

## FUTURE NEEDS FOR AUDITING RESEARCH

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There are many disciplines where a discussion of future needs would require an extensive survey of a comprehensive body of research already undertaken. The person charting a road map for the future needs of auditing is not so constrained since it can be safely said that auditing is one of the least researched areas in all academic study. The history of auditing research would fill a very short book.

Of late, however, there have been encouraging stirrings that this area is beginning to see research interest developed. We are seeing more articles and papers appearing which might be said to explore the subject on a research basis as opposed to the “how to do it” basis characteristic of most writing on auditing up to this time.

Both from the point of view of the accounting profession and the business community the development of academic interest in the area of auditing research is of considerable importance. Research is generally the first step toward the systematic development of a discipline.

One of the reasons why auditing has not been the focus of much research is that the key issues in the field are not easily researchable. Subjective value judgments are still the essence of most policy issues in auditing and research techniques for dealing with such matters are difficult to develop. Even with this constraint, however, much can be done if adequate resources are made available. It increasingly appears that the human and financial resources necessary for significant progress are becoming available.

In this paper, therefore, we expect to sketch a research framework that might be of assistance in identifying the areas in which research is needed within the broad field of auditing. Then, we will conclude this paper by enumerating a number of specific problems falling within that framework which seem to call for developmental research at the present time.

The development of a framework for research requires both a division of the field being researched and an analysis of the techniques that might be useful in each division. We believe that a logical division for the topic at hand is first, the study of auditing objectives; second, research into data gathering techniques; and finally, behavioral research in the auditing area. Let us look at each of these in turn.

Auditing Objectives: The first problem that needs to be considered is a definitional one. What is auditing? In a broad generic sense auditing means simply to review or to check. It is by no means restricted to financial information but, in its generic sense, could refer to almost anything that needs to be so reviewed. For example, there is considerable literature of late about what is broadly called the social audit. There have also been writings on the management audit, the operational audit and the efficiency audit. As accountants view auditing, however, the term is much more narrow. It generally refers to a review of financial statements using generally accepted auditing standards developed by the accounting profession. It is not clear that research into the topic of auditing should be constrained with this narrow definition. However, for purposes of this paper we will be constraining ourselves to audits of information prepared by economic entities which are performed by independent public accountants.

Whatever definition of auditing is agreed upon, it seems desirable that there be a better articulation of what an audit really is. There are widely varying perceptions today as to what an auditor is and does. A recent survey sponsored by Arthur Andersen & Co. indicated that there is a great gulf between the auditors' view of an audit and the view of outsiders who are not familiar with the auditing process. In addition, there are substantial pressures being put upon independent public accountants to increase the scope of their audit to include many non-financial areas.

In this connection it is worth noting that a Commission headed by Manuel Cohen, former Chairman of the Securities and Exchange Commission, is currently studying the issue of auditing objectives under the broad sponsorship of the American Institute of CPAs. While Mr. Cohen is a lawyer, he has had long experience in accounting matters. Further, three members of his Commission are practicing CPAs. It is hoped that the Commission will be able to focus on the role of auditing in a fashion that will assist both auditors and users of audited information to develop a greater understanding of what the role of an independent public accountant, in fact, is and can be.

In addition to the definition of auditing and the study of the role of auditors, it would seem that auditing research should contemplate a substantial consideration of legal precedents in

the area. The legal environment affecting public accounting is changing with dramatic and frightening rapidity. Approximately 40 years ago Judge Cardozo indicated in the *Ultramares* case that the word “public” in public accountant simply meant that the accountant was offering accounting services to any member of the public who sought them. Today the term “public accountant” is viewed quite differently. More substantive public responsibility to third parties is now contemplated in the auditors’ role. This change in responsibility is one that has generally not been enthusiastically supported by members of the accounting profession. It seems clear, however, that this higher level of responsibility does and will continue to exist and that it must be dealt with. Research is needed into the implications of the cases decided, the complaints brought, and judicial determinations made. A study of the changing legal environment may suggest improvements in the institutional framework of accounting along with possible suggestions for new legislative initiatives.

A fourth area of research that may be included in a broad study of auditing objectives and an area that requires research is an analysis of the costs and benefits of the auditing process. Some of the costs of auditing are generally possible to measure by examining the magnitude of audit fees, although at the present time there are no reliable public data which permit such a study. In addition to the out-of-pocket costs however, there are other costs which must be considered. For example, the time of company employees is not costless. A successful audit requires significant employee time commitments in both instructing auditors and responding to their inquiries. Placing a value on the benefit side is much harder. Audit benefits appear to be primarily of an “avoided cost” nature. There is no specific output from an audit. Rather, as a result of the audit, certain behavioral and economic activities which might have a negative social cost do not take place. Since it is extremely difficult to measure “what might have been,” the quantitative analysis of the costs and benefits from auditing is probably not feasible as a research area given the present state of the art. However, a number of behavioral studies might be undertaken which would provide some inputs and would help to develop a framework for future research in this area.

Research into Data Gathering Techniques: The second major area for auditing research that we have suggested is that of data gathering techniques. To date, most of the auditing research which is worthy of the name has taken place in this area (a quick check of the table of contents of this conference will verify this point). Auditors have done research on computer auditing and statistical sampling techniques which use the powerful tools of data processing and analysis. These tools were previously not readily available to the auditor.

There are really two types of data gathering that must be undertaken by auditors. The first is internal fact finding based upon the records maintained by the entity under audit. The second is independent verification of internal records by some form of procedure which goes outside the entity being audited.

Given these two data requirements, research is first needed to explore the amount of data required to reach the desired conclusions. At the present time this is largely handled on a common sense or field experience basis, although statistical sampling techniques have made some progress toward a better articulation of data needs. In addition, there should be research into the cost of gathering data. We know relatively little about the cost effectiveness of current data gathering techniques. Somehow we should be able to maximize information obtained per dollar of cost incurred to obtain it. The various techniques now being used by auditors should be considered with this objective in mind. Finally, research is needed to explore the reliability of the independent verification procedures now being used. For example, we have recently seen some research reported which raises questions about the reliability of receivable confirmations as a technique of independent verification. It may be that some of the conventional wisdom that exists regarding auditing techniques may be debunked as researchers study the various sources of information available to the auditor from outside the firm.

Behavioral Research: Perhaps the most currently promising of the various areas of auditing research is that which relates to the behavior of individuals who are involved in the auditing process. Basically, there are three groups whose behavior must be considered. The first

group consists of those being audited; the second, those doing the audit; and the third, those who will be receiving the auditors report.

A study of those being audited is certainly extremely important since many, if not most, of the benefits of an audit arise from the behavior that it creates within the audited entity rather than the specific facts that are determined or judgments that are made by the auditor. An independent audit means that an outside party is reviewing the data produced and the work done by management. It seems incontrovertible that the existence of this audit will result in the more careful performance of work by those being reviewed. We need more knowledge as to this effect (although some studies have been done in the area). As we look at proposed extensions of the audit function combined with possible reductions of the amount of detailed auditing work done, it is likely that the most significant variable which will affect the utility of such decisions will be the response of the auditee to changing patterns of audit activity. It may be for example, that a quarterly visit by an auditor with the purpose solely of making inquiry of principal officers and performing limited review procedures may engender a reaction such that significant improvement in interim financial reporting will occur. This improvement may occur even though the auditor has not undertaken procedures which enable him to find certain types of errors which may commonly occur in such reports. The presence of the auditor may have the effect of preventing the occurrence of errors even though the auditor's specific activities might not have resulted in their discovery.

The behavior of those performing the audit must also be a subject of further research. We have remarkably little information today as to what constitutes auditing ability and what can be done to develop it. Huge amounts of resources are devoted by major public accounting firms to training programs and techniques but there is not much research based evidence as to the success or failure of such programs. Some suggest that auditing is primarily an instinct which cannot be taught. Others suggest that audit awareness and skepticism is a skill which may be developed like any other. Research may help to resolve these and other questions into what makes an auditor "tick."

Relating to this might be research into the structure of auditing teams. How should audit teams be made up? What should be the relationship between partners, managers and staff? What sort of relationship or structure makes it most likely that evidence will be developed at the least cost and with the least probability of significant errors occurring? There is a tremendous amount of tradition built up in public accounting firms regarding the makeup of an audit team and there is no immediate reason to doubt that this tradition is based on anything other than empirical observation of optimum performance. Nevertheless, although it is easy to accept the conventional wisdom, one of the roles of academics is to challenge such acceptance through research activities.

In addition, the behavior of the audit staff might be studied from the point of view of firm organization or incentives offered to achieve desired behavior patterns. For example, the traditional modus operandi for accounting firms is to throw all newly hired staff members into one pot on the assumption that the "cream will rise" and the outstanding auditor will soon (or eventually) stand out. It is not clear that this is the best approach or one which will lead to the best audits.

Similarly there are questions which could be researched as to the adequacy of communication among audit personnel within a firm. As accounting firms have grown larger, they have necessarily had to develop formal systems for communication to replace the informal systems in use when their size was smaller. The managerial implications of this more formalized communication structure and studies of the effectiveness of communication could play a significant role in improving the practice of accounting in the future. Related to this is the development of audit quality control systems within a firm and the need for research as to whether or not these systems are effective. Several recent investigations before the Securities and Exchange Commission have dealt with the problems of quality control and the American Institute of Certified Public Accountants has initiated a program to study the effectiveness of present quality control systems.

A final area for research into those doing the audit is a study of the problems of independence and how such an attitude is achieved. It has long been suggested that independent accountants should not be adversaries to their clients but at the same time they should maintain an independence in attitude. This is not an easy combination to achieve. As we consider some of the problems that have arisen in the accounting profession in the past decade, a number of them can be traced to the inability of partners and staff members to achieve an appropriate balance on the question of independence. Behavioral research is needed to know whether or not there are fundamentally antithetical ends to the problem of independence of the auditor. Also, the question of developing an attitude of independence within the framework of a system which has the auditor paid by the audit client needs to be investigated. The analogy of the auditor to the judge who is paid by the government but hears cases between the government and outside parties might be a useful starting point in this regard.

The third major category of behavioral research that is needed is research into the behavior of those receiving an auditor's report. The report presumably is a communications vehicle. It is supposed to provide information that will enable the user to improve the quality of any actions based on the financial statements. At the present time, very little is known about how people react to auditors' reports. For example, we do not know the response to the unqualified opinion, qualified opinion, or disclaimer of opinion wordings that appear in a standard auditor's "certificate." Although we hear a great deal about it, we do not know the impact of negative assurance on recipients of a report. The profession has apparently made a judgment that such assurance cannot be an effective vehicle of communication. Yet, the research underlying this judgment seems nonexistent. Lastly the response of users to nonquantitative data such as reports on internal controls is also not known.

Until we know how users respond to auditor reports, it is very difficult to develop any systematic approach to what kind of report should be issued. For example, we do not know whether a standard reporting format communicates better than an ad hoc approach. Some people have suggested that an auditor's report should be several pages long and should highlight those



elements that are most important in the financial statements. Others believe that this would confuse users who are far more comfortable, and therefore better served, with a standard format of limited length. It appears that most actions by professional accountants in this area have been based upon behavioral assumptions and that there has been little research to support these assumptions. The academic community should address itself to these problems in a systematic and pragmatic way.

While research in each of the three broad areas outlined here is needed to get answers to broad fundamental auditing questions, there are also current specific problems that need to be addressed today on a problem solving basis. We would like to address these current problems at least briefly.

The first of these timely topics is the area of related party transactions. It is apparent that many accounting and auditing problems arise when the transactions recorded are not made at arms length. There has been some substantial work undertaken in this area by one large accounting firm and by the Auditing Standards Executive Committee of the AICPA. Yet, significant problems remain in terms of the definition of related parties and the description of an appropriate accounting approach to transactions between parties that are related.

A second current problem which requires attention at the present time deals with the scope of the audit. The basic problem is what scope an auditor must have in order to give an opinion on a full set of consolidated financial statements. The problem has two dimensions. The first deals with the auditor's ability to express an overall opinion on consolidated financial statements when significant parts of the audit covering major consolidated subsidiaries are done by other firms. The current approach of expressing reliance on the work performed by other firms does not appear to be totally satisfactory since the auditor reporting on the consolidated statements inevitably must take responsibility, in some fashion, for the consolidated figures. It may be, for example, that an auditor issuing an overall opinion should examine audit workpapers and programs of other auditors doing audits for substantial subsidiaries or take other steps to exercise some control over these aspects of the total audit.

The other dimension, which in some ways is more sensitive, is the question of whether or not an auditor may or must insist on the right to examine the books and records of affiliated parties in order to be satisfied as to the propriety of numbers appearing in the financial statements being audited. This situation can arise in a number of circumstances but the problem is most acute in situations where the auditor believes that transactions with an affiliated party cannot be fully substantiated by simply looking at one side of the transaction. These problems also come up when the auditor is not satisfied with the bona fides of a transaction and to obtain satisfaction must look beyond the confines of the company being audited. For example, when a single entity is performing managerial services for other entities through a contractual arrangement of one sort or another, such is the case in some oil and real estate limited partnerships, an audit of the general partner or the operator may be necessary even though that entity is not the auditor's client.

A third current problem, which is highly controversial, is the role of the auditor in preparing interim financial statements. This problem has many facets including the degree of assurance that can be obtained from limited review procedures, the desirability of reporting on limited reviews, and the development of procedures that will enable the auditors to contribute to the reliability of interim data.

The Commission has published proposals in this area and the Commissioners appear to have indicated their desire to see independent accountants involved on a more frequent basis in the financial reporting process of their clients. While substantial research into the market utility of interim reports has been performed, the topic is again ripe for investigation on matters relating to auditor involvement.

A final current problem can broadly be characterized as the problem of auditing and reporting uncertainties. For many years auditors have been aware that a major area of vulnerability in the financial statements arises from making estimates of likely future occurrences. These estimates are particularly apparent in the areas of providing a bad debt reserve, an estimate of inventory obsolescence, and in establishing the expected economic life of

assets. In the past, auditors have perhaps been too ready to simply accept management's judgments in these areas on the ground that it is not feasible to audit the future. It is becoming apparent, however, that such an approach does not fulfill the expectations which financial statement users have of the auditing process. Current user expectations have been expanded to require the auditors dig deeper and say more about such items. It is not acceptable simply to determine that the client is being "conservative" in its financial statement presentation. Excessive write-offs in good periods can be equally misleading as underprovisions in bad. Techniques for reporting the degree or range of uncertainty must also be worked out. In some respects the traditional accounting model (which is basically oriented toward point estimates or single values) does not fit the need of describing unusual uncertainties. In cases involving such uncertainties additional disclosure in the footnotes is generally required to indicate the existence of uncertainties and contingencies which must be evaluated in appraising the financial statements taken as a whole.

There are, of course, many other areas where current specific problem solving research could be undertaken. We encourage such research since we believe it holds promise for significant improvement in the professional performance of independent accountants. Recent developments that indicate a blossoming of academic interest in the area of auditing are encouraging and we expect that tomorrow's auditors will have a far more comprehensive research base on which to develop their practical solutions to the day-to-day problems of reporting on the financial results of entities.