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AN EMPIRICAL INVESTIGATION OF THE ATTITUDES OF FINANCIAL STATEMENT PREPARERS, AUDITORS, AND USERS REGARDING THE INTERNAL ACCOUNTING CONTROL PROVISION OF THE FOREIGN CORRUPT PRACTICES ACT OF 1977

presented by

Raymond S. Schmidgall

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Business - Accounting

Major professor

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# AN EMPIRICAL INVESTIGATION OF THE ATTITUDES OF FINANCIAL STATEMENT PREPARERS, AUDITORS, AND USERS REGARDING THE INTERNAL ACCOUNTING CONTROL PROVISION OF THE FOREIGN CORRUPT PRACTICES ACT OF 1977

Ву

Raymond S. Schmidgall

### A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Accounting and Financial Administration

### ABSTRACT

AN EMPIRICAL INVESTIGATION OF THE ATTITUDES OF FINANCIAL STATEMENT PREPARERS, AUDITORS, AND USERS REGARDING THE INTERNAL ACCOUNTING CONTROL PROVISION OF THE FOREIGN CORRUPT PRACTICES ACT OF 1977

Ву

### Raymond S. Schmidgall

The purpose of this research was fourfold as follows:

- To provide empirical evidence which would affirm or deny the general belief that the views of preparers, auditors, and users regarding what constitutes internal accounting control (IAC) and internal administrative control (IAdC) may be dissimilar.
- 2. To provide empirical evidence that would suggest whether preparers, auditors, and users are agreed on whether various selected internal controls may be required for a firm to be in compliance with the IAC provision of the FCPA.
- 3. To provide empirical evidence as to the degree of importance placed on information concerning internal controls by users of financial statements for making investment decisions.
- 4. To determine whether users find information concerning IAC and IAdC to be of equal importance for making investment decisions.

A questionnaire containing twenty-six control procedures was the research instrument. The questionnaire was mailed to a random sample of auditors, preparers, and users as follows:

- Five hundred partners of the twenty-four largest public accounting firms in the United States (auditors).
- 2. Six hundred financial executives from corporations listed in Standard & Poor's November 1979 <u>Stock Guide</u> and in the 1978 Fortune Double 500 Directory (preparers).
- 3. Six hundred chartered financial analysts classified as research analysts and supervisors of research analysts by the Institute of Chartered Financial Analysts (users).

The auditors and preparers were requested to identify each control procedure. Further, auditors and preparers were requested to indicate for each control whether they viewed the control as necessary to accomplish the objectives of the IAC provision of the Foreign Corrupt Practices Act of 1977 (FCPA). In addition to the above, the users were requested to respond to the assertion, "information concerning this control is important for investment decisions."

Analysis of the response resulted in the following conclusions:

- In general, preparers, auditors, and users do <u>not</u> agree on which controls constitute IAC and IAdC.
- In general, preparers and users do <u>not</u> agree on which controls constitute IAC and IAdC.
- In general, auditors and preparers are in agreement as to which controls constitute IAC and IAdC.
- 4. The researcher was unable to reject the null hypothesis

that preparers, auditors, and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.

- 5. In general, preparers and users do <u>not</u> have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 6. In general, auditors and preparers have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 7. The researcher was unable to conclude that users desire information on all internal controls for their investment decisions.
- 8. Users place a higher level of importance on controls identified as IACC than on controls identified as IACC.

Several implications of the research were stated in relation to the Auditing Standards Board, The Securities and Exchange Commission, and the American Institute of Certified Public Accountants. Suggestions for future research were also offered. Copyright by RAYMOND S. SCHMIDGALL 1980

To my wife, Barbara

### **ACKNOWLEDGMENTS**

This dissertation and my doctoral studies could not have been completed without the assistance and counsel received from several people.

First, I express my sincere appreciation to my dissertation committee. Professor Alvin A. Arens, chairman of the committee, provided excellent guidance and encouragement throughout. Professor D. Dewey Ward made many helpful suggestions and editorial comments. Professor Randall B. Hayes provided assistance in the statistical aspects of the research, and Professor Leroy A. Olson assisted greatly in the design of the questionnaire.

I appreciated the encouragement from Professor Harold Sollenberger during my doctoral studies, and also the financial support he provided. Professors Robert Blomstrom and Donald A. Smith, Directors of Michigan State University's School of Hotel, Restaurant, and Institutional Management during my doctoral studies, were generous with financial support at their disposal.

Several others who were most helpful were James

Leisenring of Bristol, Leisenring & Co., for comments in

the early stages of the research, Karen Grannemann for

editing assistance, and Gabriella Belli for computer

programming assistance.

Finally, to my family I am greatly indebted. My mother in her quiet way provided moral support. My children, Erica and Monica, were wonderful during the several years of the doctoral studies. My wife, Barbara, assisted by mailing the questionnaires and typing numerous drafts of the dissertation. Further, and most important, she provided needed encouragement throughout my doctoral studies.

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### CHAPTER 1

### INTRODUCTION

This chapter presents the research problem, purpose for the research, research hypotheses, and research methodology. In addition, it contains a brief description of the subsequent eight chapters.

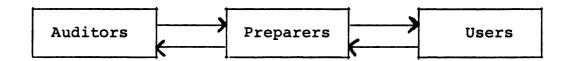
The major objective of this research is to determine whether preparers, auditors, and users have similar views on internal accounting control (IAC) as specified in the Foreign Corrupt Practices Act of 1977 (FCPA). The preparers, auditors, and users are defined as follows:

- 1. Preparers of financial statements are the chief financial executives for companies subject to the requirements of the FCPA. Robert Mautz's research suggests that the chief financial executives in such companies either have complete responsibility or a shared responsibility with the internal audit department for the company's system of IAC. 1
- 2. Auditors of financial statements are partners of CPA firms with a minimum of fifteen SEC clients.

  Auditors generally rely to a considerable degree on a company's system of IAC in conducting an

- examination of the company's financial statements.
- 3. Users of financial statements are the Chartered Financial Analysts who are classified as research analysts, as shown in the membership publication of the Institute of Chartered Financial Analysts. These users are major beneficiaries of audited financial statements.

The relationship among preparers, auditors, and users may be depicted as follows:



Auditors are contracted by companies to audit financial information, thereby providing direct contact between auditors and preparers. Preparers provide general financial information to users by filing financial information with governmental agencies (such as the Securities and Exchange Commission) and by responding to direct inquiries from users. Auditors have indirect contact with users by providing audited financial reports to preparers who make these available to users.

# Statement of the Problems

# Internal Accounting and Administrative Controls

The Foreign Corrupt Practices Act of 1977, signed by President Carter on December 19, 1977, states that certain companies must devise and maintain an adequate system of

IAC. Companies subject to the FCPA are those companies with securities registered under Section 12 of the Securities Exchange Act of 1934, and companies required to file periodic reports pursuant to Section 15(d) of the 1934 Act. The definition and objectives of IAC as stated in the law were taken from the auditing standards literature, which subdivides internal control into IAC and internal administrative control (IAdC). The FCPA requires companies to maintain an adequate system of IAC, while IAdC is not mentioned in the Act. IAC is defined as follows:

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 management's 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 management's 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.<sup>2</sup>

Further, the auditing literature defines IAdC as follows:

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.<sup>3</sup>

Even though the auditing literature makes a distinction

between IAC and IAdC, all interested parties (i.e., preparers, auditors, and users) may not agree with the distinction. Auditors and preparers may not agree on what constitutes the definition and objectives of IAC. Agreement is
desirable, as the preparers (chief financial executives of
companies) are, in many corporations, delegated the responsibility of ensuring their corporations' compliance with
the FCPA, and auditors will review and evaluate IAC as part
of the audit process. Auditors must evaluate any material
weaknesses in IAC based on the FCPA, as a corporation may
be found liable for up to \$10,000 for any willful violation
of the law. Further, the materiality of this contingent
liability would have to be considered by auditors.

The definition and objectives of IAC in the auditing literature were developed for auditing purposes. In conducting an audit, auditors evaluate the system of internal control of the audited corporation to determine the extent that additional auditing tests may be restricted.

The American Institute of Certified Public Accountants (AICPA), recognizing that the guidance in the auditing literature concerning IAC had been developed for limited (auditing) purposes, formed the Special Advisory Committee on Internal Accounting Control (SACIAC) in August of 1977 to provide guidance to management. In its report, the SACIAC did not define IAdC, but concerning IAC it stated:

An internal accounting control is one that is concerned with the reliability of the financial statements and/or with broad internal

accounting control objectives of authorization, accounting, and asset safeguarding, and further, the accounting controls should extend to external reports of historical financial information, such as historical financial information included in the financial highlights section of a report, in the president's letter, and in earnings releases.

Not all SACIAC members totally agreed with the Committee's failure to address the IAC-IAdC distinction issue.

Roger Carolus, a Committee member and Director of Internal Auditing of Northwest Bancorporation, made the following point in his qualified assent to the Committee's report:

...from a management viewpoint (and that of many interested third parties), the distinction between accounting and administrative controls is usually not recognized or even acknowledged, particularly in the current environment in which business operates, and therefore, the distinction is, more often than not, academic when it comes to establishing, maintaining, and evaluating internal accounting controls.<sup>5</sup>

The federal court of the Eastern District of Tennessee, in the case of Adams v. Standard Knitting Mills, Inc., addressed the IAC-IAdC distinction issue. In this case, the auditors attempted to make a distinction between IAC and IAdC to explain away their reliance on a defective EDP system during an audit. The court ruled that such distinction was "overly technical and ignores the interrelatedness of the concepts in the real world." Thus, the court and Carolus are agreed; however, the professional auditing literature discussion on IAC, the basis for the FCPA, contains the distinction.

Further support for research concerning the positions of auditors and preparers on IAC comes from Eugene Minahan,

chairman of the SACIAC. In a speech at the sixth national AICPA Conference on Current SEC Developments, he stated that if the preparers' ideas on IAC differ from those of the auditors, problems can arise. The problems Minahan refers to are apparently conflicts between auditors and preparers as to what constitutes IAC. This researcher concludes that research is necessary to determine if auditors and preparers are agreed on which controls constitute IAC and IAdC.

Further difficulties arise if those using financial information as a basis for investment decisions (users) have different views than auditors or preparers. Marilyn V. Brown, a chartered financial analyst, interviewed twenty-seven investment research executives and security analysts in 1977 concerning internal controls, and concluded that analysts do not share auditors' distinctions between IAC and IAdC. Since this small number of interviews can hardly be considered conclusive evidence, additional research concerning the views of users of financial information toward IAC seems desirable.

# Objectives of Internal Accounting Control

The difference between IAC and IAdC is an issue receiving considerable attention since the passage of the FCPA.

However, some accountants have suggested that the IAC-IAdC distinction discussions miss the real issue of IAC as it relates to the FCPA.

The chief accountant of the SEC, in an article entitled

"The Internal Auditing Profession: Challenges and Opportunities" published in the October 1979 issue of <u>The Internal Auditor</u>, stated that discussion regarding the differentiation between accounting controls and administrative controls is misguided, as it focuses on the type of control procedures. He suggests, rather, that the focus should be on the objectives of IAC; i.e., the preparation of financial statements, authorization of transactions, and safeguarding of assets.

To the degree that the IAC objectives are interpreted differently by preparers, auditors, and users, the meaning of public reports on internal control to various parties will differ. For example, a user may believe that the objectives of IAC include a corporation's quality control program for its manufacturing process, whereas preparers may believe that the quality control program is outside the scope of the objectives of IAC. However, when a corporation releases a report on internal accounting control stating that the IAC are adequate within the corporation to meet the objectives of IAC, the user takes this to mean that among other things, the quality control program is adequate, while the preparer perhaps never intended to convey this idea.

Therefore, research seems warranted as to whether preparers, auditors, and users are in agreement concerning the controls, regardless of how they are identified (labeled), that may be viewed as necessary to meet the objectives of IAC, as specified in the FCPA.

# Public Reporting on Internal Accounting Control

Another issue related to the FCPA is public reporting by corporations on their systems of IAC. The Securities and Exchange Commission (SEC) proposed on April 30, 1979, that companies report to their shareholders the opinion of management regarding whether the system of IAC provides reasonable assurance that specified objectives of IAC were achieved. Although the SEC withdrew this proposal on June 6, 1980, it is urging voluntary initiatives with public reporting and intends to give further attention to rule proposals concerning reporting on IAC at the end of three years.

In addition to the SEC's strong support, others have supported public reporting on IAC as follows:

- Marilyn V. Brown concluded that, because information on the adequacy of a corporation's internal control can be of material importance in making investment decisions, it should be provided to investors.
- 2. The Commission on Auditors' Responsibilities recommended that management issue a report on IAC, and that auditors attest to management's internal accounting control report. 13 This recommendation was endorsed by the Financial Executives Institute's Committee on Corporate Reporting. Further, the AICPA's Special Advisory Committee on Reports by Management, formed to

consider the recommendations of the Commission on Auditors' Responsibilities concerning reports by management, has proposed that a management report including information and representations on IAC be issued. 14

3. The decision by a federal court in Adams v.

Standard Knitting Mills, Inc., lends support to

public reporting in certain cases. The court held

that the weaknesses of the corporation's electronic

data processing system were material, and the

auditor's failure to reveal these significant weak
nesses in the proxy statements constituted a mis
statement of material fact. 15

Thus, there is considerable support for management reporting publicly on IAC. However, of the aforementioned support, only Brown's conclusions are based on a study to determine user interest.

The Auditing Standards Board (ASB) and its predecessors have not required public reporting on the adequacy of a company's system of IAC. In its Statement on Auditing Procedure No. 49, the Committee on Auditing Procedure made the following statement:

The usefulness of reports on internal accounting control to the general public is questionable... any possible action that could be taken by the general public as a result of such reports would be indirect, since it ordinarily would be limited to making decisions about either a company's financial statements or its management.16

The Auditing Standards Executive Committee, the

predecessor to the ASB, issued Statement on Auditing Standards No. 20, entitled "Required Communication of Material Weaknesses in Internal Accounting Control," in August 1977.

This statement requires the auditor to communicate material weaknesses in IAC to senior management and the board of directors or its audit committee. There is, however, no requirement to report weaknesses in IAC to the public.

Similarly, in July 1980, the ASB issued Statement on Auditing Standards No. 30, entitled "Reporting on Internal Accounting Control," in which it does not require or even endorse public reporting on IAC. This statement describes the procedures an auditor should apply when engaged to report on a firm's system of IAC, and it describes the different forms of reports to be used in connection with such engagements. 18

The AICPA, in its response to the SEC concerning the proposed Statement of Management on Internal Accounting Control, stated the following:

- 1. Compliance with the FCPA is not dependent on a public report on internal accounting control. Since the proposed rules would not change or delay the requirements of the FCPA, we question why it is necessary to require public reporting on internal accounting control. Corporations must comply with countless laws and regulations, but it is highly unusual for the Commission, or any regulatory agency, to require a company to positively affirm compliance in the absence of an alleged violation.
- 2. Benefits to users of a report on a system of internal accounting control in effect during the past year would be moderate at best. As to those companies that have already corrected any material weaknesses, the benefits would be negligible.

The AICPA has strongly opposed the proposed public reporting of IAC, despite recommendations from the Commission on Auditors' Responsibilities and the committee (Special Advisory Committee on Reports by Management) established by the AICPA to review the Commission's recommendations that some type of management report on IAC be made.

Based on the above discussion, there is both considerable support and opposition to corporations publicly reporting on IAC. However, evidence of user interest in public reporting on IAC, based on research, appears to be slight, as this researcher located only Brown's study. Therefore, this researcher concludes that users should be surveyed to determine their perceived need for information on IAC for making investment decisions. Further, if information on IAC is useful to the user, as the SEC suggests, it is possible that information on IACC may also be useful. Therefore, this researcher concludes that research to determine the users' need for information on IACC for making investment decisions is also desirable.

# Purpose of the Research

The purpose of this research is as follows:

- To provide empirical evidence which would affirm or deny the general belief that the views of preparers, auditors, and users regarding what constitutes IAC and IAdC may be dissimilar.
- 2. To provide empirical evidence that would suggest

whether preparers, auditors, and users are agreed on whether various selected internal controls may be required for a firm to be in compliance with the IAC provision of the FCPA.

- 3. To provide empirical evidence as to the degree of importance placed on information concerning internal controls by users of financial statements for making investment decisions.
- 4. To determine whether users find information concerning IAC and IAdC to be of equal importance for making investment decisions.

The evidence obtained from the aforementioned purposes will be used as follows:

- To provide policy recommendations for the ASB in developing or modifying auditing standards concerning reporting on internal controls.
- To provide policy recommendations for the SEC in developing rules for the administration of the FCPA.

### Research Hypotheses

The research hypotheses tested are stated in their null form below. There are eight hypotheses as follows:

- 1. H<sub>O</sub>: Preparers, auditors, and users agree on what constitutes IAC and IAdC.
- 2. H<sub>O</sub>: Preparers and users agree on what constitutes IAC and IAdC.

- 3. H<sub>o</sub>: Preparers and auditors agree on what constitutes IAC and IAdC.
- 4. H<sub>O</sub>: Preparers, auditors, and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 5. H<sub>O</sub>: Preparers and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 6. H<sub>O</sub>: Preparers and auditors have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 7. H<sub>O</sub>: Users consider information on internal controls to be important for their investment decisions.
- 8. H<sub>o</sub>: Users place a different level of importance on information concerning IAdC than on IAC.

# Research Methodology

A questionnaire containing twenty-six control procedures was mailed to randomly selected preparers, auditors, and users. (A copy of the questionnaire mailed to members of each group is contained in Appendix A.) The basis of selecting the control procedures was as follows:

1. Nine control procedures were written by the

- researcher based on essential characteristics of IAC according to paragraphs 320.35 through 320.48 of the Statement on Auditing Standards No. 1.<sup>20</sup>
- 2. Five control procedures were those instituted by Boards of Directors of corporations following their involvement in making questionable or illegal payments according to the "Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices."
- 3. The remainder of the control procedures (twelve) were based on control procedures suggested in Price Waterhouse & Co. publications.<sup>22</sup>

Each preparer, auditor, and user respondent was requested to indicate, for each of the twenty-six control procedures, both the "type of control" (IAC, IAdC, both IAC and IAdC, and neither IAC nor IAdC) and whether the control was viewed as being necessary to accomplish the objectives of IAC as stated by the FCPA. Further, for the user population, each respondent was requested to indicate the importance for purposes of investment decisions he or she placed on receiving information concerning each of the twenty-six control procedures.

For each of the first six research hypotheses listed on pages twelve and thirteen, there are twenty-six control procedures. The Chi-Square Test for Independence was used to test each control procedure for each research hypothesis. From these tests, one either can or cannot

reject the null hypotheses.

The seventh research hypothesis pertains to the importance indicated for each control procedure by users. The results of the research for this question are presented in frequency distributions and are summarized according to the level of importance placed on each control by users.

The final research hypothesis concerns the importance of information for IAC and IAdC procedures as indicated by users. The importance indicated for controls labeled IAC is compared to the importance indicated for controls labeled IAdC. Weights were assigned to the different responses in order to determine a numerical value for each control procedure. The control procedures then were ranked numerically, and the Fisher Exact Probability Test was used to determine the statistical significance of the result. 24 This test provides information as to whether it is likely that IAC and IAdC procedures have been drawn from populations with the same median.

# Organization of Chapters

The chapters are organized as follows:

- Chapter 2 reviews the development of internal accounting control and public reporting on internal control.
- Chapter 3 reviews the Foreign Corrupt Practices Act of 1977, events leading to the passage of the Act, and related SEC releases.

- Chapter 4 reviews past research relating to internal control.
- Chapter 5 includes a detailed discussion of the development of each research hypothesis.
- Chapter 6 explains the development and pretest of
  the questionnaire. In addition, the
  sampling procedure and the response to
  the questionnaire are discussed, including
  a test of non-response bias.
- Chapter 7 presents the results of the study for research hypotheses A-F.
- Chapter 8 presents the results of the study for research hypotheses G and H.
- Chapter 9 contains the conclusions, implications, limitations, and suggestions for further research.

### Summary

This research addresses the attitudes of financial statement preparers, auditors, and users regarding the internal accounting control provision of the Foreign Corrupt Practices Act of 1977. A mail questionnaire, consisting of twenty-six control procedures, was sent to partners of the twenty-four largest CPA firms (auditors), to chief financial executives of publicly-listed companies (preparers), and to CFAs classified as research analysts (users). First, members of the interest groups were requested to identify

control procedures. Second, regardless of the identification, subjects were requested to indicate whether they viewed selected controls as necessary to accomplish the objectives of the IAC provision of the FCPA. Third, user respondents were requested to indicate a degree of agreement or disagreement with the assertion that each control is useful for making investment decisions.

This chapter presents eight research hypotheses and the research methodology used in the research. The chapter also contains a brief description of the subsequent eight chapters.

#### **FOOTNOTES**

- Robert K. Mautz et al., Internal Control in U.S.

  Corporations: The State of the Art (New York: Financial Executives Research Foundation, 1980).
- <sup>2</sup>Committee on Auditing Procedure, Statement on Auditing Standards No. 1 Codification of Auditing Standards and Procedures (New York: American Institute of Certified Public Accountants, Inc., 1973), pars. 320.27-320.28.
  - 3<sub>Ibid</sub>.
- <sup>4</sup>Special Advisory Committee on Internal Accounting Control, Report of the Special Advisory Committee on Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1979), p. 2.
  - <sup>5</sup>Ibid., p. 28.
- <sup>6</sup>Adams v. Standard Knitting Mills, Inc., 95,683 CCH Fed. Sec. Law Rept. (E. D. Tenn., 1976).
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- <sup>9</sup>A. Clarence Sampson, "The Internal Auditing Profession: Challenges and Opportunities," <u>The Internal Auditor</u> 36 (October 1979):33.
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  - 15 Adams v. Standard Knitting Mills, Inc.
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- 17 Auditing Standards Executive Committee, Statement on Auditing Standards No. 20 Required Communication of Material Weaknesses in Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1977), par. 1.
- 18 Auditing Standards Board, Statement on Auditing Standards No. 30 Reporting on Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1980).
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- 22Price Waterhouse & Co., <u>Guide to Accounting Controls:</u>
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#### CHAPTER 2

### INTERNAL ACCOUNTING CONTROL

#### Introduction

Considerable attention has been focused on internal control, particularly internal accounting control (IAC), since the passage of the Foreign Corrupt Practices Act of 1977 (FCPA). In this chapter, the responsibilities of auditors and management for IAC, the development of the definition of IAC, and its reporting requirements prior to passage of the FCPA are discussed.

# The Responsibilities of Auditors and Preparers For Internal Accounting Control

The chief financial executives of corporations (preparers) have the responsibility of establishing and maintaining adequate systems of IAC according to the FCPA.

This responsibility has previously been recognized by the
accounting profession, as evidenced by the following statement from the Statement on Auditing Standards (SAS) No. 1:

The establishment and maintenance of a system of internal control is an important responsibility of management.

The auditors' responsibility for the evaluation of IAC relates to auditors providing services to companies in several ways as follows:

- 1. Audit evidence The second standard of field work specifies the relationship between a company's internal control and the additional work to be conducted by the auditor. It states that the auditor's review of internal control may result in reducing the remaining audit tests. The Commission on Auditors' Responsibilities has recommended that the auditors' study be expanded beyond the requirements of Generally Accepted Auditing Standards to a review and testing of the entire IAC system. 3
- 2. Management letters One by-product of an examination of financial statements is a letter to the management of the company being audited. This letter, often referred to as a management letter, contains recommendations by the independent auditor relating to weaknesses in IAC and other recommendations for improving the company's operations. The recommendations concerning IAC are based on the review and evaluation of IAC conducted as part of the audit. Statement on Auditing Standards (SAS) No. 20, entitled "Required Communication of Material Weaknesses in Internal Accounting Control," issued in August 1977, establishes the requirement that auditors "communicate to senior management and the board of directors or its audit committee material weaknesses in internal accounting control."4

- 3. Government agencies Several government agencies, such as the Securities and Exchange Commission and the Federal Home Loan Bank Board, require reports from institutions they regulate on the institutions' systems of internal control. Some government agencies require an independent evaluation of a potential recipient's system of internal control. 5 Specific criteria for such reports may be set by the agency to include not only IAC, but also "specified aspects of administrative control or of compliance with grants, regulations, or statutes." The auditor has the responsibility for evaluating the system of internal control of the potential agency grant recipient based on the specific criteria established by the government agency.6
- 4. Other In addition, auditors may be engaged to review an entity's system or proposed system of IAC for the restricted use of management or other specified third parties. The auditor's responsibility during this type of study is to conduct the study in accordance with the engagement.

# Development of Internal Accounting Control

The first reference to internal control appears to have been made by the Federal Reserve Board. In 1929, the Board published Verification of Financial Statements, which stated:

...The extent of the verification will be determined by the conditions in each concern. In some cases the auditor may find it necessary to verify a substantial portion of all of the transactions recorded upon the books. In others, where the system of internal check is good, tests only may suffice...

In 1936, the American Institute of Accountants (AIA), predecessor to the AICPA, published Examination of Financial Statements by Independent Public Accountants, in which internal control was discussed extensively, with the following definition being given:

The term "internal check and control" is used to describe those measures and methods adopted within the organization itself to safeguard the cash and other assets of the company as well as to check the clerical accuracy of the bookkeeping...

At this point, no references were made to the broader aspects of what later was called internal administrative control (IAdC).

In 1939, the Committee on Auditing Procedure (CAP) of the AIA suggested direct reference to internal control in the officially recommended form of the accountant's report as follows:

We have examined the balance-sheet of the XYZ Company as of April 30, 1939, and the statements of income and surplus for the fiscal year then ended, have reviewed the system of internal control...9

In 1947, the CAP developed ten generally accepted auditing standards. The second field standard, unchanged since 1947, discusses the study of internal control by the auditor, as follows:

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. 10

Subsequent to the adoption of the ten generally accepted auditing standards, a reference to the review of internal control in the accountant's report was eliminated.

A special report of the CAP, made in 1948, gave the following definition of internal control:

Internal control comprises the plan of organization and all the coordinate methods and measures adopted within a business to safeguard its assets, check the accuracy and reliability of its accounting data, promote operational efficiency, and encourage adherence to prescribed managerial policies. 11

In 1957, the definition of internal control was the subject of three articles in <u>The Journal of Accountancy</u>. Saul Levy<sup>12</sup> and Gilbert Byrne<sup>13</sup> argued that internal control was too broadly defined, thereby inviting potential misunderstanding of the independent auditor's responsibility. Paul Grady countered with arguments in favor of the broad definition. <sup>14</sup>

In October 1958, the CAP subsequently issued Statement on Auditing Procedure No. 29, entitled "Scope of the Independent Auditor's Review of Internal Control," in which internal control was subdivided into accounting and administrative controls as follows:

Accounting controls comprise...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...

Administrative controls comprise...the 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. 15

The CAP further clarified the auditor's responsibilities by stating the auditor's primary concern as being accounting controls. It indicated that administrative controls relate indirectly to the financial records and generally are not required to be evaluated by the auditor, but added that those administrative controls having an important bearing on the reliability of the financial statements should be evaluated. 16

Even though internal control had been subdivided into IAC and IAdC, the former being related to safeguarding of assets and the reliability of financial records (according to the CAP), there continued to be different interpretations of internal control, specifically IAC. R. K. Mautz and Hussein Sharaf, in <a href="https://doi.org/10.1001/jhear.1001/jh

Although there is considerable agreement on the auditor's interest in internal control and its importance to auditing, there is still some controversy over the nature of internal control itself, particularly as the term is used by auditors in such statements as the second standard of field work. The essence of the controversy is founded in the breadth of the definition. 17

The CAP, in November 1972, attempted to clarify the meaning of IAC in Statement on Auditing Procedure (SAP)

No. 54. According to the Committee, "safeguarding of assets" refers to "protection against loss arising from intentional and unintentional errors in processing

transactions and the related assets." Management decisions resulting in losses, such as a decision to sell a product at a price that proves to be unprofitable, are not considered to be evidence of inadequate IAC. Further, "reliability of financial records" refers to IAC being sufficiently reliable for accountants to prepare financial reports for external reporting. The Committee's clarification of IAC is expressed in relation to the flow of transactions, as transactions are the basic components of business operations; therefore, they are the primary subject matter of internal control. 18

In SAP No. 54, IAC and IAdC were defined as follows:

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 management's 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 management's 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.

Administrative control includes the plan of organization and the procedures and records that are concerned with the decision processes leading to management's authorization of transactions. (This definition is intended only to provide a point of departure for distinguishing accounting controls and consequently is not necessarily definitive for other purposes.) 19

Subsequent to SAP No. 54, and increasingly so since the passage of the FCPA, several writers have argued in accounting periodicals that an evaluation of IAC should not ignore IAdC. 20 In an article in the October 1976 issue of The Wisconsin CPA, Lawrence Noxon even suggested that IAdC should be certified. 21 The AICPA recognized that IAC had been developed from an auditor's viewpoint, and that quidance for management was needed when it established the Special Advisory Committee on Internal Accounting Control (SACIAC) in August 1977. Rather than suggesting a change in the definition of IAC, the SACIAC proposed that the boundaries of IAC be extended from concern over the preparation of financial statements to cover all external reporting of historical financial information, such as historical financial information included in the president's letter and in earnings releases. 22 Further, it coined the phrase "internal accounting control environment," referring to the factors having a significant impact on the selection and effectiveness of a company's accounting control procedures and techniques. The Committee concluded that a poor control environment would make some IAC inoperative, while a strong control environment can significantly complement specific accounting controls and techniques. 23

# Reports on Internal Accounting Control

Four statements covering reporting on internal control

Or IAC have been issued by the Auditing Standards Board and

its predecessors since November 1971. Since the Commission on Auditors' Responsibilities issued its final report in 1978, there has been increased expression for public reporting on IAC.

In November 1971, the CAP issued SAP No. 49, entitled "Reports on Internal Control." In this release, users of reports on internal control were divided into three major groups: "management," including directors, officers, and others who perform managerial functions; "regulatory agencies," including governmental and other agencies; and the "general public," including investors, creditors, customers, and others. The CAP concluded that reports to management and regulatory agencies serve a useful purpose. However, they also suggested that reports on IAC to the general public do not provide useful information. 24

In October 1972, the CAP issued SAP No. 52, entitled "Reports on Internal Control Based on Criteria Established by Government Agencies." This release supplemented SAP No. 49 by dealing more specifically with reports on internal control that were to be based on criteria established by governmental agencies. 25

Presently, there are a few situations in which firms provide government agencies with reports on internal control. Most members of national securities exchanges, as well as every broker or dealer registered according to the Securities and Exchange Act, file annually SEC Form X-17A-5, which requires the independent auditor to make certain

representations covering internal control. Further, some other government agencies have requirements concerning reports required on internal control. For example, the Office of Economic Opportunity (OEO) requires an auditor's appraisal of a grantee's accounting system and internal control before a substantial amount of OEO grant funds have been expended. <sup>26</sup>

Independent auditors, as a by-product of their examination of financial statements, have historically issued management letters to audit clients that have included recommendations on IAC. In August 1977, the Auditing Standards Executive Committee, the immediate predecessor of the ASB, issued SAS No. 20, "Required Communication of Material Weaknesses in Internal Accounting Control." SAS No. 20 established the requirement that the auditor communicate to senior management and the board of directors or its audit committee the material weaknesses in IAC. This requirement pertains to material weaknesses in IAC that come to the auditor's attention during an examination of financial statements made in accordance with generally accepted auditing standards, if such weaknesses have not been corrected before coming to his or her attention. 27

In July 1980, the ASB issued SAS No. 30, entitled "Reporting on Internal Accounting Control," which supercedes both SAP No. 49 and SAP No. 52. This SAS does not indicate a position on public reporting on IAC, but provides guidance to auditors for issuing public reports on

IAC. 28

The Commission on Auditors' Responsibilities, the Special Advisory Committee on Reports by Management, and the Securities and Exchange Commission have recommended public reporting on IAC. The Commission on Auditors' Responsibilities, established to evaluate the appropriate responsibilities of independent auditors, recommended public reporting on IAC as follows:

Users of financial information have a legitimate interest in the condition of controls over the accounting system and management's responses to the suggestions of the auditor for correction of weaknesses. The Commission believes those matters should be disclosed in the proposed report by management. It is consistent with the normal responsibilities for financial reporting that primary reporting responsibility be assigned to management with a report by the auditor on management's representations.<sup>29</sup>

The Special Advisory Committee on Reports by Management, formed by the AICPA to consider recommendations of the Commission on Auditors' Responsibilities, recommended that companies disseminate reports by management which include their representations on IAC. 30 On April 30, 1979, the Securities and Exchange Commission proposed that companies subject to the FCPA issue public reports on IAC. On June 6, 1980, it formally withdrew its proposed rule on public reporting on IAC; however, it strongly encouraged voluntary public reporting in its statement, as follows:

The Commission's decision to withdraw the rule proposals at this time is based, in part, on a determination that private-sector initiatives for public reporting on internal accounting control have been significant and

should be allowed to continue. The Commission believes that the action announced today will encourage further voluntary initiatives and permit public companies a maximum of flexibility in experimenting with various approaches to public reporting on internal accounting control. 31

### Summary

Internal accounting control is a subset of internal control. Management has the responsibility for a company's system of internal control. The auditor, during an examination of financial statements, generally reviews the system of IAC to determine the extent to which additional audit tests can be restricted. Until 1948, the definition of internal control was basically "safequarding assets" and "checking the accuracy and reliability of accounting data," after which time the definition was expanded to include "operational efficiency" and "encouraging adherence to prescribed managerial policies." In 1958, the expanded definition was further modified to reflect the distinction between IAC and IAdC. In 1972, in an attempt to clarify IAC, the CAP included in the definition of IAC the major objectives of IAC. Considerable disagreement continues as to the distinction between IAC and IAdC.

The ASB and its predecessors have issued four statements on reporting on internal accounting control. The last SAS issued (SAS No. 30, issued in July 1980) does not take a position on the desirability of public reporting on IAC, but provides guidance to auditors for reporting on IAC.

#### FOOTNOTES

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  - <sup>2</sup>Ibid., par. 320.01.
- The Commission on Auditors' Responsibilities, The Commission on Auditors' Responsibilities Report, Conclusions and Recommendations (New York: The Commission on Auditors' Responsibilities, 1978), p. 61.
- Auditing Standards Executive Committee, Statement on Auditing Standards No. 20 Required Communication of Material Weaknesses in Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1977), p. 3.
- <sup>5</sup>Marilyn V. Brown, "Auditors and Internal Controls: An Analyst's View," <u>The CPA Journal</u> 47 (September 1977):29.
- Auditing Standards Board, Statement on Auditing Standards No. 30 Reporting on Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1980), pars. 54-59.
- <sup>7</sup>Federal Reserve Board, <u>Verification of Financial</u>
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  <u>May 1929</u>), p. 1.
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- 18 Committee on Auditing Procedure, Statement on Auditing Procedure No. 54 The Auditor's Study and Evaluation of Internal Control (New York: American Institute of Certified Public Accountants, Inc., November 1972), pars. 13-17.
  - <sup>19</sup>Ibid., pars. 27-28.
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- <sup>21</sup>Lawrence A. Noxon, "Why Not Certify Administrative Controls," The Wisconsin CPA (October 1976):1, 21.
- 22 Special Advisory Committee on Internal Accounting Control, Report of the Special Advisory Committee on Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1979), p. 2.
  - <sup>23</sup>Ibid., p. 12.
- 24 Committee on Auditing Procedure, Statement on Auditing Procedure No. 49 Reports on Internal Control (New York: American Institute of Certified Public Accountants, Inc., 1971), par. 17.
- 25 Committee on Auditing Procedure, Statement on Auditing Procedure No. 52 Reports on Internal Control Based on Criteria Established by Governmental Agencies (New York:

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- 31 Securities and Exchange Commission, Statement on Withdrawal of Proposal to Require Reports on Internal Accounting Controls Release No. 34-16877 (Washington, D.C.: Government Printing Office, June 6, 1980).

#### CHAPTER 3

#### THE FOREIGN CORRUPT PRACTICES ACT OF 1977

## Introduction

This chapter outlines the developments leading to the passage of the Foreign Corrupt Practices Act of 1977 (FCPA), and discusses the FCPA, the rules issued, and the rules proposed (and subsequently withdrawn) by the Securities and Exchange Commission (SEC).

The FCPA requires various corporations to devise and maintain an adequate system of internal accounting control (IAC). A determination of whether preparers, auditors, and users have similar views on IAC as specified in the FCPA is a major objective of this research. Therefore, the major impetus for the research is the FCPA. Another objective of the research is to determine the usefulness of information on internal controls to the users. The impetus for this portion of the research was the SEC's proposed rules for corporations' public reporting on IAC.

# Background of the FCPA

The FCPA was signed into law on December 19, 1977.

The major impetus for the law was bribery and other illegal and questionable activities by U. S. corporations, located

both in the U.S. and around the world.

Illegal domestic political contributions by U.S. corporations first surfaced during the 1973 investigation by the Watergate Special Prosecutor of alleged illegal contributions to the Committee for the Re-election of the President. The SEC, recognizing that these activities involved matters potentially significant to investors, began its own investigation in 1974. The Commission's subsequent inquiry into circumstances surrounding the illegal political campaign contributions revealed violations of the federal securities laws. As a result, the SEC investigations culminated in injunctive actions against nine corporations during the one-year period following the spring of 1974.

Corporate misconduct was not limited to the domestic scene. In April 1975, during a routine investigation of United Brands Corporation, the SEC became aware that a substantial illegal payment had been made to the president of Honduras. In the same month, reports of sensitive foreign payments arose in congressional oversight hearings related to Lockheed Corporation's loan guarantee program. Shortly thereafter, Gulf Oil Corporation admitted to paying 4.2 million dollars to foreign officials to shield assets.<sup>2</sup>

In September 1975, based on the apparent magnitude of the corrupt misconduct, the SEC determined that, in addition to its traditional investigative and enforcement activities, new techniques imposing less strain on its staff resources would be necessary. Thus, the voluntary

disclosure program was born.

This voluntary disclosure program requires that a company discovering a potential disclosure problem with respect to questionable or illegal activities, including the improper recording or accounting of such activities, take the following steps:

- Undertake a thorough investigation of the activities which it believes may be illegal or questionable. The investigation should be conducted by outside auditors and they should report to a committee of board members who had no part in the activities under review. The committee should then prepare a detailed report to the full board.
- Issue a policy statement indicating a cessation of improper activities (and a prohibition on such activities in the future), institute appropriate implementing procedures and necessary safeguards, and establish independent monitoring.
- Consider interim public disclosure; Form 8-K would be used.
- 4. At the conclusion of the investigation, submit a final report to the Securities and Exchange Commission describing all material facts, usually on Form 8-K.<sup>3</sup>

The SEC reported partial results of the voluntary disclosure program to the Banking, Housing, and Urban Affairs

Committee of the U.S. Senate in May 1976. The report showed that eighty-nine corporations had filed pursuant to the voluntary disclosure program, while six companies had made disclosures due to SEC enforcement actions. The ninety-five companies reported the following questionable or illegal payments and related practices:

- payments to foreign officials (54)
- payments categorized as "other foreign matters" (27)
- foreign political payments (17)

- foreign sales-type commissions (29)
- domestic political contributions (26)
- other domestic matters of questionable or illegal nature (13)<sup>4</sup>

The Commission stated that most of the reported abuse involved some falsification of corporate records or the maintenance of records appearing to be inadequate. Further, the SEC stated that reports obtained as a result of enforcement actions disclosed instances of flagrant abuse of the corporate accountability system, including the establishment and maintenance of substantial off-book funds used for questionable and illegal purposes.<sup>5</sup>

According to the Commission, by 1977 more than 400 corporations had admitted to making questionable or illegal payments. The companies reported paying in excess of 300 million dollars in corporate funds. Further, these corporations included some of the largest and most widely held in the United States, as over 117 of the 400 (29.2%) were ranked in the Fortune 500. A Wall Street Journal article indicated that by 1978 over 500 corporations had been involved in questionable and illegal activities amounting to one billion dollars.

On May 12, 1976, the SEC submitted the "Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices" to the Banking, Housing, and Urban Affairs Committee of the U.S. Senate.

In addition to summarizing Commission actions relative to

its investigations of U.S. corporations involved in alleged questionable and illegal practices, the report contained proposed legislation aimed at curbing the questionable and illegal practices of U.S. corporations. The Commission proposed legislation to prohibit the falsification of corporate accounting records, an act it considers most unusual, as it violates a fundamental tenet of corporate recordkeeping, i.e., corporate accountability. A second proposal, directed at the failure of companies to record activities and the use of slush funds, would require that a company make and keep its books to accurately and fairly reflect the transactions and disposition of the assets. A third proposal suggested by the Commission would prohibit corporate officials or agents from making false and misleading statements to auditors conducting examinations of financial statements. Finally, the proposed legislation included the requirement that management establish and maintain a system of internal accounting control designed to provide reasonable assurances that the objectives of internal accounting control are achieved. 8 The objectives of internal accounting control are authorization, accountability, accessibility, and comparability. These are the same four objectives included by the CAP in the 1972 definition of internal accounting control (IAC).

Because the 94th Congress did not act on the proposed legislation, on January 19, 1977, the SEC issued Securities Exchange Act Release No. 13185, which included four rules

that:

- 1. require the keeping of accurate books and records,
- require the establishment and maintenance of an adequate system of internal accounting controls,
- prohibit the falsification of accounting records,
   and
- 4. prohibit officers, directors, or shareholders from making false statements or omitting material facts that would make the financial statements misleading to auditors.

These proposed rules comprised the basis of the Commission's proposed legislation to the Banking, Housing, and Urban Affairs Committee of the U.S. Senate. The adoption of the proposed rules was delayed, pending the outcome of congressional legislation considered by the 95th Congress in 1977.

Also in January 1977, the AICPA's Auditing Standards
Executive Committee responded to alleged abuses by U.S. corporations, and subsequent failure by auditors to detect
these abuses, by issuing Statement on Auditing Standards
(SAS) No. 17, titled "Illegal Acts by Clients." This SAS
provided guidance to auditors regarding the discovery during
an audit of financial statements of seemingly illegal client
activities, and how to report such acts. Further, guidance
was provided to the auditor concerning the consideration
that should be given to the possibility that illegal acts
have occurred. This SAS reflects, in part, the accounting
profession's efforts to rectify the weaknesses of audit

procedures pertaining to illegal acts.

# The Foreign Corrupt Practices Act of 1977

After several months of vigorous debate, the Foreign Corrupt Practices Act of 1977 was passed. The name is a misnomer, for the Act pertains to much more than "foreign" activities and practices which are "corrupt." The purpose of the FCPA, according to Senator William Proxmire, is:

...to maintain accurate books and records in as reasonable detail, as will prevent foreign corporate bribery. Corporate management is required to maintain systems of accounting controls that will insure no funds are spent to corrupt government officials...The law is intended to stop bribery...ll

The FCPA consists of 1) antibribery provisions which prohibit U.S. corporations from engaging in certain foreign corrupt practices, and 2) the accounting provisions. Although the major concern of preparers and auditors regarding the FCPA is the accounting provisions, a brief discussion of the antibribery provisions is provided for information purposes.

The FCPA makes it a criminal offense for any U.S. company to offer or make a payment to a foreign official, foreign political party, or party official or candidate for foreign political office for the purpose of obtaining, directing, or retaining business for any person or company. Companies violating this provision of the law can be fined a maximum of \$1,000,000, while guilty individuals may be fined a maximum of \$10,000 and imprisoned for a maximum of

five years. Further, the FCPA prohibits companies from paying fines imposed on its officials or agents. 12

The accounting provision portion of the law reads as follows:

- (2) Every issuer which has a class of securities registered pursuant to section 12 of this title and every issuer which is required to file reports pursuant to section (d) of this title shall --
  - (A) Make and keep books, records, and accounts, which, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the issuer; and
  - (B) Devise and maintain a system of internal accounting control sufficient to provide reasonable assurances that --
    - (i) transactions are executed in accordance with management's general or specific authorization;
    - (ii) 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:
    - (iii) access to assets is permitted only
       in accordance with management's
       general or specific authorization;
       and
    - (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

Subsections A and B of the accounting provisions have been referred to as the record-keeping and internal accounting control provisions, respectively.

David Ricchiute, in a recent article in MSU Business

Topics, indicated that the intent of this congressional

legislation was "...to require that corporations develop

and maintain internal accounting control systems sufficient to signal illegal payments and to enable preparation of accurate and fairly stated financial reports." 14

The IAC provision wording was taken verbatim from paragraph 320.28 of SAS No. 1, 15 as proposed by the SEC in its report of May 12, 1976, to the Banking, Housing, and Urban Affairs Committee of the U.S. Senate. The Commission's reasons for choosing the wording of SAS No. 1 follow:

Because the accounting profession has defined the objectives of a system of accounting control, the Commission has taken the definition of the objectives of such a system contained in our proposed legislation from the authoritative accounting literature - American Institute of Certified Public Accountants, Statement on Auditing Standards No. 1, 320.28 (1973). The Commission is satisfied that the specifications of the objectives of a system of internal accounting controls found in the accounting literature can be readily understood by issuers and accountants. 16

Since the language of the law pertaining to IAC was taken from the auditing literature, auditors and preparers may turn to the auditing literature for assistance in interpreting the FCPA. The concept of reasonable assurances, according to SAS No. 1, recognizes that the expected cost of a control should not exceed expected benefits to be derived, and the evaluation of expected costs and expected benefits is based on estimates and judgments by management. However, the lack of clarity still present in the definition of IAC has carried over to the interpretation of the FCPA.

## SEC Rules and Proposed Rules

Included in the FCPA were two of the four disclosure rules contained in the rules proposed by the SEC in January 1977, on which the Commission had postponed action.

In February 1979, the SEC issued two new rules, based on those proposed in January 1977 but not subsequently included in the FCPA, as follows:

- No person shall, directly or indirectly, falsify or cause to be falsified, any book, record or account subject to section 13 (b) (2) (A) of the Securities Exchange Act.
- No director or officer of an issuer shall, directly or indirectly,
  - (a) make or cause to be made a materially false or misleading statement, or
  - (b) omit to state or cause another person to omit to state any material fact necessary in order to make statements made in the light of the circumstance under which such statements were made, not misleading to an accountant in connection with
    - (1) any audit or examination of the financial statements of the issuer required to be made pursuant to this subject or
    - (2) the preparation or filing of any document or report required to be filed with the Commission pursuant to this passport or otherwise. 18

According to the SEC, the primary purpose of these rules parallels that of the FCPA; i.e., to strengthen the accuracy of corporate books and records, to increase the reliability of the audit process, and to prevent the use of corporate assets for corrupt purposes.<sup>19</sup>

On April 30, 1979, the SEC issued proposed rules which, if adopted, would require companies subject to the FCPA to include a statement on internal accounting control

in their annual reports.

The proposal would be implemented in two steps:

- 1. As of dates after December 15, 1979 and prior to December 16, 1980 for which audited balance sheets are required, the statement of management on internal accounting control would be required to include the following:
  - (a) Management's opinion as to whether, as of the date of such audited balance sheet, the systems of internal accounting control of the registrant and its subsidiaries provided reasonable assurances that specified objectives of internal accounting control were achieved; and
  - (b) A description of any material weaknesses in internal accounting control communicated by the independent accountants of the registrant or its subsidiaries which have not been corrected, and a statement of the reasons why they have not been corrected.
- 2. For periods ending after December 15, 1980 for which audited statements of income are required, the statement of management on internal accounting control would be required to include management's opinion as to whether, for such periods, the systems of internal accounting control of the registrant and its subsidiaries provided reasonable assurances that the specified objectives of internal accounting control were achieved. In addition, the statement of management on internal accounting control would be required to be examined and reported on by an independent public accountant for such periods.

The response to the SEC's proposed rules on IAC reporting was the largest ever received to proposed rules, with nearly 1,000 comments (almost all of which were negative) submitted to the Commission within six months of their release. What seemed to cause the most alarm among those responding to the proposed rules was the fear that reporting an accounting control flaw might mean self-incrimination under criminal provisions of the federal securities law. 21

Even though a loud cry against the SEC's proposal of public reporting on IAC was expressed, many corporations affected by the proposed rules voluntarily complied with them. Ricchiute reported voluntary compliance for 1979 to be approximately 25% to 30%. 22

As a result of the overwhelming negative response and the voluntary issuance of statements on internal accounting control, the SEC, as of June 6, 1980, withdrew the proposed rules, indicating its intent to give further consideration to rule proposals on management reports on IAC and auditor association with them based upon three years' experience. The SEC plans to monitor private-sector initiatives related to reporting on IAC and efforts to implement the broader recommendations of the Commission on Auditors' Responsibilities covering comprehensive management reports. <sup>23</sup>

# Implications of the Internal Accounting Control Provision of the FCPA

The implications of the IAC provision of the FCPA appear to be immediate and direct for preparers, while they appear to be less direct for auditors and users. Companies subject to the FCPA are now required by law to devise and maintain a system of IAC sufficient to provide reasonable assurances that the objectives specified in the Act are accomplished. The IAC provision codifies responsibilities already inherent in sound business practices. However, as Alexander Grant & Co. stated in a recent publication, the FCPA (thus, the IAC provision) is a matter of concern as

it increases the exposure of business practices and judgments to the risk of regulatory and judicial actions. 24

Failure by companies to devise and maintain systems of internal accounting control as required by the FCPA can subject them to liability under the Securities Exchange Act of 1934.

Many questions concerning IAC provisions of the FCPA have been raised, including the following:

- 1. What is an adequate system of IAC?
- 2. Does the FCPA pertain only to accounting controls or does it also include administrative controls?
- 3. How does management measure the adequacy of its system of IAC?

Even though the above questions and others remain unanswered, the SEC has urged preparers to review their systems of IAC and to take any actions necessary to comply with the requirements of the Act. 25

Independent auditors have the responsibility for reviewing a company's system of IAC during an examination of the company's financial statements. In addition, during an examination of financial statements, auditors review company activities to determine reasonable compliance with the securities laws. Although the IAC provision of the FCPA does not expressly require auditors to expand their audit tests, a material weakness in IAC may ultimately be determined to be a violation of the FCPA and, thus, an illegal

act. A violation of the IAC provision does not in itself have a direct effect on amounts presented in the financial statements. However, a corporation ultimately determined to have willfully violated the IAC provision of the FCPA could be fined up to \$10,000 for the violation. The auditor has the responsibility for considering the materiality of such a contingent monetary effect on the audited financial statements taken as a whole. Further, public accounting firms have shown considerable interest in assisting companies in evaluating their IAC, as evidenced, in part, by the many publications issued regarding evaluation of a company's system of IAC. 27

The implications of the IAC provision of the FCPA to the users of financial information are less clear. As a result of the SEC's proposed rules, a number of companies have responded voluntarily to issuing reports on IAC. The issuance of these reports can be traced to the FCPA and subsequent SEC actions. Therefore, any benefit of these reports to users would appear to be, for the most part, a result of the FCPA and subsequent SEC actions.

#### Summary

The Foreign Corrupt Practices Act of 1977 was passed as Congress' response to corporate corruption, both in the United States and in foreign countries. Although the act has "foreign" and "corrupt" in its title, it is far more encompassing than simply corruption or foreign activity.

The element of the law of most concern to auditors and management is the internal accounting control provision. provision is taken verbatim from SAS No. 1 and, most likely, the auditing literature will be used to interpret this portion of the FCPA. The SEC has administrative responsibility for the IAC provision, and has issued proposed rules relating thereto that would ultimately require that auditors attest to management's Statement of Internal Accounting Con-The SEC withdrew the proposed rules as a result of private-sector voluntary efforts to provide users information on companies' systems of IAC; however, the Commission will monitor private-sector efforts for the next three years to determine whether rules concerning public reporting of IAC should be reissued. The FCPA has immediate and direct implications for management, as it has the responsibility for establishing and maintaining the companies' systems of IAC.

#### FOOTNOTES

- <sup>1</sup>U.S., Congress, Senate, Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices, 94th Cong., 2nd sess., 1976, p. 3.
- Advisory Committee on Corporate Disclosure, Report of the Advisory Committee on Corporate Disclosure to the Securities and Exchange Commission (Washington, D.C.: Government Printing Office, November, 3, 1977), p. 697.
- <sup>3</sup>U.S., Congress, House, <u>SEC Voluntary Compliance Program on Corporate Disclosure</u> Staff Study by the Subcommittee on Oversight and Investigations of the Committee on Interstate and Foreign Commerce, 94th Cong., 2nd sess., June 1976, p. 3.
- Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices, pp. 37-40.
  - <sup>5</sup>Ibid., pp. 41-42.
- 6Securities and Exchange Commission, Regulation 13B-2, Maintenance of Records and Preparation of Required Reports (Washington, D.C.: Government Printing Office, February 1979).
- <sup>7</sup>Burt Schorr, "Questionable Payments Drives Stimulates Competition, Tougher Internal Control," The Wall Street Journal, 23 June 1978, p. 34.
- Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices, p. 58.
- <sup>9</sup>Securities and Exchange Commission, <u>Securities</u> <u>Exchange Act Release No. 13185</u> (Washington, D.C.: Government Printing Office, January 19, 1977).
- On Auditing Standards Executive Committee, Statement
  On Auditing Standards No. 17 Illegal Acts of Clients
  (New York: American Institute of Certified Public Accountants, Inc., 1977), p. 1.
- 11 Felix Pomeranz, "A Corporate Response to the Foreign Corrupt Practices Act," Journal of Accounting, Auditing & Finance 1 (Fall 1978):70.
- 12U.S., Congress, House, Securities Exchange Act of 1934, Amendment, Public Law 95-213, 95th Cong., 1st sess., December 19, 1977.

- 13<sub>Ibid</sub>.
- 14 David N. Ricchiute, "Illegal Payments, Deception of Auditors, and Reports on Internal Controls," MSU Business Topics 28 (Spring 1980):57.
- 15 Committee on Auditing Procedure, Statement on Auditing Standards No. 1 Codification of Auditing Standards and Procedures (New York: American Institute of Certified Public Accountants, Inc., 1973), par. 320.28.
- 16 Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices, p. 59.
  - 17 Statement on Auditing Standards No. 1, par. 320.32.
  - 18 Securities and Exchange Commission, Regulation 13B-2.
  - 19 Ibid.
- 20 Securities and Exchange Commission, Statement of Management on Internal Accounting Control Release No. 34-15772 (Washington, D.C.: Government Printing Office, April 30, 1979).
- <sup>21</sup>Burt Schorr, "SEC Proposal on Accounting Disclosures is Likely to be Changed Due to Criticism," The Wall Street Journal, 22 October 1979, p. 8.
  - <sup>22</sup>Ricchiute, pp. 57-62.
- 23 Securities and Exchange Commission, Statement on Withdrawal of Proposal to Require Reports on Internal Accounting Controls Release No. 34-16877 (Washington, D.C.: Government Printing Office, June 6, 1980).
- Accounting Control (Chicago: Alexander Grant & Co., 1979), p. 6.
- 25 Securities and Exchange Commission, Accounting Series Release 242 Notification of Enactment of Foreign Corrupt Practices Act of 1977 (Washington, D.C.: Government Printing Office, February 16, 1978).
- 26 Auditing Standards Board, AICPA Codification of Statements on Auditing Standards Numbers 1 to 23 (New York: American Institute of Certified Public Accountants, Inc., 1979), pars. 9328.03-9328.06.
- <sup>27</sup>Several publications issued by public accounting firms are as follows:

Albert S. Martin, Jr. and Kenneth P. Johnson, Assessing Internal Accounting Control: A Workable Approach (New York: Coopers & Lybrand, 1978); Alexander Grant & Co., Guide to Evaluating and Reporting on Internal Accounting Control (Chicago: Alexander Grant & Co.); Arthur Andersen & Co., A Guide for Studying and Evaluating Internal Accounting Controls (Chicago: Arthur Andersen & Co., 1978); Touche Ross & Co., Controlling Assets and Transactions (New York: Touche Ross & Co., 1979); Arthur Young & Co., Evaluating Accounting Controls - A Systematic Approach (New York: Arthur Young & Co., 1980); Ernst & Ernst, Evaluating Internal Control: A Guide for Management and Directors (Cleveland: Ernst & Ernst, 1978).

#### CHAPTER 4

#### PRIOR RESEARCH

# Introduction

This study involved, among other things, auditors, preparers, and users rendering "judgments" on various internal control procedures. Comparisons were made between the judgments rendered by the three groups to determine if those judgments were similar. Prior studies have been conducted on the consistency of auditors' internal control judgments. Although the auditors' judgments in those studies were not compared to other groups, the consistency of auditors' judgments are tangentially related to this research, as the prior research and this research deal with both internal controls and auditors' judgments. The researcher was unable to locate prior studies which compared judgments made on internal controls by one of these groups with either of the other two groups.

Further, this research includes users' evaluations of the importance of information on internal control for investment decisions. In this chapter, prior research regarding users' needs for information on internal control for investment decisions is reviewed. In addition, this chapter includes a review of recent research of internal control in U.S. corporations.

Research of auditors' internal control judgments has dealt with the consistency of those judgments. Consistency of auditors' judgments has been divided into three types, las follows:

- "Judgment stability" is agreement over time between the judgments of the same auditor using the same data.
- 2. "Judgment consensus" is agreement among the judgments of different auditors using the same data at the same point in time.
- 3. "Judgment insight" is agreement between the auditor's subjective description of his judgment process and an objective description derived from mathematical or statistical techniques.

Research relating to all three types of consistency in relation to internal control judgments was conducted by Robert Ashton<sup>2</sup> in 1973, and Robert Ashton and Paul R. Brown<sup>3</sup> in 1979. R. E. Hamilton and W. F. Wright's<sup>4</sup> research in 1977 dealt with judgment consensus and judgment insight, while Philip M. J. Reckers and Martin E. Taylor's<sup>5</sup> 1979 research dealt with judgment consensus.

In addition, research directed by Robert K. Mautz<sup>6</sup> regarding internal accounting control of U.S. corporations is discussed in this chapter. Also, Marilyn V. Brown's<sup>7</sup> survey of users of financial information concerning their

need for information on IAC is summarized and critiqued.

Each of the aforementioned research studies is covered by first summarizing the research, including methodology used and results, then discussing any weaknesses.

# Research of Auditors' Internal Control Judgments

Four research studies of auditors' internal control judgments are discussed. After the four studies are presented, their relevance to this research is discussed.

# Ashton

In 1973, Ashton studied auditors' judgment inconsistency in the evaluation of a hypothetical internal control situation. The sixty-three practicing auditors who served as subjects in the experiment were selected on a judgmental basis. The majority of them were relatively inexperienced, having worked only two or three years. The experiment consisted of providing each subject with six questions on payroll internal control, each of which was preanswered either "yes" or "no" to form a situation. Each subject made thirty-two judgments of internal control as a function of thirty-two different combinations of "yes" and "no" answers to the six indicators. The judgments were made on a six point scale of "extremely weak" to "adequate to strong." The experiment was repeated with each auditor in order to assess individual auditor consistency over time, as well as measuring consistency across auditors. In general, the judgments of the sixty-three auditors studied were found

to exhibit a fairly high level of consistency, both over time for each auditor (average correlation was .81) and across auditors (average correlation was .70). 8 In addition, the average correlation of the insight index computed for each auditor was .89.9

The subjects utilized in Ashton's study were not randomly selected, thus the generalizability of the research is limited. Further, Reckers and Taylor suggest the task assigned in the study may have been artificial, as Ashton's cases contained only six indicators of payroll internal control, whereas most standard internal control questionnaires list in excess of twenty questions for payroll. 10

# Hamilton & Wright

In 1977, Hamilton and Wright replicated, in part, the 1973 Ashton study. They omitted two of Ashton's original six internal control questions and divided the two separation-of-duties questions into three questions in order to isolate more detailed classification of the separation of duties. The subjects of this study were seventeen auditors from a national CPA firm's Minneapolis office. The years of experience of the subjects ranged from one to twenty-eight years. The subjects were presented with all thirty-two combinations of the five pre-answered "yes" and "no" questions.

The result of consistency between auditors found by Ashton was affirmed in this study, as the average

correlation for pairwise comparisons of judgments for all seventeen subjects was 0.66. However, further analysis by the researchers revealed that more experienced auditors displayed more consensus than less experienced auditors. The researchers also tested for judgment insight by correlating beta weights from the subjects' judgment model to subjective weights reported by the subject. The results indicated considerable self-insight as revealed by a correlation of 0.87. 11

As in the case of the Ashton study, the subjects were not randomly selected, and only five internal control questions were used. Therefore, it would appear that the criticism of Ashton's 1973 study by Reckers and Taylor regarding artificiality could be leveled against this research.

# Ashton & Brown

The Ashton 1973 study was extended by Ashton and Brown in 1979 to include, among other changes, two additional internal control questions (eight questions), five times as many cases (160 cases), and two different cue orders. The subjects were thirty-one practicing auditors from seven of the "Big Eight" public accounting firms. The experience levels of these subjects were significantly lower than those Of Ashton's 1973 study.

The results of this study were similar to Ashton's

Previous study, as the average values (average correlations)

Of consensus, insight, and stability were 0.67, 0.86, and

0.91, respectively. Further, the researchers found an absence of any order effect, which lends credibility to prior research in which all subjects were provided cues in the same order. 12

As in the previous study by Ashton, subjects were subjectively selected; however, in this research effort, both more questions and more hypothetical cases were provided to the subjects than in Ashton's previous research.

# Reckers & Taylor

Reckers and Taylor's research in 1979 was an extension of Ashton's 1973 study. Thirty auditors were selected on a nonrandom basis and were asked to evaluate internal control for payroll, based on a lengthy payroll questionnaire (thirty-six control procedures). The control procedures were preanswered "yes" or "no," and five cases were developed. Each auditor assigned a reliability rating to each of the five cases. The research result was an average inter-rater correlation of 0.1554; thus, a high variability among auditors. The researchers reported a higher inter-rater correlation between more experienced auditors than less experienced auditors. The researchers suggest that differences in the results between this study and Ashton's 1973 study may be due to the complexity of the task (thirty-six variables versus five). 13

Like the previous studies, the subject selection was nonrandom; thus, generalization is limited. Further,

although there was a difference between mean consensus indexes of the more experienced auditors and the less experienced, Ashton's review of this research found that the difference was not significant at the 0.10 alpha level. 14

# Summary

The foregoing studies dealt with auditors' internal control judgments, as does this research. Each of the studies reviewed was limited to comparisons among auditors, as no attempt was undertaken to make comparisons to other parties. This research, on the other hand, makes comparisons of auditor judgments of internal controls with judgments of preparers and users, but does not make comparisons among auditors. Subjects in the previous four studies were selected on a judgmental basis, thus limiting generalizability; whereas, subjects in this research were selected randomly. This random selection allows for greater generalizability of the results than if the sample selection had been made on a judgmental basis.

### Mautz

Mautz<sup>15</sup> directed research by seven University of Michigan professors on the subject of internal control in U.S. corporations. This research, which commenced after the passage of the Foreign Corrupt Practices Act of 1977, was designed to determine what corporations are doing in the area of internal control. The research approach included on-site interviews with corporate executives of fifty

randomly selected U.S. corporations and a questionnaire mailed to 2,000 U.S. corporate executives, of which 673 responded.

The major findings of their research that appear to relate directly to this researcher's study include the following:

- Most executives contend that there are conceptual distinctions among internal accounting control, internal control, and management control.
- 2. Executives who hold a narrow view of internal control see it as the responsibility of the controller's department, with the internal audit staff assuming a monitoring role. Executives who hold a broader view of internal control consider it a shared management responsibility, with the controller and internal audit staff having a leading role.

Overall, this study contributed significantly to the research on internal control, as it examined the present state of internal control in U.S. companies. The results listed above are views on internal control held by preparers. However, comparisons to other parties (i.e., auditors and users), are lacking. This research compares the views of preparers with those of auditors and users.

## Brown

In 1977, Brown conducted a telephone survey of twentyseven investment research executives and securities analysts
selected on a judgmental basis to determine their view of
internal control and their desired reporting on internal
accounting control. The research indicated that analysts
do not share auditors' distinctions between accounting controls and administrative controls. Brown stated that
analysts' views of internal controls appear to correspond
more closely to the 1948 definition by the Committee on
Auditing Procedure than to the narrower definition of
accounting controls now in use. Further, the researcher
found that analysts desired public reporting on internal
controls, and a fairly comprehensive statement including an
appropriate description of any material weaknesses and comments concerning corrective action taken or being taken. 16

Although Brown did not use random selection of participants and no statistical measurement of the results was conducted, her research is a first step toward acquiring information from users on internal control. The weaknesses in Brown's research were overcome by the research discussed in this dissertation. Users were selected randomly and, where possible, the results were measured in statistical terms.

## Summary

Considerable research has been conducted concerning auditors' internal control judgments. Several researchers using five to eight internal control questions found auditor judgment consensus to be fairly high, based on an interrater correlation. They also found high auditor judgment stability and insight.

Research by Reckers and Taylor was conducted using a payroll internal control questionnaire containing thirty-six questions. The inter-rater correlation measure of judgment consensus was quite low (0.16) compared to researchers using five to eight questions (0.66 to 0.70).

Mautz's recent research into internal control was a descriptive study of the state of the art of internal control in U.S. corporations. It was limited to "what is" versus "what should be." Further, it was limited to views of preparers, as views of auditors and users were not solicited.

Based on her research, Brown concluded that analysts desire public reporting on internal control. Further, she indicated that analysts' views on internal control tend to be broader than the auditors' present definition of accounting controls.

#### FOOTNOTES

- Robert H. Ashton, "Comment: Some Observations on Auditors' Evaluations on Internal Accounting Controls,"

  Journal of Accounting, Auditing & Finance 2 (Fall 1979):57.
- <sup>2</sup>Robert H. Ashton, "Judgmental Formation in The Evaluation of Internal Control: An Application of Brunswik's Lens Model" (Ph.D. dissertation, University of Minnesota, 1973).
- Robert H. Ashton and Paul R. Brown, "Descriptive Modeling of Auditors' Internal Control Judgments: Replication and Extension," <u>Journal of Accounting Research</u> 18 (Spring 1980):269-277.
- <sup>4</sup>R. E. Hamilton and W. F. Wright, "The Evaluation of Internal Controls Over Payroll" (Research Paper No. 397, Stanford University, December 1977).
- <sup>5</sup>Philip M. J. Reckers and Martin E. Taylor, "Consistency in Auditors' Evaluations of Internal Accounting Controls," <u>Journal of Accounting</u>, <u>Auditing & Finance</u> 2 (Fall 1979):42-55.
- 6Robert K. Mautz et al., <u>Internal Control in U.S.</u>

  <u>Corporations: The State of the Art (New York: Financial Executives Research Foundation, 1980).</u>
- <sup>7</sup>Marilyn V. Brown, "Auditors and Internal Controls: An Analyst's View," <u>The CPA Journal</u> 47 (September 1977): 27-32.
- <sup>8</sup>Robert H. Ashton, "An Experimental Study of Internal Control Judgments," <u>Journal of Accounting Research</u> 12 (Spring 1974).
- <sup>9</sup>Robert H. Ashton, "Cue Utilization and Expert Judgments: A Comparison of Independent Auditors With Other Judges," <u>Journal of Applied Psychology</u> 59 (August 1974): 441.
  - 10Reckers and Taylor, p. 46.
  - 11 Hamilton and Wright.
  - <sup>12</sup>Ashton and Brown, pp. 269-277.
  - 13 Reckers and Taylor.
  - 14 Ashton, "Observations on Auditors' Evaluations," p. 64.

- 15<sub>Mautz.</sub>
- 16 Brown.

#### CHAPTER 5

# THE DEVELOPMENT OF RESEARCH HYPOTHESES AND THE QUESTIONNAIRE

## Introduction

The bases for this research, thus the research hypotheses, stem from the passage of the Foreign Corrupt Practices Act of 1977 (FCPA) and reporting requirement proposed by the Securities and Exchange Commission (SEC), which has subsequently been withdrawn. 1 The FCPA requires companies subject to the FCPA to establish and maintain a system of internal accounting control (IAC) sufficient to accomplish the objectives of IAC according to the professional auditing literature (SAS No. 1:320.28). On April 30, 1979, the SEC proposed rules which, if adopted, would have required companies subject to the FCPA to issue a statement on IAC to the public. On June 6, 1980, the SEC withdrew the proposed The Commission indicated that voluntary privatesector efforts on public reporting of IAC would be monitored for three years, after which it would determine whether rules on public reporting would again be proposed and perhaps adopted.<sup>3</sup>

Several questions have been raised concerning the FCPA, including those addressed in this research. This research

addresses three major categories of questions, as follows:

- 1. Do preparers, auditors, and users agree on what constitutes internal accounting control and internal administrative control (IAdC)?
- 2. Regardless of the label--IAC or IAdC--attached to a control procedure, do preparers, auditors, and users agree on which controls may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA?
- 3. Is information on internal controls useful to users for making investment decisions?

In this chapter, the research hypotheses and their development will be discussed. Further, the development of the questionnaire will be presented.

# Development of Research Hypotheses

# IAC vs. IAdC

The discussion concerning IAC and IAdC did not originate with the FCPA. The phrases IAC and IAdC were first described in auditing standards in 1958, when the Committee on Auditing Procedure (CAP) issued Statement on Auditing Procedure (SAP) No. 29<sup>4</sup> in which the CAP discussed the auditors' responsibilities for the evaluation of internal control in conducting an examination of financial statements. In 1972, the CAP attempted to clarify IAC by stating four general objectives of IAC. IAdC was defined by CAP in 1972, but only to differentiate it from IAC.<sup>5</sup>

The FCPA's internal accounting control provision is taken from the auditing standards; therefore, the controversy over whether controls are IAC or IAdC has become part of the discussion concerning the FCPA. Although most discussions on types of controls center on IAC and IAdC, some writers suggest that internal control could be divided into three or more types of controls, or that the effectiveness of IAC is dependent either on other controls, or on an environment conducive to IAC. The FCPA specifies IAC, but does not mention IAdC.

Given that Congress specifically used the term internal accounting control in the FCPA, and that preparers, auditors, and users are involved, do they agree on what constitutes IAC? Auditors review IAC of their audit clients during an examination of their financial statements. If preparers and auditors to not agree on what constitutes IAC, a corporation's system of IAC that the preparer believes is adequate may be considered less than adequate by the auditor. Different perceptions of the corporation's system of IAC by auditors and preparers may be a result of different IAC frames of reference. The result of this difference is that the auditors then expand the remaining audit tests in order to obtain sufficient evidence. Thus, considerable time and effort may be wasted due to a basic disagreement as to what constitutes IAC. If auditors are required to attest to the preparers' statement on IAC, as previously proposed by the SEC, a different frame of reference between auditors and

preparers could result in needless waste of resources.

The SEC proposed that management report on IAC to users. The SEC has withdrawn this proposal, due, in part, to voluntary private-sector reporting efforts. Therefore, public reporting on IAC results in users receiving information on IAC, who will utilize this information along with financial information to make investment decisions. If the users' frame of reference for IAC differs from that of management, then a less than optimal allocation of resources results.

For example: A company reports that there are no material weaknesses in its system of IAC. The company may mean that the accounting controls, such as separation of duties, are adequate, while the user may interpret this reporting to mean that the firm has no material weaknesses in its operational systems, such as quality control. As a result, the user may recommend that investors invest in this company; however, had the user realized that the company's frame of reference for IAC was limited to accounting controls, this recommendation to investors may not have been given.

Research questions A through C deal with the understanding of preparers, auditors, and users regarding what constitutes IAC and IAdC. Listed under the research question are the null and alternative hypothesis for each research question.

Research Question A - Do preparers, auditors, and users
agree on what constitutes IAC and IAdC?

- H<sub>o</sub>: Preparers, auditors, and users agree on what constitutes IAC and IAdC.
- H<sub>1</sub>: Preparers, auditors, and users do not agree on what constitutes IAC and IAdC.
- Research Question B Do preparers and users agree on what constitutes IAC and IAdC?
  - H<sub>O</sub>: Preparers and users agree on what constitutes IAC and IAdC.
  - H<sub>1</sub>: Preparers and users do not agree on what constitutes IAC and IAdC.
- Research Question C Do preparers and auditors agree on
  what constitutes IAC and IAdC?
  - H<sub>o</sub>: Preparers and auditors agree on what constitutes IAC and IAdC.
  - H<sub>1</sub>: Preparers and auditors do not agree on what constitutes IAC and IAdC.

Research questions B and C pertain to preparers and users, and preparers and auditors, respectively. As discussed in Chapter 1, these groups are in direct contact, while auditors and users are not. Since auditors and users are not in direct contact, this researcher did not hypothesize agreement or disagreement concerning what constitutes IAC or IAdC for these two groups.

# Objectives of IAC

Several accountants have suggested that, although the FCPA clearly states that companies must devise and maintain

adequate systems of IAC, the distinction between IAC procedures and IAdC procedures is irrelevant. They argue that the focus must be on the objectives of IAC, and that certain IAdC procedures may be required in order for a company to be in compliance with the objectives of IAC.

Clarence Sampson, chief accountant of the SEC, speaking at the Institute of Internal Auditors' 38th International Conference in June 1979, stated that discussions about the distinction between IAC and IAdC are misguided, as the focus must be on the objectives of IAC, not on the types of controls. James Loebbecke and George Zuber, in an article in the February 1980 issue of The Journal of Accountancy, concur with Sampson as follows:

Although management and accountants alike recognize a distinction between internal accounting and internal administrative controls, it is essential to realize that the distinction is not clear. The distinguishing factor is not the control's label but, rather, whether the control is necessary for the company to achieve the broad objectives of internal accounting control.10

Thus, these authors appear to argue that some procedures classified by auditors as IAdC may be required in order for a company to be in compliance with the FCPA. Alternatively, some procedures classified by auditors as IAC may not be necessary for a company to be in compliance with the FCPA. To the degree that the IAC objectives of the FCPA are interpreted differently by preparers, auditors, and users, the value to the various parties of a "statement of management on internal control" will differ.

Therefore, an additional objective of this research was to determine whether preparers, auditors, and users are agreed, regardless of label, on controls that may be viewed as necessary to meet the objectives of IAC as specified in the FCPA. Research questions D through F deal with this objective. Listed under the research question are the null and alternative hypotheses.

- Research Question D Do preparers, auditors, and users

  have similar views of the controls that may be viewed

  as necessary to accomplish the objectives of the IAC

  provision of the FCPA?
  - H<sub>O</sub>: Preparers, auditors, and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
  - H<sub>1</sub>: Preparers, auditors, and users do not have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- Research Question E Do preparers and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA?
  - H<sub>O</sub>: Preparers and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.

- H<sub>1</sub>: Preparers and users do not have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- Research Question F Do preparers and auditors have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA?
  - H<sub>O</sub>: Preparers and auditors have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
  - H<sub>1</sub>: Preparers and auditors do not have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.

# Public Reporting on IAC

On April 30, 1979, the SEC proposed that companies issue a statement of management on internal accounting control to the public. The statement would include management's opinion as to whether the system of IAC provided reasonable assurances that specific objectives of IAC were achieved. Further, the statement would include a description of any material weaknesses in IAC communicated by the independent auditors that had not been corrected, and a statement of the reasons why corrective action had not been taken. 11 The

Commission's rationale for proposing public reporting on IAC was expressed in Release No. 34-15772, as follows:

...information regarding the effectiveness of an issuer's system of internal accounting control may be necessary to enable investors to better evaluate management's performance of its stewardship responsibilities and the reliability of interim financial statements and other unaudited financial information generated from the accounting system, and that, therefore, the proposed rules may be necessary to the interests of investors and other users of financial information. 12

On June 6, 1980, the Commission withdrew its proposed rules on public reporting on IAC. The rationale for this action was expressed in Release No. 34-16877 as follows:

The Commission's decision to withdraw the rule proposals at this time is based, in part, on a determination that the private-sector initiatives for public reporting on internal accounting control have been significant and should be allowed to continue. The Commission believes that the action announced today will further voluntary initiatives and permit public companies a maximum of flexibility in experimenting with various approaches to public reporting on internal accounting control. Further, the Commission urges similar experimentation concerning auditor association with such statements. 13

It is possible that the SEC has simply delayed instituting rules, based on its stated intention to give further consideration to public reporting on IAC and auditor association with the statements in the spring of 1982, based upon three years of experience. The Commission indicated it will monitor private-sector initiatives concerning reporting on IAC, and the practice of preparers in providing reports on IAC and engaging independent auditors

to report on these statements. 14

Over the past few years, increasing attention has been focused on management reporting of internal accounting control. Marilyn Brown surveyed twenty-seven investment research executives and securities analysts in 1977 and concluded that information on the adequacy of a corporation's internal control can be of material importance in making investment decisions; thus, it should be provided to investors. In an article in the September 1977 issue of The CPA Journal, she discussed the survey and stated:

...as a result of publicity surrounding corporate failures in recent years, analysts recognize that the quality of a company's internal controls can be an important component in the investment decision-making process.

...if the Comptroller of the Currency and the Federal Home Loan Bank Board find that information on the quality of internal control is important in determining the soundness of a financial institution; if the SEC finds it important in judging the viability of a broker/dealer; and if the awarding of government grants is contingent on adequate internal controls, that same information would be considered important to those involved in the distribution of private capital through the investment decision-making process. 16

The Commission on Auditors' Responsibilities, an independent commission established by the AICPA in November 1974 for the purpose of developing conclusions and recommendations regarding the appropriate responsibilities of independent auditors, issued its final report in 1978. This Commission stated that users of financial information are interested in whether IAC is adequate to:

1. help reduce the loss of assets through unauthorized

use, and

2. produce reliable financial information. 17

The Commission concluded that users have a legitimate interest in both the quality of IAC and management's response to auditor recommendations for correcting weaknesses in IAC. The Commission recommended that management issue a report on IAC, and that the auditors attest to management's report. Further, the Commission suggested that auditors should describe material uncorrected weaknesses not disclosed in management's report. 18

The Financial Executives Institute endorsed the Commission's recommendations and issued "Guidelines for Preparation of a Statement of Management Responsibility for Financial Statements" on June 6, 1978. The guidelines suggested that management include in its annual report its assessment of the effectiveness of the company's IAC system. 19

The AICPA formed the Special Advisory Committee on Reports by Management (Special Advisory Committee) to consider the recommendations of the Commission concerning reports by management. The Special Advisory Committee recommended that management include in the corporate annual report a management report on the financial statements, which would include information and representations on IAC. The Special Advisory Committee did not recommend that the management report describe the corporation's response to material weaknesses in IAC communicated by its independent auditors, as had been suggested by the Commission on

Auditors' Responsibilities. 20

Kenneth Johnson and Henry Jaenicke have written a book entitled <u>Evaluating Internal Control</u> since the FCPA was passed. They indicate that pressure is growing for public reporting on IAC and, further, that many corporate officers believe that such reports will <u>not</u> provide substantive benefit to users. However, they conclude that "public representations about internal control are inevitable." <sup>21</sup>

The decision by a federal court in the case of Adams v. Standard Knitting Mills, Inc., lends support to public reporting of IAC in certain cases. The auditing firm engaged to prepare a proxy statement for filing with the SEC in connection with the proposed acquisition of Standard Knitting Mills, Inc., failed to disclose weaknesses in the electronic data processing system of Chadborn, Inc. Stockholders of Standard Knitting Mills, Inc., argued that the auditor's failure to disclose material weaknesses in the electronic data processing system seriously impaired their ability to make informed judgments about the proposed merger. The court held that the EDP system's weaknesses were material, and the auditor's failure to reveal these significant weaknesses constituted a misstatement of material fact. 22

The Auditing Standards Board (ASB) and its predecessors, the Auditing Standards Executive Committee (Audsec) and Committee on Auditing Procedure (CAP), have not required public reporting on the adequacy of a company's system of IAC. In 1971, the CAP issued Statement on Auditing

Procedure No. 49, titled "Reports on Internal Control." In this release, the CAP questioned the usefulness of reports on IAC to the public, as it did not foresee the public being able to take any direct action as a result of such a report. 23

In 1977, the Audsec issued Statement on Auditing Standards No. 20, which dealt with the required communication of material weaknesses in IAC by the auditor to corporate personnel and its board of directors or audit committee. 24

There is no requirement to report weaknesses in a company's IAC system to the public. The ASB, in its recently released Statement on Auditing Standards No. 30, "Reporting on Internal Accounting Control," has not proposed to require or even endorse reporting on IAC. 25

The AICPA, in its July 26, 1979, response to the SEC concerning the SEC's proposed Statement of Management on Internal Accounting Control, questioned whether benefits to users of a report on IAC would be cost-justified. The response stated the benefits would be moderate, at best. 26

Although there is considerable support for and against public reporting of IAC, the evidence of user interest appears to be minimal. Thus, research to determine the users' perceived need for information on IAC for making investment decisions appears to be desirable.

Research question G concerns users' desire for information on internal controls, and the research hypotheses follow:

 $\underline{\textbf{Research Question G}} \ \textbf{-} \ \textbf{Do} \ \textbf{users consider information on}$ 

internal control to be important for their investment decisions?

- H<sub>O</sub>: Users consider information on internal controls to be important for their investment decisions.
- H<sub>1</sub>: Users do not consider information on internal controls to be important for their investment decisions.

If information on IAC is useful to the user, as the SEC suggests, it is possible that information on IACC may also be useful, perhaps more so than information on IAC. The importance of IAdC was recognized by the CAP in its issuance of SAP No. 54 in 1972, when it indicated that many controls defined as IAdC had important bearing on the evaluation of the system of internal control. Thus, auditors should not exclude such controls when reviewing and evaluating a company's system of internal control in the conduct of an examination of financial statements. Several others have suggested or implied that IAdC are important, as follows:

1. The Commission on Auditors' Responsibilities did not recommend reporting on IAdC; however, it did suggest that such reporting may occur in the future--

Management may wish to describe its system of administrative controls....The Commission does not wish to preclude future development of standards for the evaluation of administrative controls and for reporting on them, but rather to suggest that this is a later step in the evolution of the audit function.<sup>28</sup>

2. Marguerite Fisher, an adviser to the AICPA

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Special Advisory Committee on Internal Control, stated in a recent article that many accountants believe that IAC should not be studied to the exclusion of more important controls. The more important controls she referred to appear to be IAdC.

3. In a recent article in <a href="The Financial Executive">The Financial Executive</a>,

Harvey Guttry and Jesse Foster stress the importance of IAdC, as follows:

Regardless of where the definitional boundaries of internal accounting controls are placed, it must be emphasized that so-called administrative controls have the most bearing on the success of a business. 30

- 4. Lawrence Noxon, arguing for the certification of IAdC by auditors, states that many abuses that have haunted the auditing profession could have been avoided had IAdC been certified. 31
- 5. Finally, Marilyn Brown indicates that her research revealed that analysts' views of internal control are broader than the auditor's IAC. She suggests that they correspond more closely with the 1948 definition of internal control, which did not distinguish between IAC and IAdC. Thus, she suggests that auditors provide information on IAdC.

Therefore, research to determine the users' need for information on IAdC as compared to IAC for making investment decisions was undertaken. The research question and research hypotheses are as follows:

- Research Question H Do users place a different level of importance on information concerning IAdC than on IAC?
  - H<sub>o</sub>: Users place a different level of importance on information concerning IAdC than on IAC.
  - H<sub>1</sub>: Users do not place a different level of importance on information concerning IAdC than on IAC.

# Development of Questionnaire

A mail questionnaire approach was selected to obtain data to test the research hypotheses. Approaches used by other researchers studying internal control have included laboratory experiments and interviews. A major problem with these approaches, given a limited research budget, is that the subjects are selected on a judgmental basis rather than randomly; thus, generalizability of the research results is limited. Secondly, a great time commitment is required of a few subjects; whereas, with the mail questionnaire, only a fraction of the time is required of many subjects. In addition, this method was selected because the cost and time requirements of this approach were believed to be within the researcher's cost and time constraints.

# Survey Questions for Research Hypotheses

To obtain information with which to test the research hypotheses for research questions A-C, each respondent was requested to indicate for each of the twenty-six control procedures the "type of control." The responses available were as follows:

- a. internal accounting control (IAC)
- b. internal administrative control (IAdC)
- c. both IAC and IAdC
- d. neither IAC nor IAdC

The IAC and IAdC responses were provided for obvious reasons. The "both IAC and IAdC" response was provided, as the auditing literature suggests there is overlap between IAC and IAdC controls. The "neither IAC nor IAdC" response was provided based on the researcher's belief that some potential respondents might desire to indicate a control was neither IAC nor IAdC.

To obtain information with which to test the research hypotheses for research questions D-F, each respondent was requested to answer either "yes" or "no." The "yes" response was provided for potential respondents who viewed the control as being necessary to accomplish the objectives of the IAC provision of the FCPA. The "no" response was provided for potential respondents who did not view the control as being necessary to accomplish the objectives of the IAC provision of the FCPA.

To obtain information with which to test the research hypotheses for research questions G and H, each user respondent was requested to respond to the assertion "information concerning this control is important for investment decisions." The responses available to each respondent were as follows:

a. strongly agree

- b. agree
- c. neutral
- d. disagree
- e. strongly disagree

The researcher considered using a Likert-type scaling which would have allowed potential respondents to indicate their response by checking a point on a continuum between two extreme points; e.g., for this question, the two extreme points would have been "strongly agree" and "strongly disagree." The Likert-type scaling approach was rejected, as the researcher chose to provide five alternative responses which were clearly labeled. Two degrees of "agreement" were provided as possible responses, as well as two degrees of "disagreement." The "neutral" response was provided for potential respondents who were not in agreement or disagreement with the assertion.

## Survey Questions - Other

The researcher anticipated that, if there were differences among the three groups to the questions, the differences might be due, in part, to the respondents' knowledge of internal controls. Therefore, to obtain information on the respondents' knowledge of internal controls, each potential respondent was requested to rate his/her knowledge of internal controls. The question on knowledge of internal controls and the possible responses were as follows: In general, how would you rate your knowledge of internal

#### controls?

- a. Excellent
- b. Good
- c. Fair
- d. Less than fair

In addition, as discussed earlier in the chapter, several accountants have argued both for and against a distinction between IAC and IAdC relating to the FCPA. Since this research deals with internal control and the FCPA, the researcher deemed it appropriate to ask potential respondents whether they believe there should be a distinction between IAC and IAdC. The question and possible responses were as follows: Regarding the Foreign Corrupt Practices Act, do you believe a distinction should be made between internal accounting controls and internal administrative controls?

- a. Yes
- b. No
- c. Undecided

Appendix A contains a copy of the questionnaires mailed to auditors, preparers, and users.

## Survey Control Procedures

The questionnaire consisted of twenty-six randomly ordered control procedures that were selected judgmentally. Although there was no master list of control procedures from which the controls could be randomly selected, an attempt

was made to select a sample of control procedures which would be fairly representative of the undefined population of internal controls. The twenty-six control procedures were based on the following:

- Nine control procedures were written by the researcher based on the seven essential characteristics of IAC according to paragraphs 320.35 through 320.48 of the Statement on Auditing Standards No. 1.<sup>32</sup>
- 2. Five control procedures were selected from those instituted by Boards of Directors of corporations involved in making questionable or illegal payments according to the "Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices." These control procedures were included in the report, which was submitted by the SEC to the Committee on Banking, Housing, and Urban Affairs of the U.S. Senate. It was this report which appeared to provide most of the impetus for passage of the FCPA.
- 3. The twelve remaining control procedures were based on those published by Price Waterhouse & Co. 34 in a series of nine guides on transaction systems of financial reporting, EDP, revenues and receivables, production costs and inventories, productive assets, purchases and payables, employee

ment. These publications were developed for clients of Price Waterhouse & Co. for the review and evaluation of their systems of internal control. The emphasis in each guide is on the administrative controls for each transaction system, as, according to Price Waterhouse & Co., administrative controls establish the environment in which IAC procedures operate. The auditing standards provide little guidance on IAdC due to their emphasis on IAC, so the researcher used this highly reputable source of IAdC to obtain control procedures for use in the questionnaire.

The essential characteristic from the auditing literature pertaining to each IAC is provided as an indication of the researcher's effort to include internal accounting controls representative of the undefined population of internal accounting controls. The nine control procedures are as follows:

Question- naire Control Number	Control	Essential Characteristic
3	A manufacturing company's finished goods are physically secured in a fenced-off area until they are shipped to customers.	Access to assets <sup>35</sup>
4	The accounting personnel of a corporation are required to attend accounting seminars 40 hours each year covering	Personnel <sup>36</sup>

Question- naire Control		Essential
Number	Control	Characteristic
	subjects related to their jobs.	
13	A large manufacturing corporation uses pre-numbered job order cost sheets for recording costs incurred in each job.	Recording of transactions <sup>37</sup>
14	In a large manufacturing corporation, the maintenance of the perpetual inventory records for finished goods is assigned to a person different from the person responsible for the physical inventory.	Segregation of functions 38
16	A corporation, which uses a computer for accounting purposes, prohibits programmers from testing their own programs.	Segretation of functions 39
19	A large retailer requires all credit sales, in excess of a pre-established amount, to be approved by the sales manager.	Execution of transactions 40
23	A large retail corporation has personnel independent of the sales and accounting departments count significant inventory items annually to check the accuracy of the perpetual inventory records.	Comparison of recorded accountability with assets41
25	A manufacturing corporation's raw materials are physically secured in an area marked "off limits" for all personnel except the storekeeper.	Access to assets 42
26	A corporation requires all discounts given to customers, in excess of X%, to be approved by the director of sales.	Execution of transactions <sup>43</sup>

The five control procedures instituted by Boards of Directors of corporations involved in making questionable or illegal payments that were included in the questionnaire are listed below. No essential characteristic for each control is provided as with the IAC procedures, as such was not identified for these procedures and, unlike the previous controls, they were not selected to be representative of IAC.

Question- naire Control Number	Control
	CONCLOT
1	A large corporation has changed the composition of its Executive, Audit, and Nominating Committees of the Board of Directors to increase the proportion of outside directors on each. 44
5	A large corporation has established a new procedure requiring certification of compliance by key employees with policies prohibiting questionable practices and payments with political officials. 45
10	The Board of Directors of a large corporation has directed management to institute additional internal auditing controls to counter practices of off-the-book slush funds and misrecording of questionable payments. 46
20	A large corporation has adopted a policy requiring a change in the corporation's outside auditors every five years.47
24	A large corporation has adopted a policy requiring all firms with whom they have major contracts to agree to the public disclosure of such contracts.48

Finally, twelve control procedures were based on administrative controls suggested in Price Waterhouse & Co. publications. These IAdC procedures do not have identified underlying essential characteristics as did the IAC

procedures. However, in an effort to select a representative sample of IAdC procedures, the researcher selected them from various transaction systems. These twelve control procedures and the transaction system to which each pertains are as follows:

Question- naire Control		Transaction
Number	Control	System
2	A corporation began a financial requirements planning system to help determine the resources needed to carry out plans for marketing, production, research, capital expenditures, and diversification. 49	Financial management
6	A manufacturing corporation has instituted new quality control procedures to increase the average product quality and reduce losses from defective goods. 50	Production costs and inventories
7	In a manufacturing corporation, technical performance reports (in units produced) are provided to each production department head for their use in managing. 51	Financial reporting
8	A corporation's monthly operating results are analyzed, interpreted, and communicated to departmental managers for corrective action. 52	Financial reporting
9	To ensure that capital assets are operated at intended capacity and to plan productive asset replacement, a corporation has provided for preventative and corrective maintenance and periodic analysis of maintenance costs.53	Productive assets
11	A manufacturer has developed a long- and short-range capital	Productive assets

Question- naire Control Number	Control	Transaction System
	asset plan which considers the length of time required to plan, acquire, and put into operation related productive assets. 54	
12	A manufacturing corporation has adopted new procedures for establishing optimum stock levels for raw materials, work in progress, and finished goods inventories. Inventory levels are monitored to ensure an efficient operation. 55	Production costs and inventories
15	A corporation provides a one-year cash flow forecast, a projected income statement and balance sheet to department heads for use in their decision-making. 56	Financial management
17	After prices for a major retailer's goods are established by the marketing department executives based on their acquisition costs and the competition's prices, the finance department reviews prices to ensure adequate recognition of product costs and relevant administrative and selling expenses. 57	Revenues and receivables
18	A corporation has developed a uniform chart of accounts which defines the coding structure and classification of accounts, including a description of the types of transactions to be included in each account. 58	Financial reporting
21	A large corporation with several branches decides to use a centralized purchasing department rather than de-centralized purchasing departments for each branch. 59	Purchases and payables
22	A manufacturer has instituted a labor performance measurement system using standard labor	Employee compensation and benefits

Questionnaire Control Number

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#### Control

Transaction System

productivity and pay rates as the measure of expected time and cost performance.60

# Summary

In this chapter, the development of research hypotheses was discussed. The research hypotheses cover three areas as follows:

- 1. Are the three groups (i.e., preparers, auditors, and users) agreed as to what constitutes IAC and IAdC?
- 2. Are the three groups agreed as to which controls may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA?
- 3. Is information about internal controls useful to users for making investment decisions?

  The null and alternative hypotheses were given for each research hypothesis.

Also in this chapter, the development of the questionnaire was discussed. The questionnaire contained twentysix controls selected on a judgmental basis. Nine controls
were based on the essential characteristics of IAC according
to Statement on Auditing Standards No. 1. Five controls
were procedures instituted by Boards of Directors of companies involved in making questionable or illegal payments
according to the "Report of the Securities and Exchange

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Commission on Questionable and Illegal Corporate Payments and Practices." The remaining twelve controls were selected from Price Waterhouse & Co.'s <u>Guide to Accounting Controls</u>, which emphasizes administrative controls.

The design of the questionnaire for auditors and preparers was as follows:

- 1. Questions were asked concerning "type of control" and "objectives of IAC."
- The twenty-six controls were listed on the questionnaire.

The questionnaire for the user group was designed like the questionnaire for auditors and preparers, except that the users' questionnaire also included a question concerning the usefulness of information on internal control for investment decisions.

All questionnaires contained two general questions concerning the respondents' knowledge of internal controls and whether the respondents believed a distinction should be made between IAC and IAdC regarding the FCPA.

#### FOOTNOTES

- <sup>1</sup>Securities and Exchange Commission, Statement of Management on Internal Accounting Control Release No. 34-15772 (Washington, D.C.: Government Printing Office, April 30, 1979).
- <sup>2</sup>Committee on Auditing Procedure, <u>Statement on Auditing Standards No. 1 Codification of Auditing Standards and Procedures</u> (New York: American Institute of Certified Public Accountants, Inc., 1973), par. 320.28.
- <sup>3</sup>Securites and Exchange Commission, <u>Statement on With-drawal of Proposal to Require Reports on Internal Accounting Controls Release No. 34-16877</u> (Washington, D.C.: Government Printing Office, June 6, 1980).
- 4Committee on Auditing Procedure, Statement on Auditing Procedure No. 29 Scope of the Independent Auditor's Review of Internal Control, quoted in The Journal of Accountancy 106 (November 1958):66-67.
- <sup>5</sup>Committee on Auditing Procedure, <u>Statement on Auditing Procedure No. 54 The Auditor's Study and Evaluation of Internal Control</u> (New York: American Institute of Certified Public Accountants, Inc., November 1972), pars. 27-28.
- <sup>6</sup>John D. Lesure, "Internal Control in Hotels," <u>Lodging</u> 5 (June 1979):42-47.
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- <sup>9</sup>A. Clarence Sampson, "The Internal Auditing Profession: Challenges and Opportunities," <u>The Internal Auditor</u> 36 (October 1979):33.
- 10 James K. Loebbecke and George R. Zuber, "Evaluating Internal Control," The Journal of Accountancy 149 (February 1980):50.
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- 15 Marilyn V. Brown, "Auditors and Internal Controls: An Analyst's View, " The CPA Journal 47 (September 1977):27.
  - <sup>16</sup>Ibid., pp. 28-29.
- 17 The Commission on Auditors' Responsibilities, The Commission on Auditors' Responsibilities Report, Conclusions, and Recommendations (New York: The Commission on Auditors' Responsibilities, 1978), p. 55.
  - <sup>18</sup>Ibid., p. 62
- 19 Financial Executives Institute, Alert, Vol. 6, No. 4 (New York: Financial Executives Institute, December 3, 1979), p. 3.
- 20 Special Advisory Committee on Reports by Management, Conclusions and Recommendations of the Special Advisory Committee on Reports by Management (New York: American Institute of Certified Public Accountants, Inc., 1979), pp. 2-3.
- 21Kenneth P. Johnson and Henry R. Jaenicke, <u>Evaluating</u>
  <u>Internal Control</u> (New York: John Wiley & Sons, Inc., 1980),
  p. 161.
- <sup>22</sup>John O. Mason, Jr. and Jonathan J. Davies, "Legal Implications of EDP Deficiencies," <u>The CPA Journal</u> 47 (May 1977):22.
- 23Committee on Auditing Procedure, Statement on Auditing Procedure No. 49 Reports on Internal Control (New York: American Institute of Certified Public Accountants, Inc., 1971), p. 176.
- 24 Auditing Standards Executive Committee, Statement on Auditing Standards No. 20 Required Communication of Material Weaknesses in Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1977), par. 1.
- 25Auditing Standards Board, Statement on Auditing Standards No. 30 Reporting on Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1980).
  - <sup>26</sup>American Institute of Certified Public Accountants,

- Inc., AICPA Response to SEC Proposed Statement of Management on Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., July 26, 1979).
  - <sup>27</sup>Statement on Auditing Procedure No. 54.
  - <sup>28</sup>The Commission on Auditors' Responsibilities, p. 62.
- <sup>29</sup>Marguerite Fisher, "Internal Controls: Guidelines for Management Action," <u>Journal of Accounting</u>, <u>Auditing & Finance</u> 1 (Summer 1978):351.
  - 30 Guttry and Foster, p. 45.
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- 32<sub>Statement on Auditing Standards No. 1</sub>, pars. 320.35-320.48.
- 33U.S., Congress, Senate, Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices, 94th Cong., 2nd sess., 1976.
- 34 Price Waterhouse & Co., <u>Guide to Accounting Controls:</u> Establishing, Evaluating and Monitoring Control Systems (New York: Price Waterhouse & Co., 1979).
  - 35 Statement on Auditing Standards No. 1, par. 320.42.
  - <sup>36</sup>Ibid., par. 320.35.
  - <sup>37</sup>Ibid., pars. 320.38-320.41.
  - <sup>38</sup>Ibid., par. 320.36.
  - 39 Ibid.
  - <sup>40</sup>Ibid., par. 320.37.
  - <sup>41</sup>Ibid., par. 320.43.
  - <sup>42</sup>Ibid., par. 320.42.
  - <sup>43</sup>Ibid., par. 320.37.
- 44 Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices, p. B-6.
  - <sup>45</sup>Ibid., p. 45.
  - <sup>46</sup>Ibid., p. 46.

- <sup>47</sup>Ibid., p. B-20.
- <sup>48</sup>Ibid., p. 46.
- 49 Guide to Accounting Controls, p. 9-17.
- <sup>50</sup>Ibid., p. 5-15.
- <sup>51</sup>Ibid., p. 2-21.
- <sup>52</sup>Ibid., p. 2-15.
- <sup>53</sup>Ibid., p. 6-18.
- <sup>54</sup>Ibid., p. 6-15.
- <sup>55</sup>Ibid., p. 5-15.
- <sup>56</sup>Ibid., p. 9-17.
- <sup>57</sup>Ibid., p. 4-16.
- <sup>58</sup>Ibid., p. 2-15.
- <sup>59</sup>Ibid., p. 7-13.
- 60 Ibid., p. 8-17.

#### CHAPTER 6

THE QUESTIONNAIRE: PRETEST, SAMPLING, RESPONSE, AND NONRESPONSE BIAS

### Introduction

This chapter consists of a discussion of the methods used to pretest the questionnaire, including changes made as a result of the pretesting. Secondly, the populations sampled and the selection of the potential respondents are covered. The last portion of the chapter includes the response to the questionnaire and tests for nonresponse bias.

#### The Pretest

The questionnaire was pretested through interviews with two accounting executives (preparers), two audit partners (auditors), and three Chartered Financial Analysts (users). Two of the interviews were by telephone, while the remainder were person-to-person interviews. The interviewees were selected based on their proximity to the researcher; that is, all but one were located in Michigan.

The interviewees were initially contacted by telephone and, after agreeing to participate in the pretesting of the questionnaire, were mailed a copy of the questionnaire and its accompanying cover letter to review prior to the interview.

## Response from Pretest

One of the two preparers interviewed was a controller of a U.S. manufacturing corporation, and the second a Vice President of Financial Services of a U.S. conglomerate. Both preparers expressed that, overall, the questionnaire and the cover letter were satisfactory. One preparer suggested including the definition of internal administrative control (IAdC) in the introduction to the questionnaire. (The definition of internal accounting control [IAC] was included in the introduction as it was stated in the Foreign Corrupt Practices Act of 1977.) The other preparer suggested that some controls were ambiguous, and restatement might be helpful.

Two audit partners were interviewed. One audit partner was with a "Big Eight" accounting firm, while the other was with a non-"Big Eight" firm. The audit partners stated that the questionnaire was satisfactory and did not suggest changes. One audit partner did suggest, however, that the cover letter indicate the estimated time required to complete the questionnaire.

Three Chartered Financial Analysts (CFAs) were interviewed. The first interview was with a portfolio manager, while the other two interviews were with supervisors of security research analysts. The portfolio manager expressed satisfaction with the questionnaire, but suggested that the researcher would receive greater response from CFAs by stressing that the Foreign Corrupt Practices Act of 1977

(FCPA) and the Securities and Exchange Commission's proposed rules would involve more government red tape. Further, he suggested that rather than sampling all CFAs, the more knowledgeable group of CFAs, i.e., the research analysts, should be the population of users.

Both of the other CFAs indicated the questionnaire was satisfactory, but expressed concern over the response rate. They agreed with the first CFA interviewed that research analysts would be more likely to respond than the general population of CFAs. One CFA also suggested that including the definition of IAdC in the introduction to the questionnaire would be helpful to CFAs.

## Response to Pretest Suggestions

As a result of the questionnaire pretest, the researcher took the following actions:

- Reviewed the controls as had been suggested,
   and modified two which appeared ambiguous.
- 2. Changed the cover letter accompanying the questionnaire to include an estimate of the time required to complete the questionnaire. Based on the pretests, it took an average of fifteen minutes. Therefore, the following statement was included in the cover letter: "Based on pretests, the questionnaire can be completed in less than twenty minutes."
- 3. The targeted user group was changed to research

analysts, a subset of CFAs, as it was suggested that this group was more knowledgeable than CFAs in general and, thus, would be more likely to participate.

There were two suggestions the researcher rejected, as in both cases it was felt they could bias the results. First, the suggestion to emphasize the possibility of "more government red tape" was rejected. Although this may be true, a respondent might tend to react to the questionnaire based on an attitude toward more government action rather than to the questions asked. Secondly, it was suggested by two interviewees that including the definition of IAdC might be helpful. The introduction to the questionnaire included the following:

In the past few years, internal control has been discussed considerably by accountants, auditors, Commissioners of the SEC and others. The auditing literature, in defining internal controls, suggests that there are accounting controls and administrative controls. The Foreign Corrupt Practices Act, passed by Congress in December 1977, requires that publicly held corporations maintain a system of internal accounting controls providing reasonable assurance that

- 1. "transactions are executed in accordance with management's general or specific authorization;
- 2. "transactions are recorded as necessary (a) to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements, and (b) to maintain accountability for assets;
- "access to assets is permitted only in accordance with management's general or specific authorization; and
- 4. "the recorded accountability for assets is compared with the existing assets at reasonable

intervals and appropriate action is taken with respect to any differences."

The Securities and Exchange Commission has recently issued proposed rules which, if adopted, will require management to report on the adequacy of their company's systems of internal accounting control. Further, auditors will be required to express an opinion of management's report on internal accounting control.

The definition of IAC was included, as it is part of the FCPA. The researcher rejected the suggestion of including a definition of IAdC, as it was not part of the FCPA and could possibly bias the results. The questionnaires, as modified, are contained in Appendix A.

## Populations Sampled

The three populations sampled were as follows:

- Partners of the twenty-four largest public accounting firms in the United States (auditors).
- 2. Financial executives from corporations listed in Standard & Poor's November 1979 Stock Guide,<sup>2</sup> and from the 1978 Fortune Double 500 Directory<sup>3</sup> which lists the 1,000 largest industrial corporations (preparers).
- 3. CFAs classified as research analysts and supervisors of research analysts by the Institute of Chartered Financial Analysts (users).

## Auditors

The population of auditors was restricted to partners

of public accounting firms (twenty-four) with fifteen or more

SEC clients. Since the FCPA pertains to SEC firms, the auditors most likely to be affected by the FCPA (and thus more knowledgeable) would be auditors of SEC firms. The auditors' population was restricted to partners, based on the researcher's belief that they are the most knowledgeable group in the public accounting firms. The AICPA listing of the CPA firms as of July 9, 1979, included in the SEC practice section, was used in selecting the public accounting firms from which partners would be selected for this study. The AICPA listing contained the number of SEC clients for each firm. The firms selected and the number of SEC clients for each firm are shown in Table 6-1.

The total number of SEC clients of the firms listed by the AICPA is 8,596; thus, the twenty-four firms listed audit approximately 95% of the total. The "Big Eight" public accounting firms audit 7,176, or approximately 88% of the SEC clients audited by the twenty-four largest public accounting firms.

#### Preparers

The preparers sampled consisted of 300 high ranking financial executives of corporations listed in Standard & Poor's November 1979 issue of Stock Guide, and an additional 300 high ranking financial executives from 1978 Fortune

Double 500 Directory. The Stock Guide lists the top 1,000 industrial corporations and over 8,000 smaller corporations whose stock is traded publicly. The two populations

TABLE 6-1
PUBLIC ACCOUNTING FIRMS AND NUMBER OF SEC CLIENTS

Firm		Number of SEC Clients
Arthur Andersen & Co.		1,428
Coopers & Lybrand		943
Deloitte, Haskins & Sells		625
Eisner & Lubin		22
Ernst & Whinney		927
John F. Forbes & Co.		17
Fox & Co.		101
Alexander Grant		178
Harris Kerr Forster & Co.		32
Laventhol & Horwath		144
Kenneth Leventhal & Co.		16
Main, Hurdman & Cranstoun		181
Mann Judd Landau		20
McGladrey Hendrickson & Co.		42
Meahl McNamara & Co.		40
Newman & Co.		20
Oppenheim, Appel, Dixon & Co.		18
Peat, Marwick, Mitchell & Co.		1,295
Price Waterhouse & Co.		<b>79</b> 2
A. M. Pullen Co.		20
Seidman & Seidman		70
Tait Weller & Baker		66
Touche Ross & Co.		604
Arthur Young & Co.		562
	Total	8,163

sampled result in a bias toward large firms, as reflected by the potential respondents below. The potential respondents and the size of their corporations were as follows:

	Number of firms	Percent of total
Top 500 industrial corporations	172	28.67%
Next 500 industrial corporations	180	30.00
Other corporations	248	41.33
Total	<u>600</u>	100.00%

## Users

The sample of users was restricted to CFAs classified as research analysts. The Fifteenth Directory of Members

1977-78 contains twelve functional classifications as follows:

- 1. Security or industry research analyst
- 2. Supervisor of security research analysts
- 3. Portfolio analyst, advisor, or manager
- 4. Supervisor of portfolio managers or advisors
- 5. General investment administrator
- 6. General business administrator
- 7. Bond market or stock market analyst
- 8. Economist
- 9. Investment quantitative or statistical research analyst
- 10. Professor or teacher
- 11. Other
- 12. Retired member

CFAs were selected from the four functional classifications of security or industry research analyst, supervisor of security research analysts, bond market or stock market analyst, and investment quantitative or statistical research analyst. These four functional classifications include the CFAs who

are research analysts.

The following represents a breakdown of the 600 analysts selected:

Functional Classification	Number	Percent of total
Security or industry research analyst	454	75.67%
Supervisor of security research analysts	102	17.00
Bond market or stock market analyst	28	4.67
Investment quantitative or statis- tical research analyst	16	2.66
Total	<u>600</u>	100.00%

## Sample Selection

Sample selection used for each group was based on a computer-generated random number listing. Sampling without replacement was used.

### Auditors

The AICPA List of Members 1978<sup>5</sup> was used to randomly select 500 partners in the twenty-four largest public accounting firms. A modification was required, due to firm mergers following publication of the membership listing. At the time the 1978 membership listing was published, Main Lafrentz & Co. and Hurdman & Cranstoun had not merged into the firm of Main, Hurdman & Cranstoun. For the partners selected from these two firms, the same partner name and address was used as provided by the membership listing, but the new company name was used.

In selecting auditors, the researcher first identified partners of the top twenty-four public accounting firms on each of the 1,064 pages of the membership listing. The number of partners per page ranged from zero to seventeen. A computer-generated random number listing, obtained by page and partner on the page, was used to select the 500 partners.

# Preparers

Chief financial executives were randomly selected in a two-step process, as the two listings of corporations did not indicate the chief financial executives. First, the corporation was selected, followed by selection of the chief financial executive representing that corporation.

The corporations were selected as follows:

- 1. Three hundred corporations were selected from the Stock Guide for November 1979. In some cases, a corporation was listed more than once when its stock, other than common, or bonds were listed. In all cases, only the listing for common stock was used. A computer-generated random number listing, which provided the page number and line number per page, was used to select half of the sample of preparers.
- 2. Three hundred additional corporations were selected from the 1,000 largest industrial corporations listed in the 1978 Fortune Double 500

<u>Directory</u>. A computer-generated random number listing, which provided random numbers from 1 to 1,000, was used to select the second half of the sample of preparers. Corporations, which had been selected from the population of corporations listed in the <u>Stock Guide</u>, were ignored in this selection process.

The chief financial executive for each corporation was selected from Dun & Bradstreet's Million Dollar Directory 1979, 6 as the Stock Guide and the 1978 Fortune Double 500 Directory contain only the corporation name. In a few instances, when a corporation was not listed in the Million Dollar Directory 1979, the Standard & Poor's Register of Corporations, Directors, and Executives 7 was used. These reference books list several financial executives for most corporations (such as controller, vice president for finance, and treasurer), while only one or, in a few cases, none for others. Therefore, the priority established for selecting high ranking financial executives was as follows: 8

- First either controller, comptroller, or
   Vice-President Accounting was selected.
- Second either Vice-President Finance or Chief
   Financial Officer was selected.
- 3. Third if the reference books did not list individuals with titles in the first two categories, then the Treasurer was selected.

If no high ranking financial executive was listed, then the

questionnaire was mailed to the President.

## Users

The 600 users randomly selected for this research were CFAs classified as research analysts in the <u>Fifteenth Directory</u> of <u>Members 1977-1978</u> (<u>Fifteenth Directory</u>) and the <u>1978-1979 Supplement to 1977-78 Membership Directory</u>. <sup>9</sup>

First, the analysts were identified in the <u>Fifteenth Directory</u> and its supplement. The number of analysts per page ranged from zero to fourteen. The computer-generated random numbers, which provided the page number and analyst per page, were used to select the sample of users.

# Participation of Preparers, Auditors, and Users

The questionnaire was mailed to potential respondents of each of the three sample groups on December 5, 1979. A cover letter describing the research, signed by Alvin A. Arens, Professor of Accounting, accompanied the questionnaire (see Appendix A). To encourage participation, a prepaid, self-addressed return envelope was enclosed. The questionnaires were prenumbered so that nonrespondents could be identified for a follow-up mailing.

Seventy questionnaires were returned as "undeliverable." Forty-eight of these (68.57%) had been mailed to users. This relatively high amount of "undeliverable" questionnaires appeared to be due to the obsolescence of the membership list of CFAs obtained from the Institute of Chartered Financial Analysts, even though it was the most

recent membership list published. New addresses were obtained for fifty-five of the seventy names, and the questionnaires were remailed.

On January 4, 1980, a follow-up mailing was made to the potential respondents who had not returned the questionnaire from the first mailing. The response from users was considerably less than that from preparers and auditors, so a third mailing was undertaken on January 25, 1980, to all users who had not responded to the first two mailings.

Fifty-nine questionnaires were received partially completed. After duplicating the partial response, each questionnaire, with a letter identifying the uncompleted portion and requesting the respondent to complete the questionnaire, was mailed to the respondent. Fifty-three respondents (89.83%) returned their questionnaires completed, while six did not respond to this request.

All questionnaires received as of March 14, 1980, were included in the study. The usable questionnaires returned by each group for each mailing and the applicable percentages are shown in Table 6-2.

TABLE 6-2
USABLE RESPONSES BY GROUPS

	Auditors	Preparers	Users	Total
Total potential respondents	500	600	600	1,700
Usable responses received:				
1st mailing	127	170	65	362
2nd mailing	69	84	31	184
3rd mailing	N/A	N/A	_26	26
Total	<u>196</u>	<u>254</u>	122	<u>572</u>
Percent of usable responses received	39.20%	42.33%	20.33%	33.65%

In addition to the usable responses, several potential respondents returned their questionnaires without responding to any questions about the twenty-six controls. In almost all cases, the potential respondents indicated why they did not complete the questionnaire. The unusable responses returned were as follows:

	Auditors	Preparers	Users	Total
Total potential respondents	500	600	600	1,700
Unusable responses		12	_28	69
Percent	5.80%	2.00%	4.67%	4.06%

A detailed analysis of unusable responses is presented in Tables 6-3, 6-4, and 6-5. Nearly 50% of the unusable responses from partners were from tax partners who did not believe they were qualified to complete the questionnaire. <sup>10</sup> The next largest group of unusable responses (6) was from partners having retired from active practice.

Eight of the twelve (66.67%) high ranking financial executives who returned the questionnaire unanswered cited a lack of sufficient time to complete "these types of questionnaires." The remaining four high ranking financial executives each indicated a different reason for not completing the questionnaire.

Nearly 50% of the unusable responses from CFAs were due to a lack of knowledge of the FCPA and/or internal control, or their belief that they were unqualified. Five CFAs (17.86%) indicated they did not have sufficient time to complete the questionnaire.

	Number	Percent
Partner worked in tax area and did not feel qualified to complete questionnaire	14	48.28%
-	6	
Partner was retired from practice	В	20.69
Partner did not believe IAC and IAdC distinction is the issue	3	10.34
Partner simply declined to participate without stating a reason	3	10.34
Partner was not involved with SEC clients	1	3.45
Partner was not interested	1	3.45
Partner was deceased	1	3.45
Total	<u>29</u>	100.00%

TABLE 6-4
ANALYSIS OF UNUSABLE RESPONSES--PREPARERS

	Number	Percent
Preparer did not have sufficient time	8	66.67%
Preparer was not familiar with the FCPA	1	8.34
Preparer was not qualified	1	8.33
Preparer did not wish to participate	1	8.33
Against company policy to participate	_1	8.33
Total	12	100.00%

TABLE 6-5
ANALYSIS OF UNUSABLE RESPONSES--USERS

	Number	Percent
CFA was not qualified	7	25.00%
CFA was not knowledgeable of the FCPA and/or internal control	6	21.44
CFA did not have sufficient time	5	17.86
CFA was not actively engaged as analyst	3	10.71
CFA did not respond to question- naire as a matter of policy	2	7.14
CFA was "upset" with FCPA and government "red tape"	2	7.14
CFA did not believe internal con- trol is related to CFAs' work	2	7.14
CFA was retired	<u> 1</u>	3.57
Total	<u>28</u>	100.00%

The overall response rate, including both usable and unusable responses, was as follows:

	Usable	Unusable	Total	Sample Size	Percent
Auditors	196	29	225	500	45.00%
Preparers	254	12	266	600	44.33
Users	122	28	<u>150</u>	600	25.00
Total	<u>572</u>	<u>69</u>	641	1,700	<u>37.71</u> %

# Nonresponse Bias

According to Oppenheim, 11 the biggest disadvantage of the mail questionnaire approach to survey research is that

the response rate is quite often considerably less than 100%. Thus, the response may not be representative of the sample. If the nonrespondents would have responded differently than the respondents, there is a nonresponse bias in the study.

Oppenheim suggests that there are two approaches for determining whether a nonresponse bias exists. First, one could compare respondents to nonrespondents in terms of geographical location, date of birth, qualifications, etc. Secondly, one could compare the responses of early respondents with late respondents. Oppenheim indicates that respondents who submit questionnaires very late roughly approximate nonrespondents. Therefore, if it can be shown that responses from late respondents do not differ from those of early respondents, then one can assume that the respondents are representative of the original sample, and that nonresponse bias is not present. Since the researcher lacked data to test for nonresponse bias based on the first approach, the second approach was used.

To test for nonresponse bias, t-tests were conducted for each control for each group. First, the tests were conducted on "type of control" for each group, then the tests were conducted on the "objective of IAC" for each group. The values assigned to each possible response were as follows:

Type of Control	Objective of IAC
IAC = 1	Yes = 1
IAdC = 2	No = 2

Both IAC and IAdC = 3
Neither IAC nor IAdC = 4

Then, mean responses for each control were computed for the first twenty respondents and the last twenty respondents from each group, and a t-test was conducted between the means of the early and late respondents. The time periods in which these responses were received from the three groups were as follows:

Responses	Auditors	Preparers	Users
First twenty	December 13-	December 13-	December 13-
	14, 1979	14, 1979	18, 1979
Last twenty	January 22,	January 24,	February 4,
	1980-March	1980-March	1980-March
	14, 1980	14, 1980	14, 1980

If the number of respondents was increased for the test of nonresponse bias, the likelihood of differences in response due to timing of response would be reduced. Such would result because the time period between the last response of early respondents and the first response of the late respondents would be reduced. Therefore, in the judgment of the researcher, using twenty early and late respondents from each group was adequate for testing nonresponse bias.

For each group, the null hypothesis of no differences between early and late respondents was tested at the 0.05 alpha level. As the results shown in Table 6-6 indicate,

only four significant differences between the means of early and late respondents (all for auditors) are shown at the 0.05 alpha level. Therefore, the conclusion reached is that, in general, early and late respondents do not differ in their responses. If the responses of late respondents are similar to how nonrespondents would have responded, then, in general, had nonrespondents responded, they would have responded similarly to the respondents. Further, one can conclude that the respondents are representative of the original sample, which was randomly selected from the populations of auditors, preparers, and users. Therefore, the conclusion was reached that the results are generalizable to the populations from which the sample was drawn.

TABLE 6-6
T-TEST RESULTS--NONRESPONSE BIAS

Group	Research decision do not reject the null hypothesis for	8
Auditors -		
Type of Control	22 out of 26 controls	84.62
Objective of IAC	26 out of 26 controls	100.00
Preparers -		
Type of Control	26 out of 26 controls	100.00
Objective of IAC	26 out of 26 controls	100.00
Users -		
Type of Control	26 out of 26 controls	100.00
Objective of IAC	26 out of 26 controls	100.00

## Summary

The questionnaire was pretested through interviews with two auditing partners, two financial executives, and three CFAs. As a result of the pretest, minor changes were made to the questionnaire and accompanying letter of introduction. Further, the population of users was restricted from CFAs to research analysts.

The populations sampled were partners from the twentyfour largest public accounting firms in the United States,
financial executives from U.S. corporations, and CFAs classified as research analysts. The potential respondents were
selected on a random basis.

The questionnaire and a follow-up questionnaire were mailed to all potential respondents of the three groups.

In addition, potential user respondents were mailed a second follow-up questionnaire. Overall response was 45.0%, 44.33%, and 25.00% for auditors, preparers, and users respectively.

A t-test was conducted between the mean responses of early and late respondents of each group to test for non-response bias. Of a total of 156 tests, only four were significant at the 0.05 alpha level. Therefore, the researcher concluded that the respondents were representative of the samples of potential respondents.

#### FOOTNOTES

- <sup>1</sup>These classifications are functional classification codes according to the Institute of Chartered Financial Analysts.
- <sup>2</sup>Standard & Poor's Corporation, <u>Stock Guide</u> (New York: Standard & Poor's Corporation, November 1979).
- Time, Inc., The 1978 Fortune Double 500 Directory (New York: Time, Inc., 1979).
- <sup>4</sup>The Institute of Chartered Financial Analysts, Fifteenth Directory of Members 1977-78 (Charlottesville: The Institute of Chartered Financial Analysts, 1978), p. 9.
- <sup>5</sup>American Institute of Certified Public Accountants, Inc., <u>AICPA List of Members 1978</u> (New York: American Institute of Certified Public Accountants, Inc., 1978).
- 6Dun & Bradstreet, Inc., Million Dollar Directory 1979 (New York: Dun & Bradstreet, Inc., 1978).
- 7Standard & Poor's Corporation, Standard & Poor's Register of Corporations, Directors, and Executives 1979, Vol. 1 (New York: Standard & Poor's Corporation, 1979).
- <sup>8</sup>This priority listing was previously used successfully by Charles Edmund Hines, Jr. in his survey research at Michigan State University.
- <sup>9</sup>The Institute of Chartered Financial Analysts, <u>1978-1979 Supplement to 1977-78 Membership Directory</u> (Charlottes-ville: The Institute of Chartered Financial Analysts, 1978).
- 10Of the 196 partners who completed the questionnaire,
  14 labeled themselves as tax partners (7.14% of the total).
- 11A. N. Oppenheim, Questionnaire Design and Attitude
  Measurement (New York: Basic Books, Inc., 1966), pp. 3334.
  - <sup>12</sup>Ibid., p. 34.

#### CHAPTER 7

### RESULTS OF THE SURVEY--PART I

# Introduction

The results of the survey are discussed in this and the next chapters. The first part of this chapter contains a discussion of the respondents' identification of the control procedures. The identification of controls by all respondents is compared to the researcher's basis of selecting the controls. Then, identification of controls by each group is compared to the researcher's basis of selection. The second part of the chapter contains the analysis and discussion regarding the "type of control" research questions. researcher next presents analysis and discussion pertaining to the "objective of IAC" research questions. The final part of the chapter contains a summary of respondents' response to a general question regarding the distinction between IAC and IAdC. In Chapter 8, responses from users concerning the importance of information on internal control for investment decisions and the researcher's analysis of those responses are presented.

# Identification of Controls

The internal controls used in the questionnaire were selected on a judgmental basis to cover the population of internal controls as follows:

- Nine controls were based on the essential characteristics of internal accounting control (IAC) according to the professional auditing literature.
- 2. Twelve controls were based on internal administrative controls (IAdC) included in the <u>Guide to Accounting Controls</u>: <u>Establishing</u>, <u>Evaluating</u>, and <u>Monitoring Control Systems</u>, published by Price Waterhouse & Co.<sup>2</sup>
- 3. Five controls were those instituted by the Boards of Directors of corporations involved in making questionable or illegal payments.<sup>3</sup>

These controls were included in the questionnaire as follows:

- The nine controls based on the essential characteristics of IAC are controls numbered 3, 4,
   13, 14, 16, 19, 23, 25, and 26 in the questionnaire.
- 2. The twelve controls from Price Waterhouse & Co.'s publication are controls numbered 2, 6, 7, 8, 9, 11, 12, 15, 17, 18, 21, and 22 in the questionnaire.
- 3. The remaining five controls from corporations

involved in making questionable or illegal payments are controls numbered 1, 5, 10, 20, and 24 in the questionnaire.

Table 7-1 shows the combined response for preparers, auditors, and users to each of the twenty-six controls for the question regarding type of control. (The response by each group to each control is shown in Table B-1 of Appendix The controls in Table 7-1 are listed by category as selected by the researcher. Further, under IAC and IAdC categories, the controls are ranked in order of the combined response; i.e., the control procedure under the IAC category identified by the largest percentage of respondents as IAC is listed first, et cetera. The controls instituted by the Boards of Directors of corporations involved in making questionable or illegal payments are under the category labeled "Securities and Exchange Commission." These controls were not identified by the researcher as either IAC or IAdC and are listed in the order in which they are included on the questionnaire.

Both the combined percentage response of all respondents and the identification of each control is provided. The identification of controls was determined by either a majority or significant plurality as discussed below. The twenty-six controls were identified as follows:

- Fifteen control procedures were identified by a majority of all respondents.
- 2. Seven control procedures were identified by a

TABLE 7-1 Combined response for all groups--type of  $\operatorname{control}^1$ 

Question- naire Control Number		Identifi- cation of				
	IAC	IAdC	Type of Cont Both	Neither	Total	Control - All Groups
Internal						
Accounting						
Controls		•				
14	76.3%	7.0%	15.8%	0.9%	100.0%	IAC
23	68.2	6.7	23.9	1.2	100.0	IAC
13	65.5	5.5	24.9	4.1	100.0	IAC
3	57.3	13.7	24.1	4.9	100.0	IAC
16	53.9	16.4	20.3	9.4	100.0	IAC
25	48.5	18.0	28.4	5.1	100.0	IAC
19	37.2	27.3	32.5	3.0	100.0	Inconclusive
26	32.3	29.5	35.0	3.2	100.0	Inconclusive
4	17.5	29.6	15.2	37.7	100.0	Neither
Internal						
Administrati	.ve					
Controls						
7	7.6	64.2	15.0	13.2	100.0	IAdC
11	4.1	63.5	12.5	19.9	100.0	IAdC
15	4.9	58.4	21.7	15.0	100.0	IAdC
2	6.5	57.1	16.2	20.2	100.0	IAdC
6	6.7	55.3	9.0	29.0	100.0	IAdC
22	11.1	52.7	26.1	10.1	100.0	IAdC
9	6.7	52.5	24.3	16.5	100.0	IAdC
17	13.9	51.2	27.7	7.2	100.0	IAdC
12	12.5	47.0	33.8	6.7	100.0	IAdC
21	6.0	45.8	15.7	32.5	100.0	IAdC
8	20.6	27.5	48.6	3.3	100.0	Both
18	61.4	8.8	26.1	3.7	100.0	IAC
Securities						
and Exchange	:					
Commission	_					
1	5.7	45.3	24.6	24.4	100.0	IAdC
5	18.6	40.2	38.5	2.7	100.0	Inconclusive
10	46.8	7.2	43.7	2.3	100.0	Inconclusive
20	13.9	20.5	13.4	52.2	100.0	Neither
24	8.0	27.6	8.3	56.1	100.0	Neither

 $<sup>^{\</sup>mathbf{1}}$ Controls are listed by category based on the selection method by the researcher.

 $<sup>^2</sup>$ The response alternatives available to respondents were as follows: IAC = internal accounting control

IAdC = internal administrative control

Both = both IAC and IAdC

Neither = neither IAC nor IAdC

statistically significant plurality of all respondents.

3. Four controls were not conclusively identified by all respondents, as only an insignificant plurality of respondents indicated the same preference.

## Determination of Respondents' Identification of Controls

If a majority of respondents were agreed on the identification of a control procedure, then for purposes of this research the control procedure was considered to be so labeled. A plurality response for a control procedure was considered to be significant if the null hypothesis of no difference between the two most favored responses for the control procedure was rejected. Statistical significance was determined for each control using the Chi-Square One-Sample Test<sup>4</sup> as follows:

$$\chi^{2} = \sum_{i=1}^{k} \frac{(o_{i} - E_{i})^{2}}{E_{i}}$$

where O<sub>i</sub> = observed number of responses categorized
 in the ith category

E<sub>i</sub> = expected number of cases in the ith
 category

k  $\Sigma$  directs one to sum over all (k) categories i=1

The alpha level was set at 0.10. The categories of controls were limited to the two with the largest response for

each control, since the purpose of the test is to determine if there was a preference for one control label over another.

Questionnaire control number (QCN) five is shown to illustrate the calculation of this test:

			<u>I</u>	AdC	Both
	$o_\mathtt{i}$			228	218
	Ei			223	223
o <sub>i</sub>	- E <sub>i</sub>			5	-5
	χ <sup>2</sup> =	(5) <sup>2</sup> 223	+	$\frac{(-5)^2}{223}$	
	<sub>x</sub> <sup>2</sup> =	$\frac{50}{223}$	=	0.2242	

By using a Table of Chi-Square Critical Values, the significance level is determined to be between .50 and .70. Since the significance level exceeds the alpha level of 0.10, the researcher concludes that the respondents have not shown a preference in identifying QCN five as IAdC over both IAC and IAdC, even though a larger number of respondents indicated IAdC than both IAC and IAdC or any other category.

Controls identified by an insignificant plurality of all respondents were as follows:

Questionnaire Control Number	Significanc Level				
5	.50 to .70				
10	.50 to .70				
19	.10 to .20				
26	.30 to .50				

# Comparison of Respondents' Identification of Controls to Researcher's Selection Methods

A summary of the identification of controls and the comparison of the respondents' identification to the researcher's method of selecting the controls is as follows:

Method of Selec-	Identification by Respondents						
tion by Researcher	IAC	IAdC	Both	Neither	Incon- clusive	Total	
IAC	6	0	0	1	2	9	
IAdC	1	10	1	0	0	12	
SEC	<u>0</u>	<u>1</u>	<u>o</u>	<u>2</u>	<u>2</u>	_5	
Total	<u>7</u>	11	<u>1</u>	<u>3</u>	<b>4</b>	<u>26</u>	

The analysis of responses indicates that respondents clearly identified twenty-two of the twenty-six (84.62%) control procedures. This suggests that respondents are able to identify various control procedures as different types of control. The analysis also indicates that the respondents concurred with the researcher's selection of sixteen of the twenty-one (76.19%) IACs and IAdCs. This suggests a reasonable selection of controls, even though they were selected on a judgmental basis.

Additional comparisons of labels attached by respondents to questionnaire controls with selection methods by the researcher were undertaken. Table 7-2 contains the identification of each control procedure by each group. The

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IDENTIFICATION OF CONTROLS BY AUDITORS, PREPARERS, AND USERS

Question-				
naire Control		Groups		All
Number	Auditors	Preparers	Users	Respondents
Internal Accouring Controls	nt-			
3	 IAC	IAC	Inc.	IAC
4	Inc.	Neither	Inc.	Neither
13	IAC	IAC	IAC	IAC
14	IAC	IAC	IAC	IAC
16	IAC	IAC	IAC	IAC
19 23	IAC	Inc.	IAdC	Inc.
	IAC	IAC	IAC	IAC
25	IAC	IAC	IAdC	IAC
26	Inc.	Inc.	IAdC	Inc.
Internal Admin- istrative Contr				
	.015			
2	IAdC	IAdC	IAdC	IAdC
ó	IAdC	IAdC	IAdC	IAdC
7	IAdC	IAdC	IAdC	IAdC
8	Both	Both	Inc.	Both
9	IAdC	IAdC	IAdC	IAdC
11	IAdC	IAdC	IAdC	IAdC
12	IAdC	IAdC	Inc.	IAdC
15	IAdC	IAdC	IAdC	IAdC
17	IAdC	IAdC	IAdC	IAdC
18	IAC	IAC	IAC	IAC
21	Inc.	IAdC	IAdC	IAdC
22	IAdC	IAdC	IAdC	IAdC
Securities and				
Exchange Commis	sion			
1	IAdC	IAdC	Inc.	IAdC
5	Inc.	Inc.	IAdC	Inc.
10	IAC	Inc.	Both	Inc.
20	Neither	Neither	Inc.	Neither
24	Neither	Neither	Neither	Neither

IAC represents internal accounting control.

IAdC represents internal administrative control.

Both represents both IAC and IAdC.

Neither represents neither IAC nor IAdC.

Inc. represents inconclusive. Control was not clearly identified by group.

significance of a group plurality response was determined by using the Chi-Square One-Sample Test.

The identification of controls shown in Table 7-2 shows that each group identified a substantial percentage of the controls as follows:

	Percentage
Group	<u> Identified</u>
Auditors	84.62%
Preparers	84.62
Users	76.92

This suggests that each group was able to identify controls, and that auditors and preparers had a higher success rate in identifying controls than users. This success is probably due to more involvement with control procedures by auditors and preparers than by users.

Table 7-2 indicates labels attached to the controls by respondents and the researcher's selection methods as follows:

	Type of			on by Rese	
Group	Control		IAC	IAdC	SEC
Auditors					
	IAC		7	1	1
	IAdC		0	9	1
	Both		0	1	0
	Neither		0	0	2
	Inconclusive		2	1	1
		Total	2 9 =	<u>12</u>	1 5 =
Preparers					
	IAC		6	1	0
	IAdC		0	10	1
	Both		0	1	0
	Neither		1	0	2
	Inconclusive	_	2	0	2
		Total	<u><del>9</del></u>	12	<u>2</u> <u>5</u>

	Type of	Selection by Researcher			
Group	Control		IAC	IAdC	SEC
Users					
	IAC		3	1	0
	IAdC		4	· <b>9</b>	1
	Both		0	0	1
	Neither		0	0	1
	Inconclusive		<u>2</u>	_2	<u>2</u>
	•	Total	2 9 =	<u>12</u>	<u>2</u> <u>5</u>
All					
	IAC		6	1	0
	IAdC		0	10	1
	Both		0	1	0
	Neither		1	0	2
	Inconclusive		2	_0	2
		Total	<u>9</u>	12	<u>2</u> <u>5</u>

This analysis shows the auditors in agreement with this researcher's selection methods on seven of nine IAC procedures (77.78%) and on nine of twelve IAdC procedures (75.00%). The preparers agree with this researcher's selection methods on six of nine IAC procedures (66.67%) and on ten of twelve IAdC procedures (83.33%). The users agree with this researcher's selection methods on three of nine IAC procedures (33.33%) and on nine of twelve IAdC procedures (75.00%). This analysis, with the exception of users' identification of controls selected by the researcher as IAC, indicates substantial agreement between the labels attached to the Controls by the three groups and the researcher's selection methods. This provides support for the researcher's method of selecting controls, even though the selection was on a nonrandom basis.

Additional analysis of each group's response to

controls selected by the researcher on the basis of IAC and IACC is contained in Tables 7-3 and 7-4. Table 7-3 indicates the percentage of each group in agreement with the basis of the researcher's selection.

TABLE 7-3

IDENTIFICATION OF INTERNAL ACCOUNTING CONTROLS BY GROUP

Question- naire							
Control	Groups						
Number	Auditors	Preparers	Users	Total			
14	88.3%*	82.3%	43.2%	76.2%			
23	77.9*	70.4	47.5	68.2			
13	72.3*	65.7	54.2	65.6			
3	68.9*	59.4	33.1	57.2			
16	70.3*	54.3	25.6	53.9			
25	61.2*	50.2	23.7	48.5			
19	50.5*	37.8	13.7	37.2			
26	44.9*	31.2	13.6	32.3			
4	12.8	14.6	31.4*	17.5			

<sup>\*</sup>Highest group percentage response for IAC.

Table 7-3 shows that the highest percentage of agreement for eight of the nine internal accounting controls (88.89%) was by auditors. The user group had the highest percentage for the ninth control, which Table 7-2 shows was identified by all respondents as neither IAC nor IAdC. This suggests that consensus within the auditor group is greater regarding the

identification of IAC procedures than preparers and users. This result is probably due to the auditors' apparent concentration on IAC rather than other types of controls relative to other groups.

TABLE 7-4

IDENTIFICATION OF INTERNAL ADMINISTRATIVE CONTROLS BY GROUP

Question- naire				
Control Number	Auditors	Groups Preparers	Users	Total
7	63.8%	68.1%*	56.8%	64.3%
11	63.6	69.7*	50.0	63.5
15	63.3*	61.8	43.2	58.5
2	61.7*	60.2	42.4	57.0
6	53.6	58.3*	51.7	55.3
22	52.6	55.5*	47.0	52.7
9	51.5	56.7*	44.9	52.5
17	55.4*	50.8	44.9	51.1
12	51.0*	50.4	33.1	47.0
21	41.5	49.2*	45.8	45.9
8	23.5	27.2	34.7*	27.5
18	8.2	4.7	18.8*	8.8

<sup>\*</sup>Highest group percentage response for IAdC.

Table 7-4 indicates group percentage response to controls selected by the researcher on the basis of IAdC. The

group with the largest percentage labeling these controls accordingly was the preparers for six of the twelve controls, the auditors for four of the twelve controls, and users for the remaining two controls. This suggests that consensus within the preparer group is greater regarding the identification of IAdC procedures than auditors and users. This result is probably due to preparers' responsibilities extending beyond controls identified as IAC to IAdC, while auditors concentrate more on IAC procedures.

# Type of Control

In the first part of this chapter, the researcher discussed the respondents' identification of the control procedures and compared this identification to the researcher's selection methods. The remaining part of this chapter consists primarily of a discussion of the survey results as they relate to the "type of control" and "objectives of IAC" research questions.

The three research questions (Research Questions A-C) pertaining to "type of control" are as follows:

- A. Do preparers, auditors, and users agree on what constitutes IAC and IAdC?
- B. Do preparers and users agree on what constitutes
  IAC and IAdC?
- C. Do auditors and preparers agree on what constitutes IAC and IAdC?

The null and alternative hypotheses for each were given in

Chapter 5.

All potential respondents were requested to identify each of the twenty-six control procedures. Then for each control, the chi-square statistic was computed and the significance level was determined. Thus, the researcher was able to determine whether the groups were in agreement regarding the identification of a particular control procedure. The researcher was then able to generalize from the results of the statistical analysis of the controls to the research question.

## Chi-Square Test

The Chi-Square Test for Independence<sup>5</sup> was used to determine whether the groups were agreed on what constitutes IAC and IAdC. This test allowed the researcher to compare the distribution of auditor, preparer, and user responses, rather than simply determine an average (such as a mean or median) for each group.

The test statistic,  $\chi^2$ , is determined as follows:

$$\chi^{2} = \sum_{\substack{\Sigma \\ i=1}}^{r} \sum_{\substack{j=1 \\ j=1}}^{c} \frac{(O_{ij} - E_{ij})^{2}}{E_{ij}}$$

where  $O_{ij}$  = observed number of responses in ith row of jth column

- $E_{ij}$  = number of responses expected under  $H_{O}$  in ith row of jth column.  $E_{ij}$  is determined for a given cell by multiplying the ith row total for that cell by the jth column total for that cell and dividing the resultant product by the total number of respondents.
- $\Sigma$   $\Sigma$  directs one to sum over all (r) rows and all i=1 j=1 (c) columns.

Questionnaire Control Number (QCN) one, "A large corporation has changed the composition of its Executive, Audit, and Nominating Committees of the Board of Directors to increase the proportion of outside directors on each," is used to illustrate the chi-square analysis used for research questions dealing with the type of control. The following contingency table summarizes both the observed responses (top figures) and expected responses (bottom figures) to this control:

		Response					
Group	IAC	IAdC	Both	Neither	<u>Total</u>		
Auditors	12	97	36	49	194		
	11.0	88.1	47.6	47.3			
Preparers	10	114	63	67	254		
	14.4	115.3	62.4	61.9			
Users	10	46	40	22	118		
	6.7	53.6	29.0	28.8			
Column Total	32	257	139	138	566		

The chi-square test for QCN one results in a chi-square statistic of 14.18363 with six degrees of freedom, resulting in a significance level of 0.0277. Rejection of the null hypothesis of "no difference" depends upon the alpha level accepted by the researcher. The alpha level represents the risk taken by the researcher of rejecting a true null hypothesis which, for this research, was 0.1000. Therefore, the null hypothesis of "no difference" is rejected for control one. The results of the twenty-six controls will be analyzed

similarly for each question pertaining to "type of control," then the researcher will conclude whether or not to reject the null hypothesis based on the results of the twenty-six tests.

# Overall Response - Type of Control

A summary of the combined response of all three groups to the "type of control" question is shown in Table 7-5. Included in the table is the combined numerical response and the percentage response for all three groups to each control. Also included is the type of control based on the method of selection by the researcher and based on the response of the respondents. The results are included here to facilitate the discussion of the responses concerning research questions A-C. The discussion concerning the results will relate to controls as identified by the respondents.

## Research Question A

Table 7-6 contains the results of the chi-square tests used in testing the null hypotheses for controls one through twenty-six for the "type of control" research questions.

Concerning the null hypothesis of no differences among preparers, auditors, and users (Research Question A), the computed significance level is 0.1000 or less for twenty of twenty-six controls. In general, since the preparers, auditors, and users do not agree on twenty of twenty-six controls (76.92%), the researcher concludes that preparers, auditors, and users do not agree on what constitutes IAC

TABLE 7-5
SUMMARY OF COMBINED RESPONSE OF ALL THREE GROUPS--TYPE OF CONTROL

Question- naire	Type o	f Control					
Control	Based on				Respons	se <sup>3</sup>	
Number	Selection <sup>1</sup>	Respondents <sup>2</sup>	IAC	IAdC	Both	Neither	Total
1	N/A	IAdC	32 5.7%	257 45.3%	139 24.6%	138 24.4%	566 100.0%
2	IAdC	IAdC	37 6.5	324 57.1	92 16.2	115 20.2	568 100.0
3	IAC	IAC	325 57.3	78 13.7	137 24.1	28 <b>4.</b> 9	568 100.0
4	IAC	Neither	99 17.5	168 29.6	86 15.2	214 37.7	567 100.0
5	N/A	Inc.	105 18.6	228 40.2	218 38.5	15 2.7	566 100.0
6	IAdC	IAdC	38 6.7	314 55.3	51 9.0	165 29.0	568 100.0
7	IAdC	IAdC	43 7.6	365 64.2	85 15.0	75 13.2	568 100.0
8	IAdC	Both	117 20.6	156 27.5	276 <b>4</b> 8.6	19 3.3	568 100.0
9	IAdC	IAdC	38 6.7	298 52.5	138 24.3	94 16.5	568 100.0
10	N/A	Inc.	266 <b>46.</b> 8	41 7.2	248 43.7	13 2.3	568 100.0
11	IAdC	IAdC	23 <b>4.</b> 1	360 <b>63.</b> 5	71 12.5	113 19.9	567 100.0
12	IAdC	IAdC	71 12.5	267 <b>4</b> 7.0	192 33.8	38 6.7	568 100.0
13	IAC	IAC	372 65.5	31 5.5	141 24.9	23 4.1	567 100.0
14	IAC	IAC	433 76.3	<b>4</b> 0 <b>7.</b> 0	90 15.8	.9	568 100.0
15	IAdC	IAdC	28 <b>4.</b> 9	332 58.4	123 21.7	85 15.0	568 100.0

TABLE 7-5--Continued

Question- naire	Type of	f Control							
Control	Based on	2		Response 3					
Number	Selection <sup>1</sup>	Respondents <sup>2</sup>	IAC	IAdC	Both	Neither	Total		
16	IAC	. IAC	305 53.9%	93 16.4%	115 20.3%	53 9.4%	566 100.0%		
17	IAdC	IAdC	79 13.9	290 51.2	157 27.7	41 7.2	567 100.0		
18	IAdC	IAC	348 61.4	50 8.8	148 26.1	21 3.7	567 100.0		
19	IAC	Inc.	211 37.2	155 27.3	184 32.5	17 3.0	567 100.0		
20	N/A	Neither	79 13.9	116 20.5	76 13.4	296 <b>5</b> 2.2	567 100.0		
21	IAdC	IAdC	<b>34</b> 6.0	260 <b>45.8</b>	89 15.7	184 32.5	567 100.0		
22	IAdC	IAdC	63 11.1	299 52.7	148 26.1	57 10.1	567 100.0		
23	IAC	IAC	386 68.2	38 6.7	135 23.9	7 1.2	566 100.0		
24	N/A	Neither	<b>4</b> 5 <b>8.</b> 0	156 27.6	47 8.3	317 56.1	565 100.0		
25	IAC	IAC	275 <b>4</b> 8.5	102 18.0	161 28.4	29 5.1	567 100.0		
26	IAC	Inc.	183 32.3	167 29.5	199 35.0	18 3.2	567 100.0		

 $<sup>^{</sup>m l}$  The type of control is identified based on the researcher's selection process. N/A means that the control was not selected on the basis of IAC or IAdC.

 $<sup>^{2}</sup>$  The type of control as indicated by respondents.

 $<sup>^{\</sup>mathbf{3}}_{\mathbf{The}}$  responses available to the respondents were as follows:

IAC = internal accounting control

IAdC = internal administrative control

Both = both IAC and IAdC

Neither = neither IAC nor IAdC

Respondents did not clearly identify four controls. These are identified as inc. for inconclusive.

TABLE 7-6

RESULTS OF CHI-SQUARE TESTS--TYPE OF CONTROL

Question-		Significance Lo	evel
naire	A	В	С
Control	Group By	Preparers	Auditors
Number	Response	vs. Users	vs. Preparers
1	0.0277*	0.0428*	0.2910
1 2	0.0009*	0.0052*	0.2657
3	0.0000*	0.0000*	0.2236
4	0.0004*	0.0018*	0.2455
5	0.0475*	0.0082*	0.8898
6	0.4399	0.2000	0.7342
7	0.2534	0.0816*	0.7764
8	0.0991*	0.1105	0.4932
9	0.0002*	0.0034*	0.0515*
10	0.1224	0.0971*	0.7386
11	0.0011*	0.0009*	0.3672
12	0.0069*	0.0094*	0.6108
13	0.0000*	0.0000*	0.4907
14	0.0000*	0.0000*	0.1952
15	0.0089*	0.0045*	0.9121
16	0.0000*	0.0000*	0.0002*
17	0.5909	0.5861	0.7565
18	0.0000*	0.0000*	0.3291
19	0.0000*	0.0000*	0.0262*
20	0.0000*	0.0066*	0.0000*
21	0.0000*	0.0000*	0.2059
22	0.2489	0.4368	0.2565
23	0.0000*	0.0000*	0.2537
24	0.1908	0.1101	0.8221
25	0.0000*	0.0000*	0.1069
26	0.0000*	0.0000*	0.0123*

<sup>\*</sup>Hypothesis of no difference rejected at significance level of 0.1000 or less.

and IAdC.

Analysis of the agreement/disagreement of the three groups for the twenty-six controls as identified by the respondents is as follows:

Type of Control	Agreement	Dis- agreement	<u>Total</u>
IAC	0	7	7
IAdC	4	7	11
Both	0	1	1
Neither	1	2	3
Inconclusive	<u>1</u>	_3	_4
Total	<u>6</u>	20	<u>26</u>

Based on the chi-square test, the respondents of the three groups were not agreed on any of the seven controls labeled as IAC by all respondents. The three groups agreed on four of the eleven controls (36.36%), which all respondents labeled as IAdC. Finally, the three groups agreed on two of the eight controls (25.00%), which all respondents labeled as both, neither, or were unable to conclusively identify based on the labels provided by the researcher.

The six controls with a significance level greater than 0.1000, thus reflecting consensus, were as follows:

Question- naire		
Control Number	Control	Type of Control
6	Quality control procedures	IAdC
7	Technical performance reports	IAdC

Question- naire Control Number	Control	Type of Control
10	Internal auditing controls	Inconclusive
17	Review of prices by finance department	IAdC
22	Labor performance measurement system	IAdC
24	Public disclosure of contracts	Neither IAC

This analysis suggests that there is limited agreement on controls identified as IAC. but no agreement on controls identified as IAC. Analysis given later in this chapter of responses of preparers and users and preparers and auditors relating to research questions B and C, respectively, suggests that, for the most part, responses from users have indicated the general lack of agreement of the three groups concerning these controls.

#### Research Question B

Concerning the null hypothesis of no differences between preparers and users (Research Question B), the significance level, according to Table 7-6, is 0.1000 or less for twenty-one of twenty-six (80.77%) controls. In general, the research concludes that preparers and users do not agree on what constitutes IAC and IAdC.

The type of controls as labeled by the respondents of the three groups and the agreement/disagreement of the preparers and users are as follows:

Type of Control	Agreement	Dis- agreement	Total
IAC	0	7	7
IAdC	3	8	11
Both	1	0	1
Neither	1	2	3
Inconclusive	<u>o</u>	_4	_4
Total	<u>5</u>	21	<u>26</u>

These responses indicate that preparers and users do not agree, based on the chi-square results, on any controls identified as IAC by the respondents of the three groups. Preparers and users are in agreement on only three of eleven controls (27.27%), which respondents labeled as IAdC. Lastly, the two groups agree on two of seven controls (28.57%), which respondents labeled as both, neither, or were unable to conclusively identify.

The five controls with a significance level greater than 0.1000, thus reflecting consensus, were as follows:

Question- naire Control Number	Control	Type of Control
6	Quality control procedures	IAdC
8	Communication of monthly operating results	Both IAC and IAdC
17	Review of prices by finance department	IAdC
22	Labor performance measurement system	IAdC
24	Public disclosure of contracts	Neither IAC nor IAdC

This analysis shows limited agreement on controls identified as IAC and no agreement on controls identified as IAC or controls that were not conclusively identified. The number of controls identified as either both or neither are too few to warrant generalizations. Although there is limited agreement on IAdCs, agreement on only 27.27% suggests that, in general, preparers and users are not agreed on this category of controls. In general, this researcher concludes that preparers and users are not agreed on either significant subset, IAC or IAdC, of controls.

# Research Question C

Finally, concerning the null hypothesis of no differences between auditors and preparers (Research Question C), according to Table 7-6, the significance level is less than 0.1000 for five of twenty-six controls. In general, since the auditors and preparers agree on twenty-one of twenty-six controls (80.77%), the researcher concludes that auditors and preparers agree on what constitutes IAC and IAdC.

The type of controls as labeled by the respondents and the agreement/disagreement of the auditors and preparers are as follows:

Type of Control	Agreement	Dis- agreement	<u>Total</u>
IAC	6	1	7
IAdC	10	1	11
Both	1	0	1
Neither	2	1	3
Inconclusive	_2	<u>2</u>	4
Total	<u>21</u>	<u>5</u>	<u>26</u>

Thus, auditors and preparers agree on six of seven controls (85.71%) labeled by all respondents as IAC, ten of eleven controls (90.91%) that all respondents labeled as IAdC, and five of the remaining eight controls (62.50%) that all respondents labeled as both, neither, or were unable to conclusively identify.

The five controls with a significance level less than 0.1000, thus reflecting disagreement, were as follows:

Question- naire Control Number	<u>Control</u>	Type of Control
9	Preventative and corrective maintenance program	IAdC
16	Segregation of functions	IAC
19	Execution of transactions	Inconclusive
20	Rotation of auditors	Neither IAC nor IAdC
26	Execution of transactions	Inconclusive

The auditors and preparers disagreed on two controls that respondents from all groups were unable to conclusively

identify and on one control each labeled IAC, IAdC, and neither. Although there is limited disagreement, it appears to be spread across the various categories of controls. This suggests that overall there is no significant disagreement of controls of any categories of internal controls used in this research.

The researcher did not request that respondents indicate their reasoning for identifying controls; therefore, this research does not yield a conclusive answer for the high degree of agreement. However, this researcher believes it may relate to two things. First, auditors and preparers have extensive contact during audit engagements. Secondly, preparers who are CPAs were auditors previously, and thus may still view internal controls much as auditors do.

#### Auditors and Users

No research question was directed at the possible differences between auditors and users, since this was not part of the original objectives of the research. Since the researcher has concluded 1) preparers, auditors, and users are not agreed on what constitutes IAC and IAdC; 2) preparers and users are not agreed on what constitutes IAC and IAdC; and 3) auditors and preparers are agreed on what constitutes IAC and IAdC; and IAdC; it would seem to follow that auditors and users would not agree on what constitutes IAC and IAdC. Rather than rely on this implication, the researcher, based on a hypothesis of "no differences," computed

chi-square statistics for the response from auditors and users to the twenty-six controls. Table B-5 in Appendix B contains the computed significance level for each control. The significance levels for twenty-two of twenty-six controls (84.62%) were below the alpha level of 0.1000 selected by the researcher. In general, the researcher concludes that the auditors and users do not agree on what constitutes IAC and IAdC. Thus, the statistical tests support the logical tentative conclusion of "no differences."

## Summary of Major Conclusions - Type of Controls

The major conclusions concerning the agreement/disagreement of the three groups on what controls constitute IAC and IAdC depend on how representative the sample of controls is of the undefined population of controls. To the degree that the twenty-six controls are representative, based on the results of the chi-square tests, the researcher concludes the following:

- Preparers, auditors, and users do <u>not</u> agree on what controls constitute IAC and IAdC.
- Preparers and users do <u>not</u> agree on what controls constitute IAC and IAdC.
- 3. Auditors and preparers are in agreement on what controls constitute IAC and IAdC.
- 4. Auditors and users do <u>not</u> agree on what controls constitute IAC and IAdC.

## Objectives of IAC

The three research questions (Research Questions D-F) pertaining to "objectives of IAC" are as follows:

- D. Do preparers, auditors, and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA?
- E. Do preparers and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA?
- F. Do preparers and auditors have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA?

The null and alternative hypotheses for each were given in Chapter 5.

The twenty-six controls used to obtain data for the "type of control" research questions were also used to obtain data from the various groups for the three research questions just named. For each control, the chi-square statistic was computed, and the significance level determined. Using an alpha level of 0.1000, the researcher then generalized from the results of the statistical analysis of the controls to each research question.

#### Research Question D

Table 7-7 contains the results of the chi-square tests used to test the null hypotheses for controls one through twenty-six for the "objectives of IAC" research questions. Concerning the null hypothesis of no differences among preparers, auditors, and users (Research Question D), the significance level is 0.1000 or less for sixteen of the twentysix controls (61.54%). A chi-square test calculated for the observed result, disagreement of sixteen of twenty-six controls, and the expected results given the null hypothesis of no differences, resulted in a significance level between 0.1000 and 0.2000. Since the significance level is greater than the alpha level of 0.1000, the researcher is unable to reject the null hypothesis; therefore, the researcher is unable to conclude that preparers, auditors, and users do not have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. This conclusion does not mean that the null hypothesis is accepted but simply that it cannot be rejected.

TABLE 7-7

RESULTS OF CHI-SQUARE TESTS--OBJECTIVES OF IAC

Question-		Significance Le	evel
naire	A	В	С
Control	Group By	Preparers	Auditors
Number	Response	vs. Users	vs. Preparers
1	0.1581	0.0858*	0.9660
2	0.2929	0.2776	0.7967
3	0.0000*	0.0000*	0.5329
4	0.3390	0.1811	0.6027
5	0.8660	0.9294	0.7188
6	0.5525	0.8681	0.5042
7	0.8301	0.9369	0.6403
8	0.0000*	0.0000*	0.8803
9	0.1438	0.0899*	0.2715
10	0.2840	0.2577	0.9046
11	0.9436	0.9475	0.8776
12	0.0104*	0.0262*	0.0155*
13	0.0000*	0.0000*	0.9538
14	0.0000*	0.0000*	0.5607
15	0.2428	0.2856	0.6040
16	0.0000*	0.0000*	0.4441
17	0.0002*	0.0001*	0.2163
18	0.0000*	0.0000*	0.9420
19	0.0000*	0.0000*	0.5603
20	0.0000*	0.0001*	0.0000*
21	0.0047*	0.0037*	0.7999
22	0.0478*	0.0253*	0.9921
23	0.0000*	0.0000*	0.1725
24	0.0000*	0.0000*	0.9422
25	0.0000*	0.0000*	0.1706
26	0.0083*	0.0172*	0.5333

<sup>\*</sup>Hypothesis of no difference rejected at significance level of 0.1000 or less.

An analysis of the controls for which the three groups were in agreement/disagreement, based on the identification of controls by respondents, is as follows:

Type of		Dis-	
Control	Agreement	agreement	<u>Total</u>
IAC	0	7	7
IAdC	7	4	11
Both	0	1	1
Neither	1	2	3
Inconclusive	_2	_2	_4
Total	10	16	<u>26</u>

For the seven controls identified by respondents as IAC, the preparers, auditors, and users do not have similar views concerning the objectives of IAC. For the eleven controls identified as IAdC, the three groups have similar views on seven controls (63.64%) concerning the objectives of IAC. For the remaining eight controls, the three groups have similar views on three controls (37.50%) concerning the objectives of IAC.

Even though the null hypothesis of no difference could not be rejected, the analysis strongly suggests that the three groups do not have similar views of controls they have identified as IAC that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. Since the FCPA specifies IAC rather than IAdC, the disagreement regarding IAC would suggest that the frame of reference of the three groups for controls required by the FCPA is different.

#### Research Question E

Concerning the null hypothesis of no difference between preparers and users (Research Question E), the significance level is 0.1000 or less for eighteen of the twenty-six controls (69.23%). The chi-square test was calculated comparing the observed result to the expected result, given the null hypothesis of no difference. The probability of the disagreement on eighteen of twenty-six controls, given the null hypothesis, is less than five percent. Therefore, the researcher concludes that preparers and users do not have similar views on the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.

An analysis of the controls as identified by the respondents for which the two groups were in agreement/disagreement follows:

Type of Control	Agreement	Dis- agreement	<u>Total</u>
IAC	0	7	7
IAdC	5	6	11
Both	0	1	1
Neither	1	2	3
Inconclusive	<u>2</u>	_2	_4
Total	<u>8</u>	18	<u>26</u>

Concerning the objectives of IAC, the preparers and users do not have similar views for any of the seven controls identified by respondents as IAC. For the eleven controls

identified as IAdC, the preparers and users have similar views on five controls (45.45%) concerning the objectives of IAC. For the remaining eight controls, preparers and users have similar views on three controls (37.50%) concerning the objectives of IAC. Although, in general, there is not agreement between preparers and users, this analysis suggests that there appears to be limited agreement for controls identified as IAdC.

### Research Question F

Concerning the null hypothesis of no difference between preparers and auditors (Research Question F), the significance level is 0.1000 or less for two of the twenty-six controls (7.69%). In general, since the auditors and preparers have similar views on twenty-four of twenty-six controls (92.31%), the researcher concludes that preparers and auditors have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.

The two controls on which the auditors and preparers differ are QCN twelve and twenty. The extent of the difference was as follows:

Question- naire Control		Response	Percentage
Number	Group	Yes	No
12	Auditors	19.9%	80.1%
	Preparers	30.4	69.6
differ	rence = 10.5%		
20	Auditors	6.2	93.8
	Preparers	21.3	78.7
diffe	rence = 15.1%		

Although the difference is statistically significant, the majority of both auditors and preparers agree that neither control is viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. The results of no differences between auditors and preparers suggest that auditors and preparers are in nearly complete agreement as to which controls may be viewed as necessary to accomplish the objectives of IAC according to the FCPA. This implies that auditors and preparers agree on the controls required for corporations to be in compliance with the FCPA.

#### Auditors and Users

The researcher did not have an original objective of determining if auditors and users hold similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. The null hypothesis of no difference among auditors, preparers, and users was not rejected, while the null hypotheses of no difference between auditors and preparers and between preparers

Therefore, because of these and users were rejected. results, agreement/disagreement between auditors and users is of interest to the researcher. Chi-square statistics were computed on the responses from auditors and users to the twenty-six controls. The significance levels for fifteen of the twenty-six controls (57.69%) were below the alpha level of 0.1000 used to test the null hypothesis for all three groups. (Table B-5 in Appendix B contains the computed significance level for each control.) The probability of disagreement on fifteen of twenty-six controls, if there is no difference, is between thirty and fifty percent based on the chi-square test. Since the computed significance level exceeds 0.1000, the researcher is unable to reject the null hypothesis of no difference. This result does not suggest they are agreed, but only that the researcher could not conclude on a statistical basis that they do not agree.

#### Additional Analysis

Table 7-8 provides the percentage response for all respondents for each control to the question of "objectives of IAC." The controls are categorized by type of control as identified by the respondents. Of the twenty-six controls, a majority of all respondents indicated that eleven controls may be viewed as necessary to meet the objectives of IAC as specified in the FCPA. The eleven controls by type based on the identification by the respondents are as follows:

TABLE 7-8

PERCENTAGE RESPONSE BY ALL RESPONDENTS TO CONTROLS FOR OBJECTIVES OF IAC<sup>1</sup>

Question-					
naire	Percentage Response				
Control Number	Yes	No	Total		
Internal Accounting					
Controls					
14	76.6%*	23.4%	100.0%		
23	72.3*	27.7	100.0		
18	70.1*	29.9	100.0		
3	69.4*	30.6	100.0		
25	64.2*	35.8	100.0		
16	60.9*	39.1	100.0		
13	59.0*	41.0	100.0		
Internal Administrative					
Controls					
6	9.4	90.6	100.0		
11	10.6	89.4	100.0		
21	11.9	88.1	100.0		
7	12.8	87.2	100.0		
15	14.9	85.1	100.0		
2	15.2	84.8	100.0		
9	16.6	83.4	100.0		
22	17.2	82.8	100.0		
12	24.4	75.6	100.0		
17	27.3	72.7	100.0		
1	49.4	50.6	100.0		
Both IAC and IAdC					
8	49.0	51.0	100.0		
Neither IAC nor IAdC					
4	22.8	77.2	100.0		
20	20.2	79.8	100.0		
24	31.1	68.9	100.0		
Inconclusive					
5	91.2*	8.8	100.0		
10	94.5*	5.5	100.0		
19	57.0*	43.0	100.0		
26	63.2*	36.8	100.0		

<sup>1</sup> Controls by category are based on the identification by the respondents.

<sup>\*</sup>A majority of all respondents indicated the control may be viewed as necessary to meet the objectives of IAC as specified by the FCPA.

Type		Number of Controls	Number of Controls Required
IAC		7	7
IAdC		11	0
Both		1	0
Neither		3	0
Inconclusive		_4	_4
	Total	<u>26</u>	11

Therefore, it appears that, overall, respondents believe that controls they have labeled as IAC are necessary to meet the objectives of IAC as specified in the FCPA; whereas it appears that respondents do <u>not</u> believe that controls they have labeled as IAdC, both, and neither are necessary to meet the objectives of IAC as specified in the FCPA.

A majority of respondents indicated that the four controls that were not conclusively identified by all respondents are necessary to meet the objectives of IAC as specified in the FCPA. A brief description and the basis of selection by the researcher for each is as follows:

Question- naire Control Number	Basis of Selection	Description
5	SEC	Certification of key employees with policies prohibiting questionable practices and payments with political officials.
10	SEC	Additional internal auditing controls to counter practices of offthe-book slush funds and misrecording of questionable payments.

Question- naire Control Number	Basis Selection	Description
19	IAC	Credit sales in excess of a pre- established amount must be approved by sales manager.
26	IAC	Discounts in excess of a pre- established percentage must be approved by the director of sales.

Two of the four controls were instituted to prevent questionable practices and payments. The FCPA was passed due to questionable payments and practices; therefore, respondents appear to have indicated that these controls are necessary to meet the objectives of IAC as specified in the FCPA, even though they did not identify them as IAC. The remaining two controls, QCN nineteen and twenty-six, had an insignificant plurality identify them as IAC and both. This suggests that some controls, other than IAC, are believed by respondents to be necessary to meet the objectives of IAC as specified in the FCPA. For the most part, it suggests that the "non-IACs" that are viewed as necessary are those that appear to be directed toward questionable payments and practices.

Table 7-9 contains the response to the "objectives of IAC" question by groups for each control. The controls are categorized, based on identification by respondents.

Further, Table 7-9 shows that a majority of auditors, preparers, and users indicated that twelve of twenty-six, twelve of twenty-six, and seven of twenty-six controls,

 $\mbox{TABLE 7-9} \\ \mbox{PERCENTAGE RESPONSE BY GROUP TO CONTROLS FOR OBJECTIVES OF IAC}^{1}$ 

Question- naire									
Control		Auditor	s	Preparers		<u>s</u>	Users		
Number	Yes	No	Total	Yes	No	Total	Yes	No	Total
Internal Accounting Controls									
1	74.5*	25.5	100.0	77.5*	22.5	100.0	43.1	56.9	100.0
13	65.8*	34.2	100.0	66.0*	34.0	100.0	32.2	67.8	100.0
14	79.6*	20.4	100.0	82.2*	17.8	100.0	58.8*	41.2	100.0
16	68.7*	31.3	100.0	64.8*	35.2	100.0	38.6	61.4	100.0
18	79.1*	20.9	100.0	78.3*	21.7	100.0	36.5	63.5	100.0
23	73.8*	26.2	100.0	79.8*	20.2	100.0	53.8*	46.2	100.0
25	67.9*	32.1	100.0	74.2*	25.8	100.0	36.2	63.8	100.0
Internal Adminis- trative Controls									
1	47.7	52.3	100.0	47.0	53.0	100.0	57.3*	42.7	100.0
2	13.3	86.7	100.0	14.6	85.4	100.0	19.7	80.3	100.0
6	7.7	92.3	100.0	9.9	90.1	100.0	11.1	88.9	100.0
7	13.8	86.2	100.0	11.9	88.1	100.0	12.8	87.2	100.0
9	15.3	84.7	100.0	19.8	80.2	100.0	12.0	88.0	100.0
11	10.2	89.8	100.0	11.1	88.9	100.0	10.3	89.7	100.0
12	19.9	80.1	100.0	30.4	69.6	100.0	18.8	81.2	100.0
15	17.3	82.7	100.0	15.1	84.9	100.0	10.3	89.7	100.0
17	27.7	72.3	100.0	33.6	66.4	100.0	12.9	87.1	100.0
21	10.3	89.7	100.0	9.1	90.9	100.0	20.5	79.5	100.0
22	18.9	81.1	100.0	19.4	<b>8</b> 0.6	100.0	9.5	90.5	100.0
Both IAC and IAdC									
8	55.1*	44.9	100.0	53.9*	46.1	100.0	28.2	71.8	100.0
Neither IAC nor IAdC									
4	23.0	<b>7</b> 7.0	100.0	20.5	79.5	100.0	27.4	72.6	100.0
20	6.2	93.8	100.0	21.3	78.7	100.0	41.4	58.6	100.0
24	26.2	73.8	100.0	25.4	74.6	100.0	51.7*	48.3	100.0
Inconclusive									
5	90.3*	9.7	100.0	91.7*	8.3	100.0	91.4*	8.6	100.0
10	93.4*	6.6	100.0	94.1*	5.9	100.0	97.4*	2.6	100.0
19	62.2*	37.8	100.0	65.4*	34.6	100.0	29.6	70.4	100.0
26	68.2*	31.8	100.0	64.9*	35.1	100.0	51.3*	48.7	100.0

 $<sup>^{\</sup>mathrm{l}}$ Controls by category are based on the identification by the respondents.

<sup>\*</sup>A majority of respondents of the group indicated the control may be viewed as necessary to meet the objectives of IAC as specified by the FCPA.

respectively, may be viewed as necessary to meet the requirements of the IAC provision of the FCPA.

The results contained in Table 7-9 further indicate each group's response to the objective of IAC as it relates to the type of control as identified by all respondents:

			Type of	f Control		
Group	IAC	IAdC	Both	Neither	Incon- clusive	Total
Auditors	7	0	1	0	4	12
Preparers	7	0	1	0	4	12
Users	2	1	0	1	3	7

These figures indicate that a majority of auditors and preparers believe that all controls labeled by all respondents as IAC, both IAC and IAdC, and controls not conclusively identified may be viewed as necessary to meet the objectives of IAC as specified by the FCPA. Further, auditors and preparers indicated that controls labeled either IAdC or neither IAC nor IAdC are not viewed as necessary to meet the objectives of IAC as specified by the FCPA. These results are the same as for all respondents as previously discussed.

A summarization of the user group's response is as follows:

	IAC	IAdC	Both	Neither	Incon- clusive	Total
Number of con- trols labeled as	7	11	1	3	4	26
Number of controls that may be viewed by users as necessary to meet the objectives of the IAC provision of the FCPA	2	1	0	1	3	7

A majority of users indicated that only two of seven IAC (28.57%) may be viewed as necessary to meet the objectives of the IAC provision of the FCPA. Likewise, only one of eleven IAdC (9.09%) may be viewed as necessary to meet the objectives of the IAC provision of the FCPA. Lastly, four of the eight remaining controls (50.00%) may be viewed by users as necessary to meet the objectives of the IAC provision of the FCPA. This result differs significantly from the response by auditors and preparers. The researcher believes this reflects a lack of knowledge of controls by the user group.

Table 7-10 contains the result of each group's majority response to the "objectives of IAC" and the identification by each group of each control. An analysis of the table provides a comparison of how each group viewed each control concerning the "objectives of IAC" and the group's identification of the control as follows:

TABLE 7-10

COMPARISON OF GROUP IDENTIFICATION OF TYPE OF CONTROL AND OBJECTIVES OF IAC

naire Control	A	uditors	Pr	eparers	Users		
	Туре	Objectives	Туре	Objectives	Туре	Objectives	
1	IAdC	N	IAdC	N	Inc.	Y	
2	IAdC	N	IAdC	N	IAdC	N	
3	IAC	Y	IAC	Y	Inc.	N	
4	Inc.	N	Neither	N	Inc.	N	
5	Inc.	Y	Inc.	Y	IAdC	Y	
6	IAdC	N	IAdC	N	IAdC	N	
7	IAdC	N	IAdC	N	IAdC	N	
8	Both	Y	Both	Y	Inc.	<b>N</b>	
9	IAdC	N	IAdC	N	IAdC	N	
10	IAC	Y	Inc.	Y	Both	Y	
11	IAdC	N	IAdC	N	IAdC	N	
12	IAdC	N	IAdC	N	Inc.	N	
13	IAC	Y	IAC	Y	IAC	N	
14	IAC	Y	IAC	Y	IAC	Y	
15	IAdC	N	IAdC	N	IAdC	N	
16	IAC	Y	IAC	Y	IAdC	N	
17	IAdC	N	IAdC	N	IAdC	N	
18	IAC	Y	IAC	Y	IAC	N	
19	IAC	Y	Inc.	Y	IAdC	N	
20	Neither	N	Neither	N	Inc.	N	
21	Inc.	N	IAdC	N	IAdC	N	
22	IAdC	N	IAdC	N	IAdC	N	
23	IAC	Y	IAC	Y	IAC	Y	
24	Neither	N	Neither	N	Neither	Y	
25	IAC	Y	IAC	Y	IAdC	N	
26	Inc.	Y	Inc.	Y	IAdC	Y	

		Groups		
		Auditors	Preparers	Users
1.	Number of controls labeled as			
	IAC	9	7	4
	IAdC	10	11	14
	Both IAC and IAdC	1	1 3	1 1
	Neither IAC nor IAdC Inconclusive	2 4	3 4	6
	Inconclusive	4	4	0
2.	Number of above controls viewed as necessary to meet objectives of IAC			
	IAC	9	7	2
	IAdC	0	0	2 2 1 1
	Both IAC and IAdC	1	1	1
	Neither IAC nor IAdC	0	0	1
	Inconclusive	2	4	1
3.	Percentage of controls viewed as necessary to meet objectives of IAC			
	IAC	100.00%	100.00%	50.00%
	IAdC	0.00	0.00	14.29
	Both IAC and IAdC	100.00		100.00
	Neither IAC nor IAdC	0.00	0.00	
	Inconclusive	50.00	100.00	16.67

This analysis indicates that auditors and preparers believe that all controls they labeled as IAC or both IAC and IAdC may be viewed as necessary to meet the objectives of IAC as specified by the FCPA. Further, auditors and preparers indicated that controls labeled either IAdC or neither IAC nor IAdC are not viewed as necessary to meet the objectives of IAC as specified by the FCPA.

Auditors indicated that two of the four controls that they did not conclusively identify may be viewed as necessary to meet the objectives of the IAC as specified by the FCPA. An insignificant plurality of auditors had identified these two controls as IAC or both. Preparers indicated that

all four controls that they did not conclusively identify may be viewed as necessary to meet the objectives of IAC as specified by the FCPA. An insignificant plurality of preparers identified three of these controls as both and the remaining control as IAC.

The analysis shows users' indication that only two of four controls (50.00%) labeled by users as IAC may be viewed as necessary to meet the objectives of the IAC provision of the FCPA. Likewise, only two of fourteen controls (14.24%) that users labeled as IAdC were viewed by users as necessary to meet the objectives of the IAC provision of the FCPA.

Lastly, three of the remaining eight controls (37.50%) may be viewed by users as necessary to meet the objectives of the IAC provision of the FCPA.

This analysis suggests that auditors and preparers are consistent, while users are inconsistent in relating type of control and whether the control may be viewed as necessary to meet the objectives of IAC according to the FCPA. Further, this analysis suggests that auditors and preparers understand the wording of the FCPA (that is, the FCPA specifies IAC), while users apparently do not have a similar understanding.

## Distinction Between IAC and IAdC

Since there has been considerable controversy as to whether there should be a distinction between IAC and IAdC in terms of the FCPA, all respondents were asked the

question: "Regarding the Foreign Corrupt Practices Act, do you believe a distinction should be made between internal accounting controls and internal administrative controls?"

The response to the question was as follows:

	Response					
Group	Yes	No	Undecided	Total		
Auditors	141 72.3%	34 17.4%	20 10.3%	195 100.0%		
Preparers	148 59.0	72 28.7	31 12.3	251 100.0		
Users	45 37.8	25 21.0	49 <u>41.2</u>	119 100.0		
Total Number	334	<u>131</u>	100	<u>565</u>		
Total Percentage	59.1%	23.2%	<u>17.7</u> %	100.0%		

Auditors strongly favor a distinction (72.3%), with only approximately 10% undecided. Fifty-nine percent of the preparers favor a distinction, while only 37.8% of users believe there should be a distinction. Over 40% of the user group indicated "undecided." Overall, 59.1% are in favor of a distinction, compared to 23.2% who do not believe there should be a distinction.

The large percentage of undecided users suggests a lack of knowledge on the part of the user group compared to the auditors and preparers. Further, even though Clarence Sampson, chief accountant of the SEC, does not believe there should be a distinction between IACs and IAdCs in regards to the FCPA, the respondents believe otherwise. If their

response is reflective of their approach to the IAC provision of the FCPA, then the various groups, especially auditors and preparers, will make a distinction between IACs and IAdCs. Therefore, the SEC, in administering this provision of the FCPA, should be cognizant of the beliefs of these groups and either administer the law on the basis of the respondents' beliefs or attempt to re-educate them to accept its position.

# Summary

The research questions pertaining to "type of control" and "objective of IAC" were discussed. The chi-square test statistic was computed for responses pertaining to each null hypothesis. The conclusions reached based on these tests are as follows:

- In general, preparers, auditors, and users do not agree on what controls constitute IAC and IAdC.
- In general, preparers and users do <u>not</u> agree on what controls constitute IAC and IAdC.
- 3. In general, auditors and preparers are in agreement as to what controls constitute IAC and IAdC.
- 4. The researcher was unable to reject the null hypothesis that preparers, auditors, and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 5. In general, preparers and users do not have

- similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 6. In general, auditors and preparers have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.
- 7. Respondents, as a whole, believe there should be a distinction between IACs and IAdCs regarding the FCPA.

## FOOTNOTES

- Committee on Auditing Procedure, Statement on Auditing Standards No. 1 Codification of Auditing Standards and Procedures (New York: American Institute of Certified Public Accountants, Inc., 1973), pars. 320.35-320.48.
- Price Waterhouse & Co., <u>Guide to Accounting Controls:</u>
  Establishing, Evaluating and <u>Monitoring Control Systems</u>
  (New York: Price Waterhouse & Co., 1979).
- <sup>3</sup>U.S., Congress, Senate, Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices, 94th Cong., 2nd sess., 1976.
- 4Sidney Siegel, Nonparametric Statistics (New York: McGraw-Hill Book Co., 1956), pp. 42-47.
  - <sup>5</sup>Ibid., p. 104.

#### CHAPTER 8

## RESULTS OF THE SURVEY--PART II

# Introduction

This chapter considers the research questions pertaining to the importance of information on internal control to users for making investment decisions. The first consideration is whether information on internal control is important for users' decisions. Little research has been undertaken in this area, despite suggestions from the Commission on Auditors' Responsibilities<sup>1</sup> and the Securities and Exchange Commission<sup>2</sup> that such information would be useful for users' investment decisions. In addition, in this chapter the researcher examines the different level of importance that users place on IAdC compared to IAC.

## Importance of Information to Users

Research Question G reads, "Do users consider information on internal control to be important for their investment decisions?" The null and alternative hypotheses for this research question were stated in Chapter 5. To obtain data for researching this question, the researcher requested potential user respondents to indicate for each of the twenty-six controls on the questionnaire their response to

the assertion, "information concerning this control is important for investment decisions" (hereafter referred to as "Assertion"). The potential respondents were provided five alternative responses--"strongly agree," "agree," "neutral," "disagree," and "strongly disagree."

Table 8-1 contains the response of users to the Assertion. A majority of users indicated the same response for the questionnaire controls numbered two and six. For the remaining twenty-four controls, less than fifty percent of the respondents indicated any one response. This lack of consensus among users is further indicated by the fact that the plurality of responses to six controls—questionnaire controls numbered three, four, thirteen, fourteen, seventeen, and twenty—was less than 40%. The plurality of responses to the remaining controls (18) was between 40% and 50%.

The categories of "strongly agree" and "agree" are similar, as are the categories of "strongly disagree" and "disagree." Therefore, additional analysis was undertaken by combining the similar categories into one, resulting in the three categories of "agree," "neutral," and "disagree."

Table 8-2 contains the user response based on the revised grouping of responses. The determination of overall user response to the Assertion was determined as follows:

- By a majority the same response was received from a majority of users for nine controls.
- 2. By a significant plurality the same response

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TABLE 8-1
USERS' RESPONSE TO ASSERTION

Question- naire Control	Strongly			Dis-	Strongly	
Number	Agree	Agree	Neutral	agree	Disagree	Total
1	6.6%	40.1%	33.6%	12.3%	7.4%	100.0%
2	27.0	50.9	12.3	8.2	1.6	100.0
3	4.1	13.9	32.0	36.1	13.9	100.0
4	1.6	10.7	37.7	32.0	18.0	100.0
5	3.3	23.0	45.0	19.7	9.0	100.0
6	14.8	53.2	18.9	9.8	3.3	100.0
7	4.1	25 <b>.4</b>	41.0	21.3	8.2	100.0
8	20.5	40.9	27.9	7.4	3.3	100.0
9	12.3	40.2	29.5	13.1	4.9	100.0
10	7.4	43.4	29.5	12.3	7.4	100.0
11	20.5	48.3	19.7	8.2	3.3	100.0
12	14.8	48.3	26.2	7.4	3.3	100.0
13	2.5	18.2	38.0	28.1	13.2	100.0
14	3.3	24.0	38.9	26.4	7.4	100.0
15	16.4	41.1	31.1	9.8	1.6	100.0
16	2.5	10.7	42.1	27.3	17.4	100.0
17	9.8	35.3	36.1	13.1	5.7	100.0
18	0.8	11.7	47.5	24.2	15.8	100.0
19	1.7	28.1	40.5	19.8	9.9	100.0
20	5.7	32.0	35.3	17.2	9.8	100.0
21	4.1	18.9	50.0	20.4	6.6	100.0
22	1.7	29.2	47.5	18.3	3.3	100.0
23	5.7	27.0	41.8	18.9	6.6	100.0
24	6.6	24.8	43.0	14.9	10.7	100.0
25	0.8	10.7	47.5	30.3	10.7	100.0
26	1.6	22.1	45.9	23.0	7.4	100.0

TABLE 8-2
USERS' RESPONSE TO ASSERTION--THREE CATEGORIES

Question- naire						
Control		Response				
Number	Agree	Neutral	Disagree	Total	Most Favored	
1	46.7%	33.6%	19.7%	100.0%	Inconclusive	
2	77.9	12.3	9.8	100.0	Agree*	
3	18.0	32.0	50.0	100.0	Disagree	
4	12.3	37.7	50.0	100.0	Disagree	
5	26.3	45.0	28.7	100.0	Neutral	
6	68.0	18.9	13.1	100.0	Agree*	
7	29.5	41.0	29.5	100.0	Inconclusive	
8	61.4	27.9	10.7	100.0	Agree*	
9	52.5	29.5	18.0	100.0	Agree*	
10	50.8	29.5	19.7	100.0	Agree*	
11	68.8	19.7	11.5	100.0	Agree*	
12	63.1	26.2	10.7	100.0	Agree*	
13	20.7	38.0	41.3	100.0	Inconclusive	
14	27.3	38.9	33.8	100.0	Inconclusive	
15	57.5	31.1	11.4	100.0	Agree*	
16	13.2	42.1	44.7	100.0	Inconclusive	
17	45.1	36.1	18.8	100.0	Inconclusive	
18	12.5	47.5	40.0	100.0	Inconclusive	
19	29.8	40.5	29.7	100.0	Inconclusive	
20	37.7	35 <b>.3</b>	27.0	100.0	Inconclusive	
21	23.0	50.0	27.0	100.0	Neutral	
22	30.9	47.5	21.6	100.0	Neutral	
23	32.7	41.8	25.5	100.0	Inconclusive	
24	31.4	43.0	25.6	100.0	Inconclusive	
25	11.5	47.5	41.0	100.0	Inconclusive	
26	23.7	45.9	30.4	100.0	Neutral	

<sup>\*</sup>Response indicated by a majority of users.

was received from a significant plurality for six controls.

The same response was received from an insignificant plurality of users for eleven controls. A plurality response for a control procedure was considered to be significant if the null hypothesis of no difference between the two most favored responses for the control procedure was rejected. Statistical significance was determined by using the Chi-Square One-Sample Test to determine a significant plurality for identifying controls as discussed in Chapter 7. The alpha level for this test was set at 0.10.

The response to the Assertion for the twenty-six controls was as follows:

Response	Number of Controls	Percentage
Agree	8	30.77%
Neutral	4	15.38
Disagree	2	7.69
Inconclusive	12	46.16
Total	<u>26</u>	100.00%

Prior to formulating a conclusion concerning the user response, a discussion of the meaning of the responses is in order. The "agree" and "disagree" responses are self-explanatory. A "neutral" response could mean that users either had no opinion due to lack of knowledge, or perhaps were simply undecided. As part of the survey, respondents rated their knowledge of internal control. By their own

admission, 77.8% of the users rated their knowledge of internal control as fair or less than fair, as compared to 6.7% and 7.5% of the auditors and preparers, respectively. Therefore, based on this information, it appears a neutral response might mean that users had no opinion due to lack of knowledge.

Since users agreed with the Assertion for only eight of twenty-six controls (30.77%), this researcher is unable to conclude that users desire information on internal controls. Further analysis of the user response is required prior to drawing a final conclusion.

# Additional Analysis

The additional analysis consists of comparing users' response to the Assertion to the following:

- 1. Users' response to objective of IAC
- 2. All respondents' response to objective of IAC
- 3. Users' identification of internal controls
- 4. All respondents' identification of internal controls

The researcher's interpretation follows the analysis.

Table 8-3 contains the response to "type of control," the response to "whether the control may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA" (objective of IAC), and the response of the user group to the Assertion. Column two contains the response of users to "objective of IAC" while column three contains

TABLE 8-3

SUMMARY OF RESPONSE TO "OBJECTIVES OF IAC,"
"TYPE OF CONTROL," AND TO THE ASSERTION

Question- naire	Objectiv	ve of IAC <sup>1</sup>	Type o	f Control <sup>2</sup>	Heem
Control		Respon-		Respon-	User Response to
Number	Users	dents	Users	dents	Assertion <sup>3</sup>
				<u> </u>	ASSET CION
1	Y	N	Inc.	IAdC	Inconclusive
2	N	N	IAdC	IAdC	Agree
3	N	Y	Inc.	IAC	Disagree
4	N	N	Inc.	Neither	Disagree
5	Y	Y	IAdC	Inc.	Neutral
6	N	N	IAdC	IAdC	Agree
7	N	N	IAdC	IAdC	Inconclusive
8	N	N	Inc.	Both	Agree
9	N	N	IAdC	IAdC	Agree
10	Y	Y	Both	Inc.	Agree
11	N	N	IAdC	IAdC	Agree
12	N	N	Inc.	IAdC	Agree
13	N	N	IAC	IAC	Inconclusive
14	Y	Y	IAC	IAC	Inconclusive
15	N	N	IAdC	IAdC	Agree
16	N	Y	IAdC	IAC	Inconclusive
17	N	N	IAdC	IAdC	Inconclusive
18	N	N	IAC	IAC	Inconclusive
19	N	Y	IAdC	Inc.	Inconclusive
20	N	N	Inc.	Neither	Inconclusive
21	N	N	IAdC	IAdC	Neutral
22	N	N	IAdC	IAdC	Neutral
23	Y	Y	IAC	IAC	Inconclusive
24	Y	N	Neither	Neither	Inconclusive
25	N	Y	IAdC	IAC	Inconclusive
26	Y	Y	IAdC	Inc.	Neutral

This category is "whether the control may be viewed as necessary to meet the objectives of IAC as specified in the FCPA." Y represents a majority response for yes. N represents a majority response for no.

<sup>&</sup>lt;sup>2</sup>This category is "type of control"

IAC represents internal accounting control.

IAdC represents internal administrative control.

Both represents both IAC and IAdC.

Neither represents neither IAC nor IAdC.

Inc. indicates that an insignificant plurality identified the control.

This column is for the user response to the Assertion, based on the combination of "strongly agree" and "agree," the combination of "strongly disagree" and "disagree," "neutral," and "inconclusive."

the response of all respondents. The users' response to the Assertion is compared to the users' response to the "objectives of IAC" in the following table:

Objective of	R	Response to Assertion				
IACUser Response	Agree	Neutral	Dis- agree	Incon- clusive	Total	
Yes	1	2	0	4	7	
No	<u>7</u>	<u>2</u>	<u>2</u>	8	<u>19</u>	
Tota	1 8	<u>4</u>	<u>2</u>	12	<u>26</u>	

Thus, of the eight controls to which users indicated information is important for investment decisions, only one (12.50%) was viewed as necessary to accomplish the objectives of the internal accounting control (IAC) provision of the Foreign Corrupt Practices Act of 1977 (FCPA). Of the remaining eighteen controls to which users responded either "neutral," "disagree," or a significant plurality did not respond alike, twelve (66.67%) were viewed as not necessary to accomplish the objectives of the IAC provision of the FCPA, while six (33.33%) were viewed as necessary to accomplish the objectives of the IAC provision of the FCPA.

Since users, by their own admission, were not nearly as knowledgeable as other respondents, the users' response to the Assertion is compared to the "objective of IAC" as determined by all respondents. The results are slightly different, as follows:

Objective of		Re	on			
IACAll Respondents		Agree	Neutral	Dis- agree	Incon- clusive	Total
Yes		1	2	1	5	9
No		<u>7</u>	<u>2</u>	<u>1</u>	_7	<u>17</u>
To	tal	8	4	2	12	26

In this analysis, only one of the eight controls (12.50%) for which users indicated information is important for investment decisions was viewed by all respondents as necessary to accomplish the objectives of the IAC provision of the FCPA. For the remaining eighteen controls to which users responded "neutral," "disagree," or the response was inconclusive concerning the importance of the information, eight (44.44%) were viewed by all respondents as necessary to accomplish the objectives of the IAC provision of the FCPA.

Further, the users' response to the Assertion was compared first to the users' response to "type of control," and second to the "type of control" as determined by all respondents. Columns four and five of Table 8-3 contain the user and all respondents identification of controls. A comparison of user response of importance of information to type of control as identified by users is as follows:

Type of	Response to Assertion				
Control Users	Agree	Neutral	Dis- agree	Incon- clusive	Total
IAC	0	0	0	4	4
IAdC	5	4	0	5	14
Both	1	0	0	0	1
Neither	0	0	0	1	1
Inconclusive	2	<u>0</u>	2	_2	_6
Total	<u>8</u>	<u>4</u>	<u>2</u>	12	<u>26</u>

Users did not agree with the assertion "information concerning this control is important for investment decisions" for the four controls they identified as IAC. For all four of the controls, the users' response was inconclusive. Of the fourteen controls identified as IAdC by users, users agreed with the assertion "information concerning this control is important for investment decisions" for five controls (35.71%); users were neutral for four controls (28.57%); and users were inconclusive for five controls (35.71%). For the remaining eight controls, users agreed with three (37.5%); were inconclusive for three (37.5%); and indicated disagreement with two (25.0%).

A different result is found when user response to importance of information is compared to how all respondents labeled the controls, as shown below:

Type of	Re				
ControlAll Respondents	Agree	Neutral	Dis- agree	Incon- clusive	Total
IAC	0	0	1	6	7
IAdC	6	2	0	3	11
Both	1	0	0	0	1
Neither	0	0	1	2	3
Inconclusive	<u>1</u>	<u>2</u>	<u>0</u>	_1	_4
Total	<u>8</u>	4	<u>2</u>	12	<u>26</u>

When users' response to the Assertion is compared to controls labeled as IAC by all respondents, it indicated that users do not agree with the assertion "information concerning this control is important for investment decisions" for any of seven controls labeled as IAC by all respondents. On the other hand, users indicated that information was important for six of eleven controls (54.55%) labeled as IACC by all respondents. For the remaining eight controls, users agreed with two (25.0%), were neutral for two (25.0%), disagreed with one (12.5%), and were inconclusive for three (37.5%).

In summary, the additional analysis shows the following:

1. Information does not appear to be desired by users on individual internal controls that users or all respondents believe may be viewed as necessary to meet the objectives of IAC as specified in the FCPA. Information appears to be desirable on a number of individual

internal controls that all respondents believe are not viewed as necessary to meet the objectives of IAC as specified in the FCPA. this analysis appears to suggest that users do not desire information on individual internal controls viewed as necessary to meet the objectives of IAC as specified in the FCPA, this would seem to signal to the SEC that public reporting of individual IAC will not benefit users. Therefore, it suggests that the SEC should not reconsider requiring corporations to provide public reports on individual IACs. This research does not address whether users desire a general statement on the overall system of internal control. However, to the degree that the individual controls can be extended to the overall system of internal control, then the results suggest that a general statement is not desired by users.

2. Users do not appear to desire information on individual internal accounting controls. Information appears to be desirable on a number of internal administrative controls. However, prior to drawing final conclusions, the users' response concerning IAC and IAdC was subjected to statistical tests as discussed in the next section of this chapter.

The conclusions of this analysis are subject to the degree that the control procedures are representative of the entire population of internal controls.

# Importance of Information on IAdC and IAC

The previous discussion concerning the users' response to the assertion "information concerning this control is important for investment decisions" compared to the type of control would suggest that users value information on IAdC more highly than information on IAC. Evidence for this assumption is shown in Table 8-4, which contains the users' response to the Assertion by type of control as identified by all respondents. The table shows that, for the seven controls identified as IAC, users either indicated information was not desired or were inconclusive concerning the desirability for information. Further, of the eleven controls identified as IAdC, users indicated "agree" for six controls. Although these results suggest that users value information on IAdC more highly than information on IAC, no final conclusion was reached until the user response was subjected to statistical tests as discussed below.

Research Question H reads, "Do users place a different level of importance on information concerning IAdC than on IAC?" The Fisher Exact Probability Test<sup>3</sup> (Fisher test) is used to statistically test the hypothesis for this research question. The Fisher test is a nonparametric statistical procedure for testing whether two independent groups differ

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TABLE 8-4

USERS' RESPONSE TO ASSERTION BY TYPE OF CONTROL

Agree	Res Neutral	oonse		Statistically
Agree				01161
	Neucral	Disagree	Total	Significant Response
unting Co	ontrol			
32.7%	41.8%	25.5%	100.0%	Inconclusive
27.3	38.9	33.8	100.0	Inconclusive
20.7	38.0	41.3		Inconclusive
18.0	32.0	50.0		Disagree
13.2	42.1	44.7		Inconclusive
12.5				Inconclusive
11.5	47.5	41.0	100.0	Inconclusive
nistrativ	ve Control			
77.9	12.3	9.8	100.0	Agree
68.8	19.7	11.5		Agree
68.0	18.9	13.1		Agree
63.1	26.2			Agree
57.5	31.1	11.4	100.0	Agree
52.5	29.5	18.0	100.0	Agree
46.7	33.6	19.7	100.0	Inconclusive
45.1	36.1	18.8	100.0	Inconclusive
30.9	47.5	21.6	100.0	Neutral
29.5	41.0	29.5	100.0	Inconclusive
23.0	50.0	27.0	100.0	Neutral
61.4	27.9	10.7	100.0	Agree
37.7	35.3	27.0	100.0	Inconclusive
31.4	43.0	25.6		Inconclusive
12.3	37.7	50.0	100.0	Disagree
50.8	29.5	19.7	100.0	Agree
29.8	40.5	29.7	100.0	Inconclusive
26.3	45.0	28.7	100.0	Neutral
23.7	45.9	30.4		Neutral
	27.3 20.7 18.0 13.2 12.5 11.5 nistrativ  77.9 68.8 68.0 63.1 57.5 52.5 46.7 45.1 30.9 29.5 23.0 61.4  37.7 31.4 12.3	27.3 38.9 20.7 38.0 18.0 32.0 13.2 42.1 12.5 47.5 11.5 47.5  nistrative Control  77.9 12.3 68.8 19.7 68.0 18.9 63.1 26.2 57.5 31.1 52.5 29.5 46.7 33.6 45.1 36.1 30.9 47.5 29.5 41.0 23.0 50.0  61.4 27.9  37.7 35.3 31.4 43.0 12.3 37.7  50.8 29.5 29.8 40.5 26.3 45.0	27.3	27.3

in central tendencies. This test provides information as to whether it is likely that IAC and IAdC have been drawn from populations with the same median, and is conducted by determining the median score for both IAC and IAdC. In order to determine the median score for the controls, a numerical value was determined for each control. First, the responses for each control to the Assertion were arbitrarily differentiated by using a scale of one to five as follows:

Response	Scale
Strongly agree	1
Agree	2
Neutral	3
Disagree	4
Strongly disagree	5

Then a numerical value for each control was determined by multiplying the numerical response by the scale value.

The numerical value was determined for questionnaire control number one as follows:

Type of Response	User <u>Response</u>	Scale	Control Value
Strongly agree	8	1	8
Agree	49	2	98
Neutral	41	3	123
Disagree	15	4	60
Strongly disagree	9	5	45
Total	122		334

Table 8-5 contains the numerical values determined for each of the twenty-six controls.

TABLE 8-5

Numerical Values for Questionnaire Controls

Question- naire Control Number	Value
1	334
2	252
3	417
4	432
5	376
6	285
7	371
8	283
9	315
10	328
11	275
12	288
13	401
14	376
15	292
16	419
17	329
18	411
19	373
20	358
21	374
22	351
23	358
24	361
25	414
26	381

The responses for IAC and IAdC were dichotomized at the combined median and cast in a 2x2 contingency table as follows:

Number	of	responses	above
combi	ined	l median	

Number of responses below combined median

	IAC	IAdC	<u>Total</u>
	A	В	A+B
	С	D	C+D
-	A+C	B+D	$N=n_1+n_2$

 $n_1$  = IAC used in test

n2 = IAdC used in test

The null hypothesis was tested at the 0.10 alpha level using the following test statistic:

$$P = \frac{(A+B)!(C+D)!(A+C)!(B+D)!}{N!A!B!C!D!}$$

In order to test the null hypothesis, controls identified as IAC and IAdC had to be selected. However, the proper basis for selection is not indicated by the research question; therefore, three different approaches for selecting IAC and IAdC were used. The Fisher test was calculated for each group of controls selected. The rejection or failure to reject the null hypothesis was based on the results of the three tests. The three approaches used to select the controls identified as IAC and IAdC to test the null hypothesis were as follows:

Approach Number	Basis of Selection
1	Controls were selected based on users responses.
2	Controls were selected based on all respondents' responses.
3	Controls were selected based on the researcher's basis of selection.

Table 8-6 contains the identification of each of the twenty-six controls based on these three selection approaches. For each selection approach, each control is labeled as IAC, IAdC, or NA. The NA indicates the control is not applicable for the particular approach, as the item was either identified as both IAC and IAdC, neither IAC nor IAdC, or it was not conclusively identified. The NA in the "researcher selection" column are for the five controls instituted by corporations involved in questionable payments and practices.

For approach #1, the IAC and IAdC were selected based on the response by users. A total of eighteen controls were selected of which four were IAC and fourteen were IAdC. The contingency table constructed for this approach is as follows:

	IAC	IAdC	Total
Number of controls above the combined median	3	6	9
Number of controls below the combined median	1	8	9
Total	4	14	N=18

The computed significance level was 0.2882.

For approach #2, controls were selected based on all respondents' responses. This approach resulted in the selection of seven IACs and eleven IAdCs. The contingency table constructed for this approach is as follows:

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TABLE 8-6
CONTROLS SELECTED FOR FISHER TESTS

Question- naire	Va	Various Selection Approaches			
Control		All	Researcher		
Number	Users	Respondents	Selection		
1	NA	IAdC	NA		
1 2 3	IAdC	IAdC	IAdC		
3	NA	IAC	IAC		
4	NA	NA	IAC		
5	IAdC	NA	NA		
6	IAdC	IAdC	IAdC		
7	IAdC	IAdC	IAdC		
8	NA	NA	IAdC		
9	IAdC	IAdC	IAdC		
10	NA	NA	NA		
11	IAdC	IAdC	IAdC		
12	NA	IAdC	IAdC		
13	IAC	IAC	IAC		
14	IAC	IAC	IAC		
15	IAdC	IAdC	IAdC		
16	IAdC	IAC	IAC		
17	IAdC	IAdC	IAdC		
18	IAC	IAC	IAdC		
19	IAdC	NA	IAC		
20	NA	NA	NA		
21	IAdC	IAdC	IAdC		
22	IAdC	IAdC	IAdC		
23	IAC	IAC	IAC		
24	NA	NA	NA		
25	IAdC	IAC	IAC		
26	IAdC	NA	IAC		

IAC represents internal accounting control.

IAdC represents internal administrative control.

NA indicates the control is not applicable for the particular approach.

IAC IAdC Total Number of controls above the combined median 7 2 9 Number of controls below the combined median 9 0 9 Total 7 11 N = 18

The computed significance level was 0.0011.

Finally, for approach #3, controls were selected based on the researcher's basis of selection. This approach resulted in the selection of twenty-one controls, of which nine were IAC and twelve were IAdC. The contingency table constructed for this approach is as follows:

	IAC	IAdC	Total
Number of controls above	<del> </del>	<del></del>	1
the combined median	7	3	10
Number of controls below the combined median	2	9	11
Total	9	12	N=21

The computed significance level was 0.0242.

The three approaches resulted in computed significance levels as follows:

Approach	Total Number of Controls	Computed Significance Level	
1	18	0.2882	
2	18	0.0011	
3	21	0.0242	

Only approach #1 resulted in a computed significance level greater than the alpha level of 0.1000. Since the computed significance level is less than the alpha level for two of the three approaches (66.67%), the null hypothesis of no difference is rejected. The researcher concludes that there is a difference in value placed on information on IAC compared to information on IACC for making investment decisions. Further, the researcher concludes that users place a higher level of importance on information concerning controls identified as IACC than those identified as IACC.

Users were not requested to explain why they responded as they did to the Assertion. Therefore, interpretation of the analysis is speculative. Their preference for information on IAdC over IAC may relate to the audited financial statements. Users are aware that auditors evaluate internal controls in conducting an examination of financial statements. Further, they realize that auditors emphasize IAC. Therefore, when an audit report is released, the users may have a minimum level of assurance that the IACs of the audited corporation are satisfactory. Therefore, any additional information on internal controls would be desired on other controls; i.e., internal administrative controls.

Perhaps another reason users prefer information on controls labeled IAdC over IAC is that users believe the controls to be more directly related to the profitability of the corporation. For example, users may view the

separation of the accounting and finance functions (an IAC) as less important than a production quality control program (an IAdC).

The explanations for the user response suggested above are not conclusive, nor are they supported by this research. Additional research should be undertaken to determine why users prefer information on IAdCs to information on IACs. Since the results appear to suggest that users desire information on IAdC, this suggests that the publicly-listed corporations consider providing information on IAdC to users. In addition, it suggests that opposition from the American Institute of Certified Public Accountants to public reporting on IAC on the basis of lack of cost justification was proper. However, the analysis also suggests that the Auditing Standards Board should consider establishing standards for public reporting on IAdCs.

## Summary

In this chapter, user responses were analyzed to provide answers to the research questions pertaining to the importance of information on internal control to users for making investment decisions. By a plurality, users responded to the twenty-six controls with "strongly agree" - 0, "agree" - 9, "neutral" - 16, "disagree" - 1, and "strongly disagree" - 0.

The responses of "strongly agree" and "agree" were combined into the single category of "agree," and "strongly

disagree" and "disagree" were combined into "disagree." For several controls, an insignificant plurality of users indicated the same preference; these results were labeled as inconclusive. This additional analysis showed that users indicated "agree" for eight controls, "neutral" for four controls, "disagree" for two controls, and were inconclusive for twelve controls. Therefore, the researcher was unable to conclude that users desire information on all internal controls for their investment decisions.

Response for users relating to IACs and IAdCs was analyzed by using the Fisher test to determine whether users place a different level of importance on information concerning IAdCs than on IACs. The IACs and IAdCs were selected in three different ways, and the computed significance level exceeded the alpha level of 0.1000 for one of the three (33.33%) approaches. The researcher concluded that users place a different level of importance on IAdCs than on IACs.

## FOOTNOTES

- The Commission on Auditors' Responsibilities, The Commission on Auditors' Responsibilities Report, Conclusions, and Recommendations (New York: The Commission on Auditors' Responsibilities, 1978).
- <sup>2</sup>U.S., Congress, Senate, <u>Report of the Securities and</u>
  Exchange Commission on Questionable and Illegal Corporate
  Payments and Practices, 94th Cong., 2nd sess., 1976.
- <sup>3</sup>Sidney Siegel, Nonparametric Statistics For The Behavioral Sciences (New York: McGraw-Hill Book Co., 1956), pp. 96-101.

## CHAPTER 9

# CONCLUSIONS, IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

## Introduction

In this chapter, the researcher's conclusions for each research question are provided. Next, the implications of these conclusions for the Securities and Exchange Commission and the Auditing Standards Board are discussed. As with any research, this research has limitations, primarily due to the methodology utilized. These limitations are also discussed in this chapter. Finally, the researcher presents suggestions for future research.

## Conclusions

In Chapter 1, four purposes were stated for this research. The research, as it relates to these purposes, is discussed in this section of the chapter.

Stated purpose one was to provide empirical evidence which would affirm or deny the general belief that the views of preparers, auditors, and users regarding what constitutes IAC and IAdC may be dissimilar. Empirical evidence from this research indicates that, in general, preparers, auditors, and users do not have similar views on what constitutes internal accounting control (IAC) and

internal administrative control (IAdC). This conclusion was reached as the result of chi-square tests on responses for the twenty-six controls, each of which tested the general null hypothesis that preparers, auditors, and users agree on what constitutes IAC and IAdC. For twenty of the twenty-six controls (76.92%), the computed significance level was less than the alpha level of 0.1000 used by the researcher.

Further analysis of the data resulted in the following conclusions:

- 1. In general, preparers and users do not have similar views on what constitutes IAC and IAdC. This conclusion was reached as the result of chi-square tests on responses for the twenty-six controls, each of which tested the general null hypothesis that preparers and users agree on what constitutes IAC and IAdC. For twenty-one of the twenty-six controls (80.77%), the computed significance level was less than the alpha level of 0.1000 used by the researcher.
- 2. In general, auditors and preparers have similar views on what constitutes IAC and IAdC. This conclusion was reached as the result of chisquare tests on responses for the twenty-six controls, each of which tested the general null hypothesis that auditors and preparers agree on what constitutes IAC and IAdC. For five of the

- twenty-six controls (19.23%), the computed significance level was less than the alpha level of 0.1000 used by the researcher.
- 3. In general, auditors and users do not have similar views on what constitutes IAC and IAdC. This conclusion was reached as the result of chi-square tests on responses for the twenty-six controls, each of which tested the general null hypothesis that the auditors and users agree on what constitutes IAC and IAdC. For twenty-two of the twenty-six controls (84.62%), the computed significance level was less than the alpha level of 0.1000 used by the researcher.

Stated purpose two was to provide empirical evidence that suggests whether preparers, auditors, and users are agreed on whether various selected controls may be required for a firm to be in compliance with the IAC provision of the Foreign Corrupt Practices Act of 1977 (FCPA). The researcher was unable to reject the null hypothesis that preparers, auditors, and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. This conclusion was reached as the result of chi-square tests on the responses for the twenty-six controls, each of which tested the general null hypothesis that preparers, auditors, and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC

provision of the FCPA. For sixteen of the twenty-six controls (61.54%), the computed significance level was less than the alpha level of 0.1000. Although the three groups disagreed on 61.54% of the controls, this was not a statistically significant result.

Further analysis of the responses resulted in the following conclusions:

- 1. In general, preparers and users do not have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. This conclusion was reached as the result of chi-square tests on the responses for the twenty-six controls, each of which tested the general null hypothesis that preparers and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. For eighteen of the twenty-six controls (69.23%), the computed significance level was less than the researcher's alpha level of 0.1000.
- 2. In general, auditors and preparers have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. This conclusion was reached as the result of chi-square tests on the responses for the twenty-six controls, each of

which tested the general null hypothesis that auditors and preparers have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. For two of the twenty-six controls (7.69%), the computed significance level was less than the researcher's alpha level of 0.1000.

3. The researcher was unable to reject the null hypothesis that auditors and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. This conclusion was reached as the result of chi-square tests on the responses for the twenty-six controls, each of which tested the general null hypothesis that auditors and users have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. For fifteen of the twenty-six controls (57.69%), the computed significance level was less than the researcher's alpha level of 0.1000. Although auditors and users disagreed on 57.69% of the controls, this was not a statistically significant result.

Stated purpose three of the research was to provide evidence as to the degree of importance placed on information concerning internal controls by users of financial

statements for making investment decisions. To indicate the degree of importance placed upon information on internal controls, users responded to the assertion, "information concerning this control is important for investment decisions," for each control by indicating one of the five alternatives: "strongly agree," "agree," "neutral," "disagree," or "strongly disagree." The users responded to the twenty-six controls as follows:

Response	Number of Controls	Percentage
Strongly agree	0	0.0%
Agree	9	34.6
Neutral	16	61.5
Disagree	1	3.9
Strongly disagree	_0	0.0
Total	<u>26</u>	100.0%

When the similar categories of "strongly agree" and "agree" were combined, and the similar categories of "disagree" and "strongly disagree" were combined, and plurality responses were tested for statistical significance, the results were as follows:

Response		Number of Controls	Percentage
Agree		8	30.77%
Neutral		4	15.38
Disagree		3	11.54
Inconclusive		<u>11</u>	42.31
	Total	<u>26</u>	100.00%

Based on the above, the researcher was unable to conclude that users desire information on all internal controls, as users responded "agree" for only 30.77% of the controls.

Stated purpose four of this research was to determine if users find information concerning IAC and IAdC to be of equal importance for making investment decisions. Three different sets of IAC and IAdC were used, and the Fisher test was used to determine if respondents indicated the same level of importance for information on IAdCs as on IACs. For two of the three sets (66.67%), the difference of importance of information on IAdCs versus IACs was significant. The researcher concluded that there is a higher level of importance placed on controls labeled as IAdC than controls labeled IAC.

## Implications

In Chapter 1, the researcher stated that evidence obtained regarding the four stated purposes would be used as follows:

- To provide policy recommendations for the Auditing Standards Board in developing or modifying auditing standards concerning reporting on internal controls.
- To provide policy recommendations for the SEC in developing rules for the administration of the FCPA.

The results of this research provide signals to the Securities and Exchange Commission and to the Auditing

Standards Board. Based on this research, preparers, auditors, and users do not agree on what constitutes IAC and IAdC. Further, preparers and users do not agree on what constitutes IAC and IAdC, while auditors and preparers agree on what constitutes IAC and IAdC. Clarence Sampson, chief accountant of the SEC, has argued that any distinction between IAC and IAdC for purposes of the FCPA is misguided. However, the FCPA specifically states IAC, and 59.1% of all respondents in this research believe there should be a distinction, while only 23.2% believe there should not be a distinction. (The remaining 17.7% are undecided.) Therefore, if in fact Sampson is correct, then an education process is required that will result in all parties focusing on the objectives of the controls regardless of the types of controls. Further, since this research suggests that users' views on what constitutes IAC and IAdC are different from those of auditors and preparers, there is a need to re-educate either auditors and preparers or users so that they are in agreement as to what constitutes IAC and IAdC. In the judgment of the researcher, users are probably in greater need of the re-education, based on the response to a general question on the questionnaire asking respondents to rate their knowledge of internal control. The results were as follows:

		Groups		
Knowledge	Auditors	Preparers	Users	Total
Excellent	105 54.1%	105 41.5%	4 3.3%	214 37.6%
Good	76 39.2%	129 51.0%	23 18.9%	228 40.1%
Fair	11 5.7%	19 7.5%	53 43.4%	83 14.6%
Less than fair			42 34.4%	44 
Response total	<u>194</u>	<u>253</u>	<u> 122</u>	569
Response %	100.0%	100.0%	100.0%	100.0%

By their own admission, 77.8% of the users rated their knowledge of internal control as fair or less than fair, as compared to 6.7% of the auditors and 7.5% of the preparers. The re-education process could be a cooperative effort of associations in the private sector, such as the American Institute of Certified Public Accountants and the Institute of Chartered Financial Analysts, or it could be undertaken by the SEC.

Secondly, based on the results of this research, preparers and users do not appear to have similar views of the controls that may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA. A major purpose of the SEC is to insure that corporations are providing reasonable disclosure in financial reporting. It appears the SEC was established primarily to benefit the users of financial information. Since users have different views than preparers on what controls may be viewed as necessary

to accomplish the objectives of the IAC provision of the FCPA, it appears that the SEC should undertake an education program for either the users or preparers. Based on the previously discussed lack of knowledge of internal control as admitted by users, it would appear the SEC's efforts in this area should concentrate on users.

Thirdly, this research does not appear to show that the users desire information on internal controls. This conclusion is based on users' responses to twenty-six individual controls. To the degree that these controls are representative of the undefined population of controls, then this conclusion for these controls extends to internal control in general. Brown's research suggested that users desired information on internal controls; however, the research consisted of only twenty-seven contacts which were selected on a subjective basis, while 122 user respondents in this study were selected on a random basis, as discussed in Chapter 6. The SEC, in proposing public reporting on internal control, 3 since withdrawn, 4 cited Brown's research. These results suggest that the SEC should restudy its position that users find information on internal controls useful for investment decisions. results relate to individual controls as the researcher did not address the issue of users desiring a general statement on the overall system of internal controls.

Fourthly, this research appears to support positions taken by the American Institute of Certified Public

Accountants and the Auditing Standards Board and its predecessors who have generally opposed public reporting on IAC. Users appear to indicate that reporting information on IAC is not important for investment decisions. Therefore, such reporting would not be cost justified.

Fifthly, this research indicates the users place a different level of importance on controls identified as IACC than those identified as IAC. The users indicated that information on IACC was preferred to information on IACC. The Auditing Standards Board has recently issued SAS No. 30, "Reporting on Internal Accounting Control," yet this research appears to indicate that users prefer information on IACC over IACC. This appears to be a signal to the Auditing Standards Board to consider developing a Statement on Auditing Standards on reporting on internal administrative controls.

# Limitations

The conclusions of this research are limited to some extent, due to the research methodology and design. The researcher attempted to overcome potential problems of respondents not understanding the purpose of the study by including a cover letter explaining the purpose of the research. The researcher attempted to use controls that would be understood. Two controls which reviewers believed were ambiguous during the pretest of the questionnaire were changed so that they were more understandable.

Secondly, research analysts, a subset of chartered financial analysts, were used as surrogates for users. To the extent that this group is representative of all users, the results can be generalized to all users.

Thirdly, the nonresponse of potential respondents was significant for all three groups. T-tests were conducted on responses to the "type of control" and "objective of IAC" of the first twenty and the last twenty respondents for each group to detect a possible nonresponse bias. Nonresponse bias was not detected.

Controls used in the study were selected on a non-random basis. To the extent the controls are not representative of the undefined population of controls, the research is biased. The researcher attempted to include controls that cover the entire population of controls; however, the reader of the research results must decide if there is any bias. Lastly, controls used in the survey were hypothetical. The researcher assumes the respondents responded to these controls as they would to actual controls in businesses.

# Suggestions for Future Research

Some of the limitations mentioned could be overcome by a different research approach. Obtaining information by conducting interviews would preclude any misunderstanding bias. A future research effort using many more controls may increase the probability that the controls are

representative of the undefined population of controls.

Future research should be undertaken to determine the users' need for information on internal controls for making investment decisions. First, the user group could be enlarged from chartered financial analysts who are research analysts to include all financial analysts, bankers, and other creditors. Secondly, the users could be given a choice of several pieces of information including information on internal controls, and then be asked to rank these in order of importance to determine the usefulness of information on internal control as compared to other accounting and financial information.

This research indicated that users' views on IAC and IACC differ from those of auditors and preparers. Further, the research indicated that users' views on what controls may be viewed as necessary to accomplish the objectives of the IAC provision of the FCPA differ from those of preparers. The research did not determine why the views differed. Future research should be undertaken to determine why there are differences, so the differences in views may be minimized.

### FOOTNOTES

- <sup>1</sup>A. Clarence Sampson, "The Internal Auditing Profession: Challenges and Opportunities," The Internal Auditor 36 (October 1979):33.
- <sup>2</sup>Marilyn V. Brown, "Auditors and Internal Controls: An Analyst's View," The CPA Journal 47 (September 1977):27.
- <sup>3</sup>Securities and Exchange Commission, <u>Statement of Management on Internal Accounting Control Release No. 34-15772 (Washington, D.C.: Government Printing Office, April 30, 1979).</u>
- Securities and Exchange Commission, Statement on Withdrawal of Proposal to Require Reports on Internal Accounting Controls Release No. 34-16877 (Washington, D.C.: Government Printing Office, June 6, 1980).
- 5Auditing Standards Board, Statement on Auditing Standards No. 30 Reporting on Internal Accounting Control (New York: American Institute of Certified Public Accountants, Inc., 1980).

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  Washington, D.C.: U.S. General Accounting Office,
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# APPENDIX A

THE COVER LETTERS AND THE QUESTIONNAIRE

EAST LANSING · MICHIGAN · 48824

December 5, 1979

You are invited to participate in a research project of current interest to financial executives, certified public accountants, and financial statement users. The project is an attempt to determine the following:

- 1. The degree of agreement on internal accounting control and internal administrative control among financial executives, CPAs, and chartered financial analysts.
- 2. The degree of agreement of the three groups mentioned above on whether selected internal control procedures may be viewed as necessary to accomplish the objectives of the Foreign Corrupt Practices Act.

This study is being conducted by Mr. Raymond S. Schmidgall, a doctoral candidate in our Graduate School of Business Administration, as part of his dissertation. The results of his study will be significant to the accounting profession in general, and may be useful to the Securities and Exchange Commission in administering the Foreign Corrupt Practices Act and to the Auditing Standards Board in setting auditing standards.

Using a statistical selection technique, you have been selected to represent CPA partners in major accounting firms. Your views are important, and you have the opportunity to make these views known in an anonymous way by responding to the enclosed questionnaire. Based on pretests, the questionnaire can be completed in less than twenty minutes.

In recognition of your right to privacy, we will <u>not</u> maintain an identification of you, and your responses will be combined with other CPA partners and used in the final analysis only in their aggregate form. The identification number on the questionnaire will be used to check your name off of the mailing list. The mailing list is maintained only for sending a follow-up reminder and will be destroyed before any tabulation of the results.

Your assistance and cooperation are appreciated.

Sincerely,

Alvin A. Arens, Ph. D., C.P.A.

Professor

EAST LANSING · MICHIGAN · 48824

December 5. 1979

You are invited to participate in a research project of current interest to financial executives, certified public accountants, and financial statement users. The project is an attempt to determine the following:

- 1. The degree of agreement on internal accounting control and internal administrative control among financial executives, CPAs, and chartered financial analysts.
- 2. The degree of agreement of the three groups mentioned above on whether selected internal control procedures may be viewed as necessary to accomplish the objectives of the Foreign Corrupt Practices Act.

This study is being conducted by Mr. Raymond S. Schmidgall, a doctoral candidate in our Graduate School of Business Administration, as part of his dissertation. The results of his study will be significant to the accounting profession in general, and may be useful to the Securities and Exchange Commission in administering the Foreign Corrupt Practices Act and to the Auditing Standards Board in setting auditing standards.

Using a statistical selection technique, you have been selected to represent the chief financial executives of publicly-listed corporations. Your views are important, and you have the opportunity to make these views known in an anonymous way by responding to the enclosed questionnaire. Based on pretests, the questionnaire can be completed in less than twenty minutes.

In recognition of your right to privacy, we will not maintain an identification of you, and your responses will be combined with other chief financial executives and used in the final analysis only in their aggregate form. The identification number on the questionnaire will be used to check your name off of the mailing list. The mailing list is maintained only for sending a followup reminder and will be destroyed before any tabulation of the results.

Your assistance and cooperation are appreciated.

Sincerely,

Alvin A. Arens, Ph. D., C.P.A.

Professor of Accounting

EAST LANSING • MICHIGAN • 48824

December 5, 1979

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Using a statistical selection technique, you have been selected as a representative of chartered financial analysts. Your views are important, and you have the opportunity to make these views known in an anonymous way by responding to the enclosed questionnaire. Based on pretests, the questionnaire can be completed in less than twenty minutes.

In recognition of your right to privacy, we will <u>not</u> maintain an identification of you, and your responses will be combined with other chartered financial analysts and used in the final analysis only in their aggregate form. The identification number on the questionnaire will be used to check your name off of the mailing list. The mailing list is maintained only for sending a follow-up reminder and will be destroyed before any tabulation of the results.

Your assistance and cooperation are appreciated.

Sincerely.

Alvin A. Arens, Ph. D., C.P.A.

Professor of Accounting

EAST LANSING · MICHIGAN · 48824

January 4, 1980

As a partner in a public accounting firm, you realize the importance of cooperation from third parties in conducting financial audits. Without accounts receivable confirmations, attorney's letters, and bank confirmations, most financial audits would be difficult, if not impossible, to complete. Success in academic research is also dependent upon cooperation.

Your cooperation is required in order for Mr. Raymond S. Schmidgall's research to be statistically sound and successful. A questionnaire, designed to determine your opinion concerning internal accounting control and the Foreign Corrupt Practices Act, is enclosed. Please, take the time (estimated at 15 minutes) to fill out Mr. Schmidgall's questionnaire and help him successfully complete his project.

As I mentioned in my previous letter, no identification is to be maintained of you or your firm, and your responses will be combined with other CPAs and used in the final analysis only in their aggregate form. Please be assured that you will remain anonymous.

A business reply envelope is enclosed for your convenience. Your cooperation is needed and will be greatly appreciated.

Sincerely,

Alvin A. Arens, Ph. D., CPA Professor of Accounting

EAST LANSING · MICHIGAN · 48824

January 4, 1980

As a financial executive of a large corporation, you probably realize the importance of cooperation from others to successfully complete various projects. Often, this cooperation comes from someone outside your organization. Success in the academic world is also dependent upon cooperation.

Your cooperation is required in order for Mr. Raymond S. Schmidgall's research to be statistically sound and successful. A questionnaire, designed to determine your opinion concerning internal accounting control and the Foreign Corrupt Practices Act, is enclosed. Please, take the time (estimated at 15 minutes) to fill out Mr. Schmidgall's questionnaire and help him successfully complete his project.

As I mentioned in my previous letter, no identification is to be maintained of you or your firm, and your responses will be combined with other financial executives and used in the final analysis only in their aggregate form. Please be assured that you will remain anonymous.

A business reply envelope is enclosed for your convenience. Your cooperation is needed and will be greatly appreciated.

Sincerely,

Alvin A. Arens, Ph. D., CPA Professor of Accounting

EAST LANSING . MICHIGAN . 48824

January 4, 1980

As a chartered financial analyst, you probably have found that success in your own research is often dependent upon the cooperation of others. In academic research, as in financial research, success is often possible only with outside cooperation.

Your cooperation is required in order for Mr. Raymond S. Schmidgall's research to be statistically sound and successful. A questionnaire, designed to determine your opinion concerning internal accounting control and the Foreign Corrupt Practices Act, is enclosed. Please, take the time (estimated at 20 minutes) to fill out Mr. Schmidgall's questionnaire and help him successfully complete his project.

As I mentioned in my previous letter, no identification is to be maintained of you or your firm, and your responses will be combined with other chartered financial analysts and used in the final analysis only in their aggregate form. Please be assured that you will remain anonymous.

A business reply envelope is enclosed for your convenience. Your cooperation is needed and will be greatly appreciated.

Sincerely.

Alvin A. Arens, Ph. D., CPA Professor of Accounting

EAST LANSING · MICHIGAN · 48824

January 25, 1980

HELP! HELP! HELP!

Your help is urgently needed in order for my research project to be successful!

Enclosed is my research questionnaire which you can complete in approximately 15 minutes. This research benefits you, as it will provide the message to be sent to the SEC concerning internal control and the Foreign Corrupt Practices Act.

As mentioned in the two previous letters, your responses will be combined with other chartered financial analysts and used in the final analysis only in their aggregate form.

A business reply envelope is enclosed for your convenience. Your cooperation is urgently needed and will be greatly appreciated.

Sincerely,

mond S. Schmidgall, MBA, CPA

Researcher (Ph. D. Student)

<b>OUESTIONNAIRE – INTERNAL CONTROLS</b>		
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In the past few years, internal control has been discussed considerably by accountants, auditors, Commissioners of the SEC and others. The auditing literature, in defining internal controls, suggests that there are accounting controls and administrative controls. The Foreign Corrupt Practices Act passed by Congress in December 1977, requires that publicly held corporations maintain a system of internal accounting controls providing reasonable assurance that

**AUDITORS** 

- 1. "transactions are executed in accordance with management's general or specific authorization;
- conformity with generally accepted accounting principles or any other criteria applicable to such "transactions are recorded as necessary (a) to permit preparation of financial statements in statements, and (b) to maintain accountability for assets;
- "access to assets is permitted only in accordance with management's general or specific authorization; and
- "the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences." 4.

require management to report on the adequacy of their company's systems of internal accounting control. Further, auditors will be required to express an opinion of management's report on internal accounting The Securities and Exchange Commission has recently issued proposed rules which, if adopted, will

Listed below and on the following pages are several controls. For each control, you are requested to indicate YOUR OPINION by placing an "X" in the space provided as to the following:

- 1. the type of control
- 2. whether the control may be viewed as necessary to meet the objectives of internal accounting control specified in the Foreign Corrupt Practices Act (FCPA).

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large corporation has changed the composition of its Executive,	Nudit and Nominating Committees of the Board of Directors to	increase the proportion of outside directors on each.
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Control

- A corporation began a financial requirements planning system to he determine the resources needed to carry out plans for marketin production, research, capital expenditures and diversification. 5
- A manufacturing corporation's finished goods are physically secured a fenced-off area until they are shipped to customers. ۳,
- The accounting personnel of a corporation are required to atte accounting seminars for 40 hours each year covering subjects relat to their jobs. 4.
- 5. A large corporation has established a new procedure requir certification of compliance by key employees with policies prohibit questionable practices and payments with political officials.
- A manufacturing corporation has instituted new quality cont procedures to increase the average product quality and reduce los from defective goods. •

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2. Objectives						
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To ensure that capital assets are operated at intended capacity and to plan productive asset replacement, a corporation has provided for preventative and corrective maintenance and periodic analysis of and communicated to departmental managers for corrective action. maintenance costs. 6

A corporation's monthly operating results are analyzed, interpreted

7. In a manufacturing corporation, technical performance reports (in

Control

units produced) are provided to each production department head for

their use in managing.

∞:

The Board of Directors of a large corporation has directed management to institute additional internal auditing controls to counter practices of off-the-book slush funds and misrecording of questionable payments. 0.

A manufacturer has developed a long- and short-range capital asset plan which considers the length of time required to plan, acquire, and put into operation related productive assets. Ξ.

A manufacturing corporation has adopted new procedures for establishing optimum stock levels for raw materials, work in progress, and finished goods inventories. Inventory levels are monitored to ensure an efficient operation. 12.

A large manufacturing corporation uses pre-numbered job order cost sheets for recording costs incurred on each job. 13.

14. In a large manufacturing corporation, the maintenance of the perpetual inventory records for finished goods is assigned to a person different from the person responsible for the physical inventory. A corporation provides a one-year cash flow forecast, a projected income statement and balance sheet to department heads for use in their decision making. 15.

Objectives - FCPA FCPA						
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marketing department executives based on their acquisition costs and the competition's prices, the finance department reviews prices to A corporation has developed a uniform chart of accounts which defines the coding structure and classification of accounts, including a After prices for a major retailer's goods are established by the ensure adequate recognition of product costs and relevant administrative and selling expenses. 17. ∞.

16. A corporation, which uses a computer for accounting purposes,

Control

prohibits programmers from testing their own programs.

- description of the types of transactions to be included in each account.
- A large retailer requires all credit sales, in excess of a pre-established amount, to be approved by the sales manager. 19.
- A large corporation has adopted a policy requiring a change in the corporation's outside auditors every five years. 20.
- A large corporation with several branches decides to use a centralized purchasing department rather than de-centralized purchasing departments for each branch. 21.
- system using standard labor productivity and pay rates as the measure A manufacturer has instituted a labor performance measurement of expected time and cost performance. 22.
- they have major contracts to agree to the public disclosure of such A large corporation has adopted a policy requiring all firms with whom 24.

accounting departments count significant inventory items annually to

check the accuracy of the perpetual inventory records.

A large retail corporation has personnel independent of the sales and

23.

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2. Objectives -

25. A manufacturing corporation's raw materials are physically sean area marked "off limits" for all personnel except the storeke A corporation requires all discounts given to customers, in ex X%, to be approved by the director of sales. 26.

Control

I would like you to answer a few questions to provide information that will be helpful for the analysis of the data. (Circle the number of each appropriate answer.)

1. What is your primary area of specialization within your firm?

do you believe a distinction should be made

between internal accounting internal administrative controls?

Yes
 No
 Undecided

Regarding the Foreign Corrupt Practices Act,

٣.

controls and

- Audit
  - Tax
- Management Services
- Other (please specify)
- 2. In general, how would you rate your knowledge of internal controls?
- Excellent
- Good
- Less than fair

If there is anything else you would like to indicate concerning internal accounting control and the Foreign Corrupt Practices Act, please use the space provided below and on the back of this page.

# QUESTIONNAIRE – INTERNAL CONTROLS CHIEF FINANCIAL EXECUTIVES

Commissioners of the SEC and others. The auditing literature, in defining internal controls, suggests that In the past few years, internal control has been discussed considerably by accountants, auditors, there are accounting controls and administrative controls. The Foreign Corrupt Practices Act passed by Congress in December 1977, requires that publicly held corporations maintain a system of internal accounting controls providing reasonable assurance that

- 1. "transactions are executed in accordance with management's general or specific authorization;
- "transactions are recorded as necessary (a) to permit preparation of financial statements in conformity with generally accepted accounting principles or any other criteria applicable to such statements, and (b) to maintain accountability for assets;
- "access to assets is permitted only in accordance with management's general or specific authorization; and
- "the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences."

Further, auditors will be required to express an opinion of management's report on internal accounting require management to report on the adequacy of their company's systems of internal accounting control. The Securities and Exchange Commission has recently issued proposed rules which, if adopted, will control Listed below and on the following pages are several controls. For each control, you are requested to indicate YOUR OPINION by placing an "X" in the space provided as to the following:

- 1. the type of control
- 2. whether the control may be viewed as necessary to meet the objectives of internal accounting control specified in the Foreign Corrupt Practices Act (FCPA).

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ufacturing corporation's finished goods are physically secured in	ff area until they are shipped to customers.
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	acco	accounting seminars for 40 hours each year covering subjects related	semin	nars	for	40	þō	ırs	each	year	cove	ing	s subje	ects	S	late	-
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To ensure that capital assets are operated at intended capacity and to plan productive asset replacement, a corporation has provided for preventative and corrective maintenance and periodic analysis of The Board of Directors of a large corporation has directed managemaintenance costs. <u>.</u> 6

7. In a manufacturing corporation, technical performance reports (in

Control

units produced) are provided to each production department head for

their use in managing.

∞:

A corporation's monthly operating results are analyzed, interpreted

and communicated to departmental managers for corrective action.

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14. In a large manufacturing corporation, the maintenance of the perpetual inventory records for finished goods is assigned to a person different from the person responsible for the physical inventory.

A corporation provides a one-year cash flow forecast, a projected income statement and balance sheet to department heads for use in their decision making. 15.

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Control

description of the types of transactions to be included in each account.

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A large retailer requires all credit sales, in excess of a pre-established amount, to be approved by the sales manager. 19.

20. A large corporation has adopted a policy requiring a change in the corporation's outside auditors every five years.

A large corporation with several branches decides to use a centralized purchasing department rather than de-centralized purchasing departments for each branch. 21.

A manufacturer has instituted a labor performance measurement system using standard labor productivity and pay rates as the measure of expected time and cost performance. 22.

A large retail corporation has personnel independent of the sales and accounting departments count significant inventory items annually to check the accuracy of the perpetual inventory records. 23.

they have major contracts to agree to the public disclosure of such A large corporation has adopted a policy requiring all firms with whom contracts. 24.

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25. A manufacturing corporation's raw materials are physically secured in an area marked "off limits" for all personnel except the storekeeper.

Control

26. A corporation requires all discounts given to customers, in excess of X%, to be approved by the director of sales. I would like you to answer a few questions to provide information that will be helpful for the analysis of the data. (Circle the number of each appropriate answer.)

- What are the annual revenues (sales) for your corporation? \_;
- greater than \$355,000,000
- between \$105,000,000 and \$355,000,000 between \$50,000,000 and \$105,000,000
  - between \$10,000,000 and \$50,000,000
    - less than \$10,000,000
- 2. In general, how would you rate your knowledge of internal controls?
- Excellent -3.6.4
  - Good
- Less than fair

If there is anything else you would like to indicate concerning internal accounting control and the Foreign Corrupt Practices Act, please use the space provided below and on the back of this page.

Regarding the Foreign Corrupt Practices Act, do you believe a distinction should be made controls between internal accounting internal administrative controls? between internal ۳.

I. Yes

2. No 3. Undecided

## QUESTIONNAIRE – INTERNAL CONTROLS

CHARTERED FINANCIAL ANALYSTS

Commissioners of the SEC and others. The auditing literature, in defining internal controls, suggests that In the past few years, internal control has been discussed considerably by accountants, auditors, there are accounting controls and administrative controls. The Foreign Corrupt Practices Act passed by Congress in December 1977, requires that publicly held corporations maintain a system of internal accounting controls providing reasonable assurance that

- "transactions are executed in accordance with management's general or specific authorization;
- conformity with generally accepted accounting principles or any other criteria applicable to such "transactions are recorded as necessary (a) to permit preparation of financial statements in statements, and (b) to maintain accountability for assets;
- "access to assets is permitted only in accordance with management's general or specific authorization; and ٣,
- "the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences."

Further, auditors will be required to express an opinion of management's report on internal accounting require management to report on the adequacy of their company's systems of internal accounting control. The Securities and Exchange Commission has recently issued proposed rules which, if adopted, will

Listed below and on the following pages are several controls. For each control, you are requested to indicate YOUR OPINION by placing an "X" in the space provided as to the following:

- 1. the type of control
- 2. whether the control may be viewed as necessary to meet the objectives of internal accounting control specified in the Foreign Corrupt Practices Act (FCPA).
- 3. the assertion "information concerning this control is important for investment decisions."

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	1. A large corporation has changed the composition cits Executive, Audit and Nominating Committee of the Board of Directors to increase the proportion of outside directors on each	
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- 2. A corporation began a financial requirements planning system to help determine the resources needed to carry out plans for marketing, production, research, capital expenditures and diversification.
- 3. A manufacturing corporation's finished goods are physically secured in a fenced-off area until they are shipped to customers.
- 4. The accounting personnel of a corporation are required to attend accounting seminars for 40 hours each year covering subjects related to their jobs.
- 5. A large corporation has established a new procedure requiring certification of compliance by key employees with policies prohibiting questionable practices and payments with political officials.

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	Control	6. A manufacturing corporation has instituted new quality control procedures to increase the average product quality and reduce losses from defective goods.	7. In a manufacturing corporation, technical performance reports (in units produced) are provided to each production department head for their use in managing.	8. A corporation's monthly operating results are analyzed, interpreted and communicated to departmental managers for corrective action.	9. To ensure that capital assets are operated at intended capacity and to plan productive asset replacement, a corporation has provided for preventative and corrective maintenance and periodic analysis of maintenance costs.	10. The Board of Directors of a large corporation has directed management to institute additional internal auditing controls to counter practices of off-the-book slush funds and misrecording of questionable payments.	11. A manufacturer has developed a long- and short-range capital asset plan which considers the length of time required to plan, acquire, and put into operation related productive assets.	12. A manufacturing corporation has adopted new procedures for establishing optimum stock levels for raw materials, work in progress, and finished goods inventories. Inventory levels are monitored to ensure an efficient operation.

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13.	A large manufacturing corporation uses pre-numbered job order cost sheets for recording costs incurred on each job.					
14.	In a large manufacturing corporation, the maintenance of the perpetual inventory records for finished goods is assigned to a person different from the person responsible for the physical inventory.					
15.	A corporation provides a one-year cash flow fore-cast, a projected income statement and balance sheet to department heads for use in their decision making.			1		·
16.	16. A corporation, which uses a computer for account- ing purposes, prohibits programmers from testing their own programs.					
17.	After prices for a major retailer's goods are established by the marketing department executives based on their acquisition costs and the competition's prices, the finance department reviews prices to ensure adequate recognition of product costs and relevant administrative and selling expenses.					
<b>.8</b>	A corporation has developed a uniform chart of accounts which defines the coding structure and classification of accounts, including a description of the types of transactions to be included in each account.				1	
.61	19. A large retailer requires all credit sales, in excess of a pre-established amount, to be approved by the sales manager.					

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20.	A large corporation has adopted a policy requiring a change in the corporation's outside auditors every five years.		1		1				
21.	A large corporation with several branches decides to use a centralized purchasing department rather than de-centralized purchasing departments for each branch.		 						
22.	A manufacturer has instituted a labor performance measurement system using standard labor productivity and pay rates as the measure of expected time and cost performance.		1		1				
23.	A large retail corporation has personnel independent of the sales and accounting departments count significant inventory items annually to check the accuracy of the perpetual inventory records.		1		1	1	1		234
24.	A large corporation has adopted a policy requiring all firms with whom they have major contracts to agree to the public disclosure of such contracts.		1			1	Ì	1	
25.	A manufacturing corporation's raw materials are physically secured in an area marked "off limits" for all personnel except the storekeeper.							.	
26.	A corporation requires all discounts given to customers, in excess of X%, to be approved by the director of sales.				1	1	İ		

(Please turn over)

I would like you to answer two questions to provide information that will be helpful for the analysis of the data. (Circle the number of each appropriate answer.)

- 1. In general, how would you rate your knowledge of internal controls?
- Excellent
   Good
   Fair
   Less than fair

- do you believe a distinction should be made between internal accounting controls and internal administrative controls? 2. Regarding the Foreign Corrupt Practices Act,

- Yes
   No
   Undecided

If there is anything else you would like to indicate concerning internal accounting control and the Foreign Corrupt Practices Act, please use the space provided below.

## APPENDIX B

TABLES OF RESPONSES

TO QUESTIONS IN THE QUESTIONNAIRE

236

TABLE B-1

GROUP RESPONSE TO TYPE OF CONTROL

Questio	n-					
naire				Respons	ses	
Control Number	Group	IAC	IAdC <sup>2</sup>	Both <sup>3</sup>	Neither <sup>4</sup>	Total
1	Auditors	12	97	36	49	194
	Preparers Users	10 10	114 46	63 40	67 22	254 118
2	Auditors Preparers	6 15	121 153	26 42	43 44	196 254
	Users	16	50	24	28	118
3	Auditors Preparers	135 151	17 26	<b>4</b> 0 70	<b>4</b> 7	196 254
	Users	39	35	27	17	118
4	Auditors Preparers	25 37	69 70	32 38	69 109	195 254
	Users	37	29	16	36	118
5	Auditors Preparers	37 55	77 93	78 101	<b>4</b> 5	196 254
	Users	13	58	39	6	116
6	Auditors Preparers	12 13	105 148	17 23	62 70	196 254
	Users	13	61	11	33	118
7	Auditors Preparers	13 17	125 173	29 32	29 32	196 254
	Users	13	67	24	14	118
8	Auditors Preparers	37 57	46 69	107 122	6 6	196 254
	Users	23	41	47	7	118
9	Auditors Preparers	8 12	101 144	43 66	44 32	196 254
	Users	18	53	29	18	118
10	Auditors Preparers	102 123	14 16	75 110	5 5	196 254
	Users	41	11	63	3	118
11	Auditors Preparers	<b>4</b> 8	124 177	23 26	44 43	195 254
	Users	11	59	22	26	118

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TABLE B-1--Continued

Questic naire	on-					
Control				Respon		
Number	Group	IAC	IAdC <sup>2</sup>	Both <sup>3</sup>	Neither <sup>4</sup>	Total
12	Auditors	16	100	66	14	196
	Preparers	30	128	81	15	254
	Users	25	39	45	9	118
13	Auditors	141	5	43	6	195
	Preparers	167	7	72	8	254
	Users	64	19	26	9	118
14	Auditors	173	4	19	0	196
	Preparers	209	6	39	0	254
	Users	51	30	32	5	118
15	Auditors	7	124	40	25	196
	Preparers	10	157	49	38	254
	Users	11	51	34	22	118
16	Auditors	137	8	34	16	195
	Preparers	138	38	60	18	254
	Users	30	47	21	19	117
17	Auditors	26	108	50	11	195
	Preparers	34	129	73	18	254
	Users	19	53	34	12	118
18	Auditors	129	16	48	3	196
	Preparers	162	12	74	6	254
	Users	57	22	26	12	117
19	Auditors	99	29	66	2 8	196
	Preparers	96	53	97		254
	Users	16	73	21	7	117
20	Auditors	9	24	7	156	196
	Preparers	46	69	36	103	254
	Users	24	23	33	37	117
21	Auditors	12	81	23	79	195
	Preparers	9	125	34	86	254
	Users	13	54	32	19	118
22	Auditors	17	103	60	16	196
	Preparers	28	141	58	27	254
	Users	18	55	30	14	117

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TABLE B-1--Continued

Question- naire Control				Respon	ses	
Number	Group	IAC	IAdC <sup>2</sup>	Both <sup>3</sup>	Neither <sup>4</sup>	Total
23	Auditors	152	8	34	1	195
	Preparers	178	11	60	4	253
	Users	56	19	41	2	118
24	Auditors	14	49	14	118	195
	Preparers	20	73	17	144	254
	Users	11	34	16	55	116
25	Auditors	120	19	51	6	196
	Preparers	127	38	80	8	253
	Users	28	45	30	15	118
26	Auditors	88	34	72	2	196
	Preparers	79	68	101	5	253
	Users	16	65	26	11	118

<sup>&</sup>lt;sup>1</sup>IAC represents internal accounting control

<sup>&</sup>lt;sup>2</sup>IAdC represents internal administrative control

<sup>&</sup>lt;sup>3</sup>Both represents both IAC and IAdC

<sup>&</sup>lt;sup>4</sup>Neither represents neither IAC nor IAdC

TABLE B-2

GROUP PERCENTAGE RESPONSE TO TYPE OF CONTROL

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Questio naire	on-					
Control				Respon		
Number	Group	IAC	IAdC <sup>2</sup>	Both <sup>3</sup>	Neither <sup>4</sup>	Total
1	Auditors	6.2%	49.9%	18.6%	25.3%	100.0
	Preparers Users	3.9 8.5	44.9 39.0	24.8 33.9	26.4 18.6	100.0 100.0
2	Auditors Preparers	3.1 5.9	61.7 60.3	13.3 16.5	21.9 17.3	100.0
	Users	13.6	42.4	20.3	23.7	100.0
3	Auditors Preparers	68.9 59.4	8.7 10.2	20.4 27.6	2.0 2.8	100.0
	Users	33.0	29.7	22.9	14.4	100.0
4	Auditors Preparers	12.8 14.6	35.4 27.6	16.4 15.0	35.4 42.8	100.0 100.0
	Users	31.3	24.6	13.6	30.5	100.0
5	Auditors Preparers	18.9 21.7	39.3 36.6	39.8 39.7	2.0 2.0	100.0 100.0
	Users	11.2	50.0	33.6	5.2	100.0
6	Auditors	6.1 5.1	53.6 58.2	8.7 9.1	31.6 27.6	100.0
	Preparers Users	11.0	51.7	9.3	28.0	100.0
7	Auditors	6.6	63.8	14.8	14.8	100.0
	Preparers Users	6.7 11.0	68.1 56.8	12.6 20.3	12.6 11.9	100.0 100.0
8	Auditors	18.9	23.5	54.5	3.1	100.0
	Preparers Users	22.4 19.5	27.2 34.7	48.0 39.9	2.4 5.9	100.0 100.0
9	Auditors	4.1 4.7	51.6 56.7	21.9 26.0	22.4 12.6	100.0 100.0
	Preparers Users	15.3	44.8	24.6	15.3	100.0
10	Auditors	52.0	7.1 6.3	38.3	2.6	100.0
	Preparers Users	48.4 34.7	9.3	43.3 53.5	2.0 2.5	100.0 100.0
11	Auditors	2.1	63.5	11.8	22.6	100.0
	Preparers Users	3.1 9.3	69.8 50.1	10.2 18.6	16.9 22.0	100.0 100.0

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TABLE B-2--Continued

Questio naire				Respons	ses	
Control Number	Group	IAC	IAdC <sup>2</sup>	Both <sup>3</sup>	Neither <sup>4</sup>	Total
12	Auditors	8.2%	51.0%	33.7%	7.1%	100.0%
	Preparers	11.8	50.4	31.9	5.9	100.0
	Users	21.2	33.1	38.1	7.6	100.0
13	Auditors	72.2	2.6	22.1	3.1	100.0
	Preparers	65.8	2.8	28.3	3.1	100.0
	Users	54.3	16.1	22.0	7.6	100.0
14	Auditors	88.3	2.0	9.7	0.0	100.0
	Preparers	82.2	2.4	15.4	0.0	100.0
	Users	43.3	25.4	27.1	4.2	100.0
15	Auditors	3.6	63.2	20.4	12.8	100.0
	Preparers	3.9	61.8	19.3	15.0	100.0
	Users	9.3	43.3	28.8	18.6	100.0
16	Auditors	70.3	4.1	17.4	8.2	100.0
	Preparers	54.3	15.0	23.6	7.1	100.0
	Users	25.6	40.3	17.9	16.2	100.0
17	Auditors	13.3	55.5	25.6	5.6	100.0
	Preparers	13.4	50.8	28.7	7.1	100.0
	Users	16.1	44.9	28.8	10.2	100.0
18	Auditors	65.8	8.2	24.5	1.5	100.0
	Preparers	63.8	4.7	29.1	2.4	100.0
	Users	48.7	18.8	22.2	10.3	100.0
19	Auditors	50.5	14.8	33.7	1.0	100.0
	Preparers	37.8	20.9	38.2	3.1	100.0
	Users	13.7	62.4	17.9	6.0	100.0
20	Auditors	4.6	12.2	3.6	79.6	100.0
	Preparers	18.1	27.2	14.2	40.5	100.0
	Users	20.5	19.7	28.2	31.6	100.0
21	Auditors	6.2	41.5	11.8	40.5	100.0
	Preparers	3.5	49.2	13.4	33.9	100.0
	Users	11.0	45.8	27.1	16.1	100.0
22	Auditors	8.7	52.5	30.6	8.2	100.0
	Preparers	11.0	55.6	22.8	10.6	100.0
	Users	15.4	47.0	25.6	12.0	100.0

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TABLE B-2--Continued

Question- naire				Respon	ses	
Control Number	Group	IAC	IAdC <sup>2</sup>	Both <sup>3</sup>	Neither <sup>4</sup>	Total
23	Auditors	78.0%	4.1%	17.4%	.5%	100.0%
	Preparers	70.4	4.3	23.7	1.6	100.0
	Users	47.5	16.1	34.7	1.7	100.0
24	Auditors	7.2	25.1	7.2	60.5	100.0
	Preparers	7.9	28.7	6.7	56.7	100.0
	Users	9.5	29.3	13.8	47.4	100.0
25	Auditors	61.2	9.7	26.0	3.1	100.0
	Preparers	50.2	15.0	31.6	3.2	100.0
	Users	23.7	38.2	25.4	12.7	100.0
26	Auditors	45.0	17.3	36.7	1.0	100.0
	Preparers	31.2	26.9	39.9	2.0	100.0
	Users	13.6	55.1	22.0	9.3	100.0

<sup>&</sup>lt;sup>1</sup>IAC represents internal accounting control

<sup>&</sup>lt;sup>2</sup>IAdC represents internal administrative control

<sup>&</sup>lt;sup>3</sup>Both represents both IAC and IAdC

<sup>&</sup>lt;sup>4</sup>Neither represents neither IAC nor IAdC

TABLE B-3

GROUP RESPONSE TO OBJECTIVES OF IAC

Question- naire			<b>D</b>	_
Control			Response	S
Number	Group	Yes	No	Total
1	Auditors	93	102	195
	Preparers	119	134	253
	Users	67	50	117
2	Auditors	26	170	196
	Preparers	37	217	254
	Users	23	94	117
3	Auditors	146	50	196
	Preparers	196	57	253
	Users	50	66	116
4	Auditors	45	151	196
	Preparers	52	202	254
	Users	32	85	117
5	Auditors	177	19	196
	Preparers	233	21	254
	Users	106	10	116
6	Auditors	15	181	196
	Preparers	25	227	252
	Users	13	104	117
7	Auditors	27	168	195
	Preparers	30	222	252
	Users	15	102	117
8	Auditors	108	88	196
	Preparers	137	117	254
	Users	33	84	117
9	Auditors	30	166	196
	Preparers	50	203	253
	Users	14	103	117
10	Auditors	183	13	196
	Preparers	239	15	254
	Users	114	3	117
11	Auditors	20	176	196
	Preparers	28	224	252
	Users	12	105	117

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TABLE B-3--Continued

Question- naire			_	
Control		<del></del>	Response	
Number	Group	Yes	No	Total
12	Auditors	39	157	196
	Preparers	77	176	253
	Users	22	95	117
13	Auditors	129	67	196
	Preparers	167	86	253
	Users	37	78	115
14	Auditors	156	40	196
	Preparers	208	45	253
	Users	67	47	114
15	Auditors	34	162	196
	Preparers	38	214	252
	Users	12	104	116
16	Auditors	134	61	195
	Preparers	164	89	253
	Users	44	70	114
17	Auditors	54	141	195
	Preparers	85	168	253
	Users	15	101	116
18	Auditors	155	41	196
	Preparers	199	55	254
	Users	42	73	115
19	Auditors	122	74	196
	Preparers	166	88	254
	Users	34	81	115
20	Auditors	12	183	195
	Preparers	54	200	254
	Users	48	68	116
21	Auditors	20	175	195
	Preparers	23	230	253
	Users	24	93	117
22	Auditors	37	159	196
	Preparers	49	204	253
	Users	11	105	116

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TABLE B-3--Continued

Question-				
Control			Responses	}
Number	Group	Yes	No	Total
23	Auditors	144	51	195
	Preparers	201	51	252
	Users	63	54	117
24	Auditors	51	144	195
	Preparers	64	188	252
	Users	60	56	116
25	Auditors	133	63	196
	Preparers	187	65	252
	Users	42	74	116
26	Auditors	133	62	195
	Preparers	163	88	251
	Users	60	57	117

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TABLE B-4
GROUP PERCENTAGE RESPONSE TO OBJECTIVES OF IAC

Question- naire			_	
Control Number	Group	Yes	Response No	Total
1	Auditors	47.78	52.3%	100.0%
-	Preparers	47.0	53.0	100.0
	Users	57.3	42.7	100.0
2	Auditors	13.3	86.7	100.0
	Preparers	14.6	85.4	100.0
	Users	19.7	80.3	100.0
3	Auditors	74.5	25.5	100.0
	Preparers	77.5	22.5	100.0
	Users	43.1	56.9	100.0
4	Auditors	23.0	77.0	100.0
	Preparers	20.5	79.5	100.0
	Users	27.4	72.6	100.0
5	Auditors	90.3	9.7	100.0
	Preparers	91.7	8.3	100.0
	Users	91.4	8.6	100.0
6	Auditors	7.7	92.3	100.0
	Preparers	9.9	90.1	100.0
	Users	11.1	88.9	100.0
7	Auditors	13.8	86.2	100.0
	Preparers	11.9	88.1	100.0
	Users	12.8	87.2	100.0
8	Auditors	55.1	44.9	100.0
	Preparers	53.9	46.1	100.0
	Users	28.2	71.8	100.0
9	Auditors	15.3	84.7	100.0
	Preparers	19.8	80.2	100.0
	Users	12.0	88.0	100.0
10	Auditors	93.4	6.6	100.0
	Preparers	94.1	5.9	100.0
	Users	97.4	2.6	100.0
11	Auditors	10.2	89.8	100.0
	Preparers	11.1	88.9	100.0
	Users	10.3	89.7	100.0

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TABLE B-4--Continued

Question- naire				
Control			Response	
Number	Group	Yes	No	Total
12	Auditors	19.9%	80.1%	100.0%
	Preparers	30.4	69.6	100.0
	Users	18.8	81.2	100.0
13	Auditors	65.8	34.2	100.0
	Preparers	66.0	34.0	100.0
	Users	32.2	67.8	100.0
14	Auditors	79.6	20.4	100.0
	Preparers	82.2	17.8	100.0
	Users	58.8	41.2	100.0
15	Auditors	17.3	82.7	100.0
	Preparers	15.1	84.9	100.0
	Users	10.3	89.7	100.0
16	Auditors	68.7	31.3	100.0
	Preparers	64.8	35.2	100.0
	Users	38.6	61.4	100.0
17	Auditors	27.7	72.3	100.0
	Preparers	33.6	66.4	100.0
	Users	12.9	87.1	100.0
18	Auditors	79.1	20.9	100.0
	Preparers	78.3	21.7	100.0
	Users	36.5	63.5	100.0
19	Auditors	62.2	37.8	100.0
	Preparers	65.4	34.6	100.0
	Users	29.6	70.4	100.0
20	Auditors	6.2	93.8	100.0
	Preparers	21.3	78.7	100.0
	Users	41.4	58.6	100.0
21	Auditors	10.3	89.7	100.0
	Preparers	9.1	90.9	100.0
	Users	20.5	79.5	100.0
22	Auditors	18.9	81.1	100.0
	Preparers	19.4	80.6	100.0
	Users	9.5	90.5	100.0

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TABLE B-4--Continued

Question- naire				
Control			Response	S
Number	Group	Yes	No	Total
23	Auditors	73.8%	26.2%	100.0%
	Preparers Users	79.8 53.8	20.2 46.2	100.0 100.0
24	Auditors	26.2	73.8	100.0
	Preparers Users	25.4 51.7	74.6 48.3	100.0 100.0
25	Auditors	67.9	32.1	100.0
	Preparers Users	74.2 36.2	25.8 63.8	100.0 100.0
26	Auditors	68.2	31.8	100.0
	Preparers Users	64.9 51.3	35.1 48.7	100.0 100.0

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TABLE B-5

RESULTS OF CHI-SQUARE TESTS--AUDITORS vs. USERS

Question- naire	_	
Control	Type of	Objectives
Number	Control	of IAC
1	0.0118*	0.1283
1 2	0.0003*	0.1786
3	0.0000*	0.0000*
4	0.0009*	0.4611
5	0.0556*	0.9094
6	0.4527	0.4052
7	0.2506	0.9317
8	0.0433*	0.0000*
9	0.0030*	0.5128
10	0.0279*	0.1882
11	0.0050*	0.8587
12	0.0015*	0.9290
13	0.0000*	0.0000*
14	0.0000*	0.0001*
15	0.0037*	0.1283
16	0.0000*	0.0000*
17	0.2322	0.0039*
18	0.0001*	0.0000*
19	0.0000*	0.0000*
20	0.0000*	0.0000*
21	0.0000*	0.0187*
22	0.1624	0.0394*
23	0.0000*	0.0005*
24	0.0897*	0.0000*
25	0.0000*	0.0000*
26	0.0000*	0.0043*

<sup>\*</sup>Computed significance level is less than 0.1000.

TABLE B-6

USER RESPONSE TO QUESTION ON IMPORTANCE OF INFORMATION ON INTERNAL CONTROLS

Question-	Response						
naire					Strongly		
Control	Strongly			Dis-	Dis-		
Number	Agree	Agree	Neutral	agree	agree	Total	
1	8	49	41	15	9	122	
2	33	62	15	10	2	122	
3	5	17	39	44	17	122	
4	2	13	46	39	22	122	
5	4	28	55	24	11	122	
6	18	65	23	12	4	122	
7	5	31	50	26	10	122	
8	25	50	34	9	4	122	
9	15	49	36	16	6	122	
10	9	53	36	15	9	122	
11	25	59	24	10	4	122	
12	18	59	32	9	4	122	
13	3	22	46	34	16	121	
14	4	29	47	32	9	121	
15	20	50	38	12	2	, 122	
16	3	13	51	33	21	121	
17	12	43	44	16	7	122	
18	1	14	57	29	19	120	
19	2	34	49	24	12	121	
20	7	39	43	21	12	122	
21	5	23	61	25	8	122	
22	2	35	57	22	4	120	
23	7	33	51	23	8	122	
24	8	30	52	18	13	121	
25	1	13	58	37	13	122	
26	2	27	56	28	9	122	