and the motives for this study.

Having worked for a number of years with Arthur Young & Co. and finding these types of requests coming across my desk, I understand that my questionnaire, which is the primary research instrument for my doctoral dissertation in accounting, requires an investment of your time. However, there has been a great deal of preliminary work done in conjunction with partners from all the Big Eight to streamline it and make sure it focuses on important, relevant issues. Your effort in completing this questionnaire represents the major means by which auditor opinions are being collected. Due to the helpful and insightful assistance of people like yourself, I believe that the findings of this study will be useful to teachers of auditing (myself included), standard setting bodies, and audit firms as they wrestle with issues such as audit risk, internal control, management fraud, auditor judgment, etc.

The results of the study will be submitted eventualy for publication. However, if you would like a summary of the results as soon as they are available (probably late Spring 1984), please fill out, detach the attached form, and mail it to me. Also, if you have some thoughts or ideas along the lines of this study and would like to discuss them, feel free to call me.

Your time and effort in regards to this study are greatly appreciated.

Sincerely,

Mark E. Haskins
Ph.D. Candidate
(814) 865-1809 [Office]
(814) 234-2111 [Home]

MEH/lmr
Enclosure

APPENDIX E

THE RESEARCH PACKET

CLIENT CONTROL ENVIRONMENT EVALUATIONS

TO: Each Participant

FROM: Mark Haskins, CPA, Ph.D. Candidate
409 Business Administration Building
The Pennsylvania State University (814)865-1809 office
University Park, PA 16802 (814)234-2111 home

RE: This questionnaire booklet on a client's control environment

---

You have been asked to participate in this study. I hope that you will find it thought provoking and interesting. This study is the basis for my doctoral dissertation in accounting at Penn State. The specific objectives of the project are to ascertain those factors associated with differing auditor views regarding:

1) the identification of important client control environment attributes; and
2) the relevance of these attributes to an accounting/administrative control dichotomy, assessments of audit risk, and subsequent audit procedures.

As a point of reference, the following are applicable:

> The preliminary phase of a review of internal control should be designed to provide the auditor with an understanding of the control environment ... Such an understanding should provide the auditor with a general knowledge of such matters as the organizational structure, the methods used by the entity to communicate responsibility and authority, and the methods used by management to supervise the system ... (SAS No. 43, sec. 2.52).
>
> The control environment: the general control features of the company that can influence the performance of control responsibilities [Willingham and Parks, CPA Journal, May 1982, p.28].
>
> Administrative control includes, but is not limited to, the plan of organization and the procedures and records that are concerned with the decision processes leading to management's authorization of transactions. Accounting control comprises the plan of organization and the procedures and records that are concerned with the safeguarding of assets and the reliability of financial records. (SAS No. 1, sec. 320.27 and .28).
>
> Audit risk is the risk that the auditor may unknowingly fail to appropriately qualify his opinion on financial statements that are materially misstated. [It comprises, in part, these two specific types of risk]. Inherent risk is the susceptibility of an account balance or class of transactions to error exceeding tolerable error before considering the operation of [specifically] related internal accounting controls. Control risk is the risk that error, exceeding tolerable error that may occur, will not be prevented or detected on a timely basis by the system of internal accounting controls. [AICPA, 1982, Sec. 13].

Your part in this study involves giving your opinions on a number of potentially important aspects of a client's control environment. This questionnaire booklet is being given to a wide variety of audit team members from all the Big 8 firms in a number of cities. Each team member should respond on an individual basis. Since responses are, for the most part opinions, each of your responses only reflect your opinions and your knowledge of the designated client audit, not those of other team members.

Since opinions are sought in the questionnaire, there are obviously no right or wrong answers. Please be completely frank in your opinions.

The results of this study will be examined in groups and, thus, the identity of respondents will neither be known nor sought. Your responses will be held in the strictest confidence.

The value of this research and its potential contribution to our knowledge of control environment assessments depends upon your complete and serious consideration of the task at hand.

You should complete all items in this questionnaire booklet. Relax, it looks more awesone than it actually is. For example, at the top of each page of the CONTROL ENVIRONMENT QUESTIONNAIRE a different control related concept is presented (please note that there are different concepts presented on the front and back of each page). However, for each control related concept presented, the same series of questions are asked so that you should experience some efficiency as you progress. PLEASE, even though this efficiency of moving through the questionnaire will occur, it is important that each control related concept be considered with as much thought as the first one.

All of the control related concepts have been extensively discussed and screened with partners in all the Big 8 firms. Each control related concept represents a potential area of auditor concern.

There are six (6) sections for responses on each page of the CONTROL ENVIRONMENT QUESTIONNAIRE (parts #1 and #3 have two sections each). In each of the six (6) sections there are two response lines. You should respond to each line, except where noted otherwise. Please make only one response per line by placing an "X" on the appropriate space (section #3b asks you to circle one item per line rather than using an "X"). In those cases where explanations are appropriate, please be as concise as possible but the content of your explanation is much more important to me than its style or length. The following page is presented as an example. Also, it is very important that your answers be given from the audit perspective of the named engagement on the cover sheet.

Upon completion of the materials, please return them to your contact person.

Thank you for your time and efforts in regards to this study.

Control Related Concept

extent to which the client investigates the backgrounds and references of new employees whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The *control related concept above* [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

existence of client programs for on-going evaluation of employees whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ________________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

adequacy of client planning for staff needs in regards to employees whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.

____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

appropriateness of client training programs for new or promoted employees whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

appropriateness of client policies and practices of required vacations and rotation of duties for employees whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ________________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

extent of client bonding of all employees who handle cash, securities, etc.

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________
Unfavorable:	nature	timing	extent	____________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

proper segregation of duties among client employees whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If <u>both</u> of your answers in part 1.a. were "no", please omit part 1.b.
In <u>one</u> of your answers in part 1.a. was "no", please respond to <u>only</u> the <u>other</u> line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in <u>both</u> categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	<u>Area(s) Affected</u>			<u>How Affected</u>
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

manageability of the workloads of client personnel whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

appropriateness of the client's chart of accounts

1.a. The *control related concept above* [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ________________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

existence of an appropriate policy for the authorization of transactions

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ___________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	_____	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____	_____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If <u>both</u> of your answers in part 1.a. were "no", please omit part 1.b.
In <u>one</u> of your answers in part 1.a. was "no", please respond to <u>only</u> the <u>other</u> line in part 1.b.

b. The _________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	_______	_______	_______	_______
Actually had:	_______	_______	_______	_______

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to _________ extent and an administrative control to ________ extent. (You should respond in <u>both</u> categories and your answers need not be <u>mutually exclusive</u>.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	_____	_____	_____	_____	_____
Administrative:	_____	_____	_____	_____	_____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	_____	_____	_____	_____	_____
Unfavorable:	_____	_____	_____	_____	_____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	<u>Area(s) Affected</u>			<u>How Affected</u>
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to _________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	_____	_____	_____	_____	_____
Control risk:	_____	_____	_____	_____	_____

Control Related Concept

effectiveness of a client's communication of formal codes of conduct

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ______ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ______________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ______ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ______ extent and an administrative control to ______ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ______ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________
Unfavorable:	nature	timing	extent	______________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ______ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

effectiveness of the client's policies and procedures manuals in regards to the financial reporting process

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	______	______	______	______
Actually had:	______	______	______	______

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

effectiveness of physical safeguards over records and assets

1.a. The ***control related concept above*** [should have, in your opinion/actually had] __________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	_____	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____	_____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ______________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	_____	_____	_____	_____	_____
Administrative:	_____	_____	_____	_____	_____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	_____	_____	_____	_____	_____
Unfavorable:	_____	_____	_____	_____	_____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	_____	_____	_____	_____	_____
Control risk:	_____	_____	_____	_____	_____

CONTROL ENVIRONMENT QUESTIONNAIRE

Control Related Concept

effectiveness of general EDP controls

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________________
Unfavorable:	nature	timing	extent	____________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

conscientiousness of the audit committee in the execution of their duties and responsibilities

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	_____	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____	_____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____
____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	_____	_____	_____	_____	_____
Administrative:	_____	_____	_____	_____	_____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	_____	_____	_____	_____	_____
Unfavorable:	_____	_____	_____	_____	_____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________
Unfavorable:	nature	timing	extent	______________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	_____	_____	_____	_____	_____
Control risk:	_____	_____	_____	_____	_____

Control Related Concept

qualifications of the members of the audit committee

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ____________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	______	______	______	______	______
Actually had:	______	______	______	______	______

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The __________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	________	________	________	________
Actually had:	________	________	________	________

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to __________ extent and an administrative control to _________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	______	______	______	______	______
Administrative:	______	______	______	______	______

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	______	______	______	______	______
Unfavorable:	______	______	______	______	______

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________________
Unfavorable:	nature	timing	extent	______________________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to __________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	______	______	______	______	______
Control risk:	______	______	______	______	______

Control Related Concept

qualifications of the members of the Board of Directors

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.

____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

extent of turnover in the client's top, executive management positions and the reasons for it

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________
Unfavorable:	nature	timing	extent	____________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

reputation of the client's top, executive management for taking unusual business risks

1.a. The *control related concept above* [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.

____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

compulsion on the part of the client's top, executive management for reporting the most favorable financial picture

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ____________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	______	______	______	______	______
Actually had:	______	______	______	______	______

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The __________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	________	________	________	________
Actually had:	________	________	________	________

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to __________ extent and an administrative control to _________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	______	______	______	______	______
Administrative:	______	______	______	______	______

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to _________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	______	______	______	______	______
Unfavorable:	______	______	______	______	______

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________________
Unfavorable:	nature	timing	extent	______________________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to __________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	______	______	______	______	______
Control risk:	______	______	______	______	______

Control Related Concept

existence of factors that might motivate managers to circumvent or override existing controls (e.g. tight credit, low working capital, bonus plans, need to meet forecasts, decaying industry, etc.)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ______________________________

____

If <u>both</u> of your answers in part 1.a. were "no", please omit part 1.b.
In <u>one</u> of your answers in part 1.a. was "no", please respond to <u>only</u> the <u>other</u> line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in <u>both</u> categories and your answers need not be <u>mutually</u> exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	<u>Area(s) Affected</u>			<u>How Affected</u>
Favorable:	nature	timing	extent	______________
Unfavorable:	nature	timing	extent	______________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

extent to which the client's top, executive management is dominated by one or a few individuals

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.

____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

appropriateness of the internal audit staff's assigned duties, responsibilities, and lines of reporting

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

effectiveness of the internal audit staff in reporting detected deficiencies

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	______	______	______	______
Actually had:	______	______	______	______

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________________
Unfavorable:	nature	timing	extent	____________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

extent of knowledge on the part of the client's controller concerning FASB and SEC (where appropriate) guidelines

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ____________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	______	______	______	______	______
Actually had:	______	______	______	______	______

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If <u>both</u> of your answers in part 1.a. were "no", please omit part 1.b.
In <u>one</u> of your answers in part 1.a. was "no", please respond to <u>only</u> the <u>other</u> line in part 1.b.

b. The _________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	________	________	________	________
Actually had:	________	________	________	________

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to _________ extent and an administrative control to _________ extent. (You should respond in <u>both</u> categories and your answers need not be <u>mutually exclusive</u>.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	______	______	______	______	______
Administrative:	______	______	______	______	______

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	______	______	______	______	______
Unfavorable:	______	______	______	______	______

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	<u>Area(s) Affected</u>			<u>How Affected</u>
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to __________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	______	______	______	______	______
Control risk:	______	______	______	______	______

Control Related Concept

appropriateness of the client's actions in response to the Foreign Corrupt Practices Act of 1977

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ____________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	______	______	______	______	______
Actually had:	______	______	______	______	______

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ______________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The _________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	________	________	________	________
Actually had:	________	________	________	________

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to _________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	______	______	______	______	______
Administrative:	______	______	______	______	______

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	______	______	______	______	______
Unfavorable:	______	______	______	______	______

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to __________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	______	______	______	______	______
Control risk:	______	______	______	______	______

Control Related Concept

manner in which recommendations of internal and external auditors have been dealt with in the past

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ________________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

inferences that can be drawn concerning the relationship between prior audit adjustments and the competence of the relevant personnel

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.

____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

appropriateness of the information bases used in determining raises and promotions for the client's employees (management and staff) whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ________________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

appropriateness of the information bases used in determining raises and promotions for the client's operations employees (managers and nonmanagers)

1.a. The *control related concept above* [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

timeliness with which financial managers receive the information that they need

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________
Unfavorable:	nature	timing	extent	________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

promptness with which errors in internal financial reports are detected and corrected

1.a. The *control related concept above* [should have, in your opinion/actually had] ______ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	___	___	___	___	___
Actually had:	___	___	___	___	___

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ______________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ______ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	___	___	___	___
Actually had:	___	___	___	___

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ______ extent and an administrative control to ______ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	___	___	___	___	___
Administrative:	___	___	___	___	___

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ______ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	___	___	___	___	___
Unfavorable:	___	___	___	___	___

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________
Unfavorable:	nature	timing	extent	______________

4. For this engagement, and in your opinion, the *control related concept above* is to ______ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	___	___	___	___	___
Control risk:	___	___	___	___	___

Control Related Concept

potential for errors in internal financial reports

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ________________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

effectiveness of internal financial reports in adequately highlighting, identifying, or isolating problems

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	______	______	______	______
Actually had:	______	______	______	______

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________________
Unfavorable:	nature	timing	extent	____________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

extent to which the client's line (i.e. operations) personnel review internal financial reports

1.a. The *control related concept above* [should have, in your opinion/actually had] __________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ______________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

relevance of an internal financial report to the person receiving it

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________________
Unfavorable:	nature	timing	extent	____________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

compatability of the client's formal organizational structure with their organizational goals

1.a. The *control related concept above* [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________________
Unfavorable:	nature	timing	extent	____________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

compatability of the client's informal organizational structure with their organizational goals

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

accessibility of supervisors to employees, both of whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____
____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

congruency of responsibility with authority for the client's employees whose work is related to the financial reporting process (e.g. financial management, EDP, accounting, and internal audit personnel)

1.a. The *control related concept above* [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ________________________________

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

incompatability (if any) of centralized client management over decentralized operations

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ______ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	___	___	___	___	___
Actually had:	___	___	___	___	___

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ______

______

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ______ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	___	___	___	___
Actually had:	___	___	___	___

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ______ extent and an administrative control to ______ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	___	___	___	___	___
Administrative:	___	___	___	___	___

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ______ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	___	___	___	___	___
Unfavorable:	___	___	___	___	___

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______
Unfavorable:	nature	timing	extent	______

4. For this engagement, and in your opinion, the ***control related concept above*** is to ______ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	___	___	___	___	___
Control risk:	___	___	___	___	___

Control Related Concept

appropriateness of separate accounting systems for each of the client's diversified business endeavors (e.g. a client might have a mining division and a banking division)

1.a. The *control related concept above* [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.

____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________________
Unfavorable:	nature	timing	extent	____________________

4. For this engagement, and in your opinion, the *control related concept above* is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

effectiveness of coordination among related functions for financial reporting purposes (e.g. sales, accounting, and production)

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	_____	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____	_____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	_____	_____	_____	_____	_____
Administrative:	_____	_____	_____	_____	_____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	_____	_____	_____	_____	_____
Unfavorable:	_____	_____	_____	_____	_____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	____________________
Unfavorable:	nature	timing	extent	____________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	_____	_____	_____	_____	_____
Control risk:	_____	_____	_____	_____	_____

Control Related Concept

adequacy of the client's budgetary process in covering all units or functions

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	________________
Unfavorable:	nature	timing	extent	________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

CONTROL ENVIRONMENT QUESTIONNAIRE

Control Related Concept

adequacy of the process by which operating budgets are revised

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.

____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The ________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	______	______	______	______
Actually had:	______	______	______	______

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to ________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to ________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

CONTROL ENVIRONMENT QUESTIONNAIRE

Control Related Concept

adequacy of a client's analysis of budget variances

1.a. The *control related concept above* [should have, in your opinion/actually had] ____________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	____	____	____	____	____
Actually had:	____	____	____	____	____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The __________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the *control related concept above*, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	____	____	____	____
Actually had:	____	____	____	____

2. For this engagement, and in your opinion, the *control related concept above* is an accounting control to __________ extent and an administrative control to ________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	____	____	____	____	____
Administrative:	____	____	____	____	____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the *control related concept above*, the nature, timing and/or effect of your subsequent audit programs would be affected to _________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	____	____	____	____	____
Unfavorable:	____	____	____	____	____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the *control related concept above*.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the *control related concept above* is to __________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	____	____	____	____	____
Control risk:	____	____	____	____	____

Control Related Concept

extent to which foreign nationals managing the client's foreign operations, are allowed to exercise their discretion in financial reporting decisions

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ___________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	_____	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____	_____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation.
____

____

If <u>both</u> of your answers in part 1.a. were "no", please omit part 1.b.
In <u>one</u> of your answers in part 1.a. was "no", please respond to <u>only</u> the <u>other</u> line in part 1.b.

b. The _________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	_______	_______	_______	_______
Actually had:	_______	_______	_______	_______

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to _________ extent and an administrative control to ________ extent. (You should respond in <u>both</u> categories and your answers need not be <u>mutually exclusive</u>.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	_____	_____	_____	_____	_____
Administrative:	_____	_____	_____	_____	_____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	_____	_____	_____	_____	_____
Unfavorable:	_____	_____	_____	_____	_____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	<u>Area(s) Affected</u>			<u>How Affected</u>
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to _________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	_____	_____	_____	_____	_____
Control risk:	_____	_____	_____	_____	_____

CONTROL ENVIRONMENT QUESTIONNAIRE

Control Related Concept

extent of a client's monitoring of their competition

1.a. The ***control related concept above*** [should have, in your opinion/actually had] ___________ amount of influence on the assessment of this client's control environment.

	A Very Great	A Great	A Moderate	A Low	No
Should have:	_____	_____	_____	_____	_____
Actually had:	_____	_____	_____	_____	_____

If your answers to the "should have" and "actually had" lines were different, please give a brief explanation. ____

____

If both of your answers in part 1.a. were "no", please omit part 1.b.
In one of your answers in part 1.a. was "no", please respond to only the other line in part 1.b.

b. The _________ on the job [should have/actually had] operational responsibility (as opposed to ultimate responsibility which the partner always has) for assessing the ***control related concept above***, for this engagement.

	Junior	Senior	Supervisor/ Manager	Principal/ Partner
Should have:	_______	_______	_______	_______
Actually had:	_______	_______	_______	_______

2. For this engagement, and in your opinion, the ***control related concept above*** is an accounting control to _________ extent and an administrative control to _________ extent. (You should respond in both categories and your answers need not be mutually exclusive.)

	A Very Great	A Great	A Moderate	A Low	No
Accounting:	_____	_____	_____	_____	_____
Administrative:	_____	_____	_____	_____	_____

3.a. For this engagement, and in your opinion, if you found [favorable/unfavorable] conditions existing in regards to the ***control related concept above***, the nature, timing and/or effect of your subsequent audit programs would be affected to ________ extent.

	A Very Great	A Great	A Moderate	A Low	No
Favorable:	_____	_____	_____	_____	_____
Unfavorable:	_____	_____	_____	_____	_____

b. In relation to your answer above, please circle which area(s) below would be affected and note how, when conditions are [favorable/unfavorable] regarding the ***control related concept above***.

	Area(s) Affected			How Affected
Favorable:	nature	timing	extent	______________________
Unfavorable:	nature	timing	extent	______________________

4. For this engagement, and in your opinion, the ***control related concept above*** is to _________ extent helpful in assessing [inherent risk/control risk] which, in part, influences assessments of overall audit risk.

	A Very Great	A Great	A Moderate	A Low	No
Inherent risk:	_____	_____	_____	_____	_____
Control risk:	_____	_____	_____	_____	_____

CLIENT PROFILE QUESTIONNAIRE

This form should only be completed by one team member, preferably the engagement partner or manager.

Please place an "X" on the space representing the best description of the client.

1. INDUSTRY (mark one according to client's predominant source of revenues)

Agriculture ____

Manufacturing:
- Food ____
- Textiles ____
- Chemicals ____
- Petroleum ____
- Metals ____
- Machinery ____
- Electrical Machinery ____
- Transportation ____
- Measuring Instruments ____
- Other (please specify) ____
- ____________________

Transportation:
- Rail ____
- Air ____
- Road ____
- Other (please specify) ____
- ____________________

Utilities ____

Wholesale ____

Retail ____

Financial:
- Banking ____
- Insurance ____
- Brokerage ____
- Other (please specify)
- ____________________

Other Services:
- Professional ____
- Entertainment ____
- Non-profit ____
- Other (please specify)
- ____________________

2. MANAGEMENT

a. Which one of the following best describes the predominant focus of this client's strategy for enhancing profits?

____ tends to focus on internal matters (e.g. controlling costs and developing or refining their technological bases)

____ tends to focus on external matters (e.g. monitoring actions of competitors, suppliers, and customers in order to exploit opportunities)

____ tends to exhibit a balanced focus on both internal and external matters

b. Over the last three years, in which category(ies) did the client experience significant personnel turnover irregardless of cause? (The categories are intended to be mutually exclusive).

____ top executive management (e.g. CEO, VP of finance or slaes, etc.)
____ accounting management (e.g. Controller, Accounting supervisor, etc.)
____ accounting staff (e.g. clerks, cost accountants, etc.)
____ EDP management (e.g. Chief programmer, In-charge operator, etc.)
____ EDP staff (e.g. non supervisory personnel)
____ internal audit management (e.g. Director, Supervisor, etc.)
____ others whose job was affiliated with the financial reporting process (please specify) ____________________

3. CLIENT FINANCIAL DATA (If the audit date noted on the cover sheet is a completed audit use the audited financial statement amounts. If the audit date noted on the cover sheet is for an audit in progress, use your best estimate of what the final audited statements are most likely to report. In either case, your reference point is the audit date on the cover sheet.)

   a. Total assets are:

      _____ less than $10,000,000
      _____ between $10,000,000 and $100,000,000
      _____ greater than $100,000,000

   b. The client's change in total assets from the year prior to the cover sheet audit date is:

	Decreased		Increased
15% or more	_____		_____
14% to 6%	_____		_____
5% or less	_____		_____
No change		_____	

   c. The Total Debt/Total Assets ratio as calculated from balance sheet amounts for the cover sheet audit date, ignoring items such as uncapitalized leases and convertible perferred stock, is:

      _____ 40% or less
      _____ between 40% and 60%
      _____ 60% or more

   d. The client's change in net income from the year prior to the cover sheet audit date is:

	Decreased		Increased
30% or more	_____		_____
29% to 20%	_____		_____
19% to 10%	_____		_____
9% or less	_____		_____
No change		_____	

4. INFORMATION SYSTEM

   Over the last three years audited, which <u>one</u> of the following best describes the client's financial reporting system?

      _____ changed from predominantly manual to predominantly EDP
      _____ changed from predominantly EDP to predominantly manual
      _____ no change - has remained predominantly EDP
      _____ no change - has remained predominantly manual

5. ORGANIZATION

   a. How would you characterize the dispersion of this client's main operations facilities (e.g. plant sites, outlets, branches, etc.)? Place an "X" on the appropriate space.

      Highly Diffused _____ _____ _____ _____ _____ Highly Localized

   b. How would you characterize the client's management structure? Place an "X" in the appropriate space.

      Highly Decentralized _____ _____ _____ _____ _____ Highly Centralized

6. PREDICTABILITY
In your opinion, how would the investing public most likely assess this client's financial performance? Place an "X" on the appropriate space.

Unpredictable ______ ______ ______ ______ ______ Predictable

7. CONTROL ETHIC (defined as the desire and commitment towards the fostering of an organizationally healthy control consciousness in general and employment of controls in specific).
   a. How would you characterize the extent to which <u>accounting</u> management maintains and exercises a control ethic? Place an "X" in the appropriate space.

Too Little		An Appropriate Amount		Too Much
______	______	______	______	______

   b. How would you characterize the extent to which client management, in general, maintains and exercises a control ethic? Place an "X" on the appropriate space.

Too Little		An Appropriate Amount		Too Much
______	______	______	______	______

AUDIT FIRM QUESTIONNAIRE

This form should only be completed by one team member, preferably the engagement partner or manager.

1. How many years has this practice office been the principal auditor for this client?

   ____

2. Would you say that your practice office "specializes" in clients in this industry? (As a guide, if 20% or more of your office's chargeable audit hours are for clients in this industry, consider it a specialty).

   ____

3. Approximately how many auditing professionals (i.e. CPAs and those working towards the CPA, who derive over half of their chargeable hours from typical opinion audit engagements as opposed to tax, consulting, etc.) are employed by your practice office?

   ____

4. Over the past three years this practice office's professional auditing staff (see #3 for definition of auditing professionals) has (in numbers) ... (Place an "X" on the appropriate line)

   _____ grown slightly.
   _____ grown a great deal.
   _____ not changed substantially.
   _____ decreased slightly.
   _____ decreased a great deal.

5. For your practice office's audit team, and for the audit date of this client as noted on the cover sheet versus the prior year's audit, there was ... (Place an "X" on the appropriate line)

YES	NO	
_____	_____	a change in the lead engagement partner assigned.
_____	_____	a change in the lead engagement manager assigned.
_____	_____	a change in the lead engagement senior assigned.

PARTICIPANT PROFILE QUESTIONNAIRE

This form should be completed by each audit team member.

The following biographical data is an important part of this study. It is needed in order to investigate whether differences in opinions, related to control environment evaluations, occur along auditor profiles.

1. Your firm's name: ______________________________

2. Your years of audit experience: ______________________

3. Your position title: ____________________________

4. Your office location at time of this engagement: ____________

5. If you have ever worked in a professional capacity outside of public accounting, please complete the following:

   Type of position: _____ Internal auditor

   _____ Accounting/Information systems (non-auditor)

   _____ Finance related

   _____ Other (please specify) ____________

   Type of industry: ____________________________

   Number of years of experience: __________________

   Years since leaving above industry: ______________

6. Place an "X" on the line next to the best description of your auditing experience in regards to client mix over the last three (3) years.

   _____ Primarily a specialist (i.e. over 50% of your audit assignments have been within one industry). If so, please specify the industry (e.g. banking, insurance, retailing, etc.) __________

   _____ Primarily a generalist (i.e. a mix of industry assignments with no one industry dominating).

7. Place an "X" on the line next to each kind of specialized audit training that you have received beyond what all general purpose auditors at your level receive.

   _____ statitical techniques

   _____ computer auditing

   _____ specific industry training (please specify) ____________

   _____ other (please specify) ______________________

Participant Profile (continued)

8. What academic degree(s) do you have and in what major(s)?

Degree(s) Major(s) (choose from accounting, other business liberal arts, computer science, etc.)

______________ ____

______________ ____

______________ ____

9. Please rate the following aspects of the exercise you have just completed by placing an "X" on the appropriate space.

a. The exercise itself:

Dull ____ ____ ____ ____ ____ ____ ____ Interesting

b. The clarity of the instructions:

Unclear ____ ____ ____ ____ ____ ____ ____ Clear

c. The comprehensiveness, in a control environment context, of the control related concepts presented in this study:
Incomplete ____ ____ ____ ____ ____ ____ ____ Complete

10. Length of time it took you to complete this entire exercise.

______ minutes

11. Any comments you have concerning this study, its methods, its relevance, etc. are most welcome.

____

____

____

____

Thank you for your cooperation!

PLEASE RETURN THIS COMPLETED BOOKLET TO THE CONTACT PERSON AT YOUR OFFICE.

APPENDIX F

STUDY RESULTS REQUEST FORM

To: Mark E. Haskins
409 Business Administration Building
The Pennsylvania State University
University Park, PA 16802

______ I would like a summary of the results of your study when they become available. My address is below.

______ This is an area I am really interested in. Let's discuss these issues sometime in the near future. You can get in touch with me as noted below.

______ Here are some readings and/or people that I think you might find helpful:

____

____

____

____

____

____

Name ____

Address ____

____

____

Phone ____

APPENDIX G

DEMOGRAPHIC VARIABLE LABELS

DEMOGRAPHIC VARIABLE LABELS*

1.	Industry	CLONE
2.	Management's Focus	CLTWOA
3.	Personnel Turnover	CLTWOB
4.	Total Assets	CLTHREEA
5.	Change in Total Assets	CLTHREEB
6.	Total Debt/Total Assets	CLTHREEC
7.	Change in Net Income	CLTHREED
8.	Information System in Place	CLFOUR
9.	Operation's Structure	CLFIVEA
10.	Management's Structure	CLFIVEB
11.	Predictability of Financial Performance	CLSIX
12.	Accounting Management's Control Ethic	CLSEVENA
13.	Top Managements' Control Ethic	CLSEVENB
14.	Years Auditing this Client	AUDONE
15.	Office Specialize in this Type Client	AUDTWO
16.	Change in Office Size	AUDFOUR
17.	Change in Audit Team	AUDFIVE
18.	Firm	ONE
19.	City	FOUR
20.	Years of Audit Experience	TWO
21.	Prior Work Experience	FIVE
22.	Specialist/Generalist	SIX
23.	Specialized Training	SEVEN
24.	Highest Academic Degree	EIGHT

*AUDTHREE dealt with the size of the various audit firms and since they were all very similar it was dropped from the analysis. THREE dealt with the auditors' titles and was dropped in lieu of using their years of experience.

APPENDIX H

GLOSSARY OF ACRONYMS

GLOSSARY OF ACRONYMS

AAA	American Accounting Association
AIA	American Institute of Accountants
AICPA	American Institute of Certified Public Accountants
ASR	Accounting Series Release
CAR	Commission on Auditor's Responsibilities
CCH	Commerce Clearing House
CPA	Certified Public Accountant
EDP	Electronic Data Processing
FASB	Financial Accounting Standards Board
FCPA	Foreign Corrupt Practices Act of 1977
FEI	Financial Executive's Institute
FERF	Financial Executive's Research Foundation
GAAP	Generally Accepted Accounting Principles
GAAS	Generally Accepted Auditing Standards
GAO	Governmental Accounting Office
SAP	Statement on Auditing Procedures
SAS	Statement on Auditing Standards
SEC	Securities and Exchange Commission
SPSS^{X}	Statistical Package for the Social Sciences: X

VITA

Name: Mark Eugene Haskins

Birthdate: April 21, 1953

Education: B.B.A. (1975) The University of Cincinnati
M.B.A. (1978) The Ohio University
Ph.D. (1984) The Pennsylvania State University

Experience: Teaching Assistant, The Pennsylvania State University (1981-1984)
Assistant Professor of Accounting, Muskingum College, New Concord, Ohio (1978-1981)
Audit Staff, Arthur Young and Company, Cincinnati, Ohio (1975-1977)

Certification: Certified Public Accountant (Ohio, 1977)