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Auditing Symposium IV: Proceedings of the 1978 Touche Ross/University of Kansas Symposium on Auditing Problems

University of Kansas, School of Business

Howard Stettler

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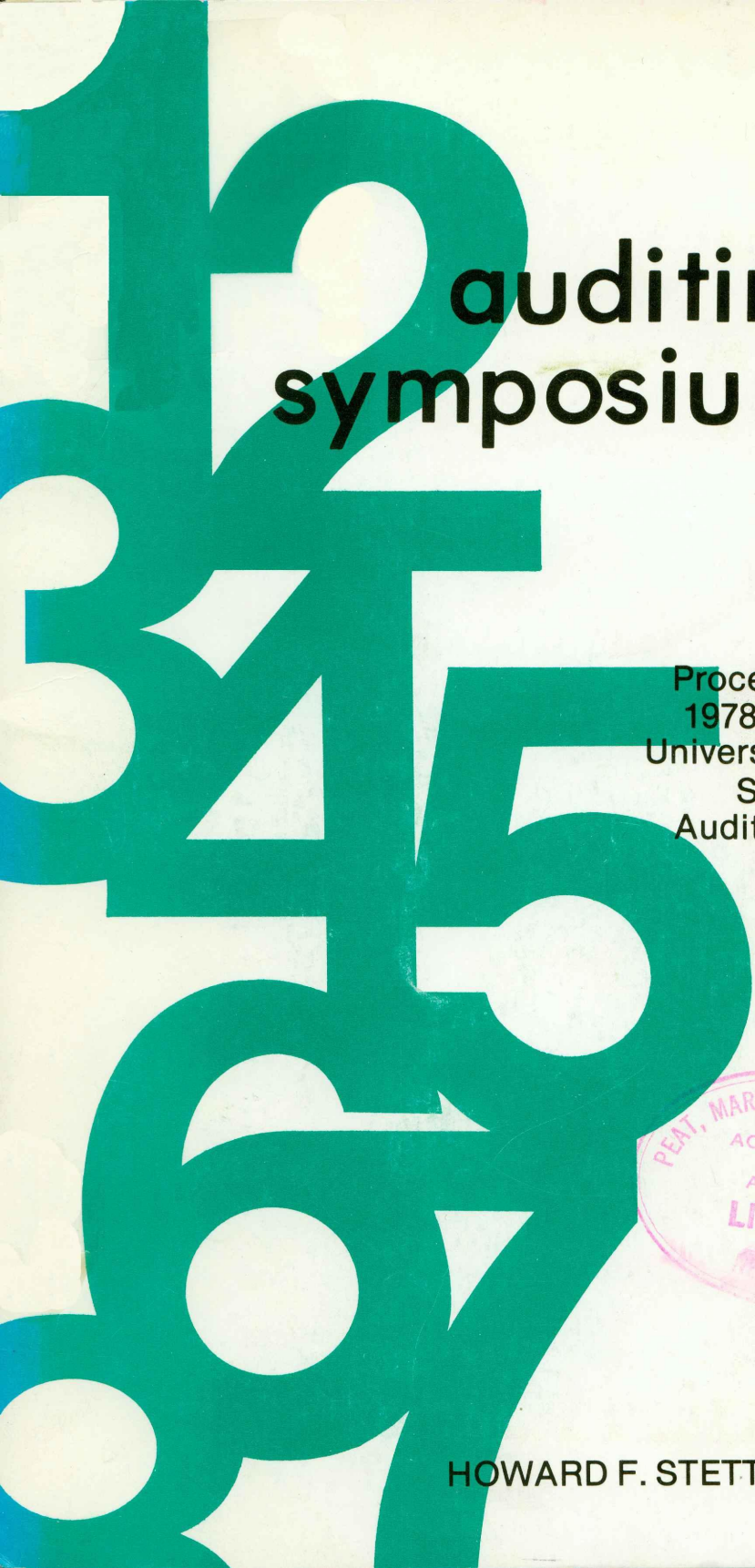
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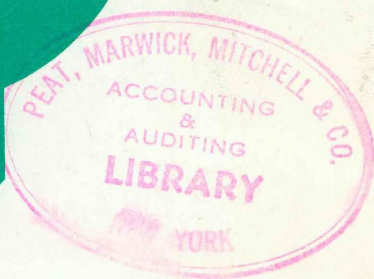
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auditing symposium iv

Proceedings of the
1978 Touche Ross
University of Kansas
Symposium on
Auditing Problems



HOWARD F. STETTLER, EDITOR

Auditing Symposium IV

Proceedings of the 1978 Touche Ross/
University of Kansas Symposium
on Auditing Problems

Edited by
Howard F. Stettler

May 25 and 26, 1978
School of Business
University of Kansas
Lawrence, Kansas 66045

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Preface

The 1978 Touche Ross/University of Kansas Symposium on Auditing Problems is the fourth of this biennial series of symposia designed to bring practitioners and educators in the field of auditing together to study matters of mutual interest and concern. Once again Touche Ross Foundation has provided the financial support that has made the Symposium and the printing of these Proceedings possible, and the broad support for this series by Touche Ross & Co. is gratefully acknowledged.

As before, a balance has been sought between practitioners and educators in the preparation of papers, with the discussant for a paper usually chosen from the other group, and with a similar balance in the invited participants. All papers, except for the traditional evening address on a more general topic, were distributed in advance, making it possible for the preparer to limit comments to summary remarks or observations about the paper, and with more than an hour available for the discussant's remarks and the ensuing open discussion. Although no attempt has been made to summarize the informal discussions, both the preparers and the designated discussants were afforded the opportunity to modify their papers and remarks to reflect matters that arose during the general discussion.

The paper "Internal Auditing—A Historical Perspective and Future Directions" by Vic Brink represents the observations of "one who was there" from the very beginning of the formal organization of the members of that profession, and thus offers a solid base for the projections for the future that are also contained in the paper. The inclusion of the historical paper on internal auditing extends my endeavor to assemble a series of papers that are expected to eventually provide a comprehensive dissertation of the development and heritage of the auditing segment of the accounting discipline. The other papers in this volume reflect a unifying theme only in that they were chosen in terms of what was perceived as being likely to be of current interest to the participants and to the readers of this volume of collected papers.

As has been true for each of these symposia, I take full responsibility for the selection of topics for both the invited and the submitted papers, but the views expressed in the papers are those of the preparers, and, of course, not necessarily those of the sponsors of the symposium or of the organizations with which the preparers are affiliated.

With the exception of the first symposium in the series, which is out of print, the proceedings of each symposium may be purchased from:

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In conclusion, I wish to acknowledge the gracious personal support and assistance of Jerry Jackson, partner in charge of the Kansas City office of Touche Ross & Co.

HOWARD F. STETTLER

February, 1979
 University of Kansas
 Lawrence, Kansas

The dates, titles, and prepaid purchase price of each of the available Proceedings volumes are as follows:

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1

Internal Auditing—A Historical Perspective and Future Directions

Victor Z. Brink

Columbia University, Professor Emeritus

An inquiry into the history and forward directions of internal auditing can best begin with a definition. In the new **Standards for the Practice of Internal Auditing** just issued by The Institute of Internal Auditors, internal auditing is defined as “. . . an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization.” The Standards then go on to say that “The objective of internal auditing is to assist members of the organization in the effective discharge of their responsibilities. To this end, internal auditing furnishes them with analyses, appraisals, recommendations, counsel, and information concerning the activities reviewed. The members of the organization assisted by internal auditing include those in management and the board of directors. Internal auditors owe a responsibility to both, providing them with information about the adequacy and effectiveness of the organization’s system of internal control and the quality of performance.” The reference to internal control is further clarified in the **Statement of Responsibilities** issued by the same Institute where internal auditing is described as “. . . a managerial control which functions in measuring and evaluating the effectiveness of other controls.” All of these statements confirm the broad constructive nature of internal auditing.

The fact that the term “internal auditing” includes the word “auditing,” and the fact that the work of the external auditor—the independent public accountant—also has to do with “auditing,” suggests that the only difference between the two professional activities is whether the individual is an employee of the organization or is engaged as an outside professional on a contractual basis. The fallacy of that oversimplified view can be shown by comparing the respective missions of internal and external auditors. In the latter case—if we exclude the wide range of special consulting services—the primary mission of the external auditor is to examine the annual financial statements of the organization in such depth as to make possible the expression of an opinion as to their fairness in conformity with generally accepted accounting principles. That opinion in part is sought by the board of directors and corporate management for their own use, but even more for the outside parties who rely on the financial statements—creditors, investors, government, and the like. In carrying out this extended mission, the external auditor functions as an independent agent for a negotiated

fee, and hence has a certain degree of independence inherent in that detached status.

The internal auditor, on the other hand, is an employee of the organization with a major mission of serving that organization in a variety of ways. The services rendered pertain to the effectiveness of both internal procedures and the related operations. The service has to do with all kinds of internal activities and interprets effectiveness to include both efficiency and profitability. The internal auditor has no direct responsibility to third parties such as creditors, investors, or government. Moreover, being an employee of the organization unavoidably restricts the level of independence as compared to that enjoyed by the external auditor. At the same time, however, it should be recognized that the two missions are not isolated from each other. Instead, as each audit group carries out its primary mission, there are intermediate and secondary concerns which involve common interests. In both cases there is an underlying need for sound internal control and the related policies, procedures, and day to day activities. Likewise in both cases, that internal control is viewed as a means to the end of carrying out the primary mission.

Historical Development

If we wish to adequately understand contemporary issues, it is always helpful to look back at historical developments and to review the manner in which the currently existing situation emerged. It, therefore, seems appropriate that we follow that approach for internal auditing. In doing this, we recognize that how far one goes back into history is bound to be arbitrary. Moreover, the applicability of the study of history always has its limitations because of changing environmental conditions. We also recognize that all organizations and all internal audit groups are different and that each situation involves a response to its own environment in a distinctive manner. Nevertheless, it can still be useful to review the past to assist in understanding the present and for projecting what may lie ahead.

In the case of internal auditing, we know that internal auditing as a concept has existed as early as there have been substantive human relationships. Conscientious people have always been concerned with the extent of compliance with instructions, the reliability of information, and the effectiveness of results—whether carried out as a part of regular operational responsibilities or by various subordinates, however they might be designated. We select 1941, however, as our first historical reference point. We do this on the personal side because this was the year that the author completed his doctoral research under Professor Roy B. Kester at Columbia University covering the nature and scope of internal auditing, and which became the basis for the first major book in the field, **Internal Auditing, Principles and Practice**, which was published by The Ronald Press Company. The year 1941 is, however, more noteworthy because it was the year in which The Institute of Internal Auditors was founded—an event in which the author was privileged to be an active participant.

In 1941 there were a number of internal auditing departments, but they existed only in a small proportion of the organizations that had need for such services. These internal audit groups concentrated on compliance with lower

level accounting and operational procedures, protection of assets, and detection of fraud. There was at that time, however, an increasing awareness of the growing size and complexity of all kinds of operations by business, government, and other types of organizations. The external auditor was also becoming increasingly concerned with those same problems, and especially how they impinged upon the responsibilities of that profession. There was in total a growing recognition that internal auditing departments could make an important contribution to coping with the emerging complexities.

The response to the foregoing was a new wave of strengthening existing internal auditing departments and creating new internal auditing departments when such audit groups did not already exist. External auditors in many cases were the parties recommending new internal auditing departments and/or being called in to help work out the needed expansion of audit effort in their client companies. In many situations, the internal audit personnel were supplied or recruited by external auditors, and then trained and guided by them. It was inevitable, therefore, that internal auditing efforts would be very supportive of external auditor needs and relatively closely coordinated to assure the greater reliability of financial statements. This meant that internal auditing efforts were especially directed to accounting procedures and related lower level compliance, as previously indicated, rather than to broader improvement, operational effectiveness, and greater profitability. The existing internal auditing departments also typically reported to one of the lower ranking financial executives—more often to the officer responsible for accounting activities. This was the typical situation, although the writer's research preceding the completion of the aforementioned book showed that some business corporations had very progressive and sophisticated internal auditing departments.

Formation of The Institute of Internal Auditors

As previously mentioned, 1941 was also the year when a group of forward-looking internal auditors became discontented with the orientation of existing professional associations and decided that a new professional organization should be established and devoted exclusively to the professional interests of internal auditors. This decision marked the creation of The Institute of Internal Auditors with twenty-four charter members. John B. Thurston, the head of the internal auditing department at North American Company—a large public utility—was the moving force, and he became the new Institute's first president. Later, Thurston also wrote a book on internal auditing: *Basic Internal Auditing Principles and Techniques*, published by International Textbook Company.

During the years following 1941—and especially following World War II—a number of interrelated forces were at work. There was first of all a continuing expansion of the size and complexity of organizations—business corporations, governmental bodies, and philanthropic organizations. Business corporations were also becoming increasingly diversified and extended geographically—including more and more international operations. As a result, there were additional concerns of both management and external auditors and a related effort to further expand and upgrade internal auditing groups. Also management became increasingly aware of the desirability of getting more benefits from the

very substantial amounts of money expended to maintain internal auditors, and therefore, was motivated to use them in connection with broader operational problems to which these internal auditors were concurrently being exposed.

Operational Auditing Introduced

At the same time, internal auditors were increasingly aware of the further opportunities to go beyond the narrower protective role and to make more substantial and dynamic contributions to management welfare. And when management responded favorably to the extension of the services rendered there was all the more incentive for internal auditors to move even more aggressively. This new emphasis of internal auditors, over and above their more traditional financial auditing role, came to be known as "operational auditing." As a result, internal auditing broadened in professional scope and attracted individuals of greater capabilities. The higher level contribution of internal auditors also brought with it new visibility with management, resulting in better organizational status and higher monetary rewards.

In most situations, the expansion into operational auditing was built on and integrated with the so-called more traditional financial auditing. In other situations the enthusiasm for the more dynamic operational auditing resulted in some reduction or contraction of the earlier financial auditing. In the latter cases, there was some weakening of the ties to the external auditors and a resulting reduction in the reliance placed on internal audit work. While again there were all types of situations, on average internal auditing came to focus on organizational effectiveness in terms of improved operational results and greater profitability. An understanding of this expanded role of the internal auditor is very important as we appraise the contemporary scene, with its new pressures, and the resulting alternative directions in which internal auditing may move.

Other Developments

The developments over the years since 1941 have also included some situations where the services provided by the internal audit department have been expanded to go beyond the needs of officers of the operating organization and to also be directed toward the needs of the board of directors. In some cases, there were new dotted-line-type organizational relationships to the board of directors and, in a few cases, solid-line-type reporting responsibility. (Dotted line describes those situations where there are partial responsibilities and solid line refers to situations where there is primary administrative responsibility.) The latter situation has more often come to pass in the banking and insurance industries where the handling of cash and negotiable securities, with the related higher level of risk exposure, has resulted in increased concerns of boards of directors. Industry wide, however, the relationship of the internal audit group to the board has been less structured and often not clearly defined.

A final significant aspect of the thirty-five plus years which have elapsed since 1941 pertains to the growth of the professional association founded in that earlier year. This association—The Institute of Internal Auditors—over the ensuing years has grown from its initial charter group of 24 to an international

organization with over 16,000 members, with over 130 chapters, and with a headquarters staff of some 55 persons. The activities of The Institute have come to include a substantial research program, the development and administration of educational seminars, the publication of a professional journal and major books and monographs, the development of an effective interface with other parties interested in internal auditing, formulation of professional standards, a certification program (Certified Internal Auditor), and a wide range of other membership services. The composite result has been an integral part of the expanding professional status of internal auditing.*

The Contemporary Scene

The internal auditing profession has developed in more recent years to a level where it serves a wide range of organizational needs. The services rendered, as we have seen, typically cover both the financial and operational dimensions of organizational activities. The services rendered can, as we also have seen, be viewed as covering both protective needs and all kinds of improvement. This total range is outlined more specifically in the earlier mentioned **Statement of Responsibilities of Internal Auditors**, as follows:

The objective of internal auditing is to assist all members of management in the effective discharge of their responsibilities by furnishing them with analyses, appraisals, recommendations and pertinent comments concerning the activities reviewed. Internal auditors are concerned with any phase of business activity in which they may be of service to management. This involves going beyond the accounting and financial records to obtain a full understanding of the operations under review. The attainment of this overall objective involves such activities as:

- Reviewing and appraising the soundness, adequacy, and application of accounting, financial, and other operating controls, and promoting effective control at reasonable cost
- Ascertaining the extent of compliance with established policies, plans, and procedures
- Ascertaining the extent to which company assets are accounted for and safeguarded from losses of all kinds
- Ascertaining the reliability of management data developed within the organization
- Appraising the quality of performance in carrying out assigned responsibilities
- Recommending operating improvements.

The above portion of the Statement of Responsibilities is a helpful elaboration of the internal auditor's role in several ways. In the first sentence it describes very concisely how the internal auditor discharges his or her responsi-

* The history of the Institute of Internal Auditors is presented in further detail in "Foundations for Unlimited Horizons—The Institute of Internal Auditors 1941-1976" written by the author of this paper, and published by The Institute of Internal Auditors.

bilities through providing analysis, appraisals, recommendations and pertinent comments covering the activities reviewed.

The six types of activities cited are also helpful because of the more precise identification of those that are primarily protective in nature (the second, third, and fourth) and those that are primarily directed to further improvement (the first, fifth, and sixth). In actual practice, the recommendations for improvement are developed to a major extent by building upon the more routine protective type activities. Both types of service are very important but it is the development of improvements that has demonstrated the most dynamic professional potentials for internal auditors.

In the previously mentioned Standards, the work of the internal auditor is covered by standards and guidelines in five areas as follows:

1. The independence of the internal auditing department from the activities audited, and the objectivity of internal auditors.
2. The proficiency of internal auditors and the professional care they should exercise.
3. The scope of internal auditing work.
4. The performance of internal auditing assignments.
5. The management of the internal auditing department.

Of special interest for educators is the portion of the second area of the Standards that deals with the knowledge, skills, and disciplines needed by internal auditors. Included here are the statements that:

- Proficiency in accounting principles and techniques is required of auditors who work extensively with financial records and reports.
- An understanding of management principles is required to recognize and evaluate materiality and significance of deviations from good business practice.
- An appreciation is required of the fundamentals of such subjects as accounting, economics, commercial law, taxation, finance, quantitative methods, and computerized information systems.

This broad coverage of required qualifications springs from the fact that the internal auditor is reviewing all types of organizational activities. It does, however, complicate the problem of where in the undergraduate and graduate business schools the responsibility for education of internal auditors should be centered.

The Changing Contemporary Situation

In more recent years, there have been a number of important developments which impact directly and indirectly on both business organizations and the independent public accountants who serve them. In the case of the business organization, the impact bears on both the management group responsible for operations and the board of directors to whom the operational group is responsible. These impacts in turn flow through to a considerable extent to the internal auditors in those same organizations. The underlying developments have cre-

ated new pressures which bear importantly on the continuing roles and responsibilities of all of the aforementioned parties of interest.

The new developments can be viewed in the most general terms as due to new expectations of the total society pertaining to the quality of life. In more specific terms, the new expectations run to the protection of the physical environment, the conservation of natural resources, elimination of poverty, providing greater equal opportunity to people, the satisfaction of higher level human needs, and higher standards of morality. These expectations have always existed over time, but the current situation is characterized by an acceleration of these expectations, with a related demand for more immediate and more substantive corrective action. These new expectations have increasingly focused on business corporations, because of their relatively greater visibility, resources, and power. At the same time, individual instances of deficiencies of corporate conduct in various areas of corporate activity have fanned the flames of the new demands for corrective action.

All of these pressures have combined to cause a rising dissatisfaction with business organizations and those responsible for their operations, plus a substantial loss of confidence in the integrity and trustworthiness of business leaders. The pressures have been exerted in a number of ways. In the case of corporate management, there is the new emphasis on adhering to higher standards of conduct, better accounting policies, and for more comprehensive and more effective systems of internal control. For boards of directors there are pressures for greater involvement in corporate affairs, a deeper sense of both shareholder and social responsibility, and a greater use of audit committees. And in the public accounting area, there are pressures for greater independence and a higher and more definitive level of responsibility. The aroused public opinion has been expressed principally through demands for new legislation and greater governmental regulation and control.

The result of all of the various new pressures just described is to some extent to further involve the internal auditor. With the internal auditor's traditional focus on compliance and internal control, it is natural that all parties of interest tend to see the internal auditing group as a useful contributor to the solution of existing problems, and more specifically as a helpful ally in the accomplishment of their own particular objectives. The question thereby posed for the internal auditor is how to respond to the new greater needs, and with a further question as to what the priorities should be in serving the particular needs of the various parties of interest. The latter question may of course be taken out of the internal auditor's hands by the decisions of higher authority, including specific legislation. At the same time, however, internal auditors are endeavoring to make their own appraisals of what is best in terms of their own self-interest and the needs of the larger society. This requires reconciliation and resolution of any existing conflicts, and then help in a constructive way to shape the evolving pressures and demands by higher authority. All of this raises questions of what is the best ongoing role and what are the related responsibilities for the internal auditor now and in the years ahead? What are the alternatives and how do they impinge both upon the responsibilities of the other parties of interest and the total social welfare? And then, in the light of those choices,

what should be the nature and scope of internal auditing practice for implementing the selected role over the foreseeable future?

Whither Internal Auditing

There are many ways that internal auditors might respond to the new pressures on business organizations and independent public accountants. In all of the various alternatives there is, however, a central issue of what priorities should be given to services to corporate management versus services to the board of directors. In this connection there are various sets of arrangements which could in some way separate or integrate these priorities. These alternative arrangements extend from the extreme of solely serving corporate management to that of solely serving the board, with various types of intermediate combinations. We propose to evaluate the two extreme alternatives and then to appraise the merits of various types of combined orientation. In that way we can best understand the trade-offs involved as one moves from one extreme to the other, and perhaps be in a better position to find the proper balance.

Let us begin with the possibility that the internal audit group is to be exclusively dedicated to the service of the operational organization and its corporate management. The merits of such an arrangement are that the corporate management can then use the internal audit group to fully serve its own managerial needs, free from any outside restrictions. Presumably, under such conditions the emphasis of internal auditing would be primarily on operational auditing, but plus whatever financial auditing activities the corporate management believes appropriate in discharging its own responsibilities to the board. One could perhaps argue that this arrangement would best exploit the already proven capabilities of internal auditors to achieve maximum profitability of the operating organization. The internal auditor would at the same time find life a bit simpler in that reporting allegiance would be only to the corporate management. Under this arrangement, however, the board of directors and its audit committee would presumably have to depend more on the independent public accountant to take care of their own needs, or alternatively create a new audit group to provide some of the needed services.

Now let us take the other extreme and assume that the existing internal audit group is exclusively responsible to the board of directors—most likely via its audit committee. Now the internal audit department would emphasize protecting the responsibilities of the board and would presumably concentrate on the more traditional objectives of compliance, protection, and integrity. To the extent that the board extended its operational involvement, it would also have the seasoned internal audit group to assist it in those endeavors. Under this arrangement, however, the role of the internal auditor would appear more likely to identify with that of the external auditor. There might also be some conflict between the work of the internal auditor and the operating organization because the internal auditor, to a considerable extent, would be checking on corporate management for the account of the audit committee. Presumably the internal auditor would take on a more powerful protective role, but that could be directly or indirectly undermining, or even giving up, the present major stake in operational auditing. It is also most likely—if not inevitable—that corporate manage-

ment would seek to obtain operational auditing type services from another organizational component, or that it would create an entirely new group to do the in-house operationally oriented internal auditing. That new audit group would likely move into the vacuum created by the partial or complete withdrawal of internal auditors from the operational area.

Exploring the Middle Ground

In between the two alternatives of exclusive service to corporate officers or the audit committee is a spectrum of intermediate possibilities. We will, however, focus only on three alternatives: one of primary responsibility to the corporate management with a defined secondary responsibility to the audit committee; one of primary responsibility to the audit committee with a defined secondary responsibility to corporate management; and a third one involving equal responsibility to the two users of audit services. In this range of alternatives, we use primary responsibility in terms of the conventional solid-line type of relationship, and secondary responsibility as the conventional dotted-line relationship. The solid line then indicates administrative control, but subject to dotted-line types of responsibility to others that should be specifically defined. When there are two solid lines, we have the unusual organizational arrangement where responsibility and administrative direction are shared equally by the two recipients on a partnership basis.

What are the merits and disadvantages of these three types of organizational arrangements? Under the first named alternative—the solid line to corporate management and the dotted line to the audit committee—the internal audit role to corporate management would stay much the same as now presently exists. The dotted line responsibility to the audit committee would presumably include periodic reporting—both in writing and in person—and immediate access for each party to the other as deemed necessary. The responsibilities as defined would probably state particular types and levels of required disclosure. The advantages are that each party of interest might be able to gain satisfaction of its needs for service without restricting the control needed by corporate management for achieving effective operations. The disadvantages are that there might be some conflict of interest between the management and the board, and that the board might then feel that it was not getting enough protective service from the internal audit group to satisfy its expanding needs.

The reverse type of organizational arrangement—a solid line to the board and a dotted line to corporate management—would of course put the audit committee in the position of top control and thus more fully satisfy governmental pressures for very strong safeguards. It would, however, have the disadvantage of tending to restrict corporate management in its now existing use of internal auditors in the areas of operational auditing. There could also be some hostility generated between the corporate management and the board. The benefits to the internal auditor would, of course, be retention of ties to both client groups, and therefore a total service role, but it would at the same time pose questions as to whether both audit roles would be adequately fulfilled. Again, corporate management might feel the need for a new audit group which it could more effectively control.

The third alternative—the solid line to both parties of interest—appears on the surface to be attractive because it asserts full service of the internal auditor to both parties of interest. The major problem here, however, is whether such a type of organizational arrangement is sound, or even realistic. Can an internal auditing group function under two administrators? Admittedly, there are some situations where this has been tried with reasonable success. The project team, with the dual responsibilities of the member to the project manager and to the department from which the member has been assigned, is one example. However, in such a situation there is a higher level organizational authority which is available to directly or indirectly resolve any major conflict. It is doubtful whether such higher level arbiter exists as between corporate management and the board in any really practical sense. Hence, even though the idea of equal joint responsibility may sound like a good solution, there is considerable doubt whether it is satisfactory for the parties of interest, including the internal auditor. We reach this conclusion even though such equal responsibility may have been made to work in isolated situations through an extraordinarily cordial relationship between the chief executive officer and the chairman of the board.

Is there an Answer?

What is the answer? Quite clearly, we have a number of trade-offs which can never be resolved in a manner that will be fully satisfactory to all parties of interest. There is also the continuing question of how the respective roles and responsibilities of corporate management and the board of directors are going to evolve in the future. On balance, it would appear—at least to this author—that boards of directors cannot effectively take over the role of corporate management. If they do, they will need full-time people of the caliber of the now existing corporate management. In such a situation it could well be that the present top level corporate officers would become the board members and simply have new titles. In that case, however, we would then need a new group to monitor the board in the discharge of their greater operational responsibilities—that is, a kind of super board—in which case, we would be back about where we had started. Possibly at this point, government might somehow take on the super board role, but based on historical performance, greater governmental control has brought with it new problems which tend to be even more difficult to solve than those previously existing. Hence, that does not seem to be a good answer.

If the relationships stay much as they are now, but with more enlightened roles on the part of both corporate management and boards of directors, we would, in this writer's opinion, tend toward the internal audit department having a solid line responsibility to corporate management and a defined dotted line to the board of directors—via the audit committee. In the case of corporate management, it would then seem to be essential for the internal auditor to have vice president status to demonstrate management commitment and to assure needed independence in carrying out an effective internal auditing role. The internal auditor would then ideally report to the chief executive officer (CEO). However, the CEO might not have adequate time to provide the needed direction to the internal auditor, and in such a situation the reporting responsibility

might well run to a senior vice president reporting directly to the CEO. Under either of these reporting arrangements, the internal auditor should work closely with the external auditor, and together they should work closely with the audit committee. In these circumstances, there would necessarily be a close partnership relationship between the chief executive officer, the chief financial officer, the chairman of the audit committee, and the chairman of the board.

The advocacy of the arrangement just described in no way denies that there are serious obstacles to making this arrangement work satisfactorily. It assumes, first of all, that the cooperative effort outlined above could be generated and sustained. The case for it is that there is, in fact, a basic common interest on the part of all participants for a well run, effective and profitable corporate enterprise. When this common interest is sufficiently well understood, there can be a sound basis for agreement and cooperative effort. The advocacy of the above-mentioned reporting arrangement also carries with it the major assumption that the internal auditor has, or can develop, the needed capabilities to adequately serve all the parties of interest. Proper organizational status is, of course, important, but needed also is a sufficiently high level of technical competence, an understanding of the high level management and related policy issues which are involved, and last but not least, the personal qualifications to be able to work effectively with high ranking persons. To develop these greater capabilities is indeed an awesome challenge to internal auditors, although the record thus far engenders confidence that it can be done. However, internal auditors will have to make proper plans and then implement them effectively.

Future Practice Directions

If the organizational arrangement for the internal auditor just described is accepted—that is, primary responsibility to corporate management and defined secondary responsibility to the board of directors—what will the impact be on the nature and scope of internal auditing practice as internal auditors strive to effectively discharge this combined service role? From the author's own perspective, the professional internal auditing practice will involve four key areas. First, the internal auditor will continue to be the leader in the appraisal of the adequacy and effectiveness of systems of internal control covering all areas of corporate activity. These systems of internal control must now, however, be broader in scope to cover the areas of social concern earlier described. The internal auditor will, at the same time, properly play an active role in the required documentation of the adequacy of internal control to comply with various types of new legislation. This "control" role of the internal auditor is, in essence, an expanded and enriched version of the role which has in recent years been one of the major areas of service.

Secondly, the internal auditor will continue to build upon the basic control role to provide supplementary "operational auditing" services pertaining to managerial effectiveness and corporate profitability. The exposure to operations provided through the analysis and appraisal of control is, as it has always been, a most useful foundation for understanding and evaluating effective operational performance. And quite clearly, the previously described expanded control role will provide the basis for a similarly expanded contribution in the area of pro-

moting operational effectiveness. This particular service is especially important when one considers that the current major emphasis by government and society on protection tends to inhibit managerial risk taking and related entrepreneurial operational actions upon which increased productivity and the welfare of society ultimately depend.

Thirdly, the internal auditor will certainly move into a new, higher level of truly effective service to boards of directors via their audit committees. It is assumed—based upon the previous analysis—that boards of directors and audit committees continue to involve the part-time services of qualified and dedicated persons. Under these conditions, audit committees may have small staffs, but in carrying out their roles, will depend primarily on their interface with corporate management and information obtained from both the internal and external audit groups. Here, as previously noted, they will need to get certain periodic reports and have the opportunity to supplement these reports with questions and face to face discussions. Audit committees will not necessarily administer internal audit groups, but they need to be cognizant of how to support them and how to best assure receiving adequate information about corporate operations. This needed information then becomes the basis for best assuring effective and profitable results in accordance with proper legal and moral standards. To help provide that kind of service would surely be a newly expanded role of internal auditors.

Fourthly, it seems to be inevitable that there will be a still more effective partnership relationship of the internal auditor with the external auditor. Here the often older relationship of superior and subordinate will be replaced increasingly by a new partnership of professional equals with mutual respect for professional competence and a common interest in service to the larger corporate and social welfare. Clearly, the different primary mission of the external auditor will still require the right of supplementary review and appraisal of the work of the internal auditor. But the two audit groups can at the same time exploit their legitimate common interests by advance planning, which can then be backed up by day-to-day liaison and cooperation to better insure the most effective, as well as the most economical, total audit effort. A forthcoming research study by The Institute of Internal Auditors covering the relations of the internal and external auditor will examine in further detail these cooperative efforts. But we can here recognize the indicated partnership directions and the major potentials for serving the needs of all parties of interest—corporate management, boards of directors, government, and the larger total society.

Summary and Conclusions

In some forty years we have seen internal auditing emerge from a relatively underdeveloped professional status to one of major importance in terms of its size and level of contribution. It has broadened its role from that of predominantly compliance and narrower financial auditing to include a major commitment to operational auditing. During this period of time, a professional association was formed and reached substantial stature. At the same time, a comprehensive literature has been developed supported by sound research. While internal auditing activities have always been, to some extent, related to those

of the external auditor, these relationships have been weakened partially by the movement of internal auditors into the broader operational auditing. But over the years, internal auditing departments have grown and have commanded increasing strength and support by corporate management, external auditors, and by boards of directors.

The new developments of our contemporary age, emerging principally from the accelerated new expectations of society, have put new pressures on corporate organizations, their boards of directors, and the independent external auditors. There is a general demand for higher standards of integrity and responsibility for socially oriented action. There is, at the same time, the focus on the need for more effective systems of internal control. Since the internal auditor is importantly concerned with the latter area, there is a new interest in the internal auditor's role in helping to satisfy the newly expanded needs. These developments have created special problems for the internal auditor in determining how best to provide internal audit services, and with what priorities. At the same time these problems, as is true for all problems, bring with them great opportunities.

As society proceeds to seek ways and means of better assuring the accomplishment of its newly expanding objectives, principally through legislation or other types of governmental action, there is the ever critical need to move in such a way as best utilizes the capabilities of the various parties of interest—corporate management, boards of directors, the independent public accountants, and last but not least, the internal auditors. It is important to avoid panic type actions which could take the form of hasty legislation and related restrictions on key participants, which would then prevent them from making needed contributions. It is especially important not to penalize the majority by actions to get protection from the relatively few offenders. Important also is the need to avoid restrictions which could choke entrepreneurial risk taking and managerial motivation which are such a basic requirement for the productivity of business and the ultimate contribution to social welfare. It is, indeed, a time for thoughtful and soundly determined action.

In the situation just described, internal auditors stand in a particularly strategic position. Possessing, as they do, special technical competence in the basic areas of internal control, and having been further indoctrinated in the broader areas of effective managerial results, they are especially well equipped to make a major contribution. The danger, however, is that their role might be too narrowly defined to serve exclusively the needs of groups which seek protection as their key objective. There is a need for all parties of interest to better understand the breadth of the services which can be provided by internal auditors and to assure broader utilization of those services. In this connection, internal auditors also have a responsibility to help develop that needed understanding—both in their own self-interest and in the broader social interest. At the same time, internal auditors must take major steps to prepare themselves to adequately discharge the greater range and higher levels of service which appear to be potentially probable.

In total, this means new major opportunities for internal auditors in the way of further professional growth and development. It has been said that the

time for the internal auditor has come. And others have said that internal auditing will be a major growth area of the eighties. If, then, the time has come for internal auditors, it is hoped that they will do everything possible to develop further capabilities to take advantage of the expanding opportunities. In all of their endeavors, the internal auditors have a sound foundation in history on which to build, but they will need the understanding and support of all parties of interest.

Discussant's Response to Internal Auditing—A Historical Perspective and Future Directions

Lawrence B. Sawyer

Consultant—Education and Management

Vic Brink's recollections of internal auditing past reach back to the beginning of a discipline which I like to think of as management-oriented internal auditing. He was there. He was in attendance when it crawled out of the cocoon of financial ticking and totting and first spread its wings. The discipline may have had its origin in the ancient verification of financial transactions. But it started to mature when Vic and a few others brought forth The Institute of Internal Auditors.

Vic's comments on those beginnings need no discussion. No one knows them better than he. And since we feel the same about internal auditing—what it is and what it should be—I have no quarrel with his concepts. Yet in seeking to put so much on the canvas, he had to omit some of the details. This commentary, therefore, will seek to amplify several of those details and fill in some of the gaps, particularly:

- The early history of internal auditing
- The definition of internal auditing
- Internal auditing as a unique discipline
- The internal auditor's responsibility to management and the board
- The internal auditor and the external auditor.

The Early History of Internal Auditing

Vic began his historical perspective with the birth of The Institute of Internal Auditors. It would be useful, however, to go back further—to the very beginnings.

Auditing as an aid to management control has its roots in antiquity. In the Mesopotamian civilization, about 3000 B.C., scribes prepared summaries of lists of transactions. These were then checked against the original lists prepared by others. Evidence of such checking, unearthed by archaeologists, shows tiny dots, ticks, and circles on the sides of figures. Apparently this was the beginning of two control devices: division of duties and systematic checking.¹

Similar provisions appear in early Egyptian, Persian, and Hebrew records. The Egyptians required the audit of one official's records by another and the actual witnessing of corn brought to warehouses, along with certification of receipt.

The Greeks, and the Romans after them, had an abiding interest in the audit of public finances. The suspicious Greeks preferred slaves to freemen as auditors. They believed, with brutally direct logic, that the statements of a slave under torture were more trustworthy than those of a freeman under oath.

The word "control" comes from the Latin *contrarotulus*, meaning "against a roll"—the comparison of one "roll" of accounts with another which had been prepared independently. During the Roman empire, an official known as a quaestor, "one who inquires," would examine the accounts of provincial governors.

During the Dark Ages, rulers demanded assurance of revenues due them. Barons and justices made the first audits of the records of amounts due and received. Later the audits were made by specially appointed officials.

The auditing function, as we know it now, started during the industrial revolution. Many commercial and industrial organizations employed expert accountants to examine and certify the validity of accounts. Even Columbus in 1492 was accompanied to America by an auditor representing Queen Isabella.

In more recent times, the railroad companies were probably among the first to meet the needs for internal verification. The far-flung activities of the railroads made it necessary to use internal auditors to examine and coordinate widely scattered operations.

Following 1933, internal auditing made important strides. Under the Securities Act of 1933 and the Securities Exchange Act of 1934, as amended, corporate management was made responsible for the accuracy of financial statements filed with the SEC. As a consequence, corporations hired accountants from the outside to make more detailed verifications of accounts than the public accountants could.

But the outside auditors controlled those on the inside. The internal auditors were a shadow or echo of public accounting. They were a simulacrum, with none of the prestige of the external auditors. Internal auditing, as a separate, distinctive discipline, did not emerge until 1941 when The Institute of Internal Auditors was formed. Then it began to range beyond the books of account. Then it began to assume a new posture.

Internal Auditing Defined

The varied definitions of internal auditing are mileposts in its history as well as indicators of how it is regarded. They also bespeak its changes and its expansion.

Webster's defines it as "1: a usually continuous examination and verification of books of account conducted by employees of a business—contrasted with independent audit; 2: a review of systems of internal check and internal control of a business." The *Encyclopaedia Britannica* says that "Internal auditors try to determine whether the requirements of an accounting system are being met effectively and also whether the system itself is adequate for management needs." Both definitions have a purely financial flavor and pedestrian posture. There is no hint of the current management-oriented approach adopted by many internal auditing practitioners.

The Institute of Internal Auditor's original 1947 **Statement of Responsibilities**

of the **Internal Auditor** was not much better. It gave a grudging nod to the internal auditor's involvement with other than financial activities when it said that internal auditing ". . . deals primarily with accounting matters but may properly deal with matters of an operating nature."

The 1957 Statement, somewhat more expansive, defined internal auditing as providing for ". . . the review of accounting, financial, and other operations."

But in 1971 the Statement cut the umbilical cord to the books of account from which internal auditors first drew their life support, by describing internal auditing quite simply as ". . . the review of operations as a service to management." Yet even this definition is too narrow. **Standards for the Professional Practice of Internal Auditing** expands "service to management" to read "service to the organization." Thus it encompasses both management and the board of directors.

I see modern internal auditing, practiced now in many organizations around the world, as going beyond even this expanded definition. I see it as doing what the president of an organization would do in appraising the operations of the organization, if only he had the time to do so. In other words, to be of service to management, the internal auditor should be an extension of management, authorized to review all operations and seeing those operations through the eyes of the people in the highest echelons in the organization. Based on these ideas, my personal definition of internal auditing is:

Internal auditing is the independent appraisal of the various operations and systems of control within an organization to determine whether acceptable policies and procedures are followed, established standards are met, resources are used efficiently and economically, planned missions are accomplished effectively, and the organization's objectives are being achieved.

This definition addresses the internal auditor's opportunities as well as the internal auditor's responsibilities. It underscores, also, the view from the top: management-oriented internal auditing. Specifically:

- **Independent appraisals** suggests complete objectivity during the performance of audits and a position within the organization which provides assurance that the internal auditor's findings and recommendations will receive adequate consideration and become the basis for needed corrective action.
- **The various operations and systems of control** imply access to all records, properties, and personnel relevant to the subject reviewed. These also imply that the auditor is concerned with performance as well as control.
- **Acceptable policies and procedures** indicate the internal auditor's responsibility for seeing that prescribed rules, systems, and controls are workable and are congruent with organizational objectives; in short, that they make sense under current conditions and in the light of the entity's aims.
- **Established standards being met** connotes reviewing for compliance with laws, regulations and established policies to determine whether

operations are properly conducted and whether reports—both operating and financial—are accurate, timely, and useful.

- **The economical and efficient use of resources** embraces the appraisal of the management of people, money, facilities, and materials, and the search for causes of any inefficient or uneconomical practices so that managers can correct them.
- **Planned missions** aims at the evaluation of program and activity results to determine whether desired benefits are being obtained.
- **Objectives being achieved** raises the internal auditor's sights to that of the manager's—of managers at all levels of the enterprise; for the achievement of organizational objectives is the lodestar to guide all those who direct the destinies of the organization.

Internal Auditing as a Unique Discipline

Internal auditing will be hard put to achieve its own goals until it is recognized as a unique discipline with distinctive objectives. It is not a younger brother or sister of other disciplines. As Vic pointed out, both the internal auditor and the external auditor perform audits; but their purposes and scope are different, and their desired outcomes are different.

Internal auditors have a different statement of responsibilities. They have a different code of ethics. They have a different common body of knowledge. They have different standards of professional practice. They have a different professional certification examination, and those who pass all four parts of that examination and can show that they have obtained the required experience in internal auditing have a different designation: Certified Internal Auditor.

The examination bespeaks the difference. First, it is international. Second, it reaches is dissimilar.

The first two parts of the examination cover the principles and the practices of internal auditing, with heavy emphasis on reviews of all operations within an entity—from marketing and research to accounts payable and the cashier's cage. The third part encompasses principles of management. The fourth part is made up of six sections: accounting, finance, economics, law and taxes, quantitative methods, and information systems.

Lest external auditors become apprehensive about the limited weight given to accounting, they must understand that the new standards for internal auditing consider that point. The standards state that the internal audit staff should collectively possess the knowledge and the skills essential to the practice of their discipline: i.e., accounting, economics, statistics, data processing, engineering, taxation, and law. Each member of the staff need not be qualified in all these disciplines. But high proficiency in accounting principles and practices is required of internal auditors who deal extensively with financial records and reports.

Although internal auditing is functioning now as a distinctive discipline, it is an emerging profession. It will be recognized as a full-blown profession when well defined courses of university study lead to a degree in internal auditing. An experiment in Australia is now addressing the subject. Australia's Royal Melbourne Institute of Technology, in its School of Business, devised a

course of study leading to a graduate Diploma in Internal Auditing. I am informed that the first session of the course will be held in 1979 in Sydney, Australia.

It is a two-year, part-time course. Prerequisites are a degree from a college of advanced education or equivalent qualification with at least four units of accountancy. The course covers 350 hours of study or a little over eight of our semester-hour equivalents. The subjects include such matters as internal auditing, internal control, administering both the internal auditing department and the internal audit assignment, internal audits of various functions of industry, commerce, and government, quantitative methods, management, forecasting, social conscience, leadership, assessment of profit opportunities and risks, and there is heavy emphasis on computers.

When internal auditing is recognized as a distinctive profession, its partnership with the external auditors will be all the more profitable for both.

The Internal Auditor's Responsibility to Management and the Board

As Vic pointed out, internal auditors have a dual responsibility: to management and to the board. This calls for walking a tightrope. But professional internal auditors have walked similar tightropes before without plunging into the net. For example, many internal auditors have espoused participative auditing—working with auditees as partners instead of as adversaries. Yet those auditors also maintain the required objectivity. When the time comes for expressing an opinion on the adequacy of control and the effectiveness of performance, they can still state their case without bias in either direction. Participative auditing does not have to equate with whitewash.

The responsibility to the board of directors, usually through the audit committee, is to discuss audit goals and plans and the adequacy of internal audit staffing and independence, to evaluate internal controls, and to submit summaries of audit findings and recommendations.

Primarily, the responsibility is to provide some measure of assurance to an increasingly nervous group of board members that systems of control are adequate and are functioning as intended and that policies and procedures are still valid and are actually being followed. Where such assurances cannot be given, then the internal auditor owes the board members the duty to inform them of the action that is being taken or should be taken to correct discovered defects.

Board members need help. They need independent, objective information, because the courts are turning deaf ears to the claims of board members that "We didn't know." The courts are responding unsympathetically that "You should have known." As a consequence, board members are facing increased difficulty in obtaining directors and officers (D&O) insurance. The July 12, 1976 *Wall Street Journal* reports that average payments to successful claimants under D&O policies rose to \$865,000 in 1975 from \$770,000 in 1974. The *Journal* says that D&O coverage is tough to get at any price. Lockheed reported that it was able to get only \$25 million in D&O coverage after its \$35 million coverage ran out. The problem seems to be getting more serious all the time. But the knowledgeable, objective, broad-ranging internal auditor should be able to help. After all, fire insurance premiums are reduced when adequate sprinkler systems

are installed. The professional internal auditor should function as the board's sprinkler system.

Executive management needs summary information on audit results. It needs to know whether deficiencies detected are being corrected. It needs to know of dangers, present or incipient, which require top management attention. And it makes use of internal auditors to carry out management studies to assist in the solution of problems that elude ready answers.

Operating management needs fair, objective appraisals of its operations, reports which are accurate and unbiased and which put audit findings in proper perspective, audit opinions which take into account both the good and the bad, and recommendations which are both reasonable and cost effective.

Internal auditors owe top management the responsibility of reporting conditions precisely as they see them. They owe operating management the duty of leaving every place they audit a little better than they found it.

More and more, management and the board are looking to the internal auditor for information on the various activities within the organization. But in all cases that information must be objective. Otherwise the internal auditor is an advocate instead of an unbiased observer. And objectivity flourishes only in a climate of independence. Clearly, no organism can be completely independent of the body it inhabits. Internal auditors can not be utterly independent of those who fund their work. But they must be independent of the activities they audit so that there can be no question about their appraisals being impartial and for the greater good of the entire enterprise. Independence, in this context, results primarily from status in the organization. Thus, where the internal auditor is organizationally responsible to the chief accountant, for example, the objectivity with which audits of the accounting department are performed may reasonably be open to question. He who is on his knees cannot stamp his foot.

In recent years, therefore, there has been an upward movement in the levels in the organization to which the internal auditor is responsible. The reporting relationship is trending to the kind Vic advocates: a solid line to the chief executive officer or senior vice president and a dotted line to the board of directors. Certainly, internal auditors will still be under the general supervision of the officer or group which pays their salaries. But the possibility of undue pressures may be avoided if the decision to appoint or remove the director of internal auditing is subject to the approval of the board of directors.

The responsibilities to management are expanding beyond examining and verifying. The reason lies in the expressed needs of managers themselves. These managers require more from their internal auditors than appraisals. They also look for guidance. The literature supports the concept that besides being an evaluator and reporter of deficient conditions, the internal auditor should be a counselor, a teacher, and a problem-solving partner. To buttress this view, here are the comments of some highly placed executives about their internal audit functions:

Counselor: Ward Burns, Controller for J. P. Stevens Company, Inc., said that the internal auditor should be available for consultation on matters of techniques and controls.²

Teacher: Dudley Stewart, vice president and controller of Industrial

Acceptance Corporation Limited, Group of Companies, said: "The internal auditor must function as an integral part of the management team . . . The chief internal auditor will become more and more a creative executive. The more effective he becomes, the more he will find that a great deal of his time is spent on teaching those who report to him and teaching very subtly those on whose work he is reporting."³

Problem-solving partner: Charles R. Gollihar, Jr., vice president—finance and treasurer for Douglas Aircraft Company of Canada Limited, said: "In the area of management audits, the auditor can and should be an integral part of the final problem-solving team . . . roll up his sleeves and jointly with other managers report to management—'we fixed it.'"⁴

The Internal Auditor and the External Auditor

The internal auditor and the external auditor need each other. Each must recognize the other's role and make use of the other's strengths.

The pressures placed upon external auditors build up. The Moss subcommittee in the House of Representatives has urged the SEC to use its powers to prescribe rules for accounting, auditing, and professional behavior. And while the current stance of the SEC is to let the public accounting profession set its own rules, the SEC will continue to watch from the sidelines. The Senate's Metcalf Committee has blistered the public accountants and is bent on proving a conspiracy among auditors, clients, and the Financial Accounting Standards Board.

The pressures mount. But however they escalate they still cannot force two quarts of liquid into a one-quart container. They cannot make possible what is impossible or economically infeasible. The costs of assuming responsibility for detecting all manner of illegality are unsupportable for either the external or the internal auditor. Besides, no amount of auditing will detect every arcane impropriety hatched in the brain of an unscrupulous genius or perpetrated by wily conspirators. As the learned Judge Lopes said in England before the turn of the century, "The auditor is a watchdog, not a bloodhound."⁵

Yet the hue and cry will continue. And external auditors will have to rely on people within client organizations who they can trust and whose work, in appraising systems of control throughout the entire enterprise, evidences professionalism, and can be relied on implicitly. The internal auditors should be those people.

There have been some justifiable complaints by external auditors about the work of internal auditors.⁶ For example, many internal auditing groups do not establish a formal plan of operations for one year, to say nothing of three or five years. Also, many internal audits are performed without a written program. And, worst of all, working papers of internal auditors sometimes leave much to be desired. A reviewer of such papers may need clairvoyance as well as analytical skill to determine what the internal auditor did, why it was done, and how thoroughly the assignment was carried out.

The recently published statement of standards for internal auditors, however, sets criteria of quality for both the administration and the conduct of the internal audit work. Compliance with those criteria is to be tested periodically

by peer evaluations and by examinations by external auditors, if the internal auditing organization wishes to lay claim to meeting the new standards.

As internal auditors strive to measure up to their own high standards, and as both internal and external auditors gain a clearer understanding of each others' needs, the cementing of the partnership between these two auditing disciplines will provide an increased measure of assurance to the external auditors.

And that brings up a significant point. The assurance of which I speak will be in direct relationship to the degree of independence enjoyed by the internal auditor—a matter on which the external auditor can exercise considerable influence. External auditors meet regularly with boards of directors. They have the board's ear and, one would hope, the board's respect for their opinions and recommendations. External auditors should be ready to point out the need for the internal auditor's independence of the activities audited, the conflicts of interest that arise when internal auditors are made responsible for developing systems or for carrying out line functions or nonaudit work, and the reduced reliance by external auditors on the work of internal auditors when independence can seriously be questioned.⁷

The independence of internal auditors is extremely important to external auditors and should be promoted so that the partnership stands on a firm foundation and so that the internal auditor's work can be accepted without fear that unwarranted pressures have influenced the internal auditor's objectivity.

Conclusions

As our review of the past has shown us, until recently internal auditing was a weak little shoot struggling to rise through inhospitable soil and find its place in the sun. That place is being found. I can see the signs today. And I foresee the possibilities that lie ahead. Vic has talked of some of these possibilities. I would like to expand upon them, because I can see at least ten developments over the horizon for internal auditing. Some are almost here. Some will not come for a while. But come they will because there is a need for them:

1. A definitive course of study leading either to a degree in internal auditing or to an MBA with a major in management-oriented auditing. Australia is showing us the way.
2. A certification program that is world wide and increasingly demanding. The beginnings are already here.
3. Requirements for continuing education to maintain expertness in a field that in common with many others is expanding by geometric progression. Internal auditing cannot remain aloof from similar requirements set by kindred professions.
4. Recognition by all concerned that internal auditing is a profession ready to take its place one day among the learned professions.
5. Recognition by the public that internal auditing is a new and exciting form of endeavor with responsibility not only to the organization for which the professional internal auditor works but also to society.
6. Realization among students and academicians that here is a vital, needed profession waiting with a kaleidoscope of exciting experiences

for competent, intelligent, adventuresome applicants. With the growth of courses and literature, and with additional promotion of internal auditing and the attractive salaries already available, this realization should be assured.

7. An increase in participative auditing where operating managers and internal auditors work together to appraise operations and correct defects.
8. A full partnership between internal and external auditors, founded on mutual respect and maintained by an appreciation of their interdependence. The partnership is here in many organizations. It needs to be extended to others.
9. Acceptance of internal auditing by members of management and the board of directors as a source of needed, impeccable information and of counsel and guidance on matters of good business practice. That consummation has come about in many organizations, and recognition of the benefits obtainable will make it spread to others.
10. Finally, membership in the highest councils of the enterprise, enjoying the same status as the vice president—controller and the chief legal counsel. Directors of internal auditing are vice presidents in a number of companies and the need for management-oriented internal auditing is making membership in the top management team in other organizations come closer and closer.

Footnotes

1. George McIntyre, "Auditing for Management Control," *The Internal Auditor*, May/June, 1975, p. 37.
2. Ward Burns, "What Top Management Expects of Internal Audit Now!" *The Internal Auditor*, May/June, 1975, pp. 21-23.
3. Dudley Stewart, "The Internal Auditor of the Future," *The Internal Auditor*, March/April, 1970, p. 55.
4. C. L. Gollihar, Jr., "What Management Expects from a Management Audit," *The Internal Auditor*, May/June, 1972, p. 38.
5. *In re Kingston Cotton Mill Co.*, No. 23, 1896, 2 Ch. 279, 288.
6. J. W. Winter, "Coordination Between Internal and External Auditors," *The Internal Auditor*, December 1976, pp. 17, 21.
7. T. E. Phillips, "Independence: Key to Successful Auditing—Both Internal and External," *The Internal Auditor*, February 1978, pp. 68, 71.

2

Analytical Auditing: A Status Report

Rodney J. Anderson

Clarkson, Gordon & Co.

The purpose of this paper is to provide: a) a brief overview of the historical development of "Analytical Auditing," b) the reasons which underlay that development, c) the purpose of certain modifications introduced in subsequent years, and d) an evaluation of the use of analytical auditing in practice today.

Analytical auditing is a systems-oriented approach to that portion of the auditor's annual audit which involves the study and evaluation of internal control. It is based on flow chart analysis supported by appropriate additional compliance verification procedures. It is not the purpose of this paper to explain the approach in detail, for it has already been comprehensively documented in the literature.¹ Rather, the purpose is to comment on past and present trends and to cast an eye to the future.

Where Does Analytical Auditing Fit in?

Generally accepted auditing standards² imply a division of the program for the recurring annual audit into a) a review and evaluation of internal control together with testing of transactions and b) a gathering of other evidence to support the audit opinion. I shall refer to the first stage as the "interim audit" (various practitioners use various names). I take the objectives of the interim audit to be the following:

- 1) To determine the accuracy and reliability of the accounting records and the appropriateness of the accounting methods followed in order to provide a basis for planning the timing, nature, and extent of the substantive procedures necessary to support an opinion on the financial statements through a) Review and evaluation of the accounting system and other relevant internal controls, and b) Compliance verification of the existence, effectiveness and continuity of operation of those controls on which reliance is to be placed, or substantive verification of internal evidence.
- 2) To perform those substantive procedures which can most usefully be commenced at an interim date. (Ref. h), Vol. 1, p. 297.)

There are various strategies by which one can accomplish this interim audit objective. The two principal strategies may be referred to as the systems-oriented approach and the data-oriented approach. The former places its primary emphasis on auditing "through" the system and understanding how the system

works. The latter places its primary emphasis on testing the results of the system and establishing the degree of accuracy of those results. Of course, these oversimplifications are extremes and in practice any systems-oriented approach will include important tests of data and any data-oriented approach will include important analysis of systems. The difference is one of emphasis.³

If one were to opt for the systems-oriented approach to the interim audit there are again various ways in which one could proceed to study the system, document one's study, analyze that documentation in order to evaluate internal control, etc. One of these ways is the "analytical auditing" approach. Any interim audit approach must contain **review** techniques (finding out what the system is) and **evaluation** techniques (deciding whether the system is any good).⁴ Analytical auditing⁵ uses a) a combination of flow charting and limited tests of transactions as review techniques, b) a combination of flow chart analysis and internal control evaluation guides as evaluation techniques, and c) appropriate additional compliance and substantive verification procedures.

Reasons for the Initial Experiment

Within Clarkson, Gordon & Co.⁶ the experimentation which led to analytical auditing began in 1960, but about the same time others were also experimenting with possible flow charting approaches (see Refs. a) and c)).

What were the reasons for this experimentation? I can only speak from my own personal viewpoint, but perhaps others had similar experiences. A major factor was the frustration of trying to relate the quantities of detailed checking we had all customarily been doing to our stated objectives of designing audit tests related to our evaluation of internal control. At this point it may be helpful to point out that the profession in Canada had grown out of a slightly different background than in the United States. In Canada, auditing had originally been founded on the concept of a detailed checking of all transactions. When it became clearly impractical to check an entire year's transactions, Canadian auditors began to check one month per quarter, and eventually this was reduced to one month per year. When I was training as a junior, the normal practice was to check one month in its entirety—the month to be tested being selected randomly each year (although there was on occasion a certain sameness in the month selected—May one year, June the next, May the next, and so on).

In contrast, I sense that the development of auditing in the United States was more from the starting point of creditor-oriented "balance sheet" audits which later came to be supplemented by tests of transactions. Thus, our two countries may have approached the testing of transactions question from the opposite extremes.⁷

In any case, in Canada, with the memories of 12-month detailed testing still fresh in the minds of the partners who were overseeing us, we rationalized checking less than the entire year on the grounds that we were placing reliance on internal control (statistical sampling ideas were not yet widely in vogue). We all knew that we were supposed to test more if internal control was poor and less if internal control was good. However, the fact is that we often filled out the internal control questionnaires as the last step in the audit (on the bus

ride back to the office). After all, before conducting the various tests we just did not know enough about the details to be able to answer the questionnaire anyway. In any case, whether the answers to the questionnaire were good or bad, we usually ended up testing one month of transactions. In short, we all paid lip service to relating the design of tests to our evaluation of control but none of us knew very well how to put this concept into practice. That certainly was one of the frustrations.

Another one was the sheer problem of knowing enough to be able to test the transactions intelligently. I can remember sitting down with a stack of 300 invoices and being told to vouch them. I did not have a thorough understanding of how the business operated, nor of what sort of expenditures one could reasonably expect to be made, and therefore what criteria one should use in deciding whether the documentary support for such expenditures was reasonable. Anyway, there was not much time to worry about this sort of question if one was going to get through the 300 invoices in a reasonable length of time. One just started looking at the pieces of paper hoping that after a while some sort of pattern would emerge and that at least the last few would be audited more intelligently than the first.

Of course, I am overstating the case. I do not mean to imply that auditors were myopic until analytical auditing came along or that those who use different approaches today do not do thoughtful and conscientious work. I am merely trying to describe some of the frustrations with what at that time was our transaction-oriented approach. These frustrations (together with fee pressures from our clients) led us to experiment with alternative techniques.

We felt there had to be a better way of focusing on an understanding of the system and relating that understanding in a more direct manner to the choice of what we tested.

Historical Overview

During the next two years (1960 to 1962) we experimented with a number of different methods for studying systems and for documenting our study. In some audits we produced whole libraries of systems notes which had to be typed if anyone was going to hope to read them. The problem was that a third of these notes would be obsolete the following year and patchwork revisions were not very intelligible. On other audits we tried various flow charting approaches, but in many cases our flow charting was completely undisciplined with every staff member having an individual style, that was often undecipherable to anyone else. After two years of experimentation we decided that it was essential to settle on a standard style of flow charting and we picked one with a horizontal layout for reasons which I will mention in a minute.

In 1962 the prototype of the analytical audit approach was field-tested on 72 audits across the country. The technique was still nameless and the few of us working on the experiment came to be known snidely as the U-2 squad—an allusion to the bad publicity which had recently been attracted by the ultra-high U-2 flights which President Eisenhower had been sending over Russia. We did not think that “U-2 auditing” would have much sales appeal and finally settled on the name “analytical auditing” to refer to the emphasis on systems analysis.

With a new name, and a few minor revisions suggested from our field tests (the introduction of "outline charts" was one of them—see Ref. e), p. 39), we began an extensive period of staff training. In the same year, the approach was documented in an article in *The Canadian Chartered Accountant* (Ref. b).

In 1964 we saw the beginning of our full-scale conversion to analytical auditing (for audits over a certain minimal size) across the firm and in that year we also began analytical auditing courses for internal auditors of our clients. Staff training was significantly expanded in 1965 and comprehensive in-house manuals were developed for our staff. Some of the material from these manuals and from our staff training courses was incorporated into the book, *Analytical Auditing*, published in 1966 (Ref. e).

Throughout this period the development of EDP systems was accelerating. *Analytical Auditing* had given an introduction to the use of this approach in EDP systems (Ref. e) Chapter 9) but it was soon apparent that more guidance was needed in this complex area. In 1967 the analytical auditing techniques were incorporated into our video-taped computer auditing course—which was for a number of years to form part of the computer auditing courses offered by the Canadian Institute of Chartered Accountants. In 1968 the Canadian Institute began giving its own separate analytical auditing courses and these have continued for the past decade.

For the next seven years the approach was continued without major revision. No doubt various annual revisions of forms were made, most of which I no longer remember, and other modifications were made as we continued to gain experience with the application of the approach to computerized systems; however, the basic outline continued the same. From time to time there were public discussions of the approach.⁸ Then, in 1975 we concluded it was time to make some significant modifications with the introduction of the by-then current concept of compliance verification. I will discuss the significance of these modifications shortly. The resulting revised format was incorporated in our textbook, *The External Audit* (Ref. h), published last year.⁹

The Initial Analytical Auditing Format

In the initial format, as described in the first article and in *Analytical Auditing*, the basic approach was as follows. The accounting system as a whole was divided into logical component systems—usually sales-receivables-receipts, purchases-payables-payments, salaries and wages, cost records, and general. This division we still use. Within each section the systems, or those portions of the systems, relating to important control points were summarized on flow charts, the flow charts merely being updated in succeeding years. To make sure we were not wasting time documenting the blueprint of a system which in fact had never been in force, we tested our understanding of the system by "walking through" four or five transactions along each path of the charted system from cradle to grave, checking related books, documents, and records and confirming procedures with the employees involved along the way. This walk-through audit can be conveniently summarized on the flow charts as well.

At that point, the flow charts were then analyzed. We have found that the flow charts themselves facilitate the detection of control weaknesses and

systems inefficiencies. Studying a flow chart and asking yourself what would happen if this shipping document were misplaced or if that entry were recorded incorrectly and then searching for the possible consequences (such as a check of serial continuity of shipping numbers that would fail or some control account reconciliation that would be out of balance) is one of the best ways of detecting the presence or absence of key controls. Moreover, the horizontal charting format employed, wherein each column represents an individual department or employee, helps to focus on controls related to the division of duties.¹⁰

The analysis of the flow charts led to two results: the identification of potentially weak areas and the identification of areas where efficiency could be improved. A "weakness investigation" was then designed to determine whether a material error had occurred because of the control weakness. Just because there is a hole in the net does not mean that any fish swam through it, but it is worthwhile checking to see. And if I have only a limited amount of audit time to deploy (and in the economic world this is always so) it will be more useful if I concentrate a lot of it on those discovered holes in the net and spend correspondingly less time in the checking of other areas where the net seems strong.

This, then, was the main answer to the early frustration of having no organized way of relating testing work to control conclusions. The flow chart analysis and walk-through audit flagged the apparently weak areas, and testing work (or other auditing procedures) was then concentrated on those apparent weaknesses.

But we went one step further. We argued that there should be some cyclical testing of those areas where control appeared strong. After all, in our walk-through audit we had tested only four or five items. I do not pretend that the four or five is significantly different from one (the Stettler "sample of one" idea). The only reason for picking four or five was to have some added opportunity to avoid mistaking the particular for the general.

But were four or five enough? Well, it must be remembered that this was not just four or five transactions in total but rather four or five transactions along every path of the system—that is, four or five transactions of each type which would be handled in a different way. Moreover, a system with good internal control has a self-policing nature which will tend to catch most errors more efficiently than does the external audit. A useful audit objective was therefore to prove that the self-policing system was there, not to do the policing over again (you don't hire a dog and then do the barking for it). The transactions tested were combined with observations of the employee procedures in practice, discussions with those employees, review of open files, etc. To assume that all the different employees with whom we talked were in a conspiracy to deceive us, that the files were reviewed happened accidentally to support that conspiracy, and that the four or five documents we tested happened also to wrongly confirm the misleading story, seemed a pretty far fetched risk. In short, we believed that our primary assurance was obtained from the discussions, the observations, and the walk-through procedures.

Nonetheless, we realized that there was a danger in never conducting any more extended tests. Accordingly, for supplementary insurance, the original version of analytical auditing called for "supplementary tests" to be carried out

on a cyclical basis over a number of years. In any one year a number of key points in each systems component would be tested extensively, but not every point would be tested each year. Better to test a few and test them well than to test them all but poorly. It was like drilling for oil. One didn't have to send a hole down on every square inch of the field. But for those holes which one selected to drill, the hole had to go at least deep enough to catch the oil if it were really there.

This, then, was the original version of analytical auditing—thorough systems analysis and selective, carefully placed testing. The approach seemed to gain reasonable acceptance among many practitioners. Over the years its use has spread considerably and the original book has since been translated into French, Portuguese, Danish, and two versions of Spanish.

The Changes in 1975

There were two principal changes made in 1975. One was the introduction of the concept of compliance verification. The other was a modification with respect to the application to computerized systems.

I will comment first on compliance verification. Although we felt that the logic of the cyclical supplementary tests was defensible, we decided to opt for annual compliance verification for three reasons. First of all, the general literature of the profession was moving solidly in this direction and we were beginning to feel a little lonely espousing the idea of very limited cyclical tests. Secondly, we found that in practice the supplementary tests were often badly executed by our staff. Perhaps because they were called supplementary, they were taken to be an after-thought which did not really need to be done well. In any case, we concluded that if more attention was not focused on compliance procedures it was unlikely that our staff would give the tests the attention they deserved.

Thirdly, the adoption of the substantive/compliance framework (which was first set out in the AICPA's Statement on Auditing Procedures No. 54) permitted us to resolve one of the dilemmas we had been facing for a number of years. During the early 1970's we had been working with a statistical sampling approach. We felt we knew a logical way to apply this statistical sampling to the year end audit work (statistical samples of accounts receivable, etc.) but we could not figure out a logical manner to apply it to the interim audit. We knew that statistical sampling should presumably be applied to our "supplementary tests" but we could not produce an obvious rationale for how one picked confidence and precision parameters without arriving at sample sizes which intuitively appeared unreasonably large (i.e., samples as large as would have been required for a substantive test had no reliance been placed on control). With the adoption of the compliance verification framework we were able to develop what we felt was a logical relationship between compliance testing and substantive testing based on the analogy of smoke detection versus fire detection.¹¹ While this latter point is perhaps not directly related to the basic idea of analytical auditing, it nonetheless was for us an outgrowth of this particular modification in our analytical auditing approach.

The other principal change in 1975 was the dividing of the computer-related review into two stages: a general computer environment review followed

by a specific application review for each particular computer system. The reason for this change was the realization that environment controls (pre-installation controls, organizational controls, development controls, operations controls, and documentation controls) tend to be common for all computer systems and can best be reviewed and evaluated at one time whereas processing controls (for example, input/output controls in a payroll system, programmed controls in a billing system) vary with each system and are best reviewed as an integral part of the evaluation of the individual system.¹²

Inevitably there have been many refinements in the organizing of the audit steps, the wording of the evaluation guides, and so on, but apart from the two modifications just mentioned, the changes have not been major in principle.

The Current Format of Analytical Auditing

In its present format, the analytical interim audit as we employ it is divided into six stages: 1) review of systems and preliminary compliance verification (including preparation or updating of flow charts and the walk-through of four or five transactions of each type), 2) evaluation of systems (based on an analysis of the flow charts with the help of internal control evaluation guides), 3) further compliance verification (depending on whether or not considerable reliance is to be placed on a given control area), 4) substantive (dual purpose) verification, 5) evaluation of compliance, and 6) issuance of an internal control/management letter.¹³

The emphasis on flow charting as an analytical tool is still present. The emphasis on auditing "through" the system is still present. At the same time, the analytical auditing approach has been fully integrated with sampling theory both as applied to substantive verification¹⁴ and as applied to compliance verification.¹⁵ This has led us to focus considerable attention on the nature of compliance verification objectives. We seek positive evidence that a key control has functioned; the mere absence of monetary error in the transaction examined does not constitute such evidence.¹⁶

Use and Evaluation within Clarkson, Gordon & Co.

We do not employ analytical auditing on all our interim audits. Where internal control is hopelessly weak throughout, where it is uneconomic to place any reliance on internal control, or where the enterprise is exceedingly small, it is often not efficient to employ analytical auditing techniques.¹⁷ However, we do employ analytical auditing in much more than half of our audit work in terms of hours. Some recent statistics indicate that slightly over 50% by number of our audits between 100 and 1,500 annual hours are done on an analytical auditing basis. Probably most of those under 100 hours would not be done as analytical audits while, on the other hand, virtually all of those over 1,500 hours are done as analytical audits. If the results were weighted by hours I would guess that more than 80% of our interim audit work is done on an analytical basis.

What have been the results? We have been generally pleased. We have found the advantages of analytical auditing to be the following:

1. It leads to a better understanding of the client's business and of the accounting system.
2. It leads to a more comprehensive appreciation of the system of internal control.
3. It helps to avoid the risk of perfunctory and unimaginative treatment that long procedural questionnaires and audit lists may invite.
4. It leads to many more valuable and more realistic recommendations on both internal control and systems efficiency.
5. It leads to greater use of initiative on the part of the audit staff in the field.
6. It leads to a more rational allocation of audit time over those areas of the accounts requiring attention.
7. It leads to greater productivity of audit time through the better briefing of audit staff.¹⁸

There are, however, some costs. There tends to be an investment in the first year when flow charts are being prepared for the first time (although when this work can be coordinated with internal audit the cost can be dramatically reduced). In any case, in later years there are compensating time reductions.

Secondly, like any sophisticated technique, it is open to abuse. If poorly trained or poorly directed, audit staff can waste time charting unnecessary detail. Until about a year ago, we felt we still had too frequent instances of what our quality control reviewers judged to be excessive flow charting. Our statistics indicate that such inefficiencies now occur on less than 7% of the engagements. Of course, there is still scope for improvement, but the problem is not of serious proportions.

In the early years we had a serious problem in getting staff to design the weakness investigations appropriately. This seems to have been less of a problem in recent years, perhaps because the quality control program kept hammering away at it.

Designing appropriate compliance procedures continues to be a problem in more engagements than we would like. This seems to us to be a problem in learning to apply the general concept of compliance verification itself rather than anything to do with the analytical auditing technique *per se*. The compliance framework is still relatively new. Our smoke/fire rationale requires that a compliance procedure look for positive evidence of the operation of the control (not merely evidence that the transaction itself was free of monetary error). This still seems to be a difficult viewpoint to get across.

Ironically, the analysis of statistics is one of the segments of the interim audit which we seem to do the worst. This procedure was referred to as "statistics analysis" in the original book.²⁰ The term has since been replaced with the current term, "analytical review."²¹ Whatever its name we do not do it as well as we would like. Whether a more formal use of regression analysis will prove to be the necessary discipline to improve the performance in this area remains to be seen.

Use by Others

Obviously, I can only talk with any certainty about the use of analytical

auditing within our own firm. However, from conversations with other colleagues I expect that the following summary is not too inaccurate. In Canada, there seems to be fairly widespread use of the comprehensive horizontal flow charting approach in Touche Ross, Peat Marwick, Thorne Riddell, Winspear Higgins, Arthur Andersen, and Ernst & Ernst. Often the flow charts are supplemented by detailed questionnaires. A number of smaller firms use the analytical auditing approach as well. As mentioned earlier, the Canadian Institute has been offering members courses in analytical auditing for the past decade. Coopers & Lybrand use a detailed questionnaire supplemented by comprehensive "vertical" flow charting (different mechanics but similar in principle). The internal audit departments of a number of major Canadian corporations employ analytical auditing in their work. At the government level, the Auditor General of Canada, with a staff of 400, and the Audit Services Bureau for Canada, with a staff of about 600, make extensive use of analytical auditing. The Provincial Auditors of three or four provinces make extensive use of analytical auditing while those of a couple of provinces (including Ontario and British Columbia) appear to make limited use of it. I do not want to suggest that all these users employ exactly the analytical auditing approach that we do. Some do. But many inevitably will have their own modifications and, no doubt, improvements. However, the general approach would appear to be reasonably common.

On the other hand, Price Waterhouse relies primarily on detailed internal control evaluation questionnaires, decision charts, and narrative systems descriptions and does not generally make use of a flow charting approach to systems analysis. Haskins and Sells relies on detailed questionnaires and extensive testing of transaction streams without generally making use of flow charting.

I am less familiar with the use of flow charting approaches in the United States. I do know that our associates in Arthur Young use the same walk-through audit approach as we do in the preliminary stage of gathering systems information and urge the use of basically the same horizontal flow charting technique as the preferred method for documenting the information obtained during this walk-through.

A Look to the Future

The use of analytical auditing in the future is likely to depend on the direction in which computer systems develop in the years to come. In one sense computerization may favor a systems-oriented approach such as analytical auditing, for the computer generally requires a more formal, rigid and reliable system. The auditor can place considerable reliance on this more rigid system if the new types of computer controls have been properly analyzed and evaluated. In another sense, computerization may favor the data-oriented approach, for computerized files may permit more extensive selection, analysis, comparison, and editing of data (especially with computer-assisted audit techniques) than possible before. Up to now we have felt that the circumstances in most computerized systems favor the systems-oriented approach. However, when computerized systems get extremely complex, the cost of comprehensive systems analysis may not be worth its payback. When a simple system generates quantities of data, it stands to reason that it is more efficient to check the system than the data. But

when the complexities of software housekeeping routines swamp the output of data, the pendulum may start to swing the other way. As we move into data base systems, the way in which data is handled may dramatically change the methods which auditors use. I don't think any of us really know how to audit data-base systems yet. Time is running out for us to learn. On the other hand, the explosive growth of mini computers and distributed processing may change the audit in other directions. I imagine that there will be a number of significant revolutions in audit approach as we feel our way into the next generation of computer systems. Whether the systems-oriented approach of analytical auditing will have a place in this brave new world it is premature to say. It will be interesting and challenging to find out.

Footnotes

1. A brief chronological bibliography of material on the subject is set out below.
 - a) Warren Chippendale, C.A. and Norman P. LeBlanc, C.A., "Progressive Audit Philosophy—The Practical Application," *The Canadian Institute of Chartered Accountants, Annual Conference Papers—1963*, pp. 51-78.
 - b) R. J. Anderson, C.A., "Analytical Auditing," *The Canadian Chartered Accountant*, November 1963.
 - c) Vernon Turley, C.A., "Flow Charting—A Modern Technique in Auditing," *The Canadian Chartered Accountant*, May 1964.
 - d) R. J. Anderson, C.A., "An Approach To Auditing Income Accounts," *The Canadian Institute of Chartered Accountants, Annual Conference Papers—1964*, pp. 186-194.
 - e) R. M. Skinner, F.C.A. and R. J. Anderson, F.C.A., *Analytical Auditing*, Sir Isaac Pitman (Canada) Ltd., Toronto, 1966.
 - f) R. J. Anderson, F.C.A., "Analytical Auditing—Does It Work?" *The Internal Auditor*, July/August, 1972, p. 36.
 - g) R. J. Anderson, F.C.A., "The Interrelationship of Compliance and Substantive Verification in Auditing," *Frontiers of Auditing Research* (Proceedings of the Symposium on Auditing Research, The University of Texas, April 1976), pp. 69-137.
 - h) R. J. Anderson, F.C.A., *The External Audit*, Pitman Publishing, Toronto, 1977—see particularly Volume 1 Chapter 9, "The Interim Audit," and Volume 2 Chapter 25, "Flow Charting to Document Systems Review," Chapter 26, "Analytical Interim Audit," and Chapter 27, "Analytical Interim Audit—Modifications for Computer Systems."
2. The interim audit objective which follows is related directly to the second field work standard in Canada. For a discussion of the differences between this and the U.S. second standard of field work see above Ref. h) Vol. 1, p. 88. The differences are probably consistent with subsequent interpretations of the earlier U.S. standard.
3. The systems-oriented and data-oriented strategies are discussed in Ref. h) Vol. 1, pp. 238 and 239.
4. Four different "review" techniques are: (i) gathering information simply from the tests of transactions, (ii) seeking answers to questionnaires, (iii) preparing or updating narrative systems notes, and (iv) preparing or updating flow charts (for a discussion of the comparative advantages of each or of some combinations see Ref. h) Vol. 1, pp. 216 to 222). Three different "evaluation" techniques are: (i) evaluation by studying the results of tests or narrative systems notes, (ii) evaluation by use of flow charts, (iii) evaluation by use of questionnaires or evaluation guides. (For a discussion of the comparative advantages of each or of some combination see Ref. h) Vol. 1, pp. 224 and 225.)
5. The term "analytical" in analytical auditing, referring to analysis of systems and controls, should not be confused with the term "analytical review procedures," which, during the intervening years has come to be used for the substantive review of business statistics, ratios, and other data for reasonableness and consistency.

6. Clarkson, Gordon & Co. is a Canadian firm of chartered accountants having presently some 200 partners and 2,000 professional staff (one of the largest public accounting firms in Canada though, of course, far from the size of the largest U.S. practices).

7. The two countries' practices are contrasted in Ref. h) Vol. 1, pp. 8 to 10.

8. See, for example, Ref. f) which was adapted from a debate staged at the 1971 Annual Conference of Accountants at The University of Tulsa.

9. While I am billed as the author of this text it was, in truth, a joint effort by John Davidson, countless other colleagues, and myself.

10. The advantages offered by the horizontal charting format are discussed in Ref. h) Vol. 2, p. 43.

11. The smoke/fire argument was first presented at the 1976 University of Texas Symposium (Ref. g) and is discussed in Ref. h) Vol. 1, p. 230.

12. See Ref. h) Vol. 2, Chapter 27, p. 116.

13. Each of these six stages is fully described in Ref. h) Vol. 2, Chapter 26, p. 82.

14. See Ref. h) Vol. 1, p. 354 and Vol. 2, p. 110.

15. See Ref. h) Vol. 1, p. 370 and Vol. 2, p. 108.

16. See the discussion in Ref. h) Vol. 2, pp. 104 to 107.

17. The criteria for choosing between analytical auditing and transactional auditing are discussed in Ref. h) Vol. 2, pp. 21 and 22.

18. For a discussion of these advantages see Ref. g) p. 44.

19. Some time statistics are analyzed in Ref. g) p. 52.

20. See Ref. e) pp. 78 and 79.

21. See Ref. h) pp. 111 and 112.

Discussant's Response to Analytical Auditing: A Status Report

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I have been an admirer of Rod Anderson's work in analytical auditing and statistical sampling in auditing for quite some time. The current paper has not affected that view. The explicit purposes for the paper were to provide: a) a historical overview of the development of "Analytical Auditing," b) reasons for the initial experimentation, c) the nature and purpose of subsequent modifications and d) a current evaluation of its success in practice. Each of these topics was considered in the paper, and as a result, we now have considerable insight into how and why analytical auditing was developed and also information about its current status. Anderson has done an admirable job in achieving the objectives set forth for the paper.

My comments are primarily directed toward providing 1) an historical perspective on "analytical" and "conventional" auditing to identify the former's contribution to auditing thought and 2) a comparison of current analytical and conventional auditing to identify remaining differences.

Two Basic Contentions

Two basic contentions stated in my paper are that 1) analytical auditing, when originally introduced, was an innovative and important contribution to auditing thought and practice and 2) that the concepts and procedures of analytical auditing and conventional auditing have evolved so that, in most respects, they are currently virtually identical.

In order to support the first contention, the concept of analytical auditing will be compared and contrasted with apparent prevailing conventional auditing concepts and principles existing at the time of its introduction. Sources for this comparison are the Skinner and Anderson book of 1966¹ and several Anderson articles² for analytical auditing. Since a single, complete description of the prevailing conventional auditing concepts and principles in the early 1960's does not exist, this concept was derived from **Auditing Standards and Procedures**,³ which was codified in 1963, and a summary review of journal articles and auditing textbooks available during the early to mid sixties, supplemented by my own limited experience during those years. The possibility of errors in description of the concepts and principles exists for both auditing approaches, and major differences in application undoubtedly exist both between and within specific firms. Thus, the descriptions are generalities, not necessarily accurate for any specific firm or auditor. Each approach will be discussed in the context

of the “normal” audit engagement which has the objective of expression of opinion on the financial statements. Finally, each approach produces information on the internal control system which may be reported to management and/or outsiders; however, this aspect will be ignored.

As correctly pointed out by Anderson, the concepts and procedures of analytical auditing encompass only a portion of the total audit process roughly equivalent to that process in conventional auditing referred to as the study and evaluation of internal control.

The major features of analytical auditing and primary areas of contribution at the time of its introduction were:

- a. A reorientation of the emphasis in the audit process from the detailed checking of transactions to a formal recognition of reliance on the accounting system, with minimal substantive testing as an equal alternative approach to verification of account balances.
- b. Emphasis on the exclusive utilization of flowcharting as a means of documenting the system and as a basis for analysis, bringing more attention and emphasis to the review of internal control than it had been given previously.
- c. A logical verbal and pictorial description of the review and evaluation part of the audit process and its integration into the overall evidence collection process.

Origins and System Orientation

With respect to the reasons for the origin of analytical auditing, Anderson notes possible differences in the development of auditing in the U.S. and Canada. Auditing in Canada in the late 1950's is viewed by him as emphasizing tests of transactions while auditing at the same time in the U.S. is viewed as emphasizing “balance sheet” tests. Several problems of theory and application of the Canadian approach are noted by Anderson which initiated the experimentation that resulted in analytical auditing.

The primary objective of analytical auditing as described in 1966 was:

To determine, through an analysis of the accounting system and the internal controls, the accuracy and reliability of his [the auditor's] client's accounting records and thus to provide a basis for planning the balance sheet audit steps necessary to support an opinion on the financial statements.⁴

This objective is similar to the aspect of the conventional auditing process referred to as the study and evaluation of the system of internal control and which, since the early 1960's, has been required by the second standard of field work of generally accepted auditing standards:

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.⁵

Despite the second standard of field work, it would probably be fair to say that auditing in the U.S. in the late 1950's and early sixties was not “system

oriented” but was “end result oriented.” Certainly, in today’s terms, the U.S. audit would appear to have been substantive-testing oriented rather than system-reliance oriented.

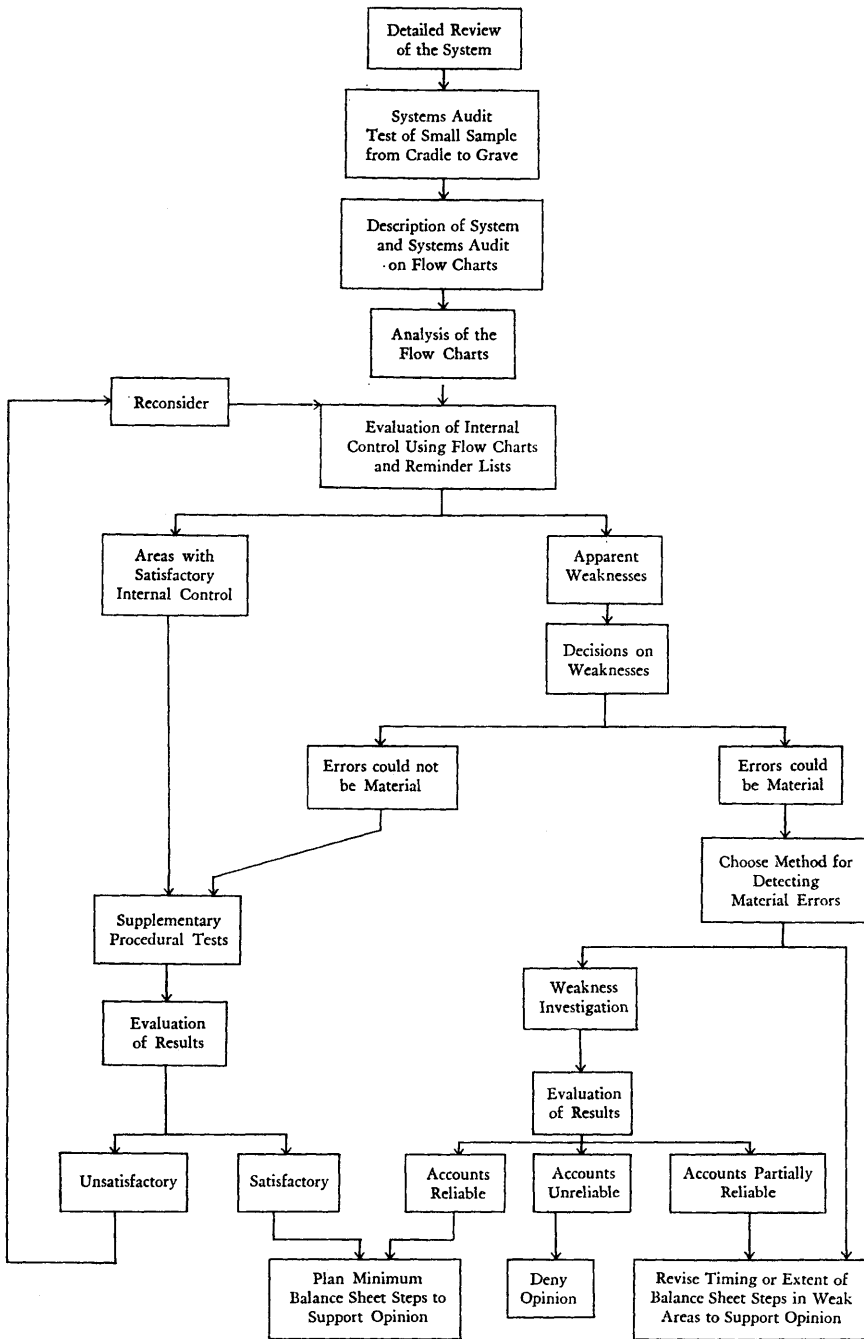
This allegation is difficult to substantiate; however, some evidence is available. The discussion of the evaluation of internal control in **Statement on Auditing Procedure No. 29**⁶ was five and one-half pages in length, of which four and one-half pages were devoted to terminology and discussion of general control elements. By contrast, the discussion of the study and evaluation of internal control in the 1972 **Statement on Auditing Procedure No. 54** was 41 pages in length.⁷ The auditing texts of the early sixties generally contained a chapter on internal control, much of which was devoted to descriptions of the general control elements. In addition, the individual chapters on the audit of specific account balances and types of transactions often contained a short discussion of appropriate specific control features; however, discussion of the evaluation of these control elements and the integration of the results in audit planning was minimal. The primary orientation appeared to be on balance sheet testing (analytical review will be assumed to be a form of balance sheet testing throughout the remainder of the paper) and on substantive testing aspects of transactions tests. Finally, as discussed later, tests of the functioning of controls (compliance tests) were not emphasized and were apparently minimal in extent at that time.

The analytical auditing approach reversed, or at least balanced, the emphasis on the system and the controls in the system, although the importance of substantive tests was retained in areas of weak internal control. This is an important contribution of the analytical auditing concept. Figure 1, based on the Skinner and Anderson book, has been modified to omit management recommendation aspects. As shown, analytical auditing recognized two main avenues of verification of financial statement amounts. On the left, reliance was placed on the system and the controls to produce reliable balances, with minimum balance sheet testing, and on the right, substantive tests of transactions and/or balances were relied on where the control system had apparent weaknesses. Of major importance, the ability of reliance on the system and controls to produce reliable information with minimum substantive testing was recognized and documented. Thus, analytical auditing was an early, clear voice on the importance of the study and evaluation of internal control relative to the total audit, and on the possibility of strong reliance on the system with minimal substantive testing as an equally acceptable, if not preferable, alternative to the conventional substantive-testing-oriented approach to obtaining sufficient evidence to support an account balance.

The preceding description of conventional auditing may be misstated. Clearly, conventional auditing was undergoing a transition in objectives and techniques as described by Brown.⁸ Reliance on the system was formally recognized; however, the documentation and discussion of the nature of the evaluation and the reliance was minimal, and it would appear that emphasis was primarily on substantive testing. Internal control was often viewed as justification for less than 100 percent testing and as the basis for responsibility for fraud prevention and detection, as espoused by Byrne⁹ and Levy.¹⁰

The study and evaluation aspect was becoming increasingly important in

Figure 1
Flow Chart of the Analytical Audit



the auditing literature of the 1960's, and some examples of this follow. Brown¹¹ presented an approach to make the internal control evaluation more objective. Mautz and Mini¹² investigated the relationship between internal control evaluation and audit program modification. In 1967, Stettler perceived a need for an alternative textbook titled **Systems Based Independent Audits**¹³ to at least complement his earlier (by inference, "nonsystems based") **Auditing Principles**.¹⁴ Other researchers investigated various aspects of internal control and its evaluation and importance. In 1972, the AICPA issued **Statement on Auditing Procedure No. 54**, which provides the official discussion of the current conventional auditing view of the study and evaluation process. This pronouncement sets forth along with substantive procedures the basis for reliance on the system as the two means of verifying account balances in current conventional auditing, providing a convergence of analytical and conventional auditing in this area.

The convergence of analytical auditing and conventional auditing involving a balancing of the reliance on the system (with minimal substantive tests) and the substantive-testing-oriented approaches in conventional auditing is evidenced by official pronouncements, particularly **SAP No. 54** in 1972. The overall audit risk is clearly segmented¹⁵ into "system" risk and "examination" risk, and the alternative of auditor reliance on the system to reduce the former is explicitly documented. The continuing increase in importance of the system of internal control is manifested in academic research, in major internal control developments within public accounting firms (e.g., Peat Marwick & Mitchell,¹⁶ and Arthur Andersen¹⁷) and in the Foreign Corrupt Practices Act of 1977.

As evidenced in part by the previously mentioned works, current conventional auditing practice and analytical auditing now appear to be practically identical in the balance between reliance on the system with minimum substantive testing and substantive testing without substantial reliance as coequal alternatives for the accumulation of evidence to provide an opinion on the financial statements.

Compliance Testing

Compliance testing, as it is now known, does not appear to be an important or well defined element of analytical or conventional auditing in the early sixties. By contrast, **SAP No. 54** and the latest versions of analytical auditing as evidenced by Rod Anderson's paper and his recent book¹⁸ incorporate annual compliance testing, and the two approaches would appear to be in agreement on this point.

Analytical auditing originally placed little emphasis on procedural tests, which are analogous to compliance testing, in areas where controls were determined to be satisfactory. Thus, the process in Figure 1 of the analytical auditing flow chart captioned "Supplementary Procedural Tests," is analogous to the compliance testing process. The purpose of the supplementary procedural tests ". . . is to confirm, by reference to objective data, the auditor's evaluation of internal control";¹⁹ however, these tests were not required each year. Supplementary procedural testing was considered sufficient if done on a cyclical basis so that all key areas judged to have satisfactory internal control would be tested

every fourth or fifth year.²⁰ Thus, the controls relied on in a given area were not tested for compliance each year, but only every four or five years.

In addition, it appears that the supplementary procedural testing, even in the year selected for testing, was not extensive. Thus, the auditor should “. . . include a *few* (original italics) supplementary tests in those areas where control is believed satisfactory . . .,” and these were recommended for application on a cyclical basis. “It is unnecessary for him to confirm each point each year or to spend extensive time on his supplementary program . . .”²¹ and “Since the tests are only a supplementary confirmation of the auditor’s initial evaluation, only a small portion of the total audit time should be devoted to this section.”²²

Compliance testing in the conventional audit of the early sixties would not have appeared to be particularly different from the above description of supplementary procedural testing. Each approach recognized the importance of some testing the functioning of the controls; however, neither seemed to require that the tests of the controls be extensive or on an annual basis. Both seem to rely in large part on the tracing of a few transactions, verification of a few examples of a control feature’s functioning, or the results of substantive tests to provide sufficient evidence of compliance. Stettler²³ argued, at one time, that a sample of one was sufficient; however, Carmichael²⁴ disagreed that a sample of one was sufficient for “dual purpose” tests. Nevertheless, Carmichael’s description of the use of dual purpose tests in both weakness areas and in areas of apparently satisfactory internal control (including testing on a cyclical basis) paralleled the description of the analytical auditing process very closely. The notion of cyclical rotation of tests in areas of internal control which appeared from the review to be satisfactory was apparently an acceptable practice prior to **SAP No. 54**.

The distinction between compliance and substantive testing and the importance of annual and extensive compliance testing where substantial reliance is placed on the system became documented in conventional auditing in **SAP No. 54** in 1972. That pronouncement requires that tests of compliance be performed each year in areas where substantial reliance is placed on controls, and furthermore the testing is to be applied to the functioning of the controls during the entire year. Thus, for those controls which leave an “audit trail of documentary evidence,” tests of compliance “. . . should be applied to transactions executed throughout the period under audit . . .” although where tests of compliance are performed on an interim basis near year end, the results of substantive tests may be used to indicate the degree of compliance during the remaining period.²⁵ For those controls that do not leave an audit trail, tests of compliance “. . . should relate to the entire period under audit . . .,” however, observations can only be made during the auditor’s visits to the clients’ premises.²⁶ Thus, it is clear that the auditor in current conventional auditing is required to test (through compliance tests) the effectiveness of the functioning, during the entire period being audited, of those controls on which substantial reliance is to be placed. These views are supported and discussed in more detail in Loebbecke.²⁷

Annual compliance testing previously represented a distinct divergence between analytical auditing and conventional auditing; however, again the two auditing approaches have converged. The latest documentation of analytical

auditing,²⁸ including Rod Anderson's paper, sets forth a requirement of annual compliance testing over the full year being audited in areas where substantial reliance is placed on internal control. As he states in his paper, the change was influenced by conventional practice, and he documents the reasons for the change.

The 1975 Changes

Anderson indicates in his paper that two major changes resulted from the 1975 revision of analytical auditing. The first, the transition from cyclical supplementary testing to annual compliance testing has been discussed in the previous section. The second major change was the formal distinction and separate review and evaluation of "general" controls and "application" controls in a computerized environment. This distinction and approach is completely consistent with current, conventional generally accepted auditing standards as documented in **SAS No. 3.**²⁹

Documentation of the System

Analytical auditing, in addition to its emphasis on the system, contained, at the outset and currently, a requirement for the use of flowcharts of the system and controls as the basic documentation. Flowcharts were used because they allegedly provided the auditor with a concise picture and a better appreciation of the item of interest—the system and its controls. The use of flowcharts allegedly reduced the risk of perfunctory or unimaginative investigation of the internal controls, that other approaches might allow.

Conventional auditing practice of the early sixties was apparently internal control questionnaire oriented. No recommendation for the means of system documentation was provided by **Auditing Standards and Procedures**. Most of the auditing texts at that time spent little time on the review and documentation of the system, and most of the discussion was centered on internal control questionnaires. Although there is still no single, accepted documentation approach for the review of the system, it is probably fair to say that flowcharts are increasingly being used in current conventional auditing practice. **SAP No. 54** contains no recommended method of documentation, but flowcharts are identified as one possible approach. Current auditing texts also discuss flowcharts as a possible means of documentation, but generally provide no preference. Increasing use of flowchart documentation probably has occurred in practice in part because of the increasing system documentation, including flowcharts, that results from computer usage. In addition, increasing acceptance of flowcharting in practice is evidenced, for example, by the virtual requirement by a number of public accounting firms for flowchart documentation where substantial reliance on the system is anticipated.

Description of the Review and Evaluation Process

The last contribution of analytical auditing that I would like to mention was that it provided a more complete and definitive description of the review and evaluation process than had previously existed. The picture presented in Figure 1 describing analytical auditing was relatively complete and definitive. Further-

more, there has been little or no substantive change in descriptions of the process in analytical or conventional auditing since the 1966 publication of **Analytical Auditing**. As evidence of the lack of significant change in the description of the review and evaluation process, several current conventional auditing texts,^{30,31} contain flowchart descriptions of the process that are remarkably similar to the original analytical auditing flowchart description. Finally, Figure 2 flowcharts my understanding of the study and evaluation segment of current conventional audit processes and the current version of analytical auditing. The minor differences shown or discussed below indicate that there is very little substantive difference in the two approaches at this time.

Comparison of Figures 1 and 2 may provide a means of summarization. Where substantial reliance on the accounting system is considered, both auditing approaches require a review of the system. In the second box, analytical auditing requires a “walk through” of several examples of each type of transaction to verify the auditor’s understanding of the system. Such a “walk-through” is mentioned, but not required, in **SAP No. 54**. Documentation of the system may differ, as has been previously discussed, with analytical auditing requiring flowchart documentation, while conventional auditing may utilize one of several approaches, including a flowchart. Each requires an analysis of the system and a tentative evaluation of whether apparent weaknesses exist or not. Even in areas with apparent satisfactory controls, Figure 2 shows that the auditor may decide not to place substantial reliance on internal controls. The possibility of nonreliance on apparent satisfactory controls was mentioned in Skinner and Anderson’s book, but not included in the flowchart, and the possibility of nonreliance is documented in Anderson’s current book. Also, as previously mentioned, the original description of analytical auditing required only supplementary procedural tests on a cyclical basis as shown in Figure 1; however, this has been modified to be the same as the box “Tests of Compliance” in Figure 2. The remainder of the diagram where controls appear satisfactory does not appear to be particularly different from the original.

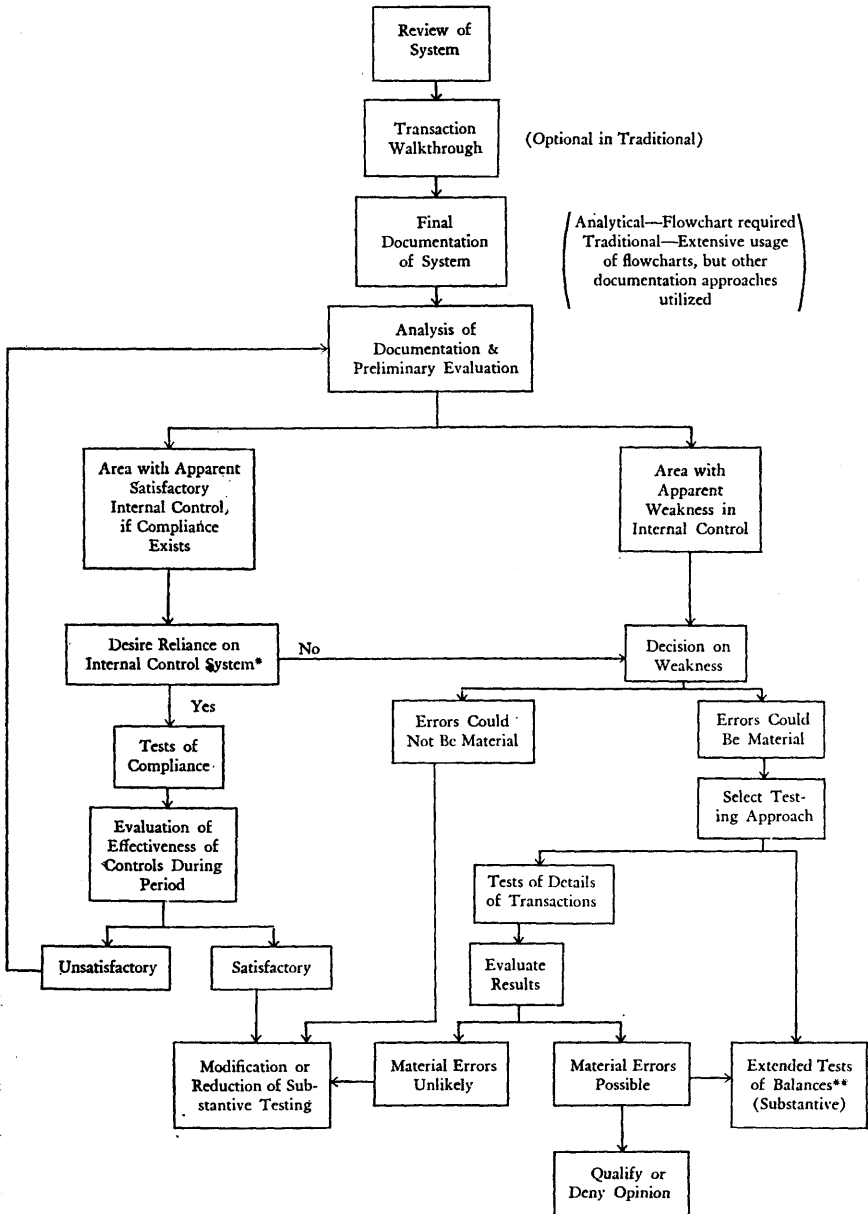
The right-hand sides of the two figures, where apparent weaknesses exist, are also very similar with but small differences in terminology. The weakness investigation of the original analytical audit is roughly equivalent to choice of emphasis on tests of transactions or balance sheet tests to verify the account balance. Alternatively, in either approach, tests of balances may be emphasized, and finally some combination of the two may be chosen.

Thus, the conclusion is that the current version of analytical auditing and current conventional auditing, with potential differences in documentation and application, are virtually the same.

Summary

The paper by Anderson on the current status of analytical auditing was informative and thorough, and as a result, few if any direct comments are necessary. I do present, however, two assertions. The first was supported by the identification of three main contributions of analytical auditing when it was originally introduced. The second contention was that the concepts of

Figure 2
Current Analytical and Traditional Auditing.



* Degrees of reliance exist, running from substantial (some substantive testing still required) to minimal reliance. On the weakness path, practically no reliance is placed on the system and sufficient evidence must be obtained from the substantive testing.

** One form of substantive test of balances** is analytical review.

analytical and conventional auditing have evolved so that, in most respects, they are currently virtually identical.

Footnotes

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3

Sampling Risk vs. Nonsampling Risk in the Auditor's Logic Process

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Most of the larger auditing practice units in this country can be described as either making considerable use of statistical methods in current practice or engaging in research and development that in the near future will encourage the use of statistical methods whenever they are appropriate. While the level and nature of the use of these methods varies considerably across these auditing firms, frequently a pervasive deficiency appears to exist in the documented incorporation of the results of such procedures in the audit logic process. In the following paper an examination of this problem is presented, followed by an analysis of the role of sampling evidence in the auditor's logic process. The paper concludes with some recommendations for action.

An Interpretation Problem

The use of statistical sampling methods as a structure for applying auditing procedures results in a confidence interval or an accept/reject decision depending on whether the auditor is using an estimation or a testing approach. (Although only an estimation approach is discussed in this paper, the comments apply with equal force to both approaches.) As an example of the estimation approach, an auditor might specify a 95% confidence interval of \$6,934,000 plus or minus \$141,700 in sending out positive confirmations of customer accounts receivable and use a mean-per-unit or an auxiliary estimation method to construct the resulting confidence interval. In documenting the results of such an application in the auditor's working papers, a conclusion similar to the following is often found:

"Based on the above tests, I am 95% confident that the accounts receivable balance of \$7,037,000 at 6/30/X7 is fairly stated."

While there are a number of issues in this conclusion that could be argued, the major concern of this paper is that the conclusion implies that the risk of a non-representative sample (the risk of sampling error) is the only audit risk of concern in the confirmation of a sample of accounts receivable. This implication is never correct. Of equal or possibly even greater significance in evaluating the results of the auditing procedure are the auditor's perceptions of (1) how well assistants executed the procedures and computations, (2) the ex post appropriate-

ness of audit procedures used, and (3) the nature of the errors and other facts identified by applying the audit procedures to the sample items.

Based on discussions with a number of staff and supervisory audit personnel in several different practice units, the implication apparent in the above conclusion is a real problem. When questioned about the nature of audit evidence such as a sample of positive confirmations, these auditors were able to effectively discuss all the aspects of the evidence mentioned above, but when they were presented with a confidence interval, the auditors seemed to suffer from a "number fixation" and talk as if the confidence interval had somehow captured all aspects of the audit evidence. In order to explore with some care the nature of this problem and to propose action, the following section analyzes the role of statistical evidence in more detail.

An Intuitive Analysis

The logic process used by auditors to reach an opinion can be viewed as a process of collecting sufficient, competent evidence to drive the risk of undiscovered material errors or omissions in the financial statements to an acceptably low level. However, in order to identify properly the role of statistical methods in a particular audit procedure, a decomposition of this overall audit risk that is consistent with the auditor's professional standards for an examination is needed.

While extensive decomposition of overall audit risk does not seem to exist in the literature, a first level of decomposition is included in **AICPA Professional Standards**, AU Sec. 320B.29. Here, in discussing overall risk, two separate risks are introduced. The first is the risk that the accounting system will generate a material error and the second is the risk that the auditor's examination will not discover a material error given that one has occurred. These two risks are stated in terms of an overall audit risk, i.e., the risk of undiscovered errors that aggregate to at least a material error. The risk of a client accounting system generating an error (or errors) is an assessment problem. This assessment activity is carried out in large part through the process of learning the client's industry, operations and personnel and through the required study and evaluation of internal controls in each transaction cycle component of the accounting system.

The risk of an error not being discovered by the auditor's examination is then minimized by designing and executing a set of audit procedures. These procedures typically include a combination of systems reliability tests (compliance tests) and tests of balances (substantive tests) that will drive the auditor's perception of the risk of undiscovered errors to an acceptably low level. This process in risk terms is susceptible to decision theoretic modeling, as discussed in footnotes 1, 2, and 4.

Identifying the Role of Statistical Sampling

In order to identify the role of statistical sampling methods in auditing, further decomposition is necessary. A decision theory approach to this analysis is possible and will be explored in another paper. In the interests of simplicity a less ambitious approach is presented here. In addressing both the assessment

problem and the design and execution problem the auditor performs specific procedures that comprise an interrelated evidence collection and evaluation process. These procedures are chosen in both problems to provide cost-effective reduction in overall audit risk. The expected contribution to risk reduction by each procedure could be analyzed by a decomposition of the overall audit risk among the various transactions cycles and balances. However, this analysis is not necessary in this paper other than to observe that it occurs and that each audit procedure used is expected to contribute to the reduction of overall audit risk, not just to a subclassification of overall risk.

Specific audit procedures used in either the assessment problem or the design and execution problem may or may not include the use of statistical sampling methods. In those situations where statistical sampling methods are used, a further two part decomposition of overall audit risk is made explicit. The risk that the sample is not representative of the evidence population being tested is the rather well known risk of sampling error. Using a confidence interval or estimation approach to sampling, this risk is one minus the confidence level. For example, a 6% achieved upper error limit at 95% confidence implies a 5% risk of sampling error. The other part of this level of evidence decomposition for a specific audit procedure is the risk of nonsampling error.

Nonsampling error can be defined by exclusion; that is, all sources of risk of audit estimation or decision error other than the risk of sampling error. However, some analysis of the types of error involved is worthwhile. At least two major sources of nonsampling risk can be identified. They are 1) the risk of error in choosing and/or using the statistical sampling methodology (or other methodology to obtain sample items and relate them back to the evidence population) and 2) the risk of error in choosing and/or using an audit evidence procedure on the basic items in the sample. An example of an error under the first source would be the choice of an inappropriate statistical methodology such as the use of unstratified mean-per-unit estimation on a highly skewed population. Another example of this first source of error would be making computational errors in obtaining the confidence interval. An example of the second source of error would be the use of an ineffective audit procedure such as the use of negative confirmations of accounts receivable for top stratum accounts of a heterogeneous population or in a situation where fraud may be present as a consequence of weak internal control. Another example of this second type of error would be any type of human error or misperception by the auditor such as omitting an audit procedure on one of the sample elements.

At this point the contribution of statistical methods to the audit process can be summarized. By using statistical methods as a framework for planning and evaluating the results of specific audit procedures, the auditor is able to control the risk of sampling error or the risk that the sample is not representative of the population for the audit application. This contribution is directly beneficial to the auditor in that a possible source of estimation or decision error is explicitly documented and evaluated. More indirect benefits are also likely because statistical sampling methods require that some of the judgmental parameters of the testing process be stated specifically. This necessary increase in specification should result in more careful planning and documentation and

improved chances that subsequent review will identify nonsampling errors. The contribution to risk reduction implicit in these additional elements is, of course, due to a reduction in the risk of nonsampling error.

A Case Illustration

The following case will illustrate some of the issues regarding sampling and nonsampling risk described above. The auditor's actions are described first, followed by a discussion of the risks of sampling and nonsampling error.

A Description of the Audit

On May, 19X8, Ohio-Indiana Utility company (OIU), a medium size mid-western regional utility company converted to a new EDP system for customer accounts. Because of a lack of controls and poor conversion procedures, a large number of errors in new and discontinued accounts as well as continuing accounts occurred through the end of the year. In addition, the accounts receivable file did not reconcile with the general ledger and it was not clear what problems would arise in attempting a reconciliation.

In planning the year-end audit of OIU, it was decided that extensive reliance on accounts receivable confirmations would be necessary in order to obtain sufficient competent evidence on accounts receivable and sales and that positive confirmation requests should be used. The accounts receivable included approximately 526,000 customers of which about 467,000 are residential and 59,000 are commercial, industrial, and other types of customers. The accounts receivable balance was expected to total approximately \$13,400,000.

In order to be as explicit as possible about the planning process and to control the risk of sampling error, statistical methods were to be used in carrying out the confirmation procedure. In this application a relatively precise, two-sided estimate was considered necessary because of the expected weakness of corroborative evidence and the possibility of proposing an upward or downward

Mean-per-unit estimation (MPU/S) with stratification was chosen as the statistical framework for the confirmation procedure to achieve this objective. adjustment based on the statistically augmented audit procedure.

Other Audit Decisions

OIU's accounts receivable population included a number of possible sub-classifications for audit purposes. Since the objective of the receivables confirmation procedure was to provide extraordinary substantive evidence in view of the known internal control problems and still stay within reasonable audit costs, some care in deciding how to treat the possible subpopulations was appropriate. The first level subclassification was residential vs. non-residential customers. Residential customers were viewed as very numerous (467,000), with smaller balances (few accounts over \$200), and as not being particularly sophisticated in understanding the confirmation request. The non-residential customers were fewer in number (59,000), with larger balances (some balances over \$10,000), and as more likely to understand the confirmation request. Given these differences, a judgmental decision was made to treat the two subpopulations separately.

In addition, within both the residential and the non-residential subpopulations there were some negative balances and a large number of zero balances as well as the usual debit balances. It was decided that the zero and negative balance subpopulations would also be tested but evaluated separately because their characteristics for auditing purposes differed from the debit balances. The tests of these accounts are not described here.

The subpopulations subjected to the MPU/S positive confirmation procedure were the debit balance residential and non-residential accounts. Based on the evidence needs in this application, it was judgmentally determined that a 95% confidence level and a precision of plus or minus \$130,000 would be used in each subpopulation. The precision is one half of the amount believed to be material for each test. The relatively high confidence level of 95% (low sampling risk) was specified because of the lack of alternative evidence and the possibility of proposing an adjustment. The materiality amount of \$260,000 was chosen based on the decision that approximately 10% of the expected net income of \$5,000,000 would be material to the financial statements as a whole and that slightly over one half of this amount could be tolerated in these specific tests of accounts receivable.

In order to perform the MPU/S estimation each of the two subpopulations was stratified.

At OIU it was decided to use 4 strata plus a 100% stratum for residential accounts and 5 strata plus a 100% stratum for non-residential accounts. The cum \sqrt{f} method was used to locate the stratum boundaries. The number of strata were chosen based on recommendations in the statistical literature that 5 to 10 strata will usually be a good choice. The cum \sqrt{f} method of locating boundaries is used by dividing the population into a large number of cells. The stratum boundaries are then located by allocating approximately equal sums of the square root of the cell width times the cell frequency to each of the strata. This process is illustrated for the four sampled strata in the residential accounts in Table 1.

After the stratum boundaries were located for the OIU application, a generalized audit software package was used to draw preliminary random samples of 50 accounts from each stratum. These preliminary samples were used to compute the estimated standard deviation of the book values in each stratum which in turn were used to estimate the required samples size for each stratum. The results are summarized in Table 2.

Because the sample sizes are based on the book values of the preliminary samples from each strata, it is very possible that the estimated standard deviation computed from the audited sample values will be larger than those estimated above. This will be particularly true if the errors move the audit values across stratum boundaries. For this reason it is good practice to increase the preliminary sample sizes by about 10% to provide some protection against this event. The result of the larger standard deviations without increased sample sizes would be a resulting confidence interval that is too wide implying that the audit evidence is insufficient.

The results of positively confirming the selected accounts receivable and performing alternative procedures on the non-responses are summarized in

Table 1
Residential Accounts

<u>Class Number</u>	<u>Width of Class</u>	<u>Number of Accounts</u>	<u>$\sqrt{W_i N_i}$</u>	<u>$\Sigma \sqrt{W_i N_i}$</u>
1	10	27,806	527	527
2	10	74,062	866	1,388
3	10	58,744	766	2,154
4	10	33,794	581	2,736
5	10	17,781	422	3,157
6	10	9,471	308	3,465
7	10	6,190	249	3,714
8	10	3,801	195	3,909
9	10	2,546	160	4,069
10	10	1,637	128	4,196
11	50	2,968	385	4,582
12	50	650	180	4,762
13	50	205	101	4,863
14	50	96	69	4,932
15	50	75	61	4,994
16	50	51	50	5,044
17	50	30	39	5,083
18	50	30	39	5,122

$$1. \frac{5122}{4} = 1280$$

$$2. 2(1280) = 2560$$

$$3. 3(1280) = 3840$$

Table 3. The client book values reported on this table are different from the totals originally used for planning as noted above, because a number of errors in the population were corrected by the client prior to this evaluation. The sub-population book values were obtained from the client's book control accounts, which at the date of the evaluation were reconciled with the detail. Errors on confirmation returns that had been corrected by the client prior to the confirmation return were not considered errors for audit purposes.

The resulting confidence interval statements were as follows:

1. Residential Accounts: Based on a point estimate of \$6,944,389 and a precision of \$138,383, the 95% confidence interval is (\$6,806,006, \$7,082,772).
2. Non-residential Accounts: Based on a point estimate of \$5,428,905 and a precision of \$133,873, the 95% confidence interval is (\$5,295,032, \$5,562,778).

Using this evidence the audit staff wrote the following conclusion:

Table 2

<u>Stratum</u>	<u>Dollar Interval</u>	<u>Stratum Size</u>	<u>Estimated Standard Deviation</u>	<u>Estimated Sample Size</u>
Residential				
1	0-19.99	101,868	4.12	147
2	20-39.99	92,538	5.18	167
3	40-79.99	37,243	9.46	123
4	80-499.99	8,288	35.01	101
5	500 and up	51	-	51
		<u>240,238</u>		<u>589</u>
Non-Residential				
1	0-74.99	20,286	22.98	167
2	75-149.99	4,398	21.24	33
3	150-499.99	4,590	110.24	181
4	500-1,499.99	1,389	297.15	148
5	1,500-3,499.99	367	554.17	73
6	3,500 and up	217	-	217
		<u>31,247</u>		<u>819</u>

Table 3
Audited Results

<u>Stratum</u>	<u>Number</u>	<u>Sample</u>	<u>Mean</u>	<u>Standard Deviation</u>
Residential				
1	101,868	160	12.15	4.89
2	92,538	190	29.04	4.90
3	37,243	140	55.89	10.33
4	8,288	110	111.95	45.99
5			Audited value of \$26,198	
			The book value of this subpopulation is \$6,955,542	
Non-Residential				
1	20,286	190	30.16	20.54
2	4,398	40	119.33	37.22
3	4,590	200	245.99	127.56
4	1,389	160	813.77	316.23
5	367	80	2,104.39	544.21
6			Audited value of \$1,260,534	
			The book value of this subpopulation is \$5,446,510	

“Based on the satisfactory results of our audit procedure described at (Index), we are 95% confident that the accounts receivable balance is fairly stated as at 12/31/X8.”

Discussion of the Sampling Risks

In this circumstance the auditor planned to accept a risk of sampling error up to 5%. The achieved sampling risk may be viewed in a variety of ways, but we will follow our estimation approach and consider each subpopulation.

The residential accounts book value of \$6,955,542 is within the achieved 95% confidence interval, but the precision is somewhat larger than the planned \$130,000. Most practice units using the estimation approach would accept the results because the confidence limits are less than a material amount of \$260,000 from the book value. The achieved sampling risk may be viewed as one minus the auditor's confidence that the book value is not materially (\$260,000) in error or approximately .0001%. That this achieved risk is far less than the planned 5% is due of course to the extremely conservative approach of setting planned precision equal to one-half a material error rather than explicitly controlling the β risk and to drawing a sample point estimate very close to the book value. The result for the nonresidential accounts is similar.

Some would argue that the two subpopulations should be combined for evaluation purposes. Combining would result in a point estimate of \$12,373,294 (the sum of the separate point estimates) plus or minus an achieved precision of \$192,540 (obtained by combining the standard deviations using the square root of the sum of the squares approach). This combination is acceptable for the evaluation of sampling risk on a combined basis, but should be viewed with some caution in the evaluation of other (nonsampling) risks. To the extent that the two subpopulations were divided for reasons other than statistical methodology, the evaluation of the results for these other objectives should be separate. An example of another objective would be to separately evaluate the perceived ability of the two classes of customers to respond to the confirmations correctly.

A Discussion of the Nonsampling Risks

The risk of nonsampling error in this illustration can be approached using the framework outlined in the previous section. First consider the choice of auditing procedures (positive confirmations) and the quality of execution of the procedures. The auditor's working paper documentation should include the essence of the narrative in the case illustration. In addition, in arriving at conclusions about accounts receivable, consideration should be given to whether or not the confirmation procedure was effective and whether or not the audit personnel performed the procedure effectively. Specific issues that would have to be considered regarding the effectiveness of the confirmation procedure include:

1. Were the anticipated rate and type of errors found in the sample and if not, why not? (If the anticipated errors were not found, is it possible that the confirmation procedure could not find them? Also, was evidence uncovered to explain the reconciliation problem?)
2. Does the nature of the errors found in the sample indicate any prob-

- lem in using confirmation results as evidence or indicate other un-anticipated problems affecting the acceptability of the debit balances?
3. Were the subclassifications of the accounts receivable population effective?
 4. Should other audit procedures be added as a supplement to or a replacement for the confirmations? (Note that in this case it is possible to argue that overreliance on the confirmations is very likely.)
 5. Was the combination of confirmation evidence and "alternative procedures" evidence appropriate?

The quality of the execution of the audit procedures is usually evaluated through discussions with the staff and by careful review of their working papers.

The second part of the evaluation of the risk of nonsampling error is to assess the risk that the statistical methodology or its execution might lead to audit decision errors. The choice of sampling methodology is controversial. The method used in this illustration as well as any other sampling method is not suitable in all audit circumstances. Either through reliance on practice unit policy or published evidence, the reasonableness of the specific method should be evaluated. The stratified mean per unit method is discussed in a number of sources such as the AICPA's *Audit Research Monograph, No. 2* by Neter and Loebbecke, and such references should be consulted in evaluating its use. The robustness of the MPU/S method documented by Neter and Loebbecke in conjunction with highly skewed populations would support the use of the method in this case.

The evaluation of the quality of the execution of the sampling procedure should be an integral part of evaluating the performance of the audit staff on all audit procedures. However, a conclusion such as that illustrated above indicates the importance of careful review by knowledgeable auditors to be sure that both in fact and appearance the statistically oriented evidence is properly integrated into the audit process.

This brief discussion of sampling and nonsampling risks in a specific application is meant to be illustrative. An exhaustive analysis may well be worthwhile, but is not critical to the intent of this paper.

An improved form of the auditor's conclusion could take at least two approaches. Either the conclusion should express the auditor's degree of satisfaction with overall risk, or the conclusion should specifically address both sampling risk and nonsampling risk. In any case both the auditor's understanding and his/her documentation should reflect careful evaluation of the impact of the evidence.

Future Action

First, the current emphasis in statistical methodology training for auditors on alternative methods and their appropriate use needs to be expanded. By using both conceptual arguments and case illustrations, the significance of the risk of sampling error on the audit process should be clarified. This expansion should, of course, be consistent with the practice unit's audit philosophy. In addition, the expanded training should include analysis of and training in writing audit conclusions where statistical evidence is a part of the material being evaluated.

Second, professional standards for auditors should be expanded to identify explicitly the role of statistical evidence in the auditor's logic process and to consider the appropriate form of an audit conclusion that responds in part to statistical evidence. Documentation that is not consistent with the actual use of the evidence, such as the conclusions illustrated in this paper, reflects poorly on the profession. Auditors are encouraged to use statistical methods in both the professional literature and standards. To the extent possible, that literature and those standards should be clear regarding the role of sampling evidence in the auditor's opinion formulation process.

Footnotes

1. Felix, William L., Jr., "A Decision Theory View of Auditing," *Contemporary Auditing Problems*, Howard Stettler (Ed.) (University of Kansas School of Business, Lawrence, Kansas, 1974), pp. 63-71.

2. Kinney, William R., Jr., "A Decision Theory Approach to the Sampling Problem in Auditing," *The Journal of Accounting Research*, Vol. 13, No. 1 (Spring, 1975), pp. 117-132.

3. Neter, John and James K. Loebbecke, *Behavior of Major Statistical Estimation in Sampling Accounting Populations: An Empirical Study* (New York; American Institute of Certified Public Accountants, 1975).

4. Scott, William R., "A Bayesian Approach to Asset Valuation and Audit Size," *The Journal of Accounting Research*, Vol. 11, No. 2 (Autumn, 1973), pp. 304-330.

5. *Statements on Auditing Standards Nos. 1 to 21* (New York, American Institute of Certified Public Accountants, 1978).

Discussant's Response to Sampling Risk vs. Nonsampling Risk in the Auditor's Logic Process

Robert K. Elliott

Peat, Marwick, Mitchell & Co.

Professor Felix' paper is ostensibly a statistical sampling paper. However, statistical and nonstatistical sampling are essentially identical, except that sampling error is quantified in the former but not the latter:

- the concepts of sampling error and nonsampling error apply equally,
- any inference must be confined to the population subject to sampling,
- if the test objective is substantive, stratification must be employed (at a minimum, all individually significant items must be audited),
- all selected items must be audited (the only rigorous alternative—"supplementary sampling"—being impractical in auditing),
- the sample findings must be projected to the population sampled, and
- sampling is highly effective against overstatement, relatively weak against understatement.

The only apparent way that statistical sampling is relevant to the paper hinges on the author's allegation that "based on discussions with a number of staff and supervisory personnel" the mere fact of quantifying the sampling error causes auditors to overlook other sources of audit risk. (Felix' sampling methods to reach this conclusion were apparently informal, but the conclusion is plausible.)

Misinterpretation of Sampling Conclusions

The possible misinterpretation of sampling conclusions that Felix is concerned with was anticipated by the AICPA Statistical Sampling Committee in its 1964 Statement (*Journal of Accountancy*, July, 1964; now included as Section 320A of *Statement on Auditing Standards No. 1*):

The competence of evidential matter as referred to in the third standard of field work is solely a matter of auditing judgment that is not comprehended in the statistical design and evaluation of an audit sample. In a strict sense, the statistical evaluation relates only to the probability that items having certain characteristics in terms of monetary amounts, quantities, errors, or other features of interest will be included in the sample—not the auditor's treatment of such items. Consequently, the use of statistical sampling does not directly affect the auditor's decisions as to the auditing procedures to be performed, the acceptability of the evidential matter obtained with respect to individual items in the

sample, or the action which might be taken in the light of the nature and cause of particular errors.

A Pilot Test of Statistical Sampling

The risk of nonsampling error is real. To illustrate, I will describe a statistical sampling pilot test conducted by our firm in 1968-69. Twenty-five randomly selected audit partners were instructed to have their staffs study the AICPA programmed instruction texts on statistical sampling, use sampling on their audit engagements, and document the results. Approximately ninety applications were performed and documented. Upon analysis, I noted that roughly two-thirds of them had included nonsampling errors of various types, such as:

- computation errors
- statistical techniques inappropriate to audit objectives (e.g., attribute sampling for a substantive test)
- misunderstanding of terminology
- use of wrong formulas or tables
- unwarranted substitution of sample items
- misappraisal of sample items
- misinterpretation of results

In one sense, the pilot test was a failure (in that the statistical results were of unacceptable quality). But in another sense, it was a success, in that we were able to identify the most common errors likely in audit sampling. We then set out to eliminate these sources of error:

- computation and mathematical errors were eliminated by relegating the math to the computer (which also eliminates the use of formulas and tables).
- terminology problems were eliminated by switching from statistical estimation to hypothesis testing (confidence and precision were replaced by auditor specification of the degree of reliance on internal control and other substantive audit procedures and a measure of audit materiality; the confidence interval conclusion was replaced by a decision to accept the account balance as materially correct or adjust it to a balance that would be materially correct).

However, three basic sources of error could not be designed out by these methods:

- selection of a statistical method not suited to test objective (design error)
- misappraisal of sample items
- misinterpretation of results

We therefore designed quality control procedures to eliminate these sources of error, and trained a group of Statistical Audit Specialists (SASs) to administer these controls.

A Quality Control Program

SASs are selected from our professional audit staff based upon the following

criteria: candidates must be CPA's, have reached the supervising senior level (effectively at least three years of audit experience), have taken at least three courses in mathematics or statistics at the university level, and be rated as outstanding auditors. These individuals are then trained in statistical auditing in a course taking 200 hours (100 hours advance preparation plus 100 hours in the classroom). Upon completion of this training, SASs are charged with implementing and controlling the quality of statistical sampling applications. Each statistical application (both attribute and variables) must be approved by an SAS before it is executed (to guard against design error and assure that the planned test will be efficient) and again after it has been completed (to evaluate the appraisal of sample data and to assure that the statistical conclusion is consistent with the audit opinion).

The combination of computerized statistical tools plus SAS review and approval has enabled us to virtually eliminate all types of error identified in our pilot testing efforts. Engagement post-inspection confirms that the incidence of nonsampling error on statistical tests is negligible.

All auditing is required to be done under adequate supervision and review, and the application of quality controls should ameliorate the problem Felix describes.

Concluding Comments

Although statistical sampling may induce the behavioral problem noted by Felix, it must be remembered that statistical sampling may help overcome some other well known behavioral problems in audit sampling. Persons familiar with the human information processing literature know that humans are not generally good as intuitive statisticians. First, they are not sensitive to the way in which information content of a sample is related to sample size. Second, they tend to be conservative in their revision of priors upon the arrival of sample information (i.e., they underreact to sample findings). Formal statistical models are explicit on these points and help the auditor avoid these information processing errors.

Those responsible for audit policy invariably note yet another way in which statistical sampling improves audit quality. The auditor who wishes to use statistical sampling invariably thinks more carefully about test objectives and usually designs a more efficient, effective test.

In summary, Felix has noted one negative behavioral effect of statistical sampling. However, it must be remembered that there are several positive effects also, and the negative effect can and should be eliminated by adequate quality control.

I will refrain from commenting on the long case study in Felix's paper because (1) it is of dubious relevance to the paper and (2) most practice today is considerably more sophisticated than that reflected in the case study.

4

Third Party Confirmation Requests: A New Approach Utilizing an Expanded Field

Horton L. Sorkin*

University of Kansas

This study is concerned with modifying the confirmation format in such a way that the probability of an error being detected by an external party and then being reported to the auditor is increased. On the basis of five field studies of confirmation reliability, “. . . it is clear that the (confirmation) technique is far from perfect.”¹ The unreliability associated with confirmations results in part from the tendency of recipients of confirmation requests to agree with the information contained in the request even when the information is erroneous. In this study, this tendency is defined as Type II error or say yes behavior.

The main purpose of the study was directed at recipient error detection and reporting improvement, accomplished by restricting an external party's ability to concur with the information on a confirmation request when the audited organization's books are in error. If say yes behavior is decreased and the recipient responds to the auditor's request, the detection rate of errors in an entity's books should increase with the use of the confirmation format modification that has been developed.

Importance of the Study

Since the auditor relies upon evidence to evaluate the accuracy of an entity's books, the auditor is necessarily concerned with the reliability of the evidence evaluated. The auditor is effective only if audit objectives are achieved. The auditor is efficient if the audit objectives are achieved with as little effort (cost) as possible. This study is concerned with the improvement of an auditing technique by increasing the reliability of the technique. If reliability can be increased, then the auditor will be able to perform the audit task more effectively and efficiently.²

* This paper is based on a 1976 study for which primary financial support was furnished by the Peat, Marwick, Mitchell Foundation and Northwest Bancorporation and a 1977 study for which primary funding came from Northwest Bancorporation. Both studies were also supported by the Twin Cities Chapter of the Institute of Internal Auditors, the International Institute of Internal Auditors, and the University of Minnesota. Individuals actively involved include Michael J. Barrett and Jack Gray of the University of Minnesota, Roger Carolus, Eugene Jackels, Charles Petry and, especially, Kenneth Meuwissen of Northwest Bancorporation. Virginia Sorkin's aid in data processing and analysis is acknowledged.

Reliability is defined as the degree to which audit evidence corresponds to an entity's books under the condition of accurate entity bookkeeping. If the entity's books are inaccurate, then reliable audit evidence should result in the auditor becoming aware of the inaccuracy. For example, if the instrument that the auditor uses to collect evidence is 100 percent reliable and the auditor is totally competent, then the auditor will be aware of all errors existing within the sample population. If, however, the instrument is only 20 percent reliable, the competent auditor would, on the average, be aware of only one-fifth of the errors within the sample population.

The Expanded Field

Any modification of the confirmation format that reduces the respondent's ability and eagerness to **say yes** should increase the confirmation technique's reliability in the detection of discrepancies. There are two rationales suggesting that reliability will increase. First, a respondent is encouraged to perform the comparison component of the task, detect errors, and note the discrepancy on the confirmation. Thus, the detection rate increases. Second, the **say yes** recipient may decline to respond. In this case, the net detection rate will increase by definition.* The positive confirmation request is unambiguous if a recipient desires to say yes because there is only one amount to be confirmed. By not taking exception, the **say yes** respondent indicates that the amount shown on the request is correct. One way to prevent **say yes** behavior is to make the confirmation ambiguous with respect to the account balance in the audited entity's books.

Exhibit 1 represents a confirmation format with added ambiguity. The current practice of including correct information in the request may be maintained with this format. (Correct information is that which agrees with the entity's books.) One of the amounts on the request may be correct information. Those recipients who would say yes to a positive confirmation have a limited number of behaviors available when faced with a request such as that shown in Exhibit 1.

The recipients may refuse to respond, in which case the Type II error for these recipients is reduced to zero if errors exist in the entity's books. The zero error results since a Type II error only occurs if the recipients confirm accounts that are incorrect, and by not responding they do not confirm.

The recipients may correctly perform the task and their personal records may be correct. In this case, the Type II error is again reduced to zero because they would detect and notify the auditor if any discrepancy existed. As a result, the net detection rate increases since the rate is a function of the number of detections.

* Net detection rate is a function of detections divided by responses. If the number of say yes respondents become nonrespondents, mathematically the detection rate must increase if four conditions hold. The four conditions are that errors exist in the entity's books, that some recipients' records are correct, that some recipients have performed the task associated without error, and that some respondents advised the auditor of errors. The appendix to this paper describes measures (rates) used.

Exhibit 1
EXPANDED FIELD FORMAT USED BY STUDY

1. Compare the information shown below with your records for the date indicated.
2. If none of the amounts agree with your records, please indicate the balance shown by your records.
3. Please sign, date, and return this form directly to the auditor. A self addressed envelope has been provided for your convenience.

****** THIS IS NOT A REQUEST FOR PAYMENT ******

Comments:

Account Number 00123456789

Current balance as of Nov. 5, 1978

***** circle the correct amount *****

\$3,763.82

\$3,961.92

\$4,160.02

Another behavior is for the recipients to incorrectly perform the task and take exception due to poor task ability or their own inaccurate records. If the entity's books are correct, there is an increase in Type I errors because a Type I error is an exception to a correct request. If the entity's books are incorrect, this behavior may result in a reduced Type II error when the auditor uses alternative procedures to determine if the exception is proper. Enough evidence may be present in either the reply or the entity's books for the auditor to conclude that an error exists.

Yet another possibility is that recipients may guess and circle an amount, or purposefully circle an amount they consider to be favorable. If the entity's books are correct, this behavior results in an increase in Type I errors by definition. If the entity's books are incorrect and the amount that reflects the entity's incorrect books is randomly assigned to a position on the request (Exhibit 1), there is a probability that one-third of the time a Type II error will occur since the respondent in guessing may circle the amount that the auditor believes to be correct.

By the very nature of Exhibit 1, the probability of randomly choosing the correct amount from the three choices is only one-third. If a recipient circles an amount other than the amount the auditor believes to be correct, whether the auditor is able to determine if the entity's books are incorrect depends upon the effectiveness of the auditor's alternative procedures in detecting errors. Therefore, for this final case, the reduction of Type II errors is not determinant. For all these behavioral patterns of say yes confirmation recipients who are confronted with Exhibit 1, Type II errors are either reduced or at worst the same Type II error rate would prevail as would be expected with the use of the traditional positive confirmation request.

The Exhibit 1 format, which has been developed by the author, is called the **expanded field confirmation**, or **expanded field**, in the remainder of this paper. The term **expanded field** is derived from the fact that the recipient has

a field of alternatives from which to choose.* For the positive or negative confirmation request there is only one signal (one amount) in the recipient's decision field, and the requested response is true/false or dichotomous. Compared to the positive or negative, the expanded field confirmation is a limited expansion of the number of signals (three) in the recipient's decision field. The requested response is polychotomous as the recipient may either agree with one of the three amounts or take exception to all three of the amounts by conceptually responding as if to a multiple choice test with the comments space as a fourth choice and representing "none of the below" (is correct). The term "expanded field" refers to this expansion of the number of signals in a confirmation request compared to the single signal of the traditional positive or negative form.

The analysis of the recipient's response behavior is limited. The question of the recipient's motivation and perception of confirmations has not been completely analyzed. Why anyone responds correctly to a confirmation is complex. Likewise, why anyone refuses to respond or why anyone performs the task erroneously is open to conjecture. The desirability of the expanded field is dependent, in part, upon the validity of the assumption that **say yes** behavior exists, and also upon the validity of the assumption that **say yes** behavior can be converted into proper task performance behavior if the expanded field format is used.

Experimental Methodology and Design

The purpose of this study, as stated, has been to determine whether Type II error rates are reduced, and hence if confirmation reliability is increased when the expanded field confirmations are used by the auditor instead of positives or negatives. A Type II error can occur only when an entity's books are incorrect. To test for Type II error, erroneous entity bookkeeping may be simulated by mailing confirmations with misstated information. The recipient of such a confirmation request receives information believed to have been generated directly from the entity's books, and hence even if the entity's books are correct, an appearance of erroneous entity bookkeeping is transmitted to the recipient. Therefore, the methodology appropriate to experimentally measure the Type II error rates for various confirmation formats requires an organization to mail confirmations with deliberately misstated information, and then to analyze the responses.³ This is the methodology that was used in this study.

Table 1 is a summary of the experimental design used in the study commencing with the mailing of 2,280 positive, negative, and expanded field confirmation requests on November 9, 1976, to debtors with installment loan accounts with a large metropolitan bank. Prior to the printing of the requests, the total account population was randomized using a computer algorithm furnished by James K. Loebbecke of Touche Ross and Company. Subsequent analyses of the accounts did not reject the hypothesis that the accounts were randomized. Thus, statistical analyses could be run that assumed randomization.

*I would like to thank Professor Gordon B. Davis, of the University of Minnesota, who helped me provide the name by pointing out that I had "expanded the respondent's decision field."

Table 1
EXPERIMENTAL DESIGN¹

Confirmation Type	Error ²	% Spread ³	Cell Sample Size ⁴
Positive	None	....	120
Positive	Small high	....	120
Positive	Large high	....	120
Positive	Small low	....	120
Positive	Large low	....	120
Negative	Small high	....	120
Negative	Large high	....	120
Negative	Small low	....	120
Negative	Large low	....	120
Expanded field	None	5%	120
Expanded field	None	10%	120
Expanded field	Small high	5%	120
Expanded field	Large high	5%	120
Expanded field	Small low	5%	120
Expanded field	Large low	5%	120
Expanded field	Small high	10%	120
Expanded field	Large high	10%	120
Expanded field	Small low	10%	120
Expanded field	Large low	10%	120
Total			<u><u>2280</u></u>

¹ On all expanded field confirmation requests, the accounts are partitioned uniformly among the three decision points.

² Small error is the smaller of 2% of the correct balance or \$4.87. Large error is the smaller of 6% of the correct balance or \$154.63.

³ % Spread is the distance between the amounts in the expanded decision field. For example, if the correct account balance was \$100.00, the error was Large high, and the % Spread was 10%, the amounts in the expanded field confirmation would be either

$(\$100 \times 6\% = \$106.00):$ \$ 84.80 \$ 95.40 \$106.00
 or \$ 95.40 \$106.00 \$116.60
 or \$106.00 \$116.60 \$127.20

⁴ Sample size is predicated upon a response rate of approximately 75%. Some uneven shrinkage of cell sizes occurs since duplicate accounts are not eliminated until the analysis stage of the study.

A total of 1,917 accounts were suitable for the analysis of the results. The elimination of 363 accounts was due to 281 duplicate loans to the same person or household, 52 due to telephoned inquiries by recipients to the bank, and 30 because of mail delivery delays.

Table 2 is the distribution of the outstanding loan balances of the accounts used in the study. The average balance was \$3,565.

An average large error of \$110.97 was included with 805 of the requests, and the remaining 811 discrepant requests were misstated by an average \$4.80. The remaining 301 requests in the study contained correct information.

Because the major emphasis of the study was an attempt to determine if

Table 2
DISTRIBUTION OF ACCOUNT BALANCES

Category	Percent
To \$200.00	2.2
From \$200.01 to \$500.00	7.5
From \$500.01 to \$1,000.00	12.9
From \$1,000.01 to \$2,000.00	22.6
From \$2,000.01 to \$5,000.00	36.6
From \$5,000.01 to \$10,000.00	12.1
From \$10,000.01 to \$20,000.00	5.0
Over \$20,000.01	1.1
Total	100.00

the error detection reliability of currently used confirmation formats could be improved, the field study attempted to follow currently used procedures. This consideration of current practice caused the study to follow a time sequence of a normal confirmation effort, and to use typical confirmation text material on the requests. Few restrictions were imposed on the study, and a complete cross section of normal installment loans was included except for a small group of commercial leasing accounts.

Results

Table 3 is the frequency data matrix for all formats, error treatments, and responses. Table 4 is the percentage rate data matrix derived from Table 3 using the measures described in the appendix to this paper. The statistical methodologies used included chi-square tests and hierarchical log-linear modelings of statistical significance.⁴ It can be seen from Table 4 that gross and net Type II error rates are lower for expanded fields than for either positives or negatives.

Gross Detection Rates. The gross detection rate is calculated by dividing the number of detections by the number of requests mailed. This rate is used to compare the three formats because it is generally assumed that negatives have a 100 percent response rate and the negative nonresponders have verified the information on the request.

The most significant variable in the explanation of the differences in gross detection rates for the various experimental treatments in Table 4 is the confirmation form. The expanded field is markedly superior to the positive, and the negative is the inferior format for error detection.

Two other variables are significant in the explanation of the gross detection rates. First, detection increases if a large rather than a small error is present, regardless of other variables, as is apparent in Table 4. A detection rate increase occurred for two of the three confirmation forms when a large rather than a small error was present.

Table 3
STUDY'S OVERALL DATA MATRIX (FREQUENCIES)

FORMAT	EXPANDED FIELD						POSITIVE						NEGATIVE		
	none	small low	large low	small high	large high	none	small low	large low	small high	large high	small low	large low	small high	large high	
Total	203	203	190	199	201	98	100	100	101	107	111	106	97	101	
Mailed															
Did not															
Reply	49	49	53	52	50	21	26	23	22	17	91	91	76	82	
Refused															
Task	2	5	4	2	1	1	1	1	0	2	0	0	1	0	
Verified															
Request	132	23	9	25	4	71	50	47	40	34	91	91	76	82	
Detected															
Error	...	123	114	113	136	...	23	29	39	54	20	15	20	19	
Type I															
Error	10	...	...	...	...	5	...	...	...	...	...	...	...	...
Amount right,															
Wrong circle	10	...	...	...	...	...	...	...	...	...	...	...	...	...
Amount wrong,															
Wrong circle	...	3	10	7	10	...	...	...	...	...	...	...	...	...

Table 4
STUDY'S OVERALL DATA MATRIX (PERCENTAGES)

FORMAT	EXPANDED FIELD						POSITIVE						NEGATIVE					
	none	small low	large low	small high	large high	none	small low	large low	small high	large high	small low	large low	small high	large high	small low	large low	small high	large high
Response																		
Rate	75.6	75.9	71.5	73.6	75.0	78.4	73.7	76.8	77.2	83.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Gross																		
Detection	...	63.6	66.7	60.9	73.0	...	23.2	29.3	38.6	51.4	18.0	14.2	20.8	18.8				
Net																		
Detection	...	84.6	93.2	82.8	97.3	...	31.5	38.2	49.4	61.4	18.0	14.2	20.8	18.8				
Gross																		
Type II	...	11.6	4.8	12.7	2.0	...	50.5	47.5	39.6	32.4	82.0	85.8	79.2	81.2				
Net																		
Type II	...	15.4	6.8	17.2	2.7	...	68.5	61.8	50.6	38.6	82.0	85.8	79.2	81.2				
Gross																		
Type I	10.0	...	...	...	...	5.2	...	...	...	...	...	...	...	...	...	...	...
Net																		
Type I	13.2	...	...	...	...	6.6	...	...	...	...	...	...	...	...	...	...	...
Task																		
Refusal	1.0	2.5	2.1	1.0	0.5	1.0	1.0	1.0	0.0	1.9	0.0	0.0	1.0	0.0	0.0	1.0	0.0	

The most important conclusion based on the results is that detection rate increases are explained by both the type of confirmation request and the direction of the error. With reference to Table 4, this conclusion is primarily the result of the large increase in detection rates for the positive format when the direction of the error was high rather than low, regardless of the magnitude of the error.

Net Detection Rates. The net detection rate is calculated by dividing the number of detections by the number of responses received. This rate is appropriate only for the comparison of the expanded field and positive formats because only these provide the auditor with response rates.

Again, the most significant variable in explaining the results is the detection superiority of the expanded field compared to the positive.

Two other variables, however, are notable in the explanation of the data. First, regardless of the format, detection is affected by both the direction and magnitude of the error. For example, when the error is large high, the detection rate is expected to be larger for either format. Second, regardless of the direction of the error, the large error and the choice of the format affect detection. This result is largely due to large percentage increases in detection with the positive when the error is large, although this is also true of the expanded field to a lesser extent.

Response Rates. Response rates are important to the auditor. When recipients of a positive or expanded field do not respond, the auditor may be forced to use costly alternative procedures to ascertain the accuracy of material non-responder account balances and to increase sample size in other situations. If a significant difference in the response rates exists between two formats, *ceteris paribus*, then the format that results in a lower response rate is more expensive for the auditor to use.

As a result of statistical tests, the null hypothesis could not be rejected that there is no difference in the response rates between the positive and expanded field formats. The major factor in a descriptive sense was the high 84.4 percent response rate associated with the positive format for the large high error treatment. Although statistically an 84.4 percent rate is not unexpected, it would be useful to determine whether the higher response rate for this treatment would recur in a replication of this study.

Expanded Field Spread. As explained in footnote 3 of Table 1, two different degrees of spread between the signals in the expanded field were included in the study to ascertain the effect of varying the spread. The spread treatment created no significant difference in response or detection rates with the expanded field.

A Replication. Currently, data is being analyzed from a 1977 study run with an installment loan population in a bank located several hundred miles from the site of the 1976 study discussed in this paper. Tentative results from this current study support all the 1976 results. Additional variables are also being tested in this new study. Table 5 summarizes the comparison of the two studies. experimental populations—a typical problem with empirical research. Whether

Table 5
COMPARISON OF TWO STUDIES
 (Net detection rates)

	<u>Expanded Field</u>	<u>Positive</u>	<u>Negative</u>
1976	89%	45%	18%
1977	94%	43%	17%

Conclusions

The results of this field study should not be generalized beyond the specific these results will hold for different populations is conjecture. This uncertainty points to the need for replications of the study.

At this time, the conceptual motivation for and the use of the expanded field format is unique to this study. A question exists as to whether results achieved in this study are due to the novelty of the format, or whether the observed results will persist over time.

To promote internal validity, the scope of the experimental treatments was limited. Perhaps the use of different levels of error treatments, format modifications, and different sequencing of events would lead to different results.

Although the appropriateness of statistical methodologies is usually subject to question in a study of this type, the methodology used did not limit the conclusions presented. The size of the experiment and the size of the differences that existed in the original analysis data matrix for various treatments would have resulted in the same conclusions with the use of almost any other statistical methodology.

The results of this study indicate that the expanded field format is significantly more reliable than either the positive or the negative format. The Type II error rates, whether gross or net, associated with the expanded field were a small fraction of the rates experienced with the use of the other two formats. (On the average, the gross Type II error rate for the expanded field was 19.3 percent of the positive rate and 9.7 percent of the negative rate. The average net Type II error rate was 20.1 percent of the positive rate and 12.9 percent of the negative rate.) The detection ability of the expanded field was also superior to either the negative or the positive, regardless of the amount or direction of the error treatment. Even without the use of second requests, the expanded field was a significantly more reliable confirmation format than either of the other two formats.

Possible Implications

If the results of these two studies persist over other account populations in which the auditor uses confirmations to ascertain account balance accuracy, the following recommendations are offered:

1. Because the cost structures of the positive and expanded field are similar, use of positives is discouraged. Even though the slightly higher Type I error rate experienced with expanded fields implies greater cost, this should be offset by the smaller sample sizes implied by the increased reliability of the expanded field format.

2. No recommendations are offered concerning the negative confirmation form. The radically different cost structure of the negative vis-à-vis the expanded field imply the desirability of performing a benefit/cost study to resolve this issue. However, the results of these two studies and previous studies on confirmation reliability might bring into question the legal defensibility of evidence derived from the use of negatives.⁵

Footnotes

1. James K. Loebbecke and John Neter, "Statistical Sampling in Confirming Receivables," *The Journal of Accountancy*, June 1973, p. 47.

2. *Research Opportunities in Auditing*, Peat, Marwick, Mitchell, & Co., 1976, pp. 2, 3. For a more extensive discussion of reliable evidence, see Horton Lee Sorkin, "An Empirical Study of Three Confirmation Techniques: Desirability of Expanding the Respondent's Decision Field" (Ph.D. dissertation, University of Minnesota, 1977), pp. 4-6, 54-65, 157-160, and Appendix B.

3. Roger R. Palmer, John Neter, and Gordon B. Davis, *A Research Study on the Effectiveness of Confirming Personal Checking Accounts*, NABAC/The Association for Bank Audit, Control and Operation, 1967, p. 5.

4. For a discussion, see Sorkin, "An Empirical Study," pp. 123-145.

5. For the data matrix of previous studies, see Horton Lee Sorkin, *The Expanded Field Confirmation*, a research monograph published October 1978 by The Institute of Internal Auditors, Inc.

Appendix—Measures

Measures are developed below to describe the study's results and to quantify those errors that may occur with the use of the confirmation technique. Exhibit A is used to derive these measures. The assumption is made that the information on the confirmation request sent to the recipient agrees with the entity's books since this is common auditing practice. However, as this study deliberately introduced errors into the requests, an entity with incorrect books is presumed to be simulated in the study and therefore the results expected under such circumstances can be projected by the auditor.

Exhibit A

DERIVATION OF MEASURES

RECIPIENT BEHAVIOR	ENTITY'S BOOKS ARE	
	CORRECT	INCORRECT
Does not respond	A	E
Responds & refuses task	B	F
Agrees with confirmation	C	G
Correct about exception	Not possible	H
Incorrect about exception*	D	J

* A recipient may take exception to a confirmation and the auditor may still conclude that the entity's books are not in error. For instance, a recipient may protest a penalty charge for a late payment on a loan and the charge is justified.

Types of Errors with the Expanded Field. Three types of errors were found

to be possible with the introduction and use of the expanded field format. First, the information on the request may be correct, but the respondent may circle a wrong amount. If the entity's books are correct, the auditor, by the use of alternative procedures, may conclude that the entity is correct and the respondent in error. This respondent behavior is defined as a Type I error in Table 4 and may occur with any form of confirmation.

Second, an error occurs when the information on the expanded field request and the entity's books are erroneous and the respondent circles the amount which is shown on the entity's books. This is defined as a verification, and is, therefore, a Type II error. This behavior is essentially the same as the behavior when a positive form is sent and the respondent "confirms" an incorrect amount.

A unique type of error that may result from the expanded field format occurs when the entity's books are incorrect and the respondent circles one of the two amounts that the auditor knows does not reflect the entity's booked amount for the account. For purposes of this analysis, this circling of the wrong signal or amount is classified as a detection. The rationale for this classification is an assumption that the auditor will, by alternative procedures, discover that the account is erroneously booked and hence detect the erroneous account.

For positives and the expanded fields, the following measures are used for the analysis of Exhibit A:

$$\text{Response rate} = \frac{(C + D)}{(A + C + D)} \text{ or } \frac{(G + H + J)}{(E + G + H + J)}$$

$$\text{Gross Type I error rate} = \frac{(D)}{(A + C + D)}$$

$$\text{Net Type I error rate} = \frac{(D)}{(C + D)}$$

$$\text{Gross detection rate} = \frac{(H)}{(E + G + H + J)}$$

$$\text{Net Type II error rate} = \frac{(G + J)}{(G + H + J)}$$

$$\text{Gross detection rate} = \frac{(H)}{(E + G + H + J)}$$

$$\text{Net detection rate} = \frac{(H)}{(G + H + J)}$$

$$\text{Task refusal rate} = \frac{(B)}{(B + C + D)} \text{ or } \frac{(F)}{(F + G + H + J)}$$

Since the response rate for negatives is assumed to be 100 percent, net and gross rates for any one measure are identical. For negatives, the following measures are used:

$$\text{Type II error rate} = \frac{(E + G + J)}{(E + G + H + J)}$$

$$\text{Detection rate} = \frac{(H)}{(E + G + H + J)}$$

$$\text{Task refusal rate} = \frac{(F)}{(E + F + G + H + J)}$$

Discussant's Response to Third Party Confirmation Requests: A New Approach Utilizing an Expanded Field

William C. Dent

Elmer Fox, Westheimer & Co.

Being a commentator on a paper at a symposium such as Auditing Symposium IV at the University of Kansas is an interesting and challenging opportunity. A commentator can be censorious, neutral, or supportive. Being neutral is not much fun. One can usually find a basis for the posture of a censor, but I believe one should not attempt to be censorious unless there is a basis for such a position, and I find none in this paper. Therefore, my overall comments on Dr. Sorkin's paper will be supportive.

I find the paper to be creative and innovative—an interesting and fascinating study. Sorkin's objective of increasing the reliability of the confirmation process is admirable, and I am pleased that he recognizes the cost/benefit relationship in his paper. Too often in accounting research the cost/benefit relationship is ignored.

Sorkin makes the statement, "If reliability can be increased, then the auditor will be able to perform the audit task more effectively and efficiently." In a period of rising audit costs there are few who would disagree with the concept of more effective and efficient auditing. The question then is: Does the expanded field confirmation request provide more reliability to the third party confirmation process? Dr. Sorkin's research suggests that the third party confirmation process is made more reliable through the use of the expanded field, but more research may be necessary as discussed later.

Sorkin makes one statement in the paper that basically I do not agree with: "The auditor relies upon evidence to evaluate the accuracy of an entity's books . . ." I would contend that the auditor relies upon evidence to corroborate the representations made in the financial statements to support the auditor's opinion thereon. If the auditor intends to rely on internal accounting controls, the auditor must study and evaluate and test compliance with those controls. In testing compliance, the auditor will gather evidence that the controls are operating and therefore can be relied on to produce accounting records that have no material misstatement in them. The type of testing performed in Dr. Sorkin's study, while not described as such, appears to be a form of attribute sampling to test compliance with accounting controls surrounding receivables and revenue.

On another point, in my opinion it was unfortunate that both the populations sampled involved individuals. One population really should have been commercial accounts. Further research might show a substantial difference in results

with commercial accounts. Also, clients with commercial accounts might be more likely to object to the expanded field confirmation request in that it could imply that the client is not sure of the balance to be confirmed.

The statement that a nonresponse to a negative request is a confirmation is questionable. There must be consideration of the recipient who tosses the confirmation in the wastebasket without any further thought—a possibility that exists with all types of negative confirmations.

Was it significant that the “large high” errors on positive confirmations had significantly higher response rates even though the Type II error rate was high? Why? Was the respondent attempting to select a balance more favorable to him? We don’t know. This area needs further research. It was also noted that the Type II error rate decreased as error increased. Why? Materiality? We don’t know.

In conclusion, the approach is innovative and forward thinking. However, research is needed involving commercial accounts receivable of different sized companies. Once this research has been performed and evaluated, more definitive conclusions can be drawn about expanded field third party confirmation requests.

5

Has the Accounting Profession Lost Control of Its Destiny?

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*No man of woman born, coward or
brave can shun his destiny.*

—Homer

When Howard Stettler asked me to write about whether the accounting profession has lost control of its destiny I accepted because I was interested in the answer. Like many others who are essentially in the business of putting words on paper, I don't know what I believe until I write it. However, the answer proved more elusive than I anticipated.

In a sense, no man controls his destiny. In this sense, the question is loaded because the idea of a destiny presumes predetermination. According to Webster's, destiny means either something to which a person or thing is destined or a predetermined course of events often held to be a resistless power or agency. Synonyms are fortune and fate. However, I think the question contemplates a related word—destination. The relevant questions are: Where are we going and who's in charge of the trip?

How Do We Know Where We're Going?

A logical starting point would seem to be a prediction of where the accounting profession is headed. However, man has not been too successful in predicting. Most predictions are merely extrapolations of present trends. We cannot know what future accidents, catastrophes, or personalities may alter those trends. As a result, predictions often tell us more about the present than the future. For example, consider these predictions from the year 1876.¹

- Poor penmanship and writer's cramp no longer impede personal correspondence thanks to the advent of the home linotype.
- Malodorous footwear will never again upset social gatherings or community affairs as gentlemen of the next century sport pasteurized spats and gaiters.
- Gone are the days of the "Three R's." Boys and girls of the future must now be drilled in the "Five R's"—Reading, Writing, Trans-

*The author wishes to acknowledge the assistance of Brian Zell of the AICPA staff and to point out that the opinions expressed are the author's views and do not necessarily represent the views of the AICPA or other members of its staff.

mitting, Receiving, and Arithmetic—as Morse’s code replaces the alphabet.

- Housewives and domestics are no longer confronted with the everyday dangers of flying porcelain shards and glass splinters as beautiful and unbreakable vulcanized dishes grace the finest tables.
- The wind may blow and the hail may fall, but Americans of the future are comfortable and secure in their prefabricated, mailorder, cast iron outbuildings.

Predictors of 1899 were no more successful.² This is how they expected events to unfold.

1923—Steam powered Victrolas bring culture to all!

1963—100 mile-an-hour express trains whisk passengers from coast to coast in complete comfort!

1975—Price of next day mail service from New York to Washington reduced to ½¢!

One could go on and on citing predictions of future developments, such as the bank-by-wireless craze of the Twenties, that have somehow gone awry. So, rather than trying to predict the destination of the accounting profession, I will try to identify the trends that seem to be guiding the accounting profession in a particular direction.

The Accounting Profession in the Age of Consumerism

Not long ago accountants were looked on with derision, if at all. The Hollywood image of accountants was typified by the likes of Franklin Pangborn and Arnold Stang. Accountants were the butt of several jokes.³ Efforts to raise the public’s awareness of accountants were largely unsuccessful. Who can remember that World War II slogan, “Pencils for Peace”?

Those days are gone. Accountants have been thrust into the public limelight. Hardly a month goes by that a major newspaper or magazine does not mention accountants. The accounting profession is under the scrutiny of both houses of Congress and the Federal Trade Commission. In colleges and universities across the country, eager students in record numbers have been signing up for accounting courses, with the apparent approval of their parents. What is it about accounting that caused this boom in popularity? In a word, accounting acquired “glamour.”

Glamour has its price, however. The increase in public awareness of independent auditors (as one segment of accounting) has sometimes caused embarrassment and has brought independent auditors in contact with the forces of consumerism.

Consumerism, of course, is not a new phenomenon. One author notes, “For centuries religious and social philosophers classified the businessman as a quasi criminal.”⁴ However, recently the cause of consumerism has been translated into legislative proposals, such as the recently defeated proposal for a Consumer Protection Agency, which have been scarce since the New Deal legislation of the 1930’s.

Consumerism will have its ups and downs, but the movement will have

a long-term effect on all institutions in our society. Now that public attention is focused on the social function that independent auditors perform, the accounting profession is bound to be affected by current social trends.

The Tortuous Fruits of Consumerism

Consumerism has had a profound influence on the courts. The current theory of torts seems to be that when someone is injured, someone else is to blame. The associated factor of "bad luck" is not defined in *Black's Law Dictionary*; however, one author has observed:

Two attitudes characteristic of our affluent society have exerted increasing pressure upon tort and compensation law. The first is intolerance of bad luck, to the extent that its victims are thought not only to need but to deserve compensation. The second is a belief that where the technology to prevent accidents or cure or prevent disease exists, it should be used.⁶

The clearest indication of this trend is in the area of product liability. Not long ago, product liability was based on concepts of warranties and negligence, and the rules for determining breach of warranty or negligence were relatively specific. Sometimes, however, the burden of meeting those specific tests prevented injured parties from collecting damages. Some courts found this offensive to social justice. They felt injured parties could and should be compensated by the market place, and the concept of strict liability has gained considerable favor. *Black's Law Dictionary* defines strict liability as—

Liability without fault. Case is one of "strict liability" when neither care nor negligence, neither good nor bad faith, neither knowledge nor ignorance will save the defendant.

Cost spreading is the theory behind strict liability. Manufacturers will be liable for damages caused by their products; the burden of damages can be spread among manufacturers by insurance; and the cost, in turn, can be passed on to consumers in general through higher prices. For example, this theory was applied to the auditor's liability in the *Rusch Factors* case:

Why should an innocent party be forced to carry the weighty burden of an accountant's professional malpractice? Isn't the risk of loss more easily distributed and fairly spread by imposing it on the accounting profession, which can pass the cost of insuring against risk on to its customers, who can in turn pass the cost onto the entire consuming public?⁶

However, the theory of product liability is a questionable analogy for the practice of independent auditing. Product liability has generally applied to sales of goods resulting in physical harm. Public accounting involves the sale of a professional service that rarely has resulted in physical harm. Nevertheless, this distinction has not been impenetrable to those bent on recovering damages.

The distinctions between the sale of a good and the sale of a service, between a professional service and a nonprofessional service, between physical harm and economic harm are not discrete, and, if these subjective boundaries

seem to lead to inequities, the courts may disregard them. For example, the distinction between goods and services has been challenged as follows:

Certainly there is no triumph of logic in the present state of the law under which a patient injured by a defective instrument used in surgery performed on him may be unable to employ strict liability, while a person purchasing an article at the hospital gift shop is able to hold the hospital strictly liable.⁷

The physical harm test has been disregarded in several cases, most notably *Union Oil Co. v. Oppen*, which involved fishermen's claims for lost profits arising from a negligent oil spill. The court substituted a test of "reasonable foreseeability" for determining compensation for economic losses.⁸

Negligence is No Excuse

The *Hochfelder* decision put a damper on some of the more adventurous interpretations of the auditor's liability under the SEC's Rule 10b-5; for example, the highly subjective "flexible standard" applied in *White v. Abrams*. Some saw the *Hochfelder* decision as affirming the traditional common law principles of fraud.⁹ But others have seen *Hochfelder* as taking away the right of investors to recovery, and they have suggested that the *Hochfelder* decision be overturned by legislation. The report of the Metcalf subcommittee stated:

The subcommittee believes that independent auditors of publicly owned corporations should be liable for their negligence to private parties who suffer damages as a result.¹⁰

Also, the American Law Institute's proposal to restate the securities laws is expected to be presented to Congress in the near future. The provisions of the ALI's securities code on liability seem to be based more on a study of past and present regulations rather than any fundamental rethinking of the auditor's role in securities markets.¹¹ If Congress does take up this project, modification of the effect of the *Hochfelder* decision is likely.

Negligence Blurs Culpability and Care

To compound the difficulties, the concept of negligence is being altered in the courts. Negligence in professional services has usually been defined in terms of the standards or customs of the profession. To practicing professionals, this would seem a reasonable basis for evaluating the adequacy of performance, both during the engagement and in hindsight. Some courts, however, disregard professional standards in determining liability.

In accounting, the most notable decision disregarding professional standards is *Herzfeld*, where the court stated:

Much has been said by the parties about generally accepted accounting principles and the proper way for an accountant to report real estate transactions. We think this misses the point. Our inquiry is properly focused not on whether LKH&H's report satisfies esoteric accounting norms, comprehensible only to initiate, but whether the report fairly

presents the true financial position . . . to the untutored eye of an ordinary investor.¹²

The *Herzfeld* decision has a counterpart in the medical profession in *Helling v. Carey*. In that case, the Supreme Court of Washington held an ophthalmologist negligent for failing to test a patient for glaucoma even though there was uncontroverted testimony that the custom was to not test patients such as the plaintiff because at his age the disease rarely appears. In finding the doctor negligent, the court indicated that the glaucoma test was harmless, reliable, and inexpensive; however, one commentator noted:

None of these assumptions may be accurate. The test is not always a reliable indicator of the presence of glaucoma, and it may cause injury to the eye. And it is inexpensive only when viewed in isolation. The test for glaucoma is only one of what is no doubt a large number of diagnostic tests which the medical profession does not administer unless special circumstances indicate that they should be.¹³

One can imagine the risks auditors would face if they were held liable for omitting uncustomary but inexpensive audit tests.

The *Helling v. Carey* decision apparently caused considerable outrage, and the State of Washington overturned the ruling by legislation. Apparently, the prospect of lawyers and judges establishing appropriate medical practice was unsatisfactory. Accounting may be viewed differently. Many accounting concepts, such as income, have counterparts in everyday life, and it is difficult for nonaccountants to understand why financial statements should be so complex.

If professional standards are disregarded as a basis for determining liability, what standard is to be applied? One author speculates:

Careful attention might well be given the view . . . that strict liability, even to professions, might be imposed where the recipient's **reasonable expectations** as to quality of service are not met, causing him detriment.¹⁴

Determining "reasonableness" in an accounting case may be highly subjective. Several factors make judicial determinations of reasonableness difficult:

(1) the evaluation of a particular defendant's conduct may require an unusually complex, highly technical analysis; (2) the parties may be in a special relationship which must be taken into account by modifying the duties each owes to the other; and (3) practical considerations may compel courts to place limits upon the extent of potential liability for certain types of conduct.¹⁵

Each of these factors can apply and has applied to audit engagements.

If reasonableness becomes an unworkable standard, it too may be eliminated. One author states:

Eventually, of course, all references to reasonableness may be removed from tort law, and liability may be strictly imposed merely on the basis of causation, with no fault standard, no required deviation from a norm.¹⁶

I'm sure he did not intend to imply that all reasonableness would be removed from tort law, but that is the inference of another observer:

We are rapidly approaching the day when liability will be determined routinely on a case by case, "under all the circumstances" basis, with decision makers (other juries) guided only by the broadest of general principles. When that day arrives, the retreat from the rules of law will be complete, principled decision will have been replaced with decision by whim, and the common law of negligence will have been de-generated into an unjustifiably inefficient, thinly disguised lottery.¹⁷

When the chaos of such a judicial system has become apparent, nonjudicial solutions will have to be considered. That kind of situation has given us no-fault auto insurance, which seems unsatisfactory to just about everyone. Similar solutions have been proposed for other types of malpractice liability.

Charting a Course against the Current

I do not mean to project a dismal or catastrophic view of the future of legal liability. The accounting profession has survived past changes and will survive future changes even though litigation may become more vexatious and torts become more tortuous.

If the profession is not to be swept away with the current change in legal liability, perhaps we should worry less about what liability has been or will be and more about what it should be.

Although the court in *Hochfelder* did not address the question of whether a reckless disregard of the truth constitutes intentional conduct, it does not seem unreasonable that independent auditors should be held liable to third parties for such recklessness.

Accountants who gullibly accept transparently fishy explanations from their clients of an obviously suspicious transaction are liable under 10b-5, no matter what their mental state.¹⁸

Current research on the effect of information on the securities markets seems to indicate that for the general investor, reliance on the financial statements may not be a relevant prerequisite to recovery. According to one's interpretation, financial statements are not, cannot, or should not be used in any direct way in making investment decisions. However, based on an analysis of the efficient market hypothesis, Anderson concludes that an auditor perhaps should be liable to a narrow class of investors.¹⁹

The extent to which the auditor's liability has developed on a case-by-case basis is indicative of the lack of a clear conception in the law of the auditor's responsibilities. Auditors and the public would benefit if more specific standards of conduct were established before the fact. Independent auditors need some confidence that the appropriateness of their conduct can be measured in advance of making difficult audit judgments.

What is needed is a thorough reexamination of the role and responsibilities of professionals under the securities laws. First, the role of experts should be examined more closely. Under the securities laws, five groups are subject to liability: (1) issuers, (2) directors, (3) corporate executives, (4) experts, and (5) underwriters. An expert is anyone whose profession gives authority to a statement made by him. However, as the administration of the securities laws

has developed, the independent auditor and, to a much lesser extent, the securities lawyer have been the experts subjected to liability. Today, the security analyst, the portfolio manager, and the investment advisor play as significant a role in the securities markets as the independent auditor and the securities lawyer, but this role remains largely unrecognized in the established framework for allocating liability.

Also desirable would be recognition by securities laws of the need for a rational connection between the fault of an expert and recoverable losses. This subject has been approached simplistically as a choice between requiring an investor to prove reliance on an expert's work and eliminating the reliance requirement because the expert's work is presumably reflected in the market price. This dichotomy ignores the social effect of removing all the burden from the investor of demonstrating a link between market price and the expert's work. The result is that experts, primarily independent auditors, have sometimes been cast as insurers against the investment risk of loss.

Nearly any major securities loss opens the auditor's performance to second guessing and hindsight. Thus, before *Hochfelder*, plaintiff's counsel had only to create a material issue of fact as to an omission or a statement that turned out, with hindsight, to have been imprecise to subject an independent auditor to potential liability.

Securities are not the same as products intended for immediate consumption. Securities are purchased to be held at risk with the expectation of future gain, but the potential of future loss. A system that causes experts to reimburse losses but not share in any gain is unreasonable unless the expert's culpability in the loss is clearly demonstrated. A negligence standard that amounts to strict liability for professional services, inappropriately makes the auditor an insurer of investment risk.

Further, the legislative pressure for a negligence standard makes development of an equitable alternative imperative. What I suggest is that culpability be measured by a recklessness standard and that performance be measured by professional standards. To be acceptable, this framework would require stringent adherence to the public interest in the development of standards. Professional standards should be subjected to a rigorous "reasonableness" test in the development process rather than subjecting performance to such a test with hindsight and in disregard of professional standards.

Standards—Who's in Charge Anyway?

What can the accounting profession do if other courts go along with the thinking of the *Herzfeld* decision and disregard professional standards in favor of a reasonableness approach?

One thing that can be done is to keep a watchful eye on court decisions and adapt professional standards accordingly. For example, the Commission on Auditors' Responsibilities recommended that the auditor evaluate the "cumulative effect of management's judgment in the presentation of financial statements." The Commission stated:

This is the only position consistent with the views expressed by regu-

latory agencies and the courts that auditors have an obligation to go beyond determining technical compliance with specific accounting principles and to evaluate the overall presentation of earnings and financial position in the financial statements.²⁰

The responsiveness of professional standards to litigation goes back at least to the first AICPA auditing pronouncement SAP No. 1 (October 1939), "Extensions of Auditing Procedure," which resulted from the McKesson & Robbins case. Being in the position of playing catch-up is not, however, satisfactory.

Another possibility which has been discussed much in certain circles is to have the government set standards. Some, including Representative Moss, have argued that the SEC should directly set accounting and auditing standards. The reasoning behind this position is that the SEC was given authority to set standards by the securities acts, and that authority should be exercised. Perhaps the courts would be less inclined to find fault with federal regulations than with professional standards. However, regulations have several disadvantages compared to professional standards. Searching for loopholes is unfortunately a practice that is fostered by detailed regulation. For this reason, and several others, professions have traditionally been expected to set their own standards. This subject has been considered at length by the Commission on Auditors' Responsibilities and I won't repeat that discussion here except to note the large role already played by the SEC in standard setting.

The SEC has been far from idle in the area of accounting and auditing standards. It has many and none-too-subtle ways of communicating its positions to the Financial Accounting Standards Board and the Auditing Standards Executive Committee. The report of the Commission on Auditors' Responsibilities chronicles the actions by the SEC in the development of auditing standards on the review of interim information.²¹ More recently, the SEC's disapproval stopped short the proposal to eliminate the auditor's qualified opinion on uncertainties.

The SEC has been adept at handling political pressure and exercising selectivity in directing the setting of accounting and auditing standards. At the moment, however, the SEC is facing a serious test with the accounting standards on oil and gas. It has held hearings to determine if the FASB has made the correct choice from among alternative accounting principles. The oil and gas standards have also sparked a new-found interest in accounting standards by the Department of Energy, the Federal Trade Commission, and the Justice Department. There is the danger that political pressure may cause the SEC or Congress to endorse alternative accounting principles for similar circumstances. As undesirable as that would be from the standpoint of improving accounting standards, it still amounts to no more than selective overriding of the standard setting process for accounting and not a takeover.

However, there is a much greater danger that the auditing standard setting process will be swept up in a more general takeover of the regulation of auditing practice.

Unbridled Regulation

Prospects for the regulation of the public accounting profession are fluid

at the moment. Representative Moss has indicated he may introduce legislation in this Congress, but it is uncertain how much support such a measure would have. Pressure has been placed on the SEC to increase its oversight of the accounting profession, and the Commission will be reporting to Congress this July on the extent of the AICPA's progress in self-regulation.

Recently, Senator Eagleton sent a questionnaire to each of the national accounting firms, the CASB, the FASB, the AICPA, and the SEC. Senator Eagleton is the chairman of the subcommittee that has assumed the responsibilities of Senator Metcalf's subcommittee since his untimely death. The request to the AICPA has over fifty questions on the AICPA's progress on the recommendations made by the Metcalf subcommittee.

Following the SEC's report in July, new hearings may be held in both houses of Congress to evaluate the need for federal legislation to regulate the accounting profession.

Consumers, for whose benefit such regulation is proposed, are ill-defined. As far as the effect of accounting data is concerned, we are all consumers. Since the consumer movement has no well developed goals, no unified organization, and no program of action, future developments may depend largely on historical accident. If another Penn Central or Equity Funding surfaces, support for federal regulation could crystallize quickly.

James Q. Wilson described several scenarios by which regulation is initiated. It is interesting to compare his description of the process to recent events affecting the accounting profession. Wilson offers the following description of the process when the benefits of regulation are diffuse and the costs of regulation are relatively concentrated, which seems to be the relevant reference for regulation of the accounting profession:

Regulatory proposals emerging from this process are likely to have certain distinctive features. First, in order to ensure vital publicity and develop political momentum in the competition for attention in and around Congress, the bills will focus attention on an "evil," personified if possible in a corporation, industry, or victim. Second the proposal will be "strong"—that is, there will be little incentive in the developmental process to accommodate conflicting interests and thus little incentive to find a politically acceptable formula which all affected parties can live with. (To compromise the proposal would be to sacrifice the capacity of the bill to mobilize support by its moralistic appeal.) Third, though few substantive bargains will be struck, many procedural ones will, especially ones that recognize the central structural fact of the American Congress—namely, that it is a federal institution based on state and district representation. Concessions will often be made to recognize existing state programs or to provide incentives for states to develop new programs. Finally, the proposed solutions to the problematic business practice will be shaped as much by the political process by which the proposal is generated as by an analysis of the problem itself.²²

The first step has happened. The shortcomings of independent auditors have been chronicled in recent Congressional hearings and reports. Emphasis has been placed on a few spectacular corporate failures and the more widespread

illegal payments problem. Little attention has been given to the cost effectiveness of audits extensive enough to seriously reduce these problems. Bob Cratchitt has become Mr. Scrooge.

It is doubtful that many members of Congress are now greatly concerned about the regulation of the accounting profession. When the securities acts were enacted in 1933 and 1934, Congress showed little familiarity with and less interest in the profession. This condition has carried over somewhat into the present. For example, consider this exchange in the House of Representatives concerning the Foreign Corrupt Practices Act of 1977:

Rep. 1: Will the gentleman please explain briefly the changes that the Senate suggested.

Rep. 2: The Senate added a provision which would have required U.S. corporations which file with the SEC to keep accurate books and records, and so forth, and we accepted that. We made two minor changes that had to go with it, that had to satisfy the accountants. There was some question about some of the things that they were perturbed about. We removed those and the section that had to do with that. Then we took section 2 of the Senate bill, the complete section, which expanded the disclosure requirements presently applicable to investors in equity securities, particularly as those requirements affect the disclosure of foreign investments in the United States. Those are the principal changes.

Rep. 1: I thank the gentleman.²³

Federal regulation of the accounting profession might have appeal to some auditors. For example, in the extreme case of a corps of federal auditors, some practicing auditors might be attracted by less overtime, better pensions, and increased job security. Also, as a federal employee, an auditor would generally be immune to litigation.

Perhaps the greater danger is not that auditors would suffer under federal regulation, but that auditors might come to like and depend on regulation. Such an occurrence is not unheard of; it has happened to varying extents in the trucking industry, television broadcasting, and the merchant marine. It is sometimes hard to tell who is regulating whom.

Recently there has been considerable discussion concerning what some see as a trend toward two tiers in the profession—firms with SEC registered clients and firms without SEC registered clients. If there is such a trend, it is because of the more extensive regulation of SEC registrants. This arises both from direct regulation by the SEC and from pressure on the profession to establish more stringent standards suitable for SEC registrants. Federal regulation of the profession could exacerbate this trend, and more extensive regulations for SEC registrants have a habit of carrying over to audits of private companies. One author describes the effects of increasing regulation on the availability of services:

A related consequence of business “reform” is the elimination of poor man’s goods. The second-hand items, the economy models, the stripped-down items are almost always the ones which turn out to be unsafe (or at least uninspected), or which fall short of some arbitrary standard

of this or that costly desideratum. The Model T and the Volkswagen fall under suspicion, but the market is made safe for Cadillacs, armored cars, and Sherman tanks.²⁴

This danger has been recognized in discussions of federal regulation of the accounting profession, but there are no substantive guarantees that federal regulation will not inflict needless costs on smaller CPA firms and their clients.

However, it is well to remember Wilson's analysis that the legislative solution will be shaped as much by the political process as by an analysis of the problem to be resolved. The introduction to the report of the Metcalf subcommittee suggests the criteria against which the need for legislation will be tested.

There are two basic tenets in today's environment that seem necessary for government and business leaders to follow if they are to regain public confidence. The first is avoidance of real or apparent conflicts of interest in the performance of their duties. The second is a policy of openness which permits the public to satisfy itself that leaders in our society are acting properly. Government officials have taken substantial steps to implement these two basic tenets. Business leaders are moving in that direction, and it is in this light that independent auditors will be judged.²⁵

For the accounting profession these two tenets can be translated into the following tests.

- Reinforce the independence of the audit function by imposing meaningful restrictions on the scope of management services and by restructuring the relationship of auditors and managements by interposing an independent audit committee.
- Improving the setting of professional standards and the enforcement of those standards by opening the process to public scrutiny and by increasing responsiveness to the public interest.

Efforts are being made by the accounting profession to achieve these goals, but the evaluation of progress is clearly in the political arena.

Well, Where Are We Going?

My mission was to provide an answer to Howard Stettler's searching question: Has the accounting profession lost control of its destiny? I took this to mean: Where is the accounting profession going and who is in charge of the trip? My answer focuses on three primary indicators of the status of the accounting profession:

- The legal liability of independent auditors.
- The authority to set professional standards.
- The extent of federal regulation of the accounting profession.

Any one of these indicators would require more than a short paper for thorough analysis. However, I hope my analysis is sufficient to point to an answer to the basic question.

The accounting profession does not control its status in any of the three areas. Control is shared with the courts, the SEC, Congress, and the undercurrent

of consumerism in society. Thus, the ability of the accounting profession to influence its destination in all three areas depends on its ability to convince those with whom it shares control that it can be trusted to act in the public interest.

Footnotes

1. E. Wharton, "Mechanical Marvels to Ease the Household Laborer's Chores in the Second Century of Our Nation's Glorious History—Noteworthy Engineers of the Philadelphia Exposition Describe the Industrial Miracles That Will Improve Everyday Life of Future Americans," *The Home Mechanic's Gazette* XVI (November 1876), pp. 14-17.

2. T. Dreiser, "The Honorable Grover Cleveland Foretells America's Progress in the Next Century," *American Boys' Monthly* II (Spring 1899), p. 8.

3. For example, "What is the difference between an accountant and a turtle? Answer: A turtle would never wear brown shoes with his blue suit."

4. Martin Bronfenbrenner, "The Consumer," James W. McKie, ed., *Social Responsibility and the Business Predicament*, The Brookings Institution, 1974, p. 171.

5. Jon T. Hirschhoff, "Recent Developments in the Law of Torts: Introduction," *Indiana Law Journal* 51 (Spring 1976), p. 463.

6. *Rusch Factors, Inc. v. Levin*, 284, F. Supp. 85 (1968).

7. Osborne M. Reynolds, Jr., "Strict Liability for Commercial Services: Will Another Citadel Crumble?" *Oklahoma Law Review* 30 (Spring 1977), p. 311.

8. "Interference with Business or Occupation—Commercial Fishermen Can Recover Profits Lost As a Result of Negligently Caused Oil Spill." *Harvard Law Review* 88 (December 1974), pp. 444-53.

9. Louis Haimoff, "Holmes Looks at Hochfelder and 10b-5," *The Business Lawyer* 32 (November 1976), pp. 147-175.

10. U.S. Senate, Subcommittee on Reports, Accounting and Management of the Committee on Government Affairs, 95th Cong., 1st Session, "Improving the Accountability of Publicly Owned Corporations and Their Auditors" (Comm. Print 1977), p. 19.

11. The ALI's proposal is described in Henry R. Jaenicke, *The Effect of Litigation on Independent Auditors*, AICPA, 1977.

12. *Herzfeld v. Laventhol, Krekstein, Horwath & Horwath*, Civ. No. 2209 (S.D.N.Y., May 29, 1974), Fed. Sec. L. Rep. (CCH), paragraph 94, 574.

13. Richard N. Pearson, "The Role of Custom in Medical Malpractice Cases," *Indiana Law Journal* 51 (Spring 1976), p. 554.

14. Reynolds, *op. cit.*, p. 316.

15. James A. Henderson, Jr., "Expanding the Negligence Concept: Retreat from the Rule of Law," *Indiana Law Journal* 51 (Spring 1976), p. 479.

16. Reynolds, *op. cit.*, pp. 316-17.

17. Henderson, *op. cit.*, p. 468.

18. Haimoff, *op. cit.*, p. 162.

19. James A. Anderson, "The Potential Impact of Knowledge of Market Efficiency on the Legal Liability of Auditors," *The Accounting Review* 52 (April 1977), pp. 417-26.

20. Commission on Auditors' Responsibilities, *Report, Conclusions And Recommendations*, AICPA, 1978, p. 21.

21. *Ibid.*, pp. 128-29.

22. James Q. Wilson, "The Politics of Regulation," In James W. McKie, ed., *op. cit.*, p. 146.

23. 123 Cong. Rec. H12,824 (December 7, 1977).

24. Bronfenbrenner, *op. cit.*, p. 188.

25. U.S. Senate Subcommittee on Reports, Accounting and Management, p. 5.

Discussant's Response to Has the Accounting Profession Lost Control of Its Destiny?

K. S. Gunning

Thorne Riddell & Co.

I deem it a privilege to be invited to your country to offer my views on the paper presented to you by such a distinguished member of our profession, and one, to boot, whose career has sprung from the fruitful wellsprings of academia.

Accordingly, I felt it incumbent on me to commence my remarks, as Doug did his paper, with some stirring and prophetic quotation from Homer or someone of equal relevance, having to do with destiny, or self-control, or professionalism.

After diligent search, I felt that I, standing here as a foreigner from the north, could do no better than to read to you the words that Representative Hiram Bell of Ohio said of my native land to your U.S. House of Representatives on January 10, 1853:

But, sir, there is a country and there is a people competent for self-government, that are prepared to take upon themselves the responsibilities of free men, and which we may find for our interest to receive among us—I mean peaceably—and allow them to become a part and parcel of this country, and I care not how soon. I refer, Mr. Chairman, to the whole British possessions upon the north, containing an area of two millions, two hundred and fifty-two thousand, three hundred and ninety-five square miles. That is something worth looking at . . . The accomplishment of that object peacefully will strengthen this Union, and add to its power and influence. The annexation of that territory to this Union (to use terms of gentlemen) Destiny has ordained, and it will ere long take place.

As Doug observed, man has not always been too successful in peering into the future, and I certainly don't intend to offer any comment on Hiram Bell's vision, even after 125 years; especially with what's going on in our country right now!

Anyway, enough of nothing, and let us consider Doug's most interesting and thoughtful paper.

There's been a great deal of ink spilled lately on the general theme of this paper—some in sorrow, some in anger, a lot in error. But little of the outpouring has considered our collective “destiny”—and, like Doug I think, I had a bit of trouble with the question posed. It's perhaps a bit like the old “have you stopped beating your wife yet?” angle—and maybe its better to answer “I never did” than get nailed for a simple yes or no.

Doug, I thought, was pretty agile in that regard, rephrasing the question with fine editorial license to read "Where are we going and who's in charge of the trip?"

The Role of the Accounting Profession

Personally I very much doubt that the accounting profession ever had control of its destiny in the first place. I subscribe to the views of the Cohen Commission re-echoed by our Adams Committee report in Canada and repeated by many, that the accounting arm of our profession has a primary responsibility for the preparation of realistic, meaningful and consistent financial reports to enable sensible decision making by others. The auditing arm fills the role of an independent and expert intermediary offering a reasonable degree of assurance to readers of those reports that they are free from error, omission, or bias.

Fundamentally, that's what I take to be the role of the accounting profession, broadly speaking, and that's what I would call its destiny. If you like, that's where we are going, and if we don't like that particular destination, well, we had better get off the train at the next stop, because that's where the tracks seem to lead.

Our profession should recognize, however, that this role is no God-given right. We happen to fill a key function in the capital formation process of our free enterprise system, a system which still seeks (with less and less success as the years go by) to operate as far as is possible without direct government intervention. But if we prove ourselves unable to command the respect and confidence of society, obviously our profession will no longer serve a useful purpose and our destiny will be the dustbin. The "accountants report" that inappropriately graced the cover of a national business magazine in March 1977 had more significance than just as a bad joke.

The voices that sound these critical sentiments are today heard loud and clear. In this age of consumerism and the rights of the little man, when profit becomes a dirty word, when successful businessmen are categorized as "well manicured hoodlums," it is not surprising to find outspoken critics of the profession building a political or academic career based on that thesis. But these shrill voices are not new; nor is the burden of their song. Consider George Bernard Shaw's often quoted condemnation of the professions as a "conspiracy against the laity." It is little wonder that today accountants face hostile and militant critics who loudly call for government takeover of the responsibilities which have been left to our profession.

A Common Problem

Doug's paper infers but does not develop the fact that our profession is far from alone in this problem. The medical profession has been subject to mounting public criticism and gradual government takeover for years and in many countries. The National Society of Professional Engineers was held, in a unanimous U.S. Supreme Court ruling last month, to have violated federal anti-trust law through their ban on competitive price bidding. Even the lawyers themselves, the draftsmen of the rules of the game, had their minimum fee

schedules outlawed in the U.S.A. in 1975. With these changes, observed the *Wall Street Journal* recently, “. . . the distinction between professions and businesses that engage in anti-competitive behaviour has become almost imperceptible.”

Nor is the situation unique in the U.S.A., which I note is the sole consideration of Doug's paper. In the United Kingdom, chartered accountants have for centuries been one of the hallmarks of respectability. Today, just as a small sampling, three separate English chartered accountants, knights or lords all, act as chairmen respectively of the Association of British Chambers of Commerce, the Royal Commission on the Legal Profession and Legal Services, and the Review Board for Government Contracts. The British accounting profession has over the past century and more gained a position of social respect and prestige unmatched certainly in North America and probably anywhere else. And yet suddenly in the past few years it finds itself in a most unaccustomed position of division, distrust and even derision. It too has been rocked by audit failures; criticized for lack of independence, standards, and failure to enforce standards or uncover fraud; badly split through a successful revolt of the membership, led by two small practitioners, against the imposition of a current cost accounting standard. Professor Eddie Stamp, the stormy petrel of the U.K. profession, derides its posture on foreign currency translation as being “reminiscent of that of the donkey who starved to death because of his inability to choose between two bales of hay,” and describes the British profession's development of auditing standards as the crowning ineptitude of its catalogue of failure. (Makes Mr. Briloff sound a bit tame, right?) But in fairness to Professor Stamp, and in contrast to Mr. Briloff, Eddie Stamp is a staunch supporter for self-control of the profession, and ends his article (in the *Financial Times* of December 14, 1977) with a ringing call (and I quote) “. . . for the profession to put its house in order quickly—before the case for government regulation becomes unanswerable.”

The Situation in Canada

In Canada, for whatever interest it may be to you, we somehow seem to have retained a reasonable degree of public confidence and escaped the wrath of public criticism. As an example, our CICA recommendations have been incorporated by regulation into law and securities regulation. Of course, we've had our audit failures—Atlantic Acceptance, after all, was one of the pioneers in that field. Our massive frauds and well-known questionable payments activities by government agencies and in the private sector take second place to virtually no one. So a year ago, the Canadian Institute of Chartered Accountants set up the Adams Committee to recommend further study and action (just as Eddie Stamp has urged in Britain) to react in advance of public calls for regulation of the profession. Many of you have probably seen the report, which took up the entire April issue of the CA Magazine. But you've probably not heard any of the press furor that followed. Why not? Because there was none, that's why. The entire body of press reaction to that report published to date consists of twenty-one newspaper articles—from sea to shining sea. Are we disappointed at that reaction? You can bet your damn boots we're not. We have the chance

in Canada, I believe, for whatever reason, if we react sensibly and responsibly, to preserve our position of relative respect (and I stress that word relative) and to hold the reasonable confidence of government and securities regulators which we now appear to have.

But I have perhaps strayed too long and too far from Doug's paper. I do so though with only slight apology, since I believe it is important to assess the position of the American accounting profession in a somewhat broader context than Doug has described.

Who's in Charge?

So back to the task—"where are we going, and who's in charge of the trip?" I have already discussed the destiny (which I translate as "role") of the profession, which I take to be the "where are we going" part of Doug's double-barreled question. The second part—"who's in charge"—he addresses in the context of the right to set the rules for the profession. He answers, realistically I think, in his last paragraph, "The accounting profession does not control its status . . . ," but rather shares it with ". . . the courts, the SEC, Congress, and the undercurrent of consumerism in society." Let's consider the question of "who's in charge" first, against the sound of the prominent voices that speak on the topic, and secondly, in the light of the response by the American profession to date. Finally, and without adding to the list of timeless predictions which Doug so entertainingly catalogued for us, let's assess in the cold light of day the present chances of approval of the steps taken by the profession to date.

First, just listen for a moment to some widely varying voices:

Dr. John C. Burton (former chief accountant, SEC—February 1, 1978)

. . . in the final analysis, I believe that the AICPA system as a whole must be characterized as insufficient. Its insufficiency does not result primarily from the unwillingness of the accounting profession to design an effective system but rather from the inadequacy of its authority to do so. In summary, it is my view that a formal self-regulatory approach is one which offers both public protection and institutional stability for the accounting profession.

Report of the Commission on Auditors' Responsibilities (1978)

It does not appear that a comprehensive federal mechanism for regulating the profession would be superior to the present system; nor is a complex restructuring of the profession required.

Eli Mason, C.P.A. (January, 1978)

Mr. Chairman, I urge that the congress of the United States enact legislation which would provide for registration of public accountants to practice before the SEC.

Of course, it has been stated that anyone can join the SEC Companies Practice Section, but Mr. Chairman, who wants to play the game if no one will ever throw you the ball?

Harvey Kapnick, C.P.A. (May 24, 1977)

It must be recognized that the profession has a critical responsibility

not to delay further but to take immediate corrective actions. If we do not abdicate our responsibility, but instead welcome it, there will be no reason or justification for more government intervention.

Alan Brost, C.P.A. (January, 1978)

It seems ironic that the very attacks on the dominant power of the Big Eight in the AICPA have triggered a response by that organization which can only make them more dominant in this crucial area of audit practice.

AICPA Report of Progress (January 30, 1978)

Perhaps never before has a profession in so short a time adopted so ambitious a program to improve its performance, police itself, report on its conduct to the public and submit itself to public scrutiny.

. . . if these (changes) are insufficient, that will quickly become apparent. Congress can then act in the light of this experience.

Abraham J. Briloff, C.P.A. (December, 1977)

Except for occasional platitudinous nods, the Institute has chosen to ignore the most serious transgressions on the part of its members . . .

. . . the profession has, in many ways, taken on the attributes of the major corporations it is supposed to audit . . .

Sub-committee on Reports, Accounting and Management (Metcalf Committee—November, 1977)

Subcommittee members prefer that the profession itself achieve reforms in cooperation with the SEC.

The amount of time for achieving reforms is not unlimited. Therefore, the subcommittee expects the accounting profession and the SEC to act in a timely manner to implement the policy goals in this report.

Harold Williams (March 3, 1978)

We believe the accounting profession should have a reasonable opportunity to achieve effective regulation on its own.

It would be premature to over-ride the profession's efforts at this time.

We believe that self-regulation, if it can be made to work, is preferable to direct governmental regulation.

The AICPA must instill in the Public and in Congress confidence that it is an independent, professional organization—not a trade association in the sense of being a promoter of the financial interests of its members and not a lobbying arm for its members corporate clients.

Representative John E. Moss (March 3, 1978)

. . . the Chair is both disappointed and dissatisfied with the self-regulatory program of the AICPA.

Whether or not the accounting profession is ultimately regulated might very well depend not so much on the adequacy or inadequacy of the present AICPA program, but on the willingness of the SEC to exercise its authority.

(February 25, 1978)

A harmful result of the high degree of concentration among the large firms is the bitterness displayed at our recent hearings between the large and small firms. The divisive allegations and cross-allegations which permeated our hearings surely take a toll on the public's perception of the profession, (and) jeopardizes the effort at self-reform . . .

My concerns about the AICPA program center on the control of SEC Section's Executive Committee by the largest 16 accounting firms, the effectiveness of the peer review procedure, and the composition and effect of the Public Oversight Board.

You may have heard, as I have, that with the passing of Senator Metcalf and John Moss not seeking re-election, legislative proposals regulating accountants will never become law. Don't bet on it!

A. E. MacKay (May 3, 1978)

Government regulation of the accounting profession gives government a further wedge into business and is unacceptable. We must retain the respect of the American people and convince them and their representatives in Congress that we accountants are able to discharge our responsibilities without regulation by the government.

Finally, one voice from the Canadian scene: **The Hon. Bette Stephenson, M.D., Minister of Labour, Province of Ontario** (February, 1977)

Self-government and professionalism are symbiotic of inter-twined mutually supportive concepts. The role of the profession is a demonstration that the principles of free enterprise, effectively combined with dedicated service to the public, can be a bulwark against the ever present danger of growing state control. It is up to government—and the professions too—to demonstrate strong opposition to the thinly veiled collectivist route to state control.

The profession—like any institution—can drift away from those it is designed to serve, into isolation. When this happens, the public sees the professional not as an ally but as an adversary. The public must recognize that your primary concern is the public interest and that you are striving to fulfill your responsibility to them.

Gentlemen, all of those voices are prominent in one way or another in influencing the decision as to the way in which our profession is to be conducted and controlled in the future. Who's in charge of the trip?

Well, Doug's paper refers to the prospects of what he terms "unbridled" regulation as being "fluid." Now exactly what that means I'm not sure, but if it means that the prospects are uncertain then I am in full agreement. As I hear these voices, and please bear in mind that I hear them from some distance and am certainly less up to date and far less intimately involved with the problem (which may be either an advantage or a disadvantage), I judge the prospects of regulatory legislation to be entirely uncertain at present, but highly likely to be resolved one way or the other in the coming months.

As I see it, there are four possible events (three of which are addressed in Doug's paper), the occurrence of any of which could trigger legislation to regulate the accounting profession.

- First, the SEC could become dissatisfied with the progress of the profession in achieving its goal of meaningful self-regulation.

While Harold Williams has indicated repeatedly a preference for self regulation by the profession, he obviously will expect stiff standards to be self-imposed. Further, as has been heard from several other prominent voices, and as Doug has pointed out in his paper, the SEC may be under strong political pressure to take regulatory action soon after their July hearings.

- Secondly, then, the politicians could become dissatisfied with the stance of the SEC vis-à-vis the profession's progress. Senator Moss' speech in California in February, from which I quoted earlier, does seem to foreshadow some big storm clouds on the horizon, shaping up quickly. If you have not read that speech, you will find it interesting. Senator Eagleton also obviously knows on which side his ballots are buttered. Doug's assessment as to the likelihood of congressional support for either or both of these crusaders, should it come to legislation, is obviously far more acute than mine, and would be of interest.
- Thirdly, as Doug noted in his paper, "If another Penn Central or Equity Funding surfaces, support for federal regulation could crystallize quickly." Perhaps something less than another such massive corporate failure might even provoke such action. I would suspect that any other highly visible combined fraud and alleged audit failure might have the same effect.
- Fourthly, there is the lawsuit challenging the AICPA move to sections. It would obviously be imprudent if not impossible for a vice president of the AICPA to write on this matter while it is before the courts, and on this basis its omission from Doug's excellent paper is fully understandable. However, as a mere observer on the sidelines I can neither ignore the matter nor prejudice the parties to the action by my comments.

In my view, it is apparent from some of the speeches and papers which I have quoted here that a successful court challenge to the validity of the AICPA action in providing for two separate practice sections would be a serious blow indeed to the accounting profession—possibly even a fatal one—in its attempt to demonstrate its willingness and ability to regulate its own affairs in the public interest. I cannot assess the likelihood of the outcome of the action. I can only note the potential of its effects.

One year ago I wrote a review of the Cohen Commission's **Report of Tentative Conclusions** for the Canadian Institute's CA Magazine entitled "A Profession at the Crossroads." I concluded that article by observing that:

. . . no less than the independent auditor's real usefulness in our free enterprise system is being questioned. It's not the Cohen Commission that is asking the question . . . It's being asked by lawyers, senators, investment analysts, members of parliament, bankers, judges, the person on the street, and by sometime soon, the profession had better start coming up with some answers. "Big Brother" will provide them soon enough if it doesn't.

If I were writing that article today I would continue to entitle it "A Pro-

fession at the Crossroads." A short year later, we're still there. The American accounting profession has certainly come up with some fast and far reaching answers. But whether "Big Brother" is satisfied that they are the right ones is, at this moment, to my view, hanging in the balance.

As I said at the beginning, it is not my place to make another of those immortal predictions of the future, but merely to serve for you as discussant on a most important and timely paper. I have to apologize, I suppose, for the gradual decline of humour in my paper. Funny thing, I noticed the same thing in Doug's. Perhaps its just not a great subject for laughs.

As a visitor from a foreign country, I am also quite conscious of what can happen when one's neighbours intrude on one's domestic concerns. But, Howard, you asked me, after all, if not to intrude, at least to comment. In doing so, I have tried to bring the broader perspective which is usually provided by a more distant vantage point.

In closing, may I observe that the destiny of the U.S. accounting profession will profoundly affect that of your fellow professionals throughout the free world.

Speaking as one of them, I sincerely hope, whoever turns out to be in charge of the trip, that the AICPA will continue to attract the support and confidence of the American public and of the elected government which is so necessary to fulfill its destiny.

Thank you, Mr. Chairman, for the honour of the invitation; and gentlemen, for the courtesy of your attention.

6

The Role of Auditing Theory in Education and Practice

Robert E. Hamilton

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Auditing activities are receiving increased public attention and scrutiny. With public institutions increasingly being the subject of auditors' activities and with public disclosure occurring of the financial and operating results of large CPA firms, there is an increasing demand for explanations of the auditor's role in our society. The expansion of audit activities performed by governmental, internal, and external auditors likewise has not gone unnoticed. New audit procedures, new forms of audit organization, and new institutional arrangements have been rapidly introduced without a simultaneous infusion of explanations which are grounded in theory.

The purpose of this paper is to describe the nature of a theory of auditing which would improve the underpinnings for explanations of audit activities and to identify specific linkages between improvements in theory and difficult problems in auditing education and practice. A theory of auditing can help improve our understanding of the role for auditing in society and thus improve the ability of society's members to design institutional structures and to take actions which lead to desired outcomes.

Auditing is a term associated with activities having specified characteristics. An auditing theory should describe these activities and their particular configurations and intensities. It should explain using differing relative amounts of substantive and compliance testing and differences in the amount of resources used to audit a public versus a private entity. These two matters are but illustrative of a larger set which is concerned with describing why observed auditing activities are what they are. If this view of auditing theory appears limited, there is an additional discussion of auditing theory in a subsequent section of this paper which should expand the horizon.

The remaining sections of this paper are organized in the following way. A discussion and review of developments in auditing theory is presented along with a description of the characteristics appropriate for an auditing theory. The two subsequent sections contain a more specific discussion and development of ways in which auditing theory can impact education and practice. The final section is a prospective on future developments in auditing theory.

Where are We in Auditing Theory?

Before a role for auditing theory can be identified there exists the steps of

identifying where we are in auditing theory. If it is found that no auditing theory exists then there is extreme difficulty in an identification of the role for theory. At that point the process turns to identifying a role for an auditing theory if only there were one like the theory under consideration. If the existing theory is so underdeveloped that it is difficult to show its value, then the issue is one of identifying the characteristics of a theory which would likely be of value. The second view is the one that obtains for much of what follows, yet the prospective indicates some reasons why such a theory can be and is likely to be produced.

Looking to a closely related discipline for support revealed that there exists *The Theory of Finance* (Fama and Miller, 1972*). The claim is that "The theory of finance is concerned with how individuals and firms allocate resources through time. In particular, it seeks to explain how solutions to the problems faced in allocating resources through time are facilitated by the existence of capital markets, . . . and of firms . . ." If the view of auditing theorists is consistent with these finance theorists then it could be expected that the theory of auditing would seek to explain how solutions to problems faced in allocating resources through time are facilitated by the existence of auditors, audit firms, and auditing institutions. While it may not be the final word on the subject of the theory of auditing, the preceding description provides a sufficient starting point. In a simple form, the theory of auditing would explain the auditing activities in the world around us. The theory may not provide explanations as precise as may be desired, e.g., why some auditors wear vests and others do not. The theory may not tell auditors what they should do in every conceivable situation, and at the beginning the predictions of the theory may be surprising and the reasons may be counter-intuitive. Only through significant exposure to the reasoning and by continued testing and refinement of the theory can it be subjected to evaluation by individuals who may accept or reject the theory. More is reported on these points in the next section of this paper. For the moment, the focus is on the review of existing developments in auditing theory.

No lengthy history is provided as there are numerous reports on the history of developments in auditing which are more complete than is possible within the scope of this paper. The additional consideration that there should be continued improvements in theory suggests that a review of history would wisely begin as late as possible so as to avoid a lot of changes which are not applicable. Our review of auditing theory will begin with the publication of *The Philosophy of Auditing* (Mautz and Sharaf) and conclude with recent working papers. *A Statement of Basic Auditing Concepts* (ASOBAC, 1972) is the second major audit theory publication during this time period. Numerous papers have developed and studied major elements of an auditing theory, but none are as complete as the two cited works.

In *The Philosophy of Auditing* it is stated that:

It is our contention that there is a theory of auditing, that there exist a number of basic assumptions and a body of integrated ideas, the

* See "References" at the conclusion of this paper for this and all other references similarly cited.

understanding of which will be of direct assistance in the development and practice of the art of auditing. (Mautz and Sharaf, 1961, p. 1.)

The authors' development proceeds from eight tentative postulates to the description of five auditing concepts: evidence, due audit care, fair presentation, independence, and ethical conduct. The process of conceptualizing in *ASOBAC*, (p. 16), on the other hand, ". . . ends with a normative description and the pragmatic benefits may not be immediately apparent." How does either of these two works provide a basis for a theory of auditing? The first is represented as the **philosophy** of auditing and therefore it seems inappropriate to consider it as an auditing **theory**. In *ASOBAC* (p. 16) there is a representation that "This study is an attempt to contribute to the development of a theory of auditing" and therefore it seems inappropriate to consider it to be a completed auditing theory. If the characteristics of a theory are present in either of these works, there has been sufficient time to refine and test the theory. What has been the recent history?

Both of these works have been widely quoted and cited in subsequent reports on studies of auditing so that a broad exposure to the ideas and conclusions contained in both *ASOBAC* and *The Philosophy of Auditing* appears to have resulted. Have these works led to tests of their ideas and conclusions? I am unaware of any reported empirical test in auditing which has directly used the ideas and conclusions in these works as a means to theoretically support the tested hypotheses. Instead most, if not all, of the auditing research which uses observations of audit or audit-related activities has formulated hypotheses in an *ad hoc* manner. Consider, for example, Warren's (1975) test of the uniformity of auditing standards. In this case, there were a number of hypotheses, each one of which would provide an hypothesis that the incidence of qualified opinions would be uniform across CPA firms. Two of the hypotheses were competition among CPA firms and uniformity in application of auditing standards. Furthermore, it was assumed that there was no selection process taking place so that audit conditions were considered to be randomly distributed throughout the firms being studied. None of these necessary theoretical underpinnings come from the existing theories of auditing.

The point here is not to single out the Warren study for criticism. Instead, the study is presented to provide an example, among many others, where it can be seen that auditing theory has not been directly beneficial in providing theoretical support for a tested hypothesis. It is beyond the scope of this paper, however, to demonstrate that existing research has not used the existing theoretical structure in auditing for underpinnings. The issue here is whether it can be used, not that there is no current use.

Refinements of Existing Theory

In the second area of questioning, i.e., has the existing theory led to further refinements, there is also a lack of direct connections. One area that has received considerable attention is the theory of evidence (Kissinger, 1977; Toba, 1975) as it has been further refined and logically examined from the beginnings of the concept of evidence as presented in *The Philosophy of Auditing*. *ASOBAC*

has been extended by Will (1974) to consider the environment which feeds into and is fed by the audit process. Yet neither of these areas has spawned underpinnings for empirical research. The further refinements in the theory of evidence lack specific relationships to the way in which particular levels of reliability are determined and thus have a significant ambiguity which precludes testing. The systems approach presented in Will (1974) adds the consideration of important environmental variables but does not provide for an operational specification sufficient for testing. While the preceding remarks may appear critical of auditing theory developments and testing, there is room for an interpretation that the existing work is exploratory, and significant verifiable results are possible, but a long way off. Before turning to a discussion of the properties of a theory of auditing, the following remark made in *The Philosophy of Auditing* (p. 65) is worthy of consideration:

. . . conceptual models, even without empirical support, can be extremely effective in the development of theory. This fact is important to us because we find the development of mathematical models, except possibly the most simple type, to be inapplicable in auditing at this stage of development.

Whether this statement would be different if it had been written in 1978 instead of in 1961 is of interest. Is there reason to believe that movement away from procedures effective in developing theory to those effective for testing and validating theories has taken place? Is auditing research still in the exploratory stage where existing research has the direction of future research activities as its goals, or is auditing research providing some knowledge about the world around us? In the final section on prospectives for auditing theory the more recent developments will be described. A look at the properties for a theory of auditing and its value is next considered.

Properties of a Theory of Auditing

One general problem impeding the development and acceptance of auditing theory is its residence in the social sciences. Numerous arguments have been recorded to suggest that social science theory is different and more difficult to produce than is theory in the physical sciences. After a physical scientist presents the theory for behavior of a type of molecule and shows it to be supported by observation, there is not generally an outcry raised by molecules to reveal their thoughts that they really do not behave as the model says they do. Yet, if we look to the social sciences, we often find that this situation applies. Whether the difference in the social sciences is supportive or detractive for theory development is an open question. I suggest, however, that the developments in the physical sciences would have been slower if protesting atoms had caused the attention of researchers to focus on detailed idiosyncracies of their behavior. In attempts to explain the finest detail, there is often a lost concentration on more general and likely more readily explainable phenomena. It is merely an issue of first things first.

What qualities should an auditing theory have? It is obvious that the answer depends on the context in which the theory is to be used. In a sense,

the production of auditing theory is like the production of technologies for use in converting the factors of production into consumer goods. The desirability of qualities for an auditing theory then depends on what products it will produce and how the products are valued. Auditing education and audit practice are examined later as to their use of the products of auditing theory. At this point, a general examination of the properties of a theory of auditing is briefly conducted.

A theory of auditing which facilitates comparison with other competing and complementary theories, which is presented so as to make validation possible and which provides results of interest to auditing educators and practitioners would be a significant addition to the current state of auditing theory. The existing theoretical base in auditing appears not to satisfy these constraints. Use of a loose conceptualizing approach has hindered comparison and made validation difficult. If one looks at Toba's theory of audit evidence, its explicit development did facilitate the response by Kissinger which has provided a clearer and more cogent relationship between the theory of evidence and auditors' reporting alternatives. Yet there is still a way to see if the theory of evidence explains the actual reporting behavior of auditors. The reason is that the theory of evidence has developed in isolation of the institutional arrangements which reward and penalize auditors, clients, and others. It is much closer to a description of one way in which an auditor may use evidence, and if the other alternatives are as explicitly developed, then there is the possibility of testing to see which theory best explains the way in which auditors behave. The question of how they should behave is then an issue in the design of the institutional arrangements.

If a theory of auditing is to be forthcoming it should include a systematic consideration of the major elements in the practice of auditing: the institutional structure, the market for audited information, the characteristics of agents doing auditing, being audited, and using audited information, and consider the available auditing technology. What would be the details for the components of an auditing theory? A simple statement is that it would explain the demand for and the supply of auditors. Such a theory would permit an analysis of the effects on the supply of auditing of changing institutional arrangements, of expanding the subject matter of auditing, and of new technologies for producing audits.

A Simplified View of Auditing Theory

At a minimum, the theory should provide a way to characterize the previously mentioned items and to identify the effects due to their interacting. In this regard, consider the following simplified view of auditing theory: If there exists a government to enforce contracts, and due to differences in wealth endowments, *inter. alia.*, individual agents in an economy find it advantageous to put their wealth in the charge of others, then contracts which reward performance may be based on numbers reported by the manager. If the owner of the wealth does not have a way to ensure the compliance of the reports with the contractual provisions or if the manager does not have a way to convince the owner of this, then certain contracts may not take place. If an auditor is incorporated into the arrangement to ascertain compliance and if the auditor is motivated to do so because of associated rewards and penalties, then valuable contracts could be formed and all will be better off. The preceding is a brief and terse explanation

of how a theory of auditing may be developed. The theory would include the technology available to the auditor and the way in which the information being audited affects the wealth of the owner and manager. This simple setting is more clearly developed and extended elsewhere (Hamilton, 1975; Magee, 1977).

The essential characteristic of this approach is to rely heavily upon the tools of economic analysis to provide an explanation of this economic phenomenon—auditing activity. It should not be that the economic analysis is accepted solely on the basis of its rigor, but also on its relevance in rigorously explaining auditing activities. To provide details on how a theory with these characteristics would assist educators and practitioners, the next two major sections of this paper will provide a description of major issues that may be explained.

Assistance to Auditing Education

On one hand, the area of auditing education may benefit more from psychological theories of learning which say something about the production of education of any type. Yet a careful description of the nature of the learning requirements for auditing is necessary to make valid applications of the theories of learning. It is in this realm that auditing theory should be helpful. If, for example, one is trying to help students understand how to make decisions about the use of compliance and substantive tests, how does auditing theory help? Do sufficiently unambiguous definitions exist to permit an observer, armed with the definitions, to categorize actual audit activities into these two types of tests? Can auditing theory demonstrate why it is important to make this choice? From an economic standpoint, these tests are two different inputs for the production of an audit. It appears that standard analysis would lead to a simple view of the production possibilities set and explain why the tests should be made a certain way. If students have an understanding of economic analysis from prerequisite courses, then it would be an appropriate language for conveying an audit issue to students.

One advantage in having a theory of auditing is that it can provide a structure for course content. An overall view—the theory—can be outlined and then developed in detail. The critical points of the theory can guide the time allocations for courses and the detailed interrelationships among the theory's elements can help to avoid misinterpretations based on considering only part of the problem. For example, the choice of penalty structure for auditors may be considered as a factor in determining what is a reasonable amount of assurance. Then it is possible to say that within this penalty structure the auditor will disclaim if he cannot obtain enough assurance. Understanding this relationship provides insights into how the auditor (or a coalition of auditors) would respond to a proposal which eliminates the option of reporting a disclaimer.

A concern for time allocation to various coverages in an auditing course could be aided by a theory of auditing which identifies the major determinants of the auditor's decision process and how they are affected by changes in the environment. Those critical points of influence on audit decisions could be given sufficient time to assure that they are well understood, with the more sensitive variables studied in depth. Audit choice variables of a more technological character, e.g. electronic data processing and statistical sampling techniques,

could then become topics of much more detailed and specialized courses.

A second advantage is that a theory of auditing should quickly highlight the differences in subject matter and environment for the different types of auditing, e.g. internal, external, and governmental. From this, then, a common core of knowledge could be identified and specialized aspects of these different areas recognized and covered in courses which detail the specialized environmental features and how audit decisions are affected thereby.

A third advantage which stems from having a theory of auditing is that it enables a systematic interpretation of evidence produced by researchers such that it can be communicated to students. When a student leaves an auditing class, does the student know what researchers have found as descriptions of audit activities? A theory of auditing which structures the learning process would more readily permit an integration of research findings into the classroom. For example, if auditing theory can describe the effect of audit penalties on audit decisions, then alternative sampling approaches can be described in terms of the effect of the approach on the auditor's likelihood of having penalties imposed upon him. When alternative confirmation techniques are discussed, as in Professor Sorokin's paper that is included in the proceedings of this symposium, then evidence about the reliability and costs of using different approaches can be conveyed to students within the theoretical structure. A major point to be emphasized here is that as a theory of auditing is systematically developed, then researchers' results will be related to the theory and this will hasten the introduction of those results into the classroom.

A fourth educational advantage derived from auditing theory is that it provides a rather complete, compact, and precise view of auditing which then enables a clear focus on the elements which explain why audit activities are what they are. The emphasis here is on providing an explanation which can serve as an aid to identifying and convincing students why activities which may at first seem counterintuitive are not necessarily so. The theory takes simple and familiar constructs and shows how they lead to the results. Errors of intuition may be uncovered and/or errors in the theory may surface. If the theory of audits is too simple, this advantage may be lost. My guess is that when a theory of auditing is developed it will be valuable in permitting a communication of the complexities of the factors which determine audit activities. Conversely, it will be difficult to comprehend some of the more important complexities in the absence of a theory of auditing.

Additional Advantages Related to Education

Two remaining advantages deserve attention. Other, less direct, effects may also be of importance in education. First, it is likely that a rather general theory which involves general phenomena will be at the base of a theory of auditing and that the communication and understanding of this theory will be of importance to a general business student audience. The economics of contracting and the attendant moral hazard and information asymmetry issues appear to be affected by auditing mechanisms. With a generic structure of the problem there is the possibility that much of this general theory can be covered in an introductory course with external auditing, internal auditing and govern-

mental auditing as special cases within the theory of auditing. Jensen and Meckling (1976) report on a theory of agency which considers the incentives for monitoring and bonding activities of managers. It is a preliminary start on what might be the foundation of a theory of auditing. The theory then should be capable eventually of explaining the conditions which result in auditing activities being done in different ways within different organizational settings. Just as micro-economics provides explanations about the production decisions of firms under different conditions, a theory of auditing would explain the effects on auditing activities that result from different conditions in the environment.

In "The Role of Securities in the Optimal Allocation of Risk-bearing," Arrow (1964) provides an explanation as to the reason why securities are introduced into a society. Within the study of auditing, it would seem that, at a minimum, a theory of auditing should show why an economy will be better off if auditors can provide their services. Yet, there is currently no well detailed exposition of this matter, and a theory of auditing which does so will provide a basis for a body of knowledge of wide applicability. Many activities in society involve contracting which critically depends on costly verification or observation mechanisms. Radner (1968) has shown that without mutual observation of states, there is little to suggest that claims on those states will be traded. At issue is the simultaneous consideration of the costs to verify states of the world and the value from being able to contract and exchange resource claims. Audit-like activities are a significant resource-consuming process of state verification which is assumed in most models of resource allocation mechanisms. An understanding of the nature of these activities is essential to understanding why one mechanism is preferred to another.

The second effect of having a theory of auditing which indirectly affects education is identified with research in auditing. With a theory, there should be clearer focus on the major unsolved issues and an easier identification of untested claims so that researchers can more readily identify interesting problems. By making it easier to do research in auditing, the supply of high quality research should increase (possibly along with the supply of low quality research as well) and should enhance the flow of knowledge about the world of auditing to the student of auditing.

There are many advantages of a theory of auditing for audit education. Each is dependent upon that theory to generate a complete, compact, and consistent story about auditing activities. When a theory of auditing comes into existence, there will be a change in the approach for viewing many aspects of auditing. A Statement on Auditing Standards will not be the subject of direct theoretical validation. Instead, there will be a concern for identifying the factors which explain why the actions described in the statement are consistent with the theory of auditing and for evaluating the effect of the statement on the supply and demand for audits.

Effect on Auditing Practice

A recent view of accounting theory production has been that it creates a product aimed at "the market for excuses" (Watts and Zimmerman, 1977). A similar possibility exists for auditing theory. When there are changes in the

“rules of the game” which reallocate resources, then there is an incentive for providing “theory” to support the allocation which favors one group. An affected group seeks the “theory” that will support a resulting allocation that will be in their favor.

To understand the incentives for buying excuses it is necessary to have a theory to explain how the activities of the world would change as the “rules of the game” are changed. This type of theory is not of the excusing type but of the explaining variety. This theory would explain which groups will buy which excuses. A theory of auditing would, in general, seek to explain why auditing is a preferred social activity, and in the process identify the specific nature of the effects of introducing auditing as these effects relate to resource allocations and production plans.

In audit practice, there are at least four aspects of choice problems concerned with auditing: the individual auditor, the CPA firm, the auditing profession, and the social choice mechanism. A theory of auditing would seek to explain how these choice problems are resolved. For example, at the individual auditor level there are numerous problems of choice that are dependent upon an individual’s position in the firm. One of the more important types of individual auditor activities is concerned with characterizing different client settings and selecting from among alternative ways of obtaining evidence. At this level of choice, there is essentially a production technology problem. The assistance would come in the form of a theory which identified the major distinct characteristics of clients and related them to their effects on the cost and reliability of alternative types of evidence.

At the individual choice level, it would be expected that the theory of auditing would identify the advantages of using both local (or individual) auditor knowledge and the advantages of using specialists in other types of knowledge to aid in the acquisition of evidence. At the individual auditor level, the theory would be heavily embedded in the technology of evidence collection. Evaluation of the evidence and choosing specific forms of evidence would likely be subject to significant influences from elsewhere.

In a CPA firm wherein there is a sharing of risks, there would be benefit to including a theory of risk sharing to assist in explaining how firms are organized. Do monetary incentives to auditors improve the risk sharing, or are quality control reviews and admonitions more effective? Are the clients in the CPA firm’s portfolio of clients consistent with the firm’s members’ attitudes toward risk? Recent advances in team theory, syndicate theory and other areas provide a structure for evaluating this type of firm policy. An understanding of portfolio theory can provide the basis for examining the effects of client mix on audit risk, although this is a difficult application since the major step involves characterizing audit risks in the portfolio context. Obvious advantages from specialization also influence the solution to the client mix problem. The characteristics (or attributes) of individual auditors within the CPA firm are another dimension which is the subject of a firm’s recruiting and training policies. The structure and size of CPA firms make them a rather interesting and unique object for research.

At the professional level there is a choice problem concerning the activities

of the profession and its ability to serve its constituency. Essentially, coalition actions are taken, and they should likely be in the best interests of the coalitions. When they are not, there is an increasing likelihood that the coalition will splinter, as has been the recent experience of the AICPA with respect to a revision in its structure to recognize two different types of practice. Professional activities include other functions such as the efficient production and dissemination of specialized knowledge. These activities are also capable of analysis in economic terms. When the total professional fund is unequally provided by members and the services are unevenly valued, there is a concern for the stability of the coalition.

A theory of auditing can assist the profession in at least one other way. With the profession serving to represent its members' activities to others, there is an advantage stemming from having a tested theory which explains what goes on in the profession. A well constructed and tested descriptive theory of concentration within the CPA industry would have been very useful in the recent Metcalf hearings. Extensive economic studies of concentration have been done for other industries. Why has such a study not been done for CPAs? One problem is a lack of data, and one advantage of a professional association is that it can give anonymity to individual data and at the same time report significant research results.

The social or governmental aspect of decision making is characterized by its large, heterogeneous constituency. As government regulations are promulgated, the effects of complying with these "rules of the game" are pervasive in their potential impact. At this level, the major analytic difficulties stem from the problems associated with the construction of a social choice function. On the other hand, empirical problems surface in the difficulties associated with the development of interpretive models for economy-wide phenomena. Yet, the individual or group of individuals that set the "rules of the game" act as if they have made a choice among the alternatives. It would appear that there is room for descriptive models in an auditing theory and that these models would provide for a tested theory which explains the effects of alternatives but does not provide rules for choice.

A warning is provided to close this discussion of auditing practice. There have been significant developments in auditing research, yet if the earlier remarks are correct one can expect that there has not been a very rigorous logical validation and testing of the claims. At the individual auditor or firm level of choice, there is then a danger in using existing theory to design policies when the theory is not well grounded, verified, and supported. Is it not more reasonable to rely on intuition and experience than to shift to untested and possibly invalid theories as a guide for policy making?

The last ten years in accounting research have witnessed a problem in the use of theoretical structure. As the efficient market research developed, the emphasis has been on a continued testing and validation of the theory in that there was concern as to the conclusions that the delayed receipt of a set of financial statements did not impact share prices. Instead of viewing this as a model which did not explain why accounting is a pervasive activity it was, at times, viewed as heresy. After ten years of pursuing a non-explanation, there is an increasing tendency to look elsewhere for explanations. Ross (1977) and

Beaver (1978) provide details on this point. In fact, understanding other uses of accounting numbers such as for compensation contracts, bond indenture provisions and industry regulatory provisions may be likely explanations for the activities taking place in accounting and auditing, and these are not inconsistent with the efficient market results. Hakansson (1977) provides a clear and detailed picture of the comparative advantages of accounting information over other types of information in a market setting. He concludes with the following remark (p. 414):

However, the crucial point is that what is to be defined as a significant event and the amount of auditor involvement that is desirable must be the result of data collection, analysis and calculation. No one is in a position to spell out convincingly in detail what is significant enough to be disclosed immediately and what the auditor's role should be without engaging in . . . cost-benefit analysis.

The cost-benefit analysis suggested is that which looks at the effects on resource allocations and considers the comparative advantage of alternative information producers.

A Prospective on Auditing Theory

A reader of the proceedings of Auditing Symposium I (Stettler, 1972) may believe that the change in approach over the intervening years has been to now have a paper on "Toward a Theory of Auditing" as distinct from a paper on "Toward a Philosophy of Auditing" (Mautz, 1972). Is there anything new here, or is this merely an unadvertised and well-developed "Columbus Complex" reflecting "Academic Amnesia" (Carmichael, 1976, p. 5)? The change to theory is to emphasize the requirements for testing and validation. As stated in Mautz (1972, p. 85) the archaic definitions of philosophy included reasoned science and the sciences as formerly studied in the universities. On the other hand, included was the non-archaic definition that philosophy is knowledge of the general laws that furnish the rational explanation of anything. This last definition is consistent with part, but not all, of the requirements for a theory.

This point is addressed by Mario Bunge (1967, p. 23) when he states:

In particular, no synthetic formula follows from analytic formulas and no analytic formulas follow from synthetic ones; the mathematician cannot infer anything about the world on the strength of his mathematical knowledge alone and, likewise, the physicist can establish no mathematical theorem on the basis of his factual knowledge.

And, on science, Bunge (p. 29) states that:

What science claims is (i) to be **true** than any non-scientific model of the world, (ii) to be able to **test** such a truth claim, (iii) to be able to **discover its own shortcomings**, and (iv) to be able to **correct its own shortcomings**, i.e., to build more and more adequate partial mappings of the patterns of the world.

In essence, the advantage of theory or science is that it is tested with observations from the world around us. Alternative and conflicting theories can be tried in

the courts of data. Prior to testing, the communication of the logic is presumed to have taken place and to have been verified by others. The logic of the efficient markets research has been the subject of scrutiny and it has been tested. In the process, it has shown where accounting information is not very useful or valuable. Considerable theoretical modeling and testing must likewise be done to show how auditing is of value and the reasons why. Although solid results may be decades away, it is not implied that the goal should not be pursued.

Questions raised within a philosophy of auditing are recast within a theory of auditing. For what and to whom auditors are responsible depends on answers to questions about the value of auditing and the technology to supply audits. Once a description of the demand for and supply of auditing is forthcoming, individuals can decide whether to produce audits and whether to pay the price for audits. This simplification of the problem to one of demand and supply analysis may appear to be extreme reductionism. On the other hand, a descriptive understanding of the world around us would appear to be a prerequisite to policy making questions.

Someone looking to the recorded auditing research should notice that a complete, logically and empirically defensible theory that explains the auditor's existence in an economy is not present. Yet the same person may observe auditors conducting audits, research reports describing what auditors are and should be doing, and economic explanations of the functioning of an economy. One might reasonably expect that with a wealth of research into the activities of auditors and into descriptions of an economy with uncertainty, that the two could be brought together with valuable results. Can the described auditor activities be shown to enhance the economy's utilization of resources? Can the change in the functioning of the economy with the introduction of auditors be evaluated in terms of social or private benefits? What motivations exist that cause an individual to engage an auditor? These and other interesting questions can be resolved only if the auditor is modeled into the economy in a direct way.

Earlier sections of this paper have omitted many specific references and descriptions of existing research in this area. Hamilton (1978) provides a more complete set of references and explanations and is available upon request. The scope for this paper was too broad to permit the detailed explanations and references, but this is not to say that they are unimportant to the theme contained herein. Recent developments along the lines suggested in this paper are excellently summarized and communicated in Ng (1978). Thus, the focus in this paper has been on explaining some roles for a theory of auditing.

Where are we in auditing theory? What activities in society are viewed as auditing? How can these activities benefit from having a well developed theory of auditing? The preceding questions served as a frame for this paper on the role of auditing theory.

What can one expect from a paper such as this? Describing the current state of auditing theory not only involves a given bibliographical set, but also involves a view as to the meaning of theory. Interpersonal differences in assessing the state of auditing theory may be induced by either one or both of these elements. Identifying the practice of auditing is obviously a definitional problem and establishing the "goodness" of one definition over another ultimately rests in estab-

lishing the usefulness of the definition as a means for improving our understanding of auditing, improving auditing itself, and improving the world around us. With the personalistic nature of the first item, the measurement difficulties associated with the second and the impossibilities for constructing social welfare measures for the third, there is reason to believe that a rigorous proof defending the definition's usefulness could not be provided herein.

Demonstrating the impact of a well developed auditing theory on education and practice is likewise exceedingly equivocal. Anyone who has tried to defend a basic research proposal knows that the process is difficult and that the arguments are generally insufficient for showing that the project should be funded. Yet, funded basic research projects provide a means for informed betting on knowledge changes on the part of the researcher and the funding agency. As in any area, some bets are won, others are lost.

I have developed a description of my betting positions and an explanation of my reasons for taking these positions. I am sure that opening a market for these bets would generate a significant amount of betting. I hope that future developments in auditing theory are such that all of our bets can eventually be settled. Actions taken by CPA firms, auditors, congressional committees, regulatory agencies and others can also be viewed as falling within a betting framework wherein the individuals who take the actions are placing their individual welfare on the line.

Concluding Observations

The preceding sections of this paper have detailed why an auditing theory does not appear to exist and how such a theory would be of value to auditing educators and practitioners. Most basic to the viewpoint expressed here is that the necessary conditions for a solution to all auditing problems have not been established in a theoretical structure which is shown to be consistent with the data from the world around us. These conditions are necessary for resolving auditing problems such as choices among confirmation formats or analytic auditing approaches. A solution to these two problems, for example, requires either that the value of auditing be established (a welfare economics viewpoint) or that the auditor's penalty/reward structure be known (a microeconomic viewpoint). Within a setting where auditing is a valued activity, the penalty/reward structure should be derived from the explanation of the demand for and supply of auditing.

Individuals seeking resolution of auditing problems, whether the problems be governmental, internal, or external will demand that other conditions be established for the variety of problems addressed. If auditing is an area of specialization, then the necessary conditions will explain why auditing is distinguished from other activities. Yet the conditions will be only necessary, and by no means sufficient, for resolving most of the interesting auditing problems. As noted earlier, it is an issue of priorities and the suggestion here is similar to suggesting that climatic and geographic conditions are necessary conditions which must be established before one proceeds to identify the specifics of the problem of choosing a particular type of house and life style which is best for the individual involved.

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Discussant's Response to The Role of Auditing Theory in Education and Practice

R. K. Mautz

Ernst & Ernst

Bob Hamilton and I approach the nature, purpose, and usefulness of auditing theory so differently that after reading his paper I thought it best to give him a call so we might get better acquainted. As I suspected, we had met earlier, but I still knew very little about Bob's background and experience. Interestingly enough, we have similar educational and experience histories. Both of us have commitments to and have spent considerable time in academic work; both of us have had practical audit experience. The major difference is that I have been at both of these for a considerably longer time than has Bob. To which one of us that is an advantage or disadvantage, you must decide.

Given those similar backgrounds, why is it that we should have such different interests, that we should approach auditing theory in such disparate ways? Our conversation suggested that Bob is not at all troubled by our differences. On the contrary, he expresses himself as thinking our differences may have usefulness, at least for the purposes of this symposium, in encouraging discussion. So let me note in more detail the nature of our major differences and then try to explain why I think they exist.

Different Approaches to Auditing Theory

Bob takes a broad view of auditing theory. He calls for a theory that explains the role of auditing in our economy, what it does, why the economy encourages it, what impact auditing has on the economy, why auditing exists at all, and the conditions of that existence. He writes:

. . . a theory of auditing should show why an economy will be better off if auditors can provide their services.

He is also greatly interested in the supply and demand for audits and notes:

Audit-like activities are a significant resource-consuming process of state verification which is assumed in most models of resource allocation mechanisms. An understanding of the nature of these activities is essential to understanding why one mechanism is preferred to another.

Thus he seems to be more concerned with the functioning of the economy, with how and why the economy allocates some part of its resources to auditing, and with what the economy receives in return, than with how auditors allocate their resources, spend their time, or face their problems.

Consistent with this, he recommends an approach to the study of auditing theory that uses the tools of economic analysis to explain how the economy allocates resources to auditing. At one point we find:

The essential characteristic of this approach is to rely heavily upon the tools of economic analysis to provide an explanation of this economic phenomenon—auditing activity.

And at another point:

What would be the details for the components of an auditing theory? A simple statement is that it would explain the demand for and the supply of auditors. Such a theory would permit an analysis of the effects on the supply of auditing of changing institutional arrangements, of expanding the subject matter of auditing, and of new technologies for producing audits.

Bob also calls for a theory that:

. . . should include a systematic consideration of the major elements in the practice of auditing: the institutional structure, the market for audited information, the characteristics of agents doing auditing, being audited, and using audited information, and consider the available auditing technology.

The Purpose of Auditing Theory

This is the scope of a theory of auditing in his terms, but what is its purpose? For Bob, a requirement of theory is that it provide a basis for testing hypotheses. Presumed theoretical writing that does not do so fails to earn the appellation of "theory." He expresses concern that existing auditing theory has not been directly beneficial for the theoretical support of tested hypotheses. Because those items he recognizes as early attempts at auditing theory formulation have not "spawned underpinnings for empirical research" he relegates them to a non-theory sort of limbo. He notes with approval, however, a trend, or at least a tendency, in more recent writings on auditing theory to emphasize "the requirements for testing and validation," but also that auditing theory will not be complete as long as it possesses "ambiguity which precludes testing" and until it can "facilitate comparison with competing and complementary theories so as to make validation possible."

This is an ambitious program. Bob is himself impressed, and desires us to be concerned, by the fact that we lack a complete theory of auditing. He will be satisfied with nothing less than a theory that fully explains the auditing activities of the world around us—everything from the justification of auditing as an economic phenomenon down to the level of why and how the amount of resources used to audit a public company may differ from those used to audit a private entity. The rewards and penalty system for auditors must fit into auditing theory as part of the explanation of why and what auditors do. All of this must be developed in such form that it lends itself to empirical verification and is both predictive and testable. The theory must be one that

. . . identifies the major determinants of the auditor's decision process and how they are affected by changes in the auditor's environment.

Bob visualizes a wide range of uses for auditing theory highly beneficial to education, practice, and research. But there are dangers as well. He points out the possibility that some interested parties might wish to advance the cause of those theories which would result in resources being allocated in their favor. He fears also that policy decisions will be made within accounting firms on the basis of theory that is not well grounded, verified, and tested, and he believes that the profession suffered in its testimony before recent Congressional hearings in not having "a well constructed and tested descriptive theory of concentration within the CPA industry."

A Different Approach

In contrast, my own approach to auditing theory, if I dare even to use that term, is at a different level. My interest is in the individual auditor, his responsibilities and obligations, in how he goes about acquiring sufficient evidential matter on which to formulate and defend, if necessary, his audit judgment. Bob Hamilton and I have significantly different notions of theory. His appears to be one that requires provision for the establishment and testing of hypotheses on some empirical basis, and without this testing he feels there is a question whether the term "theory" is warranted.

No doubt my views have been affected by my early training. I recall Professor Littleton describing theory quite simply as the reasoning that explains practice. Good practice is supported by good theory; bad practice is explained by bad theory. In Littleton's view, a constant interplay should exist between theory and practice so that each is tested against the other. Those theories that do not work well in practice should be reexamined. Those practices that lack logic or rational support likewise require reconsideration. Gradually, as each is tested against the other, both theory and practice are improved.

To the best of my knowledge, Professor Littleton never engaged in what is now termed empirical research, so he was not inhibited by requirements to support his conclusions with formulae and statistical interpretation. He had, however, spent a good deal of time in studying the rules of logic as well as in keeping abreast of current developments, and he urged that we be scientific in our development of theory, although he was quick to point out that accounting was not itself a science in any strict sense of that term.

Accepting Professor Littleton's notion that theory is the reasoning behind practice, my own interest in auditing theory has been directed toward what an auditor does, how he does it, and how he might do it better. Is this empirical? Well, certainly it is if empiricism is linked with experience as my dictionary says. My background and experience at both the staff auditor level and more recently at a somewhat more exalted rank provide an empirical foundation on which I rely heavily.

Professor Hamilton (you can tell the going is getting heavier by my use of his formal title) offers the gratuitous comment that:

. . . the theory of evidence has developed in isolation of the institutional arrangements which reward and penalize auditors, clients, and others.

He offers no proof or even an adequate explanation of that statement. Because he had at that point made reference in his paper to some totally academic discussions of audit evidential matter and of the relationship of such evidential matter to audit opinions, he may have meant to confine his comment to those papers. If he meant to include some of the earlier work on evidence, whether in *The Philosophy of Auditing* or elsewhere, he is quite in error. It would be an almost impossible task for a practicing auditor with any significant experience to write on the subject of evidential matter and at the same time ignore such institutional arrangements as the SEC, the courts, plaintiff bar, competitive fee structures, staff classifications, his own audit firm's organization, and the like. If, as the dictionary states, empiricism has to do with experience, practitioners are well equipped to test hypotheses.

An Empirical View of Theory

Professor Hamilton pronounces:

Once a description of the demand for and supply of auditing is forthcoming, individuals can decide whether to produce audits and whether to pay the price for audits.

Without the benefits of the extensive theory that he seeks, my own empirical observation is that a great many people and corporations have already decided that they are willing to pay the price for audits, and that thousands of auditors are eager to produce such audits. Without any visible concern for Professor Hamilton's desired theory, these people make just such decisions as he alludes to. How do they do it?

Those of us who now participate in such activities have a pretty good idea of how and why such decisions are made. To seek to develop and test hypotheses on such matters strikes us as less useful than would be the same amount of effort directed to a different set of questions.

As a "brief and terse (these are his words) explanation of how a theory of auditing may be developed" Professor Hamilton offers the following:

If there exists a government to enforce contracts, and due to differences in wealth endowments, *inter. alia.*, individual agents in an economy find it advantageous to put their wealth in the charge of others, then contracts which reward performance may be based on numbers recorded by the manager. If the owner of the wealth does not have a way to ensure the compliance of the reports with the contractual provisions or if the manager does not have a way to convince the owner of this, then certain contracts may not take place. If an auditor is incorporated into the arrangement to ascertain compliance and if the auditor is motivated to do so because of associated rewards and penalties, then valuable contracts could be formed and all will be better off.

What a marvelous grasp of the obvious! What does such glorification of that which is readily apparent really accomplish? Can't we accept the fact that in a market economy based on credit, auditors have a usefulness, and because

ours is a litigious environment they have every reason to be effective and efficient? Seeking overblown language to cloak the mundane is not likely to help either present or future auditors to serve more efficiently.

We need attention to practical issues that permit an auditor to survive and to serve effectively within an already institutionalized environment. Theorizing about those institutions and about the nature of that environment on such a high level is unlikely to provide much help to the auditor who must learn to respond and react to an SEC influenced by chief accountants as different as Andrew Barr and John Burton, to audit committees stimulated by increasing directors' responsibilities, and to governmental proposals for more control over audit activities. Broad scale theories of a global nature are unlikely to take into account personality differences which can be incredibly important in terms of cost and responsibility. Such theories exist at a level remote from the problems of the day, problems of litigation, of repropoals, of increased fee competition, and of personal performance under trying conditions.

I can see little benefit to the profession or to our economy, and certainly none in the immediate future, from the kind of theorizing that Professor Hamilton proposes.

In discussing the advantages of a theory of auditing for educational purposes, for example, Professor Hamilton writes:

A concern for time allocation to various coverages in an auditing course could be aided by a theory of auditing which identifies the major determinants of the auditor's decision process and how they are affected by changes in the environment. Those critical points of influence on audit decisions could be given sufficient time to assure that they are well understood, with the more sensitive variables studied in depth.

Now those are beautiful words, but for the life of me I don't know what they mean or how to apply them in developing an auditing course. My major concern as an auditing teacher is with helping students behave on the job in such a way that they can analyze the audit risk, identify the representations in the financial statements, gather and evaluate relevant evidential matter, reach a defensible judgment on the validity of the financial statement representations, and, during all of this, have a working awareness of their responsibilities as professional auditors.

I would much rather give them an understanding of audit evidence, the extent to which it can be relied on, the dangers in relying on less than the best evidence, and the cost of obtaining various types of evidence, than to have them theorize about how changes in the environment affect major determinants of the auditor's decision process.

Note where Professor Hamilton's approach is intended to lead us. He states:

The purpose of this paper is to describe the nature of a theory of auditing which would improve the underpinnings for explanations of audit activities and to identify specific linkages between improvements in theory and difficult problems in auditing education and practice. A theory of auditing can help improve our understanding of the role for auditing in society and thus improve the ability of society's members

to design institutional structures and to take action which leads to desired outcomes.

Auditing is a term associated with activities having specified characteristics. An auditing theory should describe those activities and their particular configurations and intensities.

A Vote for Pragmatism

If we carry on with that paragraph and with subsequent statements, we find that Bob has a view of the theory of auditing so comprehensive in scope that it far escapes my imagination. Indeed, I know of no activity of man for which a "complete, compact, and consistent story" exists in the scope and extent of detail which he proposes for auditing. Nor does Professor Hamilton propose such a theory. He just thinks that one could and should be developed. And in the last pages of his paper, with commendable caution, he offers some reasons why he could not have been expected to provide one.

So where does all this leave us? The difference between Bob and me and the way in which we define, think about, and propose auditing theory reflects a classic contrast of approaches. The macro approach which he prefers is at best a long-term possibility for progress. The micro approach that I choose offers immediate possibilities for improvement in auditing education and practice. My goal for auditing theory lies in the near term improvement of the profession, of education for it, and of its research efforts. I feel a strong need for improvement that will give us candidates better qualified to practice auditing in today's environment, to strengthen the profession's service to the economy now.

I have not even a casual interest in putting the profession under a microscope for intellectual examination to discover what motivates whom or why, and how various interests respond to various stimuli. I am only remotely interested in that great day in the future when Professor Hamilton's global theory may finally be tested and found complete.

One of the reasons I find myself so much concerned about our differences is that the increasing gap between education and the practice of accounting and auditing, whether in industry, the CPA profession, or government, bodes ill for the future of both. More and more I find that the interest that academics have in accounting and auditing theory and practice has little relevance to the practitioner's problems. We have few forums to bring practitioners and academics together, and when we do, the results typically are something of a Mexican standoff.

In two paragraphs near the end of his discourse—paragraphs which I must confess are not completely clear to me—Bob places his bet on the development of the kind of theory he has described in his paper. He concludes:

Actions taken by CPA firms, auditors, congressional committees, regulatory agencies and others can also be viewed as falling within a betting framework wherein the individuals who take the actions are placing their individual welfare on the line.

Practicing auditors put their welfare on the line every day in ways that few full-time academics are able to appreciate. Most practitioners would wel-

come help in reducing the odds they face. I find it disappointing that capable members of the academic community make their bets in such a way that any possible payoff is so far in the future as to be discountable to near zero in terms of today's needs.

7

Resolving the Auditor Liability Problem—An Appraisal of Some Alternatives

Richard H. Murray

Touche Ross & Co.

Decades before others were discussing the problem of auditors' liability, indeed years before many of us were born, Mr. Justice Cardozo masterfully defined the problem in the landmark case of *Ultramares vs., Touche* (then Touche, Niven & Co.):

The defendants owed to their employer a duty imposed by law to make their certificate without fraud, and a duty growing out of contract to make it with the care and caution proper to their calling. . . . To creditors and investors to whom the employer exhibited the certificate, the defendants owed a like duty to make it without fraud, since there was notice in the circumstances of its making that the employer did not intend to keep it to himself. . . . A different question develops when we ask whether they owed a duty to these to make it without negligence. If liability for negligence exists, a thoughtless slip or blunder, the failure to detect a theft or forgery beneath the cover of deceptive entries, may expose accountants to a liability in an indeterminate amount for an indeterminate time to an indeterminate class. **The hazards of a business conducted on these terms are so extreme as to enkindle doubt whether a flaw may not exist in the implication of a duty that exposes to these consequences.** (Emphasis added, 255 N.Y. 170, 174 N.E.441) (1931)

As a result of these concerns, the *Ultramares* decision held that, while auditors could be liable to their clients for simple negligence, they would have to be guilty of a considerably higher degree of fault in order to be liable in damages to third parties.

Post-Ultramares Developments

While the Supreme Courts of most States quickly followed the lead of *Ultramares* in cases involving claims against auditors, the first forty years after that decision saw a number of developments that ran counter to the Cardozo concern for avoiding destructive risks to the accounting profession:

- The Federal Securities Laws enacted in 1933 and 1934, contain specific provisions permitting the purchasers of corporate securities to recover damages from auditors for something akin to negligence. However,

those provisions were limited to specific claims, such as purchasers at an initial offering of securities (Section 11 of the 1933 Act), or purchasers relying upon documents filed with the SEC (Section 18 of the 1934 Act). The Federal Laws were silent with respect to liability from market transactions generally, leaving the impression that the standards of the *Ultramares* decision were acceptable to the Congress and were intended to control all securities liabilities not specifically defined by the '33 and '34 Acts.

- Beginning about twenty years ago, however, the Federal Courts began to engraft upon the Securities Laws the concept of implied rights of recovery for general trading activity in corporate securities. This trend, focusing principally upon Rule 10(b) of the 1934 Act, and the Commission's related Rule 10(b)5, was a major piece of social legislation through judicial fiat. The extent of the philosophical change brought by the development of 10(b)5 liabilities is manifest in the fact that these new rights of action emerged with lower standards of liability (negligence or less) than the established standards of *Ultramares*, and with none of the conditions or limitations upon liability (statute of limitations, statutory defenses, etc.,) which Congress had provided for the specific remedies in Section 11 and Section 18.
- The past fifteen years have seen certain erosions of the *Ultramares* principle in proceedings under common law and state law traditions, as well. Under the theory that more is always better in the case of plaintiff's rights of recovery, the American Law Institute promulgated changes in its semi authoritative Restatement of Torts. The resulting expansion of the liability of auditors (and, for that matter, of attorneys, and for many other participants in securities transactions) was characterized by one court in 1968: "The wisdom of the decision in *Ultramares* has been doubted . . . and this court shares the doubt. Why should an innocent reliant party be forced to carry the weighty burden of an accountant's professional malpractice? Isn't the risk of loss more easily distributed and fairly spread by imposing it on the Accounting profession, which can pass the cost of insuring against the risk on to its customers, who can in turn pass the cost on to the entire consuming public? Finally, wouldn't a rule of foreseeability elevate the cautionary techniques of the Accounting profession?" (*Rusch Factors, Inc., v. Levin*, 284 F. Supp. 85) (1968)

By the 1970's it was quite legitimate to question whether the *Ultramares* decision and the Cardozo fear of undue exposure was passé. Perhaps the fear expressed so many years before was overstated; at least, there had been no major disastrous judgments entered against accountants. Moreover, there seemed to be little sympathy or concern for the plight of an accounting profession which had prospered during the ensuing years.

The Litigious Era

Time and circumstances were, however, catching up with those who saw public benefit behind every suit against an accounting firm. The explosion of claims against accountants during the late 60's and early 70's was noted in many quarters (see, for example, Earle, "Accountants on Trial in a Theatre of

the Absurd" *Fortune*, May 1972, and Liggio, "Accountants' Civil Liability: Through the Looking Glass and Other Impossible Things" *ABA Litigation Magazine*, Volume 1). Although the voices of concern came initially from within the profession, the reality of the crisis caused by the number of claims, size of the recoveries sought, and the frustrations and expense of defending class action procedures were ultimately recognized by the U.S. Supreme Court. The first warning was struck in *Blue Chip Stamps vs., Manor Drug Stores*, (421 U.S. 723) (1975):

There has been widespread recognition that litigation under Rule 10(b)5 represents a danger of vexatiousness different in degree and in kind from that which accompanies litigation in general. . . . We believe that the concern expressed for the danger of vexatious litigation which could result from a widely expanded class of plaintiffs under Rule 10(b)5 is founded in something more substantial than the common complaint of the many defendants who would prefer avoiding law suits entirely to either settling them or trying them. These concerns have two largely separate grounds. The first of these concerns is that in the field of Federal Securities Laws governing disclosure of information even a complaint which by objective standards may have very little chance of success at trial has a settlement value to the plaintiff out of proportion to its prospect of success at trial so long as he may prevent the suit from being resolved against him by dismissal or summary judgment.

Pursuing this theme, the AICPA *Amicus* Brief in the *Hochfelder* case a few months later urged the court to recognize:

During their pendency, the charges leveled against a firm of Certified Public Accountants constitute a cloud on their professional reputation and a threat to their professional standing. The *in terrorem* effect of the pendency of even the more meritricious litigation provides a settlement value in such law suits having no relationship to the quantitative size or qualitative merit of the claim.

The capstone of this development was the Supreme Court's decision in *Ernst & Ernst vs., Hochfelder*, (425 U.S. 185) (1976). The Court noted the absurd contrast between the obvious language and purposes of the Federal Securities Acts and the uncontained potential for liability that had developed under the judiciary's creation of the 10(b)5 phenomena. As a result, the Court held that civil damage claims under the implied liability sections of the Federal Securities Acts could only be awarded upon proof that the accountant involved had been guilty of *scienter*, a knowing intent to violate the law.

Most recently the New York Court of Appeals reaffirmed the principles of its earlier *Ultramares* decision, with only slight extensions of auditor liability, in the case of *White vs., Guarente* decided just last December.

Cardozo's Fears Realized

Thus, the theoretical concern expressed by Cardozo has come full circle. Ironically, graphic proof of the accuracy of Cardozo's fears did not mature until 1977 when a California State Court jury rendered its decision in the U.S.

Financial Litigation. That verdict against Touche Ross of more than 27 million dollars results from a pattern of facts which clearly manifests the worst of the Cardozo fears:

- The plaintiffs consisted of twenty four banks and insurance companies in the U.S. and abroad who purchased notes privately placed by U.S. Financial without any registration proceedings or other advance indications that would give any warning that they would be relying upon financial statements at the time those statements were rendered.
- The majority of plaintiff institutions made their investment decision on the basis of intermediary recommendations without obtaining or examining the financial statements which contained numerous foot-notes disclosures creating doubt about the quality of the earnings reported.
- The plaintiffs' losses on these notes resulted from a decline in the general health and market value of real estate development firms like U.S. Financial, and in part from a pervasive scheme of fraud perpetrated by company management in collusion with numerous third parties including officers of the company's principal commercial bank.
- Touche Ross was charged only with negligence in the conduct of its audits for 1970 and 1971; the plaintiffs specifically disclaimed any suggestion that Touche was guilty of either intentional or reckless conduct.
- The jury, which cumulatively possessed no educational degrees beyond high school, was required to reach a verdict after nine months of trial which produced over 18 thousand pages of transcript and hundreds of exhibits arising from the numerous and complex issues.
- The jury concluded, within the first hour of deliberations, that Touche Ross had been negligent and that the plaintiffs were therefore entitled to full reimbursement of all their losses plus pre-judgment interest.*

It is clear that the past two years have seen both a judicial endorsement of the concerns originally expressed by Cardozo, and a manifestation of those fears in action.

A Broader Problem?

The recognition that the risk of civil damage recoveries constitutes a major problem for the accounting profession is, however, only a start towards defining the problem. The more significant issue is the need to determine whether this phenomenon also constitutes a problem for broader national interests. A recent report by the Sub-Committee on Reports, Accounting and Management, of the Senate Committee on Governmental Affairs (The Metcalf Committee) opined that ". . . potential legal liability for negligence is the most effective mechanism for assuring that independent auditors performed their public responsibility

* The verdict has been appealed on a number of grounds, including our belief that the *Ultramares* standards should prevail in California to prevent such an investor recovery for simple negligence. We also believe that negligence by Touche Ross was not established at the trial. The case will be appealed on that ground as well.

competently and diligently.” While that is clearly the conclusion which the Committee’s staff had hoped the Committee would reach, I don’t believe that any of the testimony or written submissions submitted to the Committee in the course of its investigation gave any credence to that conclusion. Rather, the events of recent years have given credence to the position articulated by former SEC Commissioner Al Summer:

The SEC is not unconcerned with the danger of excessive financial loss, for we recognize that an indigent profession, or one blighted with financial adversity, will need to reduce its exposure and thereby lessen protection afforded investors.

A Two-Fold Issue

The issue thus presented is essentially two fold: Has the risk of liability stimulated improved performance by the accounting profession, and Are the burdens of this risk more detrimental to the public interest than any such benefits? The Commission on Auditors’ Responsibilities (the Cohen Commission) directly addressed the issue in a staff study conducted by Professor Henry Jaenicke of Franklin and Marshall College, later separately published as (Research Study No. 1 of the AICPA), **The Effect of Litigation on Independent Auditors**.

In that study, Jaenicke notes that the Accounting profession has been much more active in the past decade in developing accounting principles and auditing standards, and in recognizing new ways in which it can serve the public. He concludes that the principal reason for this activism is the fear of civil liability. Professor Jaenicke acknowledges that his conclusion is based principally on the fact that both trends (professional activism and the litigation explosion) occurred at about the same time. That the latter has influenced the former seems unassailable; that fear is the primary motivation of professional service, however, seems to strain the available facts and rejects any recognition of the profession’s own sense of responsibility and self-initiated goals. I suggest that the accounting profession has demonstrated more rapid acclimation to contemporary challenges and public needs than has any other institutional component of the social and commercial scene, including the American Bar, the business community and perhaps Congress itself.

The dispute over what motivates professional improvements and how successful accountants have been in this regard is beyond the scope of this paper. A more meaningful question for present attention is: assuming that fear of liability has some salutary effect on the profession’s concept of public responsibility, is more always better, or have we reached (or perhaps passed) the optimum balance between the benefits and the detriments of that fear. I do not suggest that the Accounting profession or any major firm within it will be destroyed by the burdens of litigation. Rather, I am concerned that fear of excessive liability will deter the profession from serving the public as broadly and as effectively as it could.

This concern has been expressed with increasing frequency in recent years, such as the observation of Russell E. Palmer that:

The Accounting profession may . . . be showing some reluctance to extend itself into new areas. In connection with two recent controversies—Reporting on Interim Financial Statements and Reporting on Forecasts—the profession chose to debate and discuss rather than actively experiment. True, there are some difficult technical issues in each of these areas, but I am concerned that we may be using the conceptual questions to shield us from possible additional exposure to liability. (“It’s Time to Stop Talking,” *Journal of Accountancy*, October, 1975)

The effect of such reluctance was noted by Mautz and Sharaf in their 1961 monograph published by the American Accounting Association:

First, the auditor appears to be renouncing his right to an area in which he has competence and in which he can be of service; Second, as a professional group auditors are in effect refusing to provide an effective service to the business community; Third, auditors are emphasizing to clients and to the world at large their unwillingness to accept responsibility, to provide a difficult but useful service, to attempt to cope on even a small scale with an evil force that blights business life in no unsubstantial degree. (*The Philosophy of Auditing*)

Future Directions

I believe the available evidence demonstrates that the profession has reached the optimum level of reaction to litigation pressures and now faces the prospect of retrenchment from responsibility as a rational response to the escalation of such risks. Now that the profession has firmly internalized the sense of public responsibility newly imposed upon it during the present generation, further improvement in the quality and diligence of performance will depend on the profession’s ability to recruit and retain the most competent people and our ability to foster courage and responsibility in their actions. The continuance and escalation of exposure to civil liabilities places both of these goals in jeopardy, particularly as contrasted with the opportunities in the business world that are not so infected with risk.

It is a common phenomenon of 20th Century U.S. social and political history for valuable and necessary trends to first reach and then exceed the resolution of the original needs. This tendency has often required legislative reform to seek a healthier permanent balance. This has been the case with the development of unionism, the assertion of constitutional rights of criminal defendants, and numerous other economic and social issues. I suggest that we are at such a turning point in the process by which the phenomenon of risk has been used to enroll the accounting profession in an expanding public service capacity. I submit that the accounting profession has reached a stage of maturity in these new responsibilities that can be threatened and eroded by the continuation and escalation of those risks.

Possible Solutions Considered

A recognition that the risks of litigation constitute an undue burden upon the public as well as the accounting profession requires us to examine some possible solutions. We should turn first to a popular misconception—that insurance

provides all the protection the profession requires. The SEC and many protagonists of plaintiffs' rights profess that accounting firms can insure themselves against the risks of liability and pass the cost of such insurance on to their clients. This belief that the accounting profession is simply a conduit for spreading the risk to the business community and therefore to the ultimate consumer underlies the thinking of virtually all of the commentators who promote the concept of civil damage recoveries against auditors. I consider the proposition to be ill founded for a number of reasons:

- The continued availability of adequate levels of insurance coverage for the accounting profession in this country is subject to considerable doubt. As recently as the early 1970's coverage for the profession was available from numerous insurance companies who competed for our business in both price and benefits. Today only a handful of companies continue to provide coverage for accountants, and only with massive premium increases, sharp increases in coverage restrictions, and mandatory deductibles that render us substantially self insured. For example, the Big 8 has experienced a several hundred percent increase in premiums, for barely more than 50 percent of the total coverage once available, and a minimum 5 million dollar annual deductible, all in the past three years. And we are lucky; smaller firms continue to struggle with the availability of coverage of any kind.
- It is a fiction to believe that an accounting firm can directly pass on the entire cost of its litigation expense and insurance premiums in the form of higher fees. The profession in the U.S., particularly the national firms, are highly competitive and the profession as a whole is subject to demands by the business community for economizing in professional services. As a result, it is far more likely that the cost of litigation will be absorbed in depressed personal incomes, or more regrettably from the public's viewpoint, in less recruiting, training and self improvement.
- The public gets little benefit from the overall cost of litigation. As Jaenicke points out, no more than one third of total damage awards ever finds its way into the public pocket, which is hardly productive to society as a whole. Other forms of insurance protection such as auto liability, personal health and accident, etc., are designed to achieve a preponderance of public recoveries as opposed to handling costs. I believe the estimate of one third public recoveries in the securities field to be unrealistically high (the subject is presently being studied by the Department of Justice) and even if accurate it hardly seems to justify the burdens imposed by the process. I am indebted to Henry Hill, now retired from Price Waterhouse & Co., for the observations that present class action litigation is mindful of the ancient practice of according justice by cutting off the ear of the malefactor and awarding it to the injured party. We differ only in that he does not refer to the making of ear amputations highly profitable to the lawyers who perform them.

An Alternative to Insurance

If insurance is a non-solution to the liability problem, where can we look for more hopeful solutions? The Cohen Commission, despite its conclusion

that some risk is good for the profession and the public, endorses the American Law Institute's proposal to limit the amount of potential liability recoverable under the Federal Securities Act. That proposal, which is part of the ALI's suggested recodification of the Federal Securities Laws, would limit recoveries to the greater of one percent of the auditing firm's annual revenues, or one million dollars. The limitation would not apply, however, to liabilities resulting from financial statement misrepresentations in which the auditor had actual knowledge of fraud. The ALI explains this proposal as a balancing of the benefits and detriments of litigation risks:

There must be some maximum . . . to prevent the possibility of utterly outlandish recoveries from material but nevertheless relatively insubstantial lapses. . . . The other side of the coin is that, unless the potential liability is high enough to attract able lawyers who are willing to undertake class actions on a contingency basis there may not be any practical enforcement. . . ." (Reporter's Comments on Tentative Draft Number Two, 1973)

The ALI code has been in preparation for nearly a decade and has benefited from an extraordinary amount of public and professional attention. As you might expect, the proposed liability limit has enjoyed the active support of the accounting profession. Unfortunately, despite all the effort and expertise behind it, I doubt that the proposed code will fly through Congress without considerable political reshaping. If the recent active interest in the accounting profession by some Congressmen and staff members has a broad public constituency (which is an issue for another day) then the liability limitation could be in for tough sledding.

Other Considerations

Without regard to the fate of this ALI proposal, three other goals available to Congress and the courts alike, are worthy of consideration. The first deals with the standard for justifying liability of accountants. Specifically, I suggest the adoption of statutory or judicial standards akin to the principles of the *Ultramares* case: "Any auditor or auditing can be held liable to its client for negligence, but should be liable to others (such as the investing public) only when guilty of criminal participation in that client's fraud or of a knowing failure to exercise its professional responsibilities. "Such a standard, which closely resembles the Supreme Court's definition of *scienter* in *Hochfelder*, would not absolve auditors from serious professional failings. Rather, it would minimize the risk of being treated as an indemnitor of market losses in the guise of hindsight determinations of negligence.

Second, the profession's own standards of conduct should be recognized as adequate defenses to charges of malpractice. Certain commentators and a handful of cases have suggested that judges and juries can ignore compliance with generally accepted accounting principles and generally accepted auditing standards if, with hindsight, they determine that the financial statements should have been differently presented. But if the profession is to be continually subjected to fear of liability as a stimulus towards effective performance, the profession

must have some confidence that effective performance can be measured in advance of the difficult professional judgments it is required to make. Without the structure of GAAS and GAAP to rely upon, fear is more likely to produce the irrational results of guessing against the views of a judge or a jury than useful efforts to comply with established professional rules. Stated differently, if GAAS and GAAP are to apply only at the time judgments are made by an auditor and not at the time the judgments are made by a judge or jury, then there is no way that the accounting profession can convert its fear of liability into any meaningful form of public protection.

Third, in order to recover damages from accountants, plaintiffs should be required to establish a clear line between their losses and the misrepresentations alleged to have occurred in financial statements. Courts have been increasingly willing to ignore the traditional need for proof of reliance and causation in order to facilitate recoveries by large classes of plaintiffs. The fiction used to cover this erosion of standards is the claim that financial statements can be assumed to have an effect upon the market price of widely traded stocks, and that proof of individual investment decisions is unnecessary. While this fiction greatly aids class action plaintiffs, it also serves to obliterate the effect of any other causes of plaintiff's loss, such as general market decline, industry-wide difficulty, or mismanagement of corporate affairs. When these intervening causes of loss are, in effect, defined out of existence the accountants (and other defendants in securities cases) are converted to insurers of all market losses when there has been financial statement error, even if the error had little effect on the value of securities.

These three proposals are, of course, more complex than suggested by my comments, and they require careful scrutiny of possible negative effects. But each seems to be a limited and manageable objective within the present legal structure, and each offers attractive ways of containing the auditor liability problem.

A Final Observation

None of the foregoing proposals, including the statutory limitation on liability, is intended to detract from the accounting profession's own obligation to contain its exposure through the careful and skillful rendering of services. But quality controls and professional responsibilities are already highly developed within the profession and the burdens of litigation continue to grow. I submit that the profession, and the public it serves, deserve a careful analysis and adoption of those measures which produce a realistic balance of responsibility and risk.

**Discussant's Response to
Resolving the Auditor Liability Problem—An Appraisal of
Some Alternatives**

Paul Gonson

Securities and Exchange Commission

Printing of this volume was delayed while awaiting the arrival of Gonson's typed copy of his remarks delivered at the symposium. Regrettably, the typed record has still not arrived, and I was forced to conclude that printing should proceed without inclusion of Gonson's remarks.

—Editor

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Observations on the State of Shareholder Participation in Corporate Governance

Barbara Leventhal

Securities and Exchange Commission*

I was very pleased to receive Professor Stettler's invitation to speak to you tonight about corporate governance. The subject is a timely and fascinating one, with more serious implications for the accounting profession than are generally recognized. In an obvious sense, there is a direct relationship between the structure and composition of corporate boards and the ability of auditors to maintain their independence. This relationship has been acknowledged by Congress, the Commission, and the profession. It is well established, as was noted by the Commission on Auditors' Responsibilities last January, that "[t]he board of directors, with outside members and an audit committee when appropriate, is the best vehicle for achieving and maintaining balance in the relationship between the independent auditor and management." More recently, the AICPA has demonstrated its agreement with this proposition by considering whether there is a need for independent audit committees as a condition for an independent audit.

Other Calls for Reform

Less obvious perhaps but equally significant is the direct parallel between the issues facing the accounting profession and those facing the corporate community. In both cases perceived problems and a decline in public confidence have given rise to Congressional concern and calls for reform. Radical but similar solutions, such as federal licensing of accountants and federal chartering of companies have been suggested. The question which must be answered in both cases is not whether change must come but how it will come—and whether the solutions will be supplied by the private sector or whether they will be imposed by government.

In recent months, there has been an incredible amount of activity in the field of corporate governance. In addition to the Commission's re-examination of its rules relating to shareholder communications, shareholder participa-

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tion in the corporate electoral process, and corporate governance generally, corporate accountability projects have been announced by the FTC and the Department of Commerce. Following hearings held last summer by the Senate Judiciary Subcommittee on Citizens and Shareholders Rights and Remedies, Senator Metzenbaum has appointed an advisory committee to make recommendations relating to the need for federal minimum standards legislation. A working group of that committee is scheduled to report back to Senator Metzenbaum within the next six weeks. In the private sector, the American Bar Association, the American Law Institute, the Business Roundtable, the American Assembly and other organizations have undertaken a variety of corporate governance projects. Rarely does a week go by without an article appearing in some major publication on this subject. Graduate students are gathering on my doorstep in droves for assistance in researching their corporate governance theses, and if that were not evidence enough of a national movement, several weeks ago the New York Times published an editorial calling for the word "governance" to be stricken from the English language because of its pretentiousness and overuse.

Dissatisfaction with Corporate Governance

While the scope and focus of the various corporate governance projects differ, the projects all reflect a certain uneasiness or dissatisfaction with the way in which large modern corporations function. This dissatisfaction is not economic, for it is widely acknowledged even by critics that the corporate sector has performed well in providing goods, services, jobs and investment returns. Rather, there is a public perception that corporations have become vast aggregations of unchecked political and economic power with the capacity to do grave harm to society. Recent events, including widespread illegal conduct, mistreatment of consumers and shareholders, self-dealing, and misuse of corporate funds for personal gain have led many divergent groups to conclude that a problem exists and that the time has come to re-examine the checks and balances, internal and external, that regulate corporate conduct and to reconsider the basic questions about the role and responsibilities of the corporations in society.

As the staff member in charge of the Commission's corporate governance hearings, I have spent a substantial portion of the last year immersed in governance questions.

It is from this background that I draw the following comments on the status of that proceeding and offer you some personal observations.

The Hearings on Corporate Governance

In a release issued last April, the Commission announced its intention to re-examine its rules relating to shareholder communications, shareholder participation in the corporate electoral process, and corporate governance generally. The decision to undertake this study was based on the fact that recent events, such as the numerous corporate disclosures concerning questionable and illegal payments, had served to focus public attention on the subject of corporate accountability and raised questions about the adequacy of existing checks and balances related to corporate management. These events underscored the con-

cerns expressed many years ago by Berle and Means that the theoretical corporate governance model is a myth in the context of a large publicly held corporation. They asserted that directors who are chosen by management do not effectively monitor management conduct, and furthermore, since elections of directors are most often mere ratifications of management's slates, directors are not answerable to shareholders through the electoral process.

The Securities and Exchange Commission was granted a broad Congressional mandate under Section 14(a) of the Securities Exchange Act to make rules in connection with the solicitation of proxies which are necessary or appropriate in the public interest or for the protection of investors for the purpose of assuring fair corporate suffrage. Relative to this mandate, the Commission was concerned that existing regulations might not provide shareholders adequate opportunities to participate meaningfully in corporate governance or the corporate electoral process. The Commission noted that shareholders generally receive limited information about certain significant corporate policies and practices on matters not submitted to shareholders for their approval, and that shareholders have limited access to corporate proxy machinery. Election contests are rarely feasible because of the huge expenses involved, and the right to make nominations at annual meetings is of little practical significance, since at that point proxies have already been received by management and the number of shareholders attending an annual meeting typically is small. Despite the breadth of the Commission's existing authority, it recognized that a number of questions, such as the fundamental question of how corporations can best be made more responsive to their shareholders and the public at large, transcended the proxy rules in significance and that some methods of obtaining greater accountability could not be achieved within the present statutory framework. Comments therefore were requested on the desirability of Commission support for federal legislation, such as a bill establishing minimum federal standards of corporate conduct and shareholders' rights.

The preliminary stages of the re-examination consisted of a request for public comments and the holding of public hearings on a variety of issues relating to corporate governance and corporate responsibility. While too numerous to mention in detail here, these issues fell into three categories—

- The adequacy of existing avenues of communication between shareholder and corporations, and particularly, whether shareholders should be provided with more information than is now available with respect to socially significant matters affecting their corporations. Also involved was whether Rule 14a-8 regarding shareholder proposals, should be amended to further facilitate the presentation of shareholder views and concerns in the corporate proxy materials.
- The role of the shareholders in the corporate electoral process and whether the Commission should amend its proxy rules to provide shareholders access to corporate proxy materials for the purpose of nominating persons of their choice to serve on the board of directors.
- Whether additional disclosure relevant to an assessment of the quality and integrity of management should be required, such as information relating to the existence and composition of corporate nominating committees, the existence of business and personal relationships be-

tween nominees or their affiliates and the board, time spent on corporate affairs by incumbents, directors resignations and reasons therefor, and more detailed or comprehensive disclosure of management remuneration and transactions.

Related questions, such as the appropriate role of the self-regulatory organizations in improving corporate governance through revisions of their listing requirements, the perceived costs and benefits of various changes, and the need for revisions in the format of proxy cards were also considered.

Public Hearings Response

The response of the public to the Commission's request for input was encouraging. In total, more than three hundred persons and organizations including corporations, business associations, government officials, public interest and religious groups, law firms, bar associations, financial analysts, academics, accountants, and individuals submitted written comments or testified during the five weeks of public hearings. So voluminous were the materials offered to the Commission, in fact, that the staff spent the winter fighting through masses of paper, attempting to draw some conclusions from the array of comments and proposals presented.

While the paper war is not quite over, we are beginning to see the light at the end of the tunnel. Shortly, the staff intends to present a concept paper to the Commission and seek authorization to develop a number of rule proposals for publication. The staff is also preparing an extensive report for publication which will present, in excruciating detail, a summary of the information contained in the record of this proceeding along with staff analysis and recommendations concerning the various issues under study.

Emerging Trends

Although our final tally has not been completed, a few general trends have emerged from the record. First, while a number of commentators believe that the present system is working well and that corporations are fulfilling their economic functions in a satisfactory manner, there is a growing recognition that the old notion that corporate responsibility is limited to returning a profit is obsolete, and that new accountability mechanisms are necessary. There is also an increasing awareness that regardless of the adequacy of existing checks and balances or the degree to which corporate accountability has broken down, there is a public perception that problems exist amid a decreasing level of confidence in corporations by shareholders and consumers. This lack of confidence has obvious implications for the ability of companies to raise capital in the future.

Second, although there is a widely held perception that both individual and institutional investors are passive "creditors" of a company more interested in that company's income stream than in playing an active ownership role in corporate affairs, it is clear that these investors are becoming increasingly concerned with certain corporate policies and expressing growing frustration about their inability to influence management decisions. While major financial institutions are still somewhat squeamish about using their voting power to influence man-

agement decisions, individual shareholders, universities, church groups and pension funds are showing less hesitation to politicize the corporate electoral process.

Third, there is clearly growing, although by no means unanimous, support for a number of proposals designed to give shareholders more information in proxy statements and to provide them with added opportunities to participate in the corporate electoral process.

Boards of Directors as a Focal Point

Although a large number of proposals were made regarding ways in which corporate accountability could be improved, and it would be simplistic to suggest that any one of them was supported by the majority of commentators, we did encounter substantial support for the notion that the key to improved corporate governance is the evolution of stronger, more independent boards of directors. Various means to strengthen boards were suggested, including the creation of increased opportunities for shareholder input into the electoral process, the adoption of SEC disclosure requirements which would stimulate structural changes, encouraging the voluntary establishment of nominating committees and the inclusions of more independent, nonaffiliated outsiders on the board, and the enactment of legislation specifying the fiduciary obligations of directors and officers and providing certain shareholder rights, redressable in federal court. A more drastic legislative solution, involving federal chartering of corporations, also was advocated by a small number of witnesses. However, the concept of establishing constituency boards, an integral part of federal chartering, proved to be extremely unpopular.

Not surprisingly, the business community expressed a strong preference for voluntary action in lieu of the more heavy-handed approaches, citing in support of this position, the many encouraging developments and innovations which have been adopted by companies in recent years, such as the establishment of audit and other standing committees, the inclusion of more outsiders on the board, voluntary disclosure, and improved shareholder communication programs. Other more skeptical witnesses suggested that these so-called voluntary changes have occurred only in response to governmental prodding, and that reliance on voluntarism would not result in meaningful reform.

While it is clear that there is no one answer to the numerous issues which have been raised, my own view is that the commentators who stressed the importance of the role of the board of directors in monitoring corporate conduct and improving corporate accountability are correct. The evolution of stronger, more independent boards with a broader understanding of the long term social and economic responsibilities of the modern corporation and an ability to truly represent the shareholders, monitor management performance, and approve major policies would appear to be the most effective means of making corporations more accountable. Moreover, whether or not one agrees with the recent suggestion of Chairman Williams that boards be composed entirely of independent outsiders with the exception of the chief executive officer and that the CEO not serve as chairman of the board, it seems to me to be indisputable that independent directors, who are neither employees of the corporation nor providers of profes-

sional or business services, are more able to ask the probing questions that must be asked of management. Given adequate compensation, adequate information, and an adequate understanding of their responsibilities, such boards should be well equipped to perform their function.

Audit committees composed entirely of independent directors with direct access to the outside and internal auditors and prescribed duties covering all facets of the audit process obviously are desirable, although as was demonstrated in the National Telephone Case, the existence of an audit committee is meaningless absent an understanding of committee responsibilities and procedures to perform them. I look forward with interest to the AICPA's recommendations in this regard. Similarly, nominating committees which do not include any management directors should strengthen the effectiveness of boards by reducing the indebtedness felt by nominees to the CEO and expanding the universe of candidates from which board members are chosen. Compensation committees are yet another promising accountability tool, if properly constituted. Taken together, the effect of these structural reforms should be to restore, at least in part, the validity of the theoretical model of corporate governance under which management is answerable to the board.

These propositions are of course in no way novel. They are widely espoused by large segments of the business community and government. Recently a no less radical publication than *Business Week* called for the election of genuine shareholder representatives as board members in place of the crony system which now prevails. The only real question is how reforms will be achieved.

Effecting Needed Reforms

On this point, it is clear that the easiest and quickest method of effecting change either would be for each corporation to adopt structural reforms voluntarily and immediately or for Congress to mandate such change. I do not believe the former is likely to happen, and the latter, while conceivable at some point in the future, has a number of serious disadvantages, including the stifling effect it is likely to have on innovation and experimentation. Somewhere between these two extremes I believe that a number of interesting possibilities exist.

It seems to me that there are several alternatives available to the SEC within its existing statutory authority which would foster an environment of greater accountability. The adoption of disclosure requirements which provide more information about the quality of management and the structure, composition, and functions of the board and its committees would serve to encourage improvements in corporate governance and would provide investors with information vital to an assessment of management. Of particular importance, in my view, is expanded information about the business and personal relationships between board members or nominees and the corporation; information about committees and about director resignations and the reasons therefore; and disclosure about directors fees, indemnification arrangements, and an indication of the number of meetings attended. Changes in the listing requirements of self regulatory organizations also seem to warrant further attention. Additionally, the continued articulation of directors' responsibilities, both through reports of investigation and the issuance of "white papers" or guidelines could be fruitful.

Similarly, some expansion of the role of shareholders in the corporate electoral process, such as the adoption of a rule permitting shareholder nominations in corporate proxy materials, in my view, would provide a safety valve for expressions of deep-seated dissatisfaction with management performance. Despite the fact that such a procedure would not affect board composition or the outcome of corporate elections in the majority of cases, it could increase the chances of including true shareholder representatives on boards which have not been responsive to investor concerns, particularly where institutional holders are stimulated to use their voting power.

These proposals would not cause any drastic changes nor are they meant to. Instead, it is to be hoped that the alternative I have described would provide a stimulus for evolution of better governance procedures and a heightened level of awareness among corporate leaders of the responsibilities which the public expects them to meet.