ACCOUNTING THEORY
AND RESEARCH
METHODOLOGY

There is no satisfactory definition of the word “accounting.” The most widely quoted definition appeared in Accounting Terminology Bulletin No. 1 of the American Institute of Certified Public Accountants (AICPA)-(1941)

Accounting is the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof.

This appears to be a definition of accountancy, an art, rather than accounting, a body of knowledge. If the definition were clear, the objection would not count for much, as we could then define accounting as the product of accountancy. However, the AICPA definition has certain weaknesses, of which the most critical is the meaning of “financial.” The word cannot mean “money” here or “capable of representation in money,” because in both cases the previous phrase “in terms of money” would be clearly redundant. “Financial” is therefore an unstructured concept calling for definition.

Secondly, the words “in part at least” introduce an uncertainty which must affect our ability to identify those “transactions and events” which are proper subjects of accounting. Thirdly, the phrase “transactions and events” limits the scope of accounting by excluding, for example, the accrual of interest receivable, the write-off of a bad debt or the recording of depreciation expense, unless we use the circular reasoning that everything the accountant records, etc. represents a transaction or an event.

More recently, the Netherlands Institute of Registered Accountants defined accounting as:

the systematic recording, processing and supplying of information for the management and operation of an entity and for the reports that have to be submitted thereon.

This definition is too wide because it would include the functions of newspapers, libraries, and centers of documentation as well as accounting
itself. Indeed, one of the aims of the definition was to permit accounting to embrace nonmonetary items; unfortunately, which nonmonetary items cannot be determined. This same desire to extend the boundaries of accounting to include nonmonetary quantification is a feature of the American Accounting Association Committee Report, *A Statement of
Basic Accounting Theory* (ASOBAT, 1966).

The Accounting Principles Board, in its *Statement No. 4* (October, 1970) also attempted to define accounting with reference to the concept of information:

Accounting is a service activity. Its function is to provide quantitative information, primarily financial in nature, about economic entities that is intended to be useful in making economic decisions, in making reasoned choices among alternative courses of action. Accounting includes several branches, for example, financial accounting, managerial accounting and government accounting.

This definition has been greeted as a significant step forward, but closer examination reveals that the improvement is more apparent than real. Reference to "economic decisions" does not help us to identify the quantitative information which is "intended to be useful," unless we adopt the quite untenable assumption that accountants produce data for input into the decision models used by economists. The obscurity of "in part at least, of a financial character" is carried forward intact in the phrase "primarily financial in nature." These important criticisms will be examined at length in Chapters 6 through 8.

The role and functions of accountants have expanded dramatically during the past hundred years, more rapidly since World War II, so that any definition based on the practice of accountancy is liable to be out of date by the time it is published. But it is not necessary to define accounting closely. Fields of knowledge are simply groups of problems studied together because the same methodology is used for their solution; this is the case with medicine or architecture or the law. Accounting is the solution of problems using accounts; the definition directs us to the types of problem amenable to this form of solution and to the methodology used by accountants. This chapter will review the scope of accounting at the present time so 1) identify the classes of problems accountants handle, 2) identify the need for a theoretical framework, and 3) discuss the nature of methodology in general. Chapters 2 through 4 will trace the history of accounting thought, with particular reference to the development of accounting principles in the United States. The remainder of the book will deal with the subject of accounting methodology.

THE ROLE AND FUNCTIONS OF ACCOUNTANTS

The role of today's accountants has not been clearly spelled out, and their position in society is ambiguous. On the one hand, they are associated by tradition with the business world and are identified as servants of the capitalistic enterprise. This view directs attention to the accountant as keeper of the firm's records, preparer of financial statements used for inviting capital contributions to the enterprise, for verifying credit-worthiness, and as a basis for assessing income taxation. This is obviously an incomplete image of the accountant, who performs many of the same functions in a communistic economy as in a capitalistic one.

The accountant has another public role in which he or she is identified as a person of trust, a professional to whom society can give a variety of tasks knowing they will be performed in the public interest. This view directs attention to the accountant as auditor, as tax counsel, and as government employee in many capacities, such as civil servant, consultant to regulators, and advisor to administrations.

A third role of accountants is that of the technician, skilled in the techniques of business management and knowledgeable about the organization and operations of particular industries. In this capacity they function as a part of management in both the private and public sectors, and as outside consultants on such matters as administrative systems and procedures, cybernetics, short and long range planning, mathematical modelling, and many other techniques, in addition to the design, installation, and operation of accounting systems.

The *Accountants' Handbook* classifies accounting into the following fields:

1. **Financial reporting**—the preparation from raw data of financial statements, consisting of an income statement, a statement of financial position and a statement of changes in financial position. These may be used within an organization, by its managers, or by outside parties, such as stockholders, creditors, labor unions, income tax authorities, and regulatory agencies.

2. **Tax determination and planning**—the preparation of tax returns and reports in accordance with the laws and regulations governing such matters, for which purpose financial reports may serve as a point of departure. This field includes tax planning and representation of the taxpayer as counsel before the Internal Revenue Service and courts of law.

3. **Independent audits**—the examination of financial statements and other representations with the objective of expressing an opinion on their fairness.

4. **Data processing and information systems**—the design, installation and administration of systems for generating, processing, storing, and retrieving data required for a variety of purposes.

5. **Cost and management accounting**—objective analyses of costs and performances and the quantitative preparation of managerial decisions.

6. **Internal auditing**—an independent appraisal performed inside an organization, on a continuous basis, to ascertain the extent of compliance with sound business practices and established systems and procedures.

7. **Budgeting**—accounting for the future, and the related function of budgetary control by comparing financial statements with budgets and investigating variances.
8. Fiduciary accounting—the administration of trusts and the estates of deceased persons, bankrupts, minors or the insane under the terms of a will, trust instrument or court order.
9. National income accounting—the preparation of the financial statements of the nation or other macroeconomic aggregate. This role has been occupied by economic statisticians, with very little involvement by accountants; nevertheless, it belongs under our definition of accounting.
10. Management consulting—this residual field covers advising management on a variety of problem areas, to improve the profitability of business firms and the economy of not-for-profit organizations.

To this list we may add the field of government accounting, including government auditing, which is of considerable importance at the present time at international, federal, state, and local levels, and the field of accounting for nongovernmental not-for-profit institutions, which is certainly significant in the United States.

THE GROWTH OF ACCOUNTABILITY KNOWLEDGE

Figure 1-1, prepared by Dr. Leo Herbert, formerly of the U.S. General Accounting Office, shows graphically the exponential rate of increase of the body of knowledge represented by accounting during the past two hundred years. Prior to 1750 there existed little literature on the subject, consisting mainly of translations and adaptations of the relevant portions of Luca Pacioli's *Summa de Arithmetica, Geometria, Proporzione et Proportionale* (1494), the first book to describe double-entry bookkeeping. Accountants were virtually all private accountants, working for a bank, merchant, chartered company, or as government employees, and their functions and responsibilities were restricted to the duties assigned by the employer. Public accounting, or the practice of offering accountability services to the public against a fee, was unknown.

The principal factors listed in Figure 1-1 as responsible for the expansion of the accountant's functions, and thus, for the growth of this body of knowledge, were:

The Industrial Revolution One result of the transition from domestic production to factory production was the growth in the size of the firm and its capital requirements. To raise capital of the required magnitude, it was frequently necessary for the firm to incorporate; the number of registered corporations increased from a few hundreds to tens of thousands between 1800 and 1900. The need for meaningful accounts to be rendered by the promoters and managers to the stockholders greatly increased the responsibilities of accountants, and company legislation in Great Britain calling for these accounts to be audited created a need for public accountants. In the United States, where the greater part of industrial capital was provided by foreign financial institutions and domestic banks, audited financial statements resulted from their requirements.
A second aspect of the industrial revolution which had an impact on accounting was the lengthening of the production time period. This feature of industrialization called attention to accounting for overheads and the allocation of costs to cost centers as well as products. Industrialization also led to the development of standard costing and to the separation of cost accounting from financial accounting which has been characteristic of accounting at least since the nineteenth century.

A third aspect was the successive waves of industrial bankruptcies which took place in Europe and the United States during the latter part of the nineteenth century. The growth of the industrial sector was accompanied by over-capacity and included many marginal firms which were unable to survive economic upheavals such as, for example, followed the American Civil War. The need for qualified persons to manage and liquidate insolvent businesses for the benefit of their creditors placed additional burdens on private and public accountants. The need to establish forms of industrial cooperation, particularly to avoid the more lethal forms of price-cutting, led to the creation of national trade associations, and many of these developed uniform accounting systems which were published for the benefit of members.

The Railroad Companies The biggest single users of corporate capital during the nineteenth century were the railroads. These companies were illustrative of additional problems presented by the industrial revolution because they were highly capital-intensive, and their fixed assets had longer useful lives than customary. Many people in the industry believed that maintenance of the tracks and rolling stock could make railroad fixed assets virtually everlasting, and there was thus no need to charge depreciation in the income statement (then called the profit and loss account). Coupled with the overstatement of profits, many less excusable abuses occurred, such as paying dividends out of capital contributed for investment and the creation of excess capacity, leading to business failures which caused investors and creditors substantial losses.

These problems directed attention to the critical necessity to distinguish capital from revenue, to the importance of the income statement, and to the need to calculate depreciation on a systematic basis. In many countries railroad finances became a matter of public concern, and legislation regulating their operations was enacted; in most countries the railroads have gradually been taken over by government and are now operated as state enterprises. In the United States certain states prescribed the form of railroad accounts; regulation was later taken over by the Federal Interstate Commerce Commission, which issued a uniform classification of accounts in 1894.

These developments were followed by regulation of other industries of public interest, such as public utilities, broadcasting, interstate gas pipelines and aviation. In each case, regulation included the requirement to use a uniform accounting system for recording and reporting, and in each case the system was different. Thus, the case of the railroads provides an example not only of the growth of accountability knowledge but of the emergence of acceptable alternatives in accounting, which is one of the reasons for a study of accounting theory.

The Rise Of The Accounting Profession The profession of public accountant gradually became organized in the English-speaking world during the nineteenth century. The Institute of Chartered Accountants in Scotland was the first such organization (founded 1854), followed by the Institute of Chartered Accountants in England and Wales (1880). The New York State Society of Certified Public Accountants was formed in 1896 and a national organization, the predecessor of the American Institute of Certified Public Accountants, in 1897.

These professional organizations laid down rules of conduct for their members and issued pronouncements on technical questions which added substantially to accountability knowledge from about 1900. The contribution of the professional organizations will be discussed more extensively in Chapter 4.

The Personal And Corporate Income Taxes After several abortive attempts, the U.S. Treasury finally succeeded in imposing an income tax in 1913. Although challenged as unconstitutional, this form of taxation was eventually validated by constitutional amendment. Other countries, notably Britain and Germany, imposed income taxation before the end of the nineteenth century.

The significance of this development lies both in the contribution it made to strengthening the accounting profession by opening it to a new field of accounting, and in the additions to knowledge made by a succession of revenue acts and related commentaries, case law, and textbooks. The necessity to determine income, as a prerequisite to the determination of taxable income, provided a major impetus to the extension and improvement of accounting practice, and the essentially legal ideas and concepts of the tax laws influenced the development of accounting theory in subtle ways.

The First And Second World Wars In the first and second world wars the governments of the countries taking part utilized to the fullest extent the industrial sectors built up during the nineteenth and early twentieth centuries. In the United States large portions of the industrial sector were engaged in the production of weaponry, ships, ammunition, motor vehicles, military clothing, and a wide variety of goods and equipment needed for the war effort.

Only a small part of this production was carried out by the government itself; the greater part was allocated to private industry through the medium of the defense contract. There was considerable fear—in many cases justified—that defense contractors would exploit the ignorance of civil servants by overcharging for their products, but the government was a powerful force in this situation and gradually succeeded in laying down regulations for handling defense contracts (Section XV of the Armed Service Procurement Regulation) and establishing audit agencies to ensure that costs were fairly reported.

The relations between government agencies and private firms created by defense contracting and its regulation led to further consideration of cost accounting problems, and the refinement of methods of standard costing and differential or incremental costing is attributable in large part to this situation.

Government Accounting Politicians do not favor disclosure. When in power they resist it, and the opposition does not fight too hard for fear
it will inherit the obligation. It is no accident that in most countries
government accounting is a byword for backwardness and obscurity.

The tremendous increase in government revenues which followed the
introduction of income taxation, particularly at the level necessary to
finance the first world war, vastly increased the problem of government
accountability. In the English-speaking countries, government accounting
has traditionally been accounting for receipts and payments, which
paradoxically is less informative than the accrual system. It may be noted,
however, that the Kingdom of Sweden in the seventeenth century, and
the Austria of Maria Theresa in the eighteenth, developed sophisticated
forms of government accounting comparable to contemporary business
systems, and that the cash basis is no more essential to government
accounting than to any other kind.

Beginning in the 1890s, attempts were made in the United States to
reform the federal budgeting and financial reporting process, and similar
movements were discernible elsewhere. The Taft Commission, which
reported in 1912, resulted in the establishment of an executive budget
only nine years later, and the Budget and Accounting Act of 1921 enacted
some of the Taft recommendations. In 1949, the 81st Congress completed
the task of legislation by passing Public Law 784. Nevertheless, even now,
the actual implementation of reforms proposed by the Taft Commission is a long way from completion.

In addition, state and local government accounting have developed
their own techniques and literature as the revenues from sales and
property taxes have increased through both legislation and inflation.

The Fruits Of Scientific Management By the end of the nineteenth
century many of the problems of industrial organization and management
had been identified, and a scientific approach to their solution was
proposed by F.W. Taylor, the Gilbreths, and others between 1885 and
1920. Imitating the dictum of Lord Kelvin, this approach has been
summed up in the phrase: “What cannot be measured, cannot be
managed.”

It was clear to the pioneers of scientific management that accounting
had a large part to play in the measurement of cost and output and in
the evaluation of managerial performance. The business schools estab-
lished after the turn of the century placed emphasis on the study of ac-
counting as a tool of management control, and a substantial literature
has developed on this aspect of accounting. We may note as landmarks
the early work of Garecke and Fells and Hamilton Church on standard
costing and the invention of break-even charting by Henry Hess in 1904.
This literature, which grows more extensive daily, belongs to the area
designated management accounting, which is also the title of the monthly
publication of the National Association of Accountants in the United
States.

The development of management accounting has been marked by
two significant changes in emphasis, which cannot be ignored by any
student of accounting theory. One is the attempt to apply to accounting
data the mathematical methods which have proved powerful tools for
investigating the world of natural phenomena. This field of statistical
methods has produced many experiments of varying success. The use of
ratios and averages is well established, whereas other measures of central
tendency appear to have limited applicability. Compound arithmetic, as
used in financial evaluations, has a long history in accounting for bonds,
pension liabilities, and some forms of depreciation. More exotic mathe-
matical methods, such as Markov chains, Boolean algebra, and Bayesian
statistics, wait their turn to perform for accountants.

The other is the attempt to solve accounting problems within
an interfunctional, and consequently interdepartmental, framework of man-
agement. Before the industrial revolution it was common for merchants,
bankers, and artisans to keep their own accounts. As specialization be-
came necessary in the growth of manufacturing firms, accounting was one
of the first functions which the manager transferred to someone else. The
accountant became increasingly isolated from the decision-making centers
of the firm, leading to the separation of accounting from operating
management, and outside pressures created a tendency for accounting
aimed at such external users as financiers, creditors, and the tax
authority to acquire the major share of the resources available for the
accounting function. The twentieth century has seen a reversal of this
trend.

In the process, the accountant has both contributed to and taken from
the other functions of management. To production planning and control
he has given standard costing; from it the statistical techniques used in
quality control have been taken over for variance analysis. To marketing
he has given cost/volume/profit analysis, and from marketing he has
taken the principles of valuation of joint products. Figure 1-1 suggests
other flows of ideas of this type, as the accountant has interacted with
specialists in finance, cybernetics, organization theory, systems analysis,
decision theory, and human behavior.

It is this contributing factor to the growth of accountability knowledge
which is mainly responsible for the sharp upturn in the graph since about
1950. A comparative study of the literature on management accounting
prior to and since that date reveals the enormous impact which this
cross-pollination has had on the development of accounting thought, an
impact which has yet to work itself out in the body of knowledge we call
accounting theory. However, we can perceive this impact in the form of the
various approaches to accounting theory which will be identified in
this book, particularly the behavioral and communications approaches.

CRITICISMS OF ACCOUNTING

Such pervasive growth might suggest that accountants were doing
something right. On the contrary, however, many serious criticisms of
accounting have been voiced, both inside and outside the accounting
profession. Accountants claim that their work is useful to stockholders,
but financial statements do not show realized and liquidated profit avail-
able for dividends, or cumulative investment, profits, and dividends to
date. They claim that their work is useful to creditors, but statements of
financial position do not reveal current market values of assets and legal
rights against them. They claim to assist in tax assessments, but financial
statements must be reworked in accordance with fiscal legislation to
provide a figure for taxable income. And financial statements do not report some important magnitudes such as value added, which would be useful in negotiating with labor unions.

Until forty years ago, there was little criticism of accounting by accountants. A landmark was the publication in 1939 of Kenneth MacNeal's "Truth in Accounting," which attacked contemporary financial reporting standards with what the author himself called "ill temper and sweeping denunciation." A CPA with many years' experience, MacNeal dealt to some extent with generally recognized abuses, such as bypassing the income statement with profits and losses, and failing to recognize known investment losses. In the intervening thirty-five years these abuses have ceased to be the main target and to a great extent accountants have been successful in eliminating them. Most of his strictures, however, were leveled at the accountant's unwillingness to "value," let alone depart from historical costs, with the result that the figures contained in financial statements had no relation to "the truth."

The truth, following Fisher and Canning, lay in "the meaning of value in its economic aspect," which was well known and complete enough to serve most practical purposes. "A balance sheet and profit and loss statement purport to state values. In order to fulfill their purpose they must state values according to economic concepts . . . . This is a very misleading proposition; economics is not a science of values but a theory of relative prices. It was precisely on this point that modern economic theory acquired its strength, namely, the recognition by the medieval Schoolmen that the domain of truths capable of being proved by reason was limited and that many doctrines must be accepted on the basis of faith alone. Thus, economists who followed Thomas Aquinas and Duns Scotus turned away from questions of value, a subjective concept, and occupied themselves with questions of price, an objective reality.

MacNeal predicted one of two outcomes: either accounting principles and practice would remain unchanged, with the accounting profession declining in reputation and remuneration, or accountants would supply the public with "the truth" and prosper accordingly. During the intervening thirty-five years there has been very little change in accounting principles and practice, but the accounting profession has increased in numbers and prosperity as never before. This observation alone should ensure that MacNeal's criticisms are carefully examined and not simply taken at face value.

Since MacNeal wrote there have been innumerable restatements of his criticisms, but the rationale has changed subtly over the years. Although many critics still proceed from the assumption that accounting can be referred to a framework of economic theory, it has become unfashionable to call this the truth. Instead, the critics direct attention to the need for information useful in making economic decisions. The desired values are not intrinsically good, but acquire their virtue from the decision models which call them forth.

Thus accounting is being criticized for many reasons: that it is based on irrelevant historical costs instead of opportunity costs; that it provides only a description of the past, but no prediction of the future; that its models consist exclusively of identities but lack behavioral functions and do not lend themselves to optimization procedures; that it ignores psychological factors and uses "arbitrary" allocation procedures . . . that the balance sheet is not comprehensive enough because its inclusion criterion of measurability is too superficial; that the additivity assumption on which it operates is illusionary [sic]; that its measures are not accompanied by error estimates, etc . . . .

It will be one of the aims of this book to examine these criticisms in some detail. The task is clearly a fascinating one; as Brief pointed out in a recent article, the revolt against accountants has been brewing for nearly 100 years and certain accounting problems appear to be perennial and impervious to regulation and legislation. At this time, however, we are interested principally in their effect on the need for accounting theory.

THE NEED FOR ACCOUNTING THEORY

It is in the context of the tremendous growth in accountability knowledge and the accompanying fundamental criticisms of accounting and accountants that the need for accounting theory has manifested itself. In Chapters 2 and 3 we shall outline the historical development of accounting theory; here we examine the concept, and explain the relationship between theory formulation and research methodology.

A theory is a systematic statement of the rules or principles which underlie or govern the set of phenomena. The theory is viewed as a framework for the organization of ideas, the explanation of phenomena and the prediction of future behavior. Accounting theory is that branch of accounting which consists of the systematic statement of principles and methodology, as distinct from practice. Thus, the rule of conservativism belongs to the subject of accounting theory; the practice of providing for future losses from current doubtful receivables, being a question of practice, does not. It is clear, however, that theory cannot be divorced from practice, which it underlies, explains, and attempts to predict. There is not and cannot be any basic contradiction between theory and facts.

A theory is above all an explanation. There is a widespread misconception that a theory must aid in prediction, but not all theories do. The theory of evolution, for example, has no predictive ability whatsoever; it is impossible to use it to forecast changes which will take place in living things. Similarly, a political theory may explain revolution in socioeconomic terms, but could not predict that Chile would become the first country to vote a communist government into power, or to liberate itself from one.

A theory is an explanation, but not every explanation is a theory in the scientific meaning of the word. Epistemology is the science of the method or grounds of knowledge, and a Theory must conform to the rules of this science. In everyday language we use the word theory to denote a speculation, a conjecture, even a doctrine. In science, a theory is an explanation of phenomena which accounts for them to the satisfaction of knowledgeable persons, and this presupposes that the theory consists of propositions, each of which can be established by empirical research or is necessary
for the explanation in question, and has not been demonstrated to be false. For example, an economic theory may utilize the empirically verifiable concept of a production function, and the unverified but undisproved motivational assumption of profit maximization, to explain the supply curve.

There are three main views as to what a theory is, referred to as reductionism, instrumentalism, and realism. Reductionism begins from the assumption that theories do not refer directly to observables (percepts) and do not make statements which are directly testable. They do, however, provide a disguised reference to observables, a kind of shorthand which can be translated back into the observables themselves. This view has been criticized on the grounds that all theories contain terms which cannot be translated in this way, including those which no reputable theorist wishes to abandon. Further, a theory which could be supported in all its terms by explicit definitions would be a static theory, incapable of growth and therefore useless for explaining or predicting new phenomena.

Instrumentalism views theory as a tool bag or set of calculating devices, to be used in observational statements. This view emphasizes the abstract and systematic role of theories and their use for explanation or prediction, but makes no reference to content. In this framework, a theory can be true or false, only logical or illogical.

Realism is the term used for the view that theories are bundles of propositions, each of which may be a true or false statement referring to real-world phenomena or objects. If each of the propositions is believed to be true, then we have a complete concordance of theory and fact. The approach to theory used in this book is best described as realistic. Another distinction which is often encountered is between positive and normative theories. A positive theory explains what is, a normative theory, what ought to be. It is clear that, ideally, there should be no such distinction, and Gunnar Myrdal has drawn attention to the political assumptions underlying positive economic theories. A good accounting theory is both positive and normative, as it will explain practice in terms of its usefulness.

The uses of accounting are becoming more and more sophisticated and require explanations of what was in the past, perhaps, taken for granted. Many of those with whom accountants work are graduate scientists, engineers, and humanists well grounded in logic and other aspects of epistemology. It is no longer sufficient for these critics to reply to their questions by saying, “this is the way it has always been done,” or “this is how it must be.”

Further, the professional liability of accountants to clients and third parties having been established by the courts, an increasing number of accounting issues is being presented to judges for decision in cases where the accountant is the defendant. In these cases the judge will not accept as a defense the argument that a particular practice is acceptable to the accountant’s professional association, or conforms with rules and principles arrived at outside the law, unless that practice or those rules and principles can be explained within the context of some body of knowledge recognizable as accounting theory.

Finally, accountants are being challenged by the existence of new problems, to which traditional explanations of accounting do not seem to apply. Areas of accountability opening up to accountants currently include social accounting,12 human resource accounting,13 and public sector accounting.14 It is very significant that in 1975 the chairman of the Securities and Exchange Commission, Ray Garrett, Jr.,12 and Commissioner A.A. Sommer, Jr.,12 called for “a recognition that traditional models, rules and modes for disclosure” may no longer be adequate. Specifically, the impact of inflation on financial reporting was the principal issue, and the commissioners drew attention to the need for “innovative presentations” where a “single-valued, articulated set of financial statements” did not tell the “economic story”.

**WHAT IS RESEARCH?**

Explanation implies knowledge, and knowledge presupposes discovery, but just as every explanation is not a theory, so not every process of inquiry is research. The essence of research is the expansion of knowledge, through problem-solving techniques which have been tried and tested in different fields. The following description provides a framework for understanding what we mean by research.17

The initial step in research is problem-finding. Problem-finding can be generated either formally or informally. Formal problem-finding implies the use of p Jnctions and methodical procedures while the informal approach is subjective and non routinizable.

Observations of others in prior research is one of the most productive sources of formal problem finding, since new problems may arise which indicate that expanded research is needed. Other formal approaches to problem-finding are:

The Analog Method uses knowledge gained in one area to formulate a hypothesis in a related area.

Renovation is used to replace defective components with a view to restoring or improving the effectiveness of a theory.

The Dialectic Method consists of developing alternative methods for challenging, refining, or disposing of existing or proposed theories. It evaluates the advantages and disadvantages of different courses of action.

The Extrapolation Method extends current trends into the future and postulates questions relative to the predicted outcome.

The Method of Morphology analyzes all possible combinations of related problems.

The Decomposition Method breaks problems down into their component parts and analyzes each area.
The Aggregation Method takes research findings or theories from other areas and applies them to more complex problems.

Informal methods are also utilized in problem-finding:

Conjectures are hunches or intuitive feelings frequently used by decision makers.

Phenomenology is the description of the formal structure of phenomena abstracting from interpretation or evaluation.

Consensual activity is a group definition of a problem.

Experience is the observation of the problem itself.

THE RESEARCH PROBLEM

A research need arises when there is insufficient knowledge to solve an existing problem. The problem must first be defined or stated accurately. A quality of a well-defined problem is that it represents in all essential respects the environment from which it is drawn. Inadequate definitions can arise because of descriptive (what is) and normative (what should be) judgments or because of time-dimension deficiencies, such as taking a problem which has been critical in the past and assuming that it is also critical at the present.

Once the problem is identified and defined it should be put in a solvable form. This is referred to as hypothesis formulation. Frequently problems are posed in global or universal terms impossible to investigate.

A hypothesis is the building block from which a theory is constructed and can be most easily recognized as a proposition of an "if . . . then" variety. In this form it will suggest experiments whereby the proof or disproof of the proposition may be undertaken. It may be described to an accountant as the journal entry of research methodology, the means whereby a problem is translated into a convenient form for study; convenient because it is acceptable to the researchers seeking to replicate the experiments it suggests.

For example, the problem "what information should be provided to investors" is incapable of solution in that form; it is too wide, too general, and suggestive of too many different solutions between which we are unable to choose. Research methodology requires that it be restructured as a set of hypotheses, such as: "If accounting policies are disclosed to investors, then investors will be able to distinguish between companies in respect of quality of earnings." This restatement directs attention to the possibility of using established mathematical techniques for measuring discrimination, established financial techniques for measuring quality of earnings, and established sampling techniques for identifying investors. It also suggests experimental design, which is a central part of research methodology.

RESEARCH METHODOLOGY

A prime factor in the concept of research methodology is something known as scientific method. While scholars argue internarily about what is meant by scientific method, they behave as though its meaning is generally understood. We shall therefore attempt an explanation, knowing that many will disagree.

Two primary methods of reasoning can be observed in the discoveries which lead to knowledge: induction and deduction. Induction can be defined as reasoning from the particular to the general; deduction from the general to the particular. Historically, Roger Bacon is identified with inductive reasoning; Descartes with deductive. Modern science, of which Galileo is the acknowledged father, combines induction and deduction interactively. Galileo observed that heavy objects fall with increasing speed, and from these particular observations he arrived inductively at a hypothesis—that the speed is directly proportional to the distance. Lacking the measuring equipment to test this hypothesis he used deductive reasoning to arrive at the conclusion that the hypothesis was incorrect, because it implied that objects falling unequal distances would require the same elapsed time, a proposition which could easily be disproved by observation. This led to a new hypothesis, that the speed is directly proportional to the time elapsed, suggesting the experiment of rolling balls down an inclined plane.

The research sequence can be viewed as a cycle of observation → hypothesis → experiment → conclusion → observation, in which the mode is sometimes inductive, sometimes deductive. Underlying the process is the indispensable element of inspiration, which feeds observation and the choice of the problem, the construction of the experiment, and the inference which supports the conclusion.

Research methodology can also be viewed narrowly as a set of strategies, domains, and techniques employed in hypothesis testing. Of these the central and most important is the selection or construction of a model. A model is a correct representation of something else, which nevertheless abstracts from some of the properties of the thing being modeled. A model automobile may have no motor; a model ship may be unable to float. These features have been assumed immaterial in view of the purpose which the models are to serve, the automobile as a toy, the ship for display. In the same way, a model in research is a construction which permits the observation of the effects of certain selected variables identified by the hypothesis, and may therefore abstract from aspects of the reality modeled which are unaffected by the variables selected, or effects in which the researcher is not interested.

In summary, a theory is a complex set of rules or principles based upon knowledge preferably derived from research. Research is characterized by a certain methodology, which is a reliable set of methods. A method is a family of models which have been found useful for hypothesis testing. A theory, therefore, is essentially a set of acceptable hypotheses.
RESEARCH IN ACCOUNTING

Research in accounting is of relatively recent origin. It is clear, however, that abundant opportunities for research exist. Virtually every principle and rule of accounting is unsupported by knowledge scientifically obtained. This suggests that in spite of the need, little research has in fact been carried out. The critical weaknesses of much accounting research are the absence of hypothesis formulation and of research methodology and the undue reliance on the practice of counting heads.

The more important research strategies which have been used in accounting research appear to be 1) opinion, 2) empirical, 3) archival, and 4) analytical. Opinion research of an informal kind is widespread and underlies the pronouncements of professional institutions. Formal opinion research involves surveys using questionnaires and polls, with or without interviews. Empirical research, in which what is studied lies within the experience of the researcher, includes the descriptive work involved in writing case studies as well as the observation of that which can be perceived either in the field or in a laboratory. Archival research is basically the examination of recorded facts, and since accounting by its very nature consists of recorded facts, most accounting research is archival.

The library search is a characteristic method of archival research. Analytical research involves the adoption of analytical methods from other disciplines for the purpose of solving problems in accounting; the use of mathematical models is a frequent example.

The methodological limitations of accounting research, however, are not the central problem in the development of accounting theory. One critical problem is the failure of many researchers to understand that an explanation of something in accounting must start with observations outside accounting. Just as a definition which contains the word being defined is useless—"cost accounting is accounting for costs"—so a hypothesis which relies on observations of what accountants do in order to explain why they do it is of little use in theory construction. The concepts "asset," "liability," "equity," "revenue," "expense," and "income" must be established without reference to their function in accounting before we can use them to explain accounting.

The other problem has been put succinctly in these words:

But of all the phenomena science tries to deal with, it has been least successful with those involving human behavior. Few scientific findings in this sphere conflict to any great extent with the ordinary man's experience and common sense. And when they do, more likely than not it is science that turns out to have been wrong or incomplete.19

CLASSIFICATION AND ACCOUNTING THEORY

A taxonomy is a classification designed to aid the analysis and interpretation of a field of inquiry. A classification of accounting systems should be of value in many ways:

- By sharpening the focus of description and analysis
- By assembling a mass of data in a form suitable for explanation
- By permitting the isolation of critical factors which must be considered in setting accounting standards

By adaptation, a good taxonomy becomes a predictive tool, enabling the analyst to determine probable outcomes of decisions to change a system. More importantly, a taxonomy should lead to the development of models which permit inferences to be drawn from changes in causal and modifying factors to changes in accounting systems.

Classification in accounting has only recently begun to consider the theoretical implications of taxonomy. The most frequently encountered classification of accounting systems, into financial, tax, managerial, cost, government, and so on, lacks the qualities of an efficient classification in that the classes are not mutually exclusive.

The role of classification in financial accounting appeared to be well understood and generally agreed upon. New research was pursued. In the area of practice there was (and is) widespread use of charts of accounts which reflected the balance sheet and income statement categories underlying the well-known basic equation. In the area of theory, it was frequently pointed out that this was the fundamental process; Mattessich made it the point of departure in his quest for a measurement theory of accounting: "The most basic measurement is classification, a fundamental discriminatory process whereby the various categories can be identified and distinguished through numerals." The division into classes can be a scale of measurement, and he gives as his example, a chart of accounts.20 The same proposition is found in such widely different sources as a book on cost accounting, which identifies the five basic classifications of assets, liabilities, proprietorship, revenues, and expenses,20 and a contribution to the normative theory of accounting, where the last three were given the names, residual equity, income, and cost.21

The area of managerial accounting, however, did not disclose any comparable uniformity of ideas, and the study of different classifications of costs not only threw up the possibility of alternative sub-classes but also revealed a weakness in the basic classification used by financial accountants. This was the observation that a chart of accounts should not be based upon the balance sheet, because many accounts required by a business are eliminated in the preparation of the financial statements, in particular the so-called "clearing accounts."22

By 1969, when Sorter drew attention to the problem,23 the idea that accounting events were not given in nature had been recognized widely, and attention was being devoted to "economic events" as the phenomena which accountants were attempting to interpret and represent. Unfortunately, this concept led to the identical classification scheme as did ordering events. Sorter postulated that accounts were needed to provide information to be used in decision models, that individual users would develop their own input values, and therefore a financial statement should include all items relevant to any decision model. The startling implications of this observation led Johnson to attempt to design a structure for a financial accounting system of this type.24
The principal source of a user-oriented classification of accounting is a book devoted to classification systems and financial statements. Fitzgerald and Schuber extended their inquiries to three different countries and found that they could identify four bases: intended use, liquidity, degree of permanence, and legal dispositions. A book review by Russell Taussig in *The Accounting Review* for July 1963 (p. 665) suggested that the authors had "developed elements of information theory as applied to accounting."

**CONCLUSION**

In the last analysis, all systems of inquiry possess the following five structural characteristics:

1. User psychology, or how a person perceives and evaluates the world (see Table 1-1)
2. The type of decision to be made
3. The institutional or organizational context
4. The mode of presentation of information (personal or impersonal communication, verbal or written, public or private)
5. A philosophy of evidence congruent with number 1

**TABLE 1-1 PSYCHOLOGICAL APPROACHES TO INQUIRY**

<table>
<thead>
<tr>
<th>System</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locke</td>
<td>Begin with experience, judgments, basic facts, and inductively derive or predict a more general theory. Heavy weight given to judgment.</td>
</tr>
<tr>
<td>Leibniz</td>
<td>Begin with a basic theory or axioms and deduce general positional truths; collect evidence to validate theory and develop single &quot;best&quot; model for communication to users.</td>
</tr>
<tr>
<td>Kant</td>
<td>Begin with at least two alternative theories; collect data to verify each theory; present several explicit theories, with evidence; allow user to choose &quot;best&quot; model.</td>
</tr>
<tr>
<td>Hegel</td>
<td>Begin with at least two completely antithetical theories; collect a single data set to evaluate all theories. Diialectical confrontation of models in conscious conflict enables user to formulate his own theory or model by creative synthesis.</td>
</tr>
<tr>
<td>Siger</td>
<td>Continual learning and adaptation; define &quot;wicked&quot; problems in a solvable approximation; combine theory and experience to redefine problem in closer approximation; constantly adjust complexity of inquiry to maximize information.</td>
</tr>
</tbody>
</table>

Source: George B. Washbys, op. cit., p. 67.

A book on accounting theory must deal with each of these structural characteristics, which will be discussed at length in subsequent chapters.

Important in this process is the distinction between percepts and concepts. Percepts are the objects of perception; concepts are the ideas we form concerning the objects perceived. The confusion of the two is a major logical error, responsible for many of the difficulties which accompany the exposition of accounting theory.

ENDNOTES

1. The expanded version of the AICPA definition put forward by Grady does nothing to remedy these defects. Paul Grady, "Inventory of Generally Accepted Accounting Principles for Business Enterprises," Accounting Research Study No. 7, New York: AICPA, 1965.
8. See Chapter 7.
16. In an address before the NAA meeting on March 18, 1975.
17. This section summarizes and adapts Chapters 1 and 2 of *Research Methodology and Business Decisions* by John W. Buckely, Marlene H. Bickley and Hung-Fiu Chang, National Association of Accountants, 1975.
SELECTED ADDITIONAL READINGS

Look up "theory" in reputable dictionaries, encyclopedias and other reference works. Other general references


Works on Research Methodology and Accounting Theory


THE DEVELOPMENT OF ACCOUNTING THOUGHT

While accounting appears to have been practiced at least since the beginning of recorded history, accounting theory is of comparatively recent origin. This may be due to the difficult, abstract nature of accounting thought, or perhaps to a gradual change in the scope and methods of accounting, which was thereby rendered more amenable to the formalized type of explanation which we call theory. Possibly there is some other cause; it is a matter for conjecture. The preoccupation of U.S. accountants (practitioners as well as academics) with theoretical questions has a more readily identifiable cause which will be considered in Chapter 4. In this chapter we will attempt to trace the historical development of accounting thought outside the United States.¹

A SHORT HISTORY OF ACCOUNTING: THE PRE-CHRISTIAN ERA

Excavations conducted by archaeologists invariably discover evidence that accounting was a feature of early civilizations. There are respectable hypotheses that both writing and arithmetic originated in the need to keep accounts, and that this first took place at the time of man's transition from hunter to cultivator. The origins of capital, in the form of a store of food, are also the origins of accounting.

Many of the early records which are recognizable accounts, or the raw materials of accounts, lack those systematic attributes of form and content with which we associate accounting today. They consist mostly of inventories, lists of commodities used as payments, contracts of sale or loan, and, more rarely, simple journal entries. Nevertheless, ancient accounts were both used and useful; a modern archaeologist, studying the records which were kept by the Chaldean merchant Ea-Nasir nearly five thousand years ago, was able to assert that he was trading at a loss.²

The force which provided the necessary impetus for the development of modern accounting was the introduction of money as a means of exchange. As with so many other discoveries it appears that the Chinese were the originators of this practice and that they used coined money some two thousand years before it appeared in Europe. Although Western
knowledge of Chinese accounting in ancient times is very limited, we do know that sophisticated forms of government accounting, including both historical accounting and budgetary control, existed in China as early as 2000 B.C., accompanied by an audit function performed by a high and independent public official. The coinage of money having a uniform value, therefore suitable for use as a medium of exchange, first took place in Europe in the seventh century B.C. Greek civilization, based on the secularization of an economy previously controlled by the priests, possessed a sophisticated system of public administration with accounting and auditing functions, of which details have survived. Banking and other commercial activities were conducted in ancient Greece, and accounting played an important role in them. Management accounting was used in business, as we know from the Zenon papyri. These rolls represent the records of the Egyptian estates of Zenon, a man who lived in the time of Alexander the Great, and which were managed by one Zenon. It is clear from these accounts that the practice of accounting, which we associate with the modern corporate form of business enterprise, was known and understood over two thousand years ago.

No accounting records have survived the fall of the Roman civilization, which extended from about 700 B.C. to 400 A.D. This has been attributed to the fact that the Romans kept their accounts on wax tablets, which turned out to be a most perishable material. No doubt the Goths and Visigoths did their part by destroying all remaining physical records. Tantalizing glimpses of Roman accounting occur in the legal codes of Gaius and Justinian, in the orations of Cicero, and in other literary sources. From these it has been supposed that the Romans used the bilateral account form and even that the double-entry system was known fifteen hundred years before Pacioli.

We do know that large-scale commercial and industrial operations were characteristic of the Greek and Roman civilizations, and that they operated complex organizations such as banking, shipping, and insurance. From the Zenon papyri and other records we know that basic principles of accounting, planning and control such as budgeting, the journal entry, financial reporting, and auditing were used by the Greeks, and therefore probably by the Romans. We are on more certain grounds when we view the modern history of accounting.

THE RISE OF THE DOUBLE-ENTRY SYSTEM

The destruction of the Roman and Byzantine civilizations was followed by a period of European history known as the Dark Ages. The feudal system of political organization rescued Europe from chaos and provided the stability necessary for the creation of economic surpluses. These surpluses represented the capital base on which the economic development of the Middle Ages was built. The conversion of a subsistence economy into a monetized economy was effected by the Norman adventurer-kings. The medieval period, therefore, saw the existence of conditions favorable for the development of accounting.

This development took place at several levels: government, business, and the medieval manor. Apart from banking, the conduct of business was largely a function of small traders and artisans who kept accounting records of a crude memorandum nature, sufficient for their restricted information needs. Large-scale business operations were carried on by the banks, and the church, the latter through the monastic system, and we find the banks using financial accounting based on principles which eventually became double-entry bookkeeping, and the monasteries using management accounting, based on essentially statistical models.

We have mentioned the use of the bilateral account form long before this period. The integration of this form into a system of double-entry accounts appears to have evolved during the twelfth or thirteenth centuries A.D. It may or may not have been an invention of the Italians who at that time dominated banking, trade, and manufacturing there was. Larger in scope the Liber Abacci of Leonardo of Pisa, the Italians adopted Arabic in place of Roman numerals, which was an additional factor favoring the expansion of the concept underlying accounting. Although it is believed that the idea of double-entry was originated by banks, the oldest surviving record which incorporates double-entry principles is the Giovanni Farolfi branch ledger (Salon, France) for the year 1299-1300. More familiar are the double-entry trading accounts of Donald Sarno and Brothers, merchants of Venice, from the first quarter of the fifteenth century. This method of Venice became the model for the celebrated exposition of double-entry bookkeeping published by Pacioli in 1494. The first professional organization of accountants was founded in Venice in 1581. The method of Venice then spread throughout the world, partly through translations and plagiarisms, partly through being transplanted to other countries by Venetian traders and clerks.

Giovanni Farolfi and Company were a firm of Florentine merchants, and it is noteworthy that the banking and manufacturing center of Florence experienced a parallel development of double-entry bookkeeping during the same period as Venice. In fact, Florentine accounting appears to have been more sophisticated than the method of Venice and more comparable with modern accounting systems. Daunini (1335-1410) conducted a large-scale international business — what would today be called a multinational corporation — using a full double-entry system of accounts for the control of foreign as well as domestic operations. The Medici not only kept complex accounts for their banking operations, but also integrated cost accounting records for textile manufacturing. In these latter records we find the first examples of accounting for depreciation, interest on capital, and cost of production.

THE SOMBART PROPOSITIONS

Werner Sombart, a political economist of some note, was born in 1863 and died in Germany in 1941. He studied law, economics, history, and philosophy at the Universities of Berlin, Rome, and Pisa, eventually becoming a professor of economics in Berlin. His major work, Der Moderne Kapitalismus, is a book in praise of capitalism and in it he predicted that capitalism would reach its zenith in the twentieth century. Sombart's theme led him to examine the accounting records of the
period during which capitalism developed in Europe, and he identified three causal factors which contributed to the growth of the capitalist enterprise:

1. The law
2. Business management techniques
3. The market

The law provided a framework for the firm, the capitalist enterprise as a legal entity, and the market provided a means for it to become a financial entity. Business management techniques relied primarily on accounting, and Somert put forward four explanations for the role which accounting played in this connection:

(i) By representing the flow of capital through a business. "...from the capital account to the transaction accounts through the profit and loss account and back into the capital account," accounting facilitated a concentration of wealth by means of profits.

(ii) By restricting the observations of the entrepreneur to that which could be captured in the accounts, accounting fostered the development of economic rationalism: quod non est in libris, non est in mundo. ("What's not in the book doesn't exist.")

(iii) Systematic organization of the affairs of the business was achieved through accounting.

(iv) Double-entry bookkeeping facilitated the separation of management from ownership by rendering the concept of capital objective and by permitting the separation of business accounts from household accounts.

Winjum has examined these propositions in the light of accounting textbooks and records produced in England during the period 1500–1750 and has concluded that, while some evidence exists in support of all four, the primary advantage of double-entry bookkeeping was the creation of "order from chaos." The main purpose of accounting revealed by the textbooks and the main use of accounting revealed by the records was the systematic organization of the affairs of the business.

ACCOUNTING IN ITS AGE OF STAGNATION

Largely as a consequence of the influence which Pacioli's work had upon the business world of its time, but also partly because that world changed very little between 1494 and 1775, the period which followed the invention of double-entry bookkeeping has become known as accounting's "age of stagnation." The principal feature of this period is the extension of the method of Venice to other countries as they came to dominate world trade. Thus, we find double-entry accounting spreading to Germany, the Low Countries (now Belgium and Holland) England, Scotland, Portugal, and Spain during this period.

The emphasis of both literature and practice was on accounting as an aid to the management of a business, rather than as an information source for external users. The owner of a business was expected to keep accounts, and instruction in double-entry bookkeeping was a part of the education of the middle classes. Because the accounts were for one's own use, we do not find the preparation of financial statements and their audit occupying a central place in the expositions of textbook writers. Nor have we inherited any period income statements or balance sheets of the kind with which we are now familiar.

The prevailing practice was to continue the accounts through several years until some event occurred which called for a balance to be drawn up—the merchant's death, the filling of an account book, the disposal of the business. We know that the accountant-businessman sometimes prepared financial statements for specific periods, and the profit and loss account, precursor of the modern income statement, was, as its name implies, a listing of profits and losses on individual ventures or lines of business. Similarly, the balance sheet was a listing of balances left over after profits and losses had been closed out to the profit and loss account. Nevertheless, the concepts of capital as the difference between assets and liabilities, and of net profit as the change in capital between two dates (after adjusting for capital contributions and withdrawals) was well established during the age of stagnation.

THE INDUSTRIAL REVOLUTION AND THE ENGLISH COMPANIES ACTS

We will restrict ourselves here to a description of the way in which accounting and financial reporting developed in England from about 1775 (although a comparable sequence of events can be noted in other European countries) expanding on the reference to this aspect in Chapter 1.

The industrial revolution, which is conventionally regarded as beginning in the 1760s with the invention of power machinery, had several consequences of far-reaching importance to the history of accounting. One was the growth of the large-scale enterprise, beyond anything previously known, requiring quantities of capital greater than could be provided by one man or one family. Another was the introduction of the variable time period into production in the two senses of the time period required to amortize machinery and other equipment, and the time period required for production itself.

The demand for capital involved increasing numbers of savers in investment situations, either directly or through financial intermediaries such as banks and insurance companies. The corporation proved to be the most satisfactory form of business organization from this point of view. As more and more individuals and institutions were involved as stockholders, the financing function became separate from the management function, which has been designated the managerial revolution. In this situation the owners of the business were no longer able to inform themselves by keeping accounts for its operations, because they took no part in the management of the enterprise.

To afford these outside investors a measure of protection, the British government introduced a succession of Companies Acts. These laws placed certain obligations on the promoters and managers of corporations as part of the price they had to pay for the privilege of incorporation. The 1844 Act required the directors of a company to supply the stockholders with audited balance sheets annually, and the 1865 Act provided
a model form of balance sheet for this purpose. This legislation has been progressively supplemented and refined to the present day. It is aimed at providing investors and other financiers with audited information in the form of accounts on which to base their investment and disinvestment decisions and from which to judge the manner in which the directors of the corporation have managed the business.

The lengthening of the time period of production had two principal effects. These were the development of business credit, as distinct from investment, and the gradual transfer of attention from the balance sheet to the profit and loss account. Business credit, by its nature short-term and revolving, required decisions for which short-term information about financial position and results was necessary. The need to prepare more frequent financial statements which would reveal profitability and liquidity necessitated the development of accounting. In the preparation of financial statements, the analysis of changes in capital became necessary for a variety of operating decisions. This led to the establishment of rules for income statement presentation—in particular, for calculating depreciation, the valuation of inventories, revenue recognition, and provision for future expenditures arising out of past activities.

A by-product of the industrial revolution was the growth and refinement of management accounting. The use of accounting and other quantitative methods of management planning and control has been noted in Ancient Greece and in the medieval manors, and the mortgaging of property to cover short-term deficits. The age of stagnation. Some cost accounting was done, varying in sophistication from the ad hoc calculations of individuals to the integrated and detailed analyses of costs of production. Thus, the subject of cost accounting, encompassing the accounts necessary for planning, control, and analyzing costs, acquired a separate existence during the second half of the nineteenth century. This separation of cost from financial accounting has persisted to the present, in spite of practical and theoretical efforts to integrate them. For this reason, there appear to be two separate theories of accounting and reporting, an unsatisfactory state of affairs in that it should be possible to present one unified theory of accounting.

EARLY ATTEMPTS AT ACCOUNTING THEORY

Historically, there have been three basic approaches to the development of accounting theory. Attention was first directed to the account itself, and attempts were made to construct rules for the operation of accounts. This led to the celebrated personification theories (discussed later in this section) in which the account was ascribed the qualities of a person who received and gave. But an account is not a person, and recognition of this fact directed attention to the transactions and events which are in great part the subject-matter of accounts. This led to attempts to formulate rules and standards designed to ensure that objective economic facts were recorded and reported. It then became clear that accounts contained values other than those represented by transactions and events, and that the very concept of value was subjective. Attention is now directed to the user of accounting, and contemporary accounting research is heavily influenced by such questions as: is it useful? to whom? is it used?

The transfer of accounting knowledge from one age to another, and from one part of the world to another, was accomplished by writing, teaching, and example. Until the twentieth century, however, very little of this involved theoretical explanation separate and distinct from practical instruction. In the absence of an accounting theory, early writers had great difficulty in expressing their objectives, models, and systems. They resorted in most cases to precept and admonition, frequently bolstered by appeals to the deity.

A few writers attempted generalizations which would avoid the necessity to memorize many rules and procedures. One of the earliest devices was the personification theory of accounts. This device imputed personalities to accounts for things, so that they were treated as living persons. Personification permitted the formulation of general rules, such as “debit him that receives; credit him that gives,” which appear to have explanatory qualities.

Personification took three forms: the attribution of human qualities to inanimate objects, the fiction that each account was a branch of the owner’s personality (e.g., “John Smith his goods”) and the construction that the account represented a clerk, who received and gave up value for the proprietor of the business. Of these, the most useful was the second, for it permitted the accounts of a business to be classified into personal accounts, or accounts of persons outside the business (e.g., debtors, creditors) and impersonal or real accounts, or accounts for objects owned by the owner. The former, of course, would be equal and opposite to the personal accounts kept by others, and must therefore conform to general rules. The latter, being peculiar to the particular business, could be handled in different ways.

The rise of the income statement, or profit and loss account, was accompanied by the development of a third class of nominal accounts for revenues and expenses. At this point personification gave way to severe strain. How does one personify, for example, discounts received or discounts allowed? This, coupled with a growing realization of the artificial nature of the device, led to its abandonment. By the latter part of the nineteenth century explanations were being phrased in terms of transactions. The second generation of theorists was concerned with images of form and structure, and they attempted to explain accounting by demonstrating the effect of accounting entries on these images.

THE PROBLEM OF CLASSIFICATION

The problem of classification is fundamental to any science, and early writers on accounting attempted to classify ledger accounts in a logical order. An example of the transition from personalization to some other basis can be found in Abraham de Graeff’s Instructie van het Italiaans
Boekhouden ("Instruction in Italian Bookkeeping") published in Amsterdam in 1693. He divided accounts into three groups:

1. Accounts of the merchant as a person: Capital, Profits and Losses, Insurances, Reserves, Housekeeping, Interest.
2. Accounts of other persons: Debtors, Creditors, Participations in Trade Ventures, etc.
3. Accounts for merchandise: Goods in store, Goods in Ships afloat, Cash available for purchases, etc. (the real accounts).

Edmond De Grange in his book La Tenue des Livres Rendue Facile ("Bookkeeping Made Easy"), published in Paris in 1795, divided these real accounts into five classes: Cash, Goods, Bills (Notes) Receivable, Bills (Notes) Payable, and Profits and Losses. It is noteworthy that what was a personal account to de Graaf was a real account to De Grange. Followers of De Grange became known as the "Cinquecentistes" or five-account school.

In Belgium, H. Godfroid attempted to integrate cost and financial accounts for manufacturing concerns; requiring more classes, he borrowed from literary sources and in a textbook published in 1864 Godfroid suggested the use of titles, chapters, and sections for classifying accounts. In this scheme, one of the titles was used for departmental operating accounting, i.e., for cost accounts. Because of its expanded content, Godfroid's scheme became popular in Europe, and some of his followers decimalized his classification. By the end of the nineteenth century the decimal chart of accounts, based primarily on a classification of balance sheet accounts but including a section for operations, was in widespread use for didactic purposes as well as in actual accounting systems.

The first decimal chart of accounts to give equal weight to the income statement was published by Eugen Schmalkenbach in 1926. Schmalkenbach was a pioneer European accounting theorist, and his Dynamische Bilanz ("Dynamic Accounting"), originally published in Germany in 1916, was severely critical of the emphasis on the balance sheet. He argued that the objectives which were generally ascribed to the balance sheet were incapable of realization. The balance sheet could not present the value of the business as a going concern, because that value was different (more or less) from the sum of the individual parts, of which only a selection appeared in the balance sheet. The balance sheet was not a statement of financial position for the same reason and also because the assets and liabilities were not shown at liquidation amounts. Instead of pursuing unattainable objectives with regard to the balance sheet, Schmalkenbach argued, accountants should concentrate on improving the profit and loss account (income statement) with the objective of accurately measuring the results of operations. This would realign the balance sheet to the roles of a list of balances in suspense, or "a step between two income statements" as the contemporary phrase has it. An example of a modern chart of accounts derived from Schmalkenbach's classification is reproduced as on Table 2-1. It is noteworthy that more classes are allocated to income statement accounts than to balance sheet accounts.

THE BASIC EQUATION

The basic equation appears in the Italian and American literature during the nineteenth century. According to Fabio Besta, one of the Italian users of this equation, the central construct of a business is its capital, a pure abstraction without juridical meaning. It is found by deducting liabilities from assets. The American authors go a step further; they view capital as a representation of proprietorship. Thus, we call this early theory a proprietary theory of accounting.

The transactions of a business can now be referred to this equation to explain why we account for them as we do. If the transaction increases assets or decreases liabilities, it increases capital; Besta called this a modifying transaction. Transactions which alter assets or liabilities without modifying capital, he called permutable transactions. This permits the operation of accounts to be expressed in the form:

<table>
<thead>
<tr>
<th>Assets</th>
<th>=</th>
<th>Liabilities</th>
<th>+</th>
<th>Owners' Equity</th>
</tr>
</thead>
</table>

The basic equation, being expressed in balance sheet terms, presented difficulties for the explanation of entries for buying and selling and for expenses and other revenues. It was therefore expanded into the form:

Assets + Expenses = Liabilities + Revenues + Owners' Equity (Capital)

By cancellation of expenses against revenues, this becomes the basic equation again. The income statement represents the substitution of revenues for expenses, the result of which is net income or loss, an increase or decrease of capital.

One of the advantages of the basic equation is that it also explains the statement of changes in financial position, or funds statement. Cancellation of expenses against revenues in the expanded equation turns it into the following form:

Assets = Liabilities + Owners' Equity + Δ Owners' Equity

and the funds statement can then be expressed as:

Δ Assets = Δ Liabilities + Δ Owners' Equity.

However, the basic equation still leaves the terms asset, liability, owner's equity, revenue, and expense undefined.

THE INTERNATIONAL CHART OF ACCOUNTS

An international accounting conference which took place in Paris in 1951, Les Journées Internationales de la Comptabilité, resolved to put forward a proposal for a chart of accounts which would be truly international in scope. The chart would have to reflect the basic characteristics
of the firm, independent of peculiarities of national legislation, accounting conventions, or professional standards. The conference committee adopted a classification published by Joseph Anthonioz in 1947, which was based on a paper "The Cycle of the Economy" prepared by Maurice Lucas for the International Accountants' Congress held at Barcelona in 1926.

The classification is based on a proposition derived outside accounting: that a firm is an entity which takes savings from the economy, invests them in the forms of fixed and circulating capital, and by incurring costs produces goods and services for distribution to the economy. This proposition provides us with a model for the firm, depicted in Table 2-2. The model has two phases, a planning phase, which starts with the distributed product and proceeds backwards to determine the amount of savings required for investment, and an action phase, in which invested savings are transmuted into distributed products.

### Table 2-2: The Investment Cycle

<table>
<thead>
<tr>
<th>Direction of the planning phase</th>
<th>Direction of the action phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment</strong></td>
<td>Investment = the allocation of scarce resources to production</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td>= capital</td>
</tr>
<tr>
<td><strong>Finance</strong></td>
<td>= the productive capacity required for any investment cycle</td>
</tr>
<tr>
<td><strong>Credit</strong></td>
<td>= fixed capital</td>
</tr>
<tr>
<td><strong>Supply</strong></td>
<td>= the means of payment required in order to function in a money economy</td>
</tr>
<tr>
<td><strong>Costs</strong></td>
<td>= working capital</td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>= those relations between the firm and its environment which affect its needs for finance</td>
</tr>
<tr>
<td><strong>Distribution</strong></td>
<td>= the raw materials to be transformed by the firm during its production activities</td>
</tr>
<tr>
<td><strong>Results</strong></td>
<td>= the factors of production used up by the firm during its production activities</td>
</tr>
<tr>
<td><strong>Expense</strong></td>
<td>= the production activities of the firm in the form of goods and services produced, at cost value</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td>= the transfer of production to the environment, at proceeds value</td>
</tr>
<tr>
<td><strong>Profit or loss</strong></td>
<td>= the difference between costs and revenues</td>
</tr>
</tbody>
</table>

Note: Profit increases capital, loss decreases capital.

We then structure this model by including under each term the features which are empirically observable in the real world. Firms obtain savings in two forms, proprietorship and debt. Fixed capital takes many forms: land, plant, equipment, livestock, goodwill, etc. Circulating capital consists of the three elements: cash, credit, and inventories. Since credit is a two-way street, circulating capital (or working capital as it is called in business) is represented by the equation: working capital = current assets - current liabilities, where current assets is a summation of cash, inventories, and credit recognized by the firm, and current liabilities is a representation of the firm's credit.

Costs are observable in many forms and may be classified by type (natural classification), by object (functional classification), or by variability (behavioral classification). A classification by type is into wages and salaries, purchased supplies, depreciation, interest, and taxes. A functional classification is into production costs, selling costs, and administrative costs. A behavioral classification is into fixed and variable costs. Production is observable in the forms of work in process and distribution in the forms of individual products, or product groups, of goods or services.

It will be noted that profit or loss (net income) has not been mentioned. In this theory of accounts approach, as Hendriksen calls it,¹¹ profit is the difference between production and distribution measurements. It would be possible for the proceeds of distribution to be imputed back to the factors of production so that neither profit nor loss resulted. However, we observe that business firms operate under conditions of uncertainty, producing either a profit or a loss, which must be accommodated.

In the chart in Table 2-3 the model is depicted by representing the internal operations of the firm as a two-dimensional matrix, and the operations whereby the firm transacts with its environment (acquisitions and disposals) as a third dimension. The two dimensional matrix corresponds to the equation:

\[
\text{Saving} = \text{Investment}
\]

where

\[
\text{Investment} = \text{Fixed capital} + \text{Working capital}
\]

This will be recognized as the basic equation used by finance theorists, in the form:

\[
\text{Finance} = \text{Investment}
\]

The model can also be represented by means of the expanded equation:

\[
\text{Investment} + \text{Revenues} = \text{Fixed capital} + \text{Working capital} + \text{Costs}
\]

leading by cancellation to:

\[
\text{Investment} + \Delta \text{Investment} = \text{Fixed capital} + \text{Working capital}
\]
and the representation of the third dimension, which underlies the fund statement, as:

\[
\Delta \text{Investment} = \Delta \text{Fixed capital} + \Delta \text{Working capital}.
\]

It is immediately apparent that this model has some explanatory potential, since it differs from the basic equation of traditional accounting theory only in classifying current liabilities as part of working capital and not as investment, and ties in also with the theory of finance. As we shall see, contemporary accounting practice is best explained by reference to this model, which nevertheless has severe limitations. We shall call this the traditional model used in accounting, in either of the two forms illustrated.

**LIMITATIONS OF THE TRADITIONAL MODEL**

The traditional model permits us to explain much of the subject matter of accounting; nevertheless, it is constrained by severe limitations. In the first place, it does not identify all classes of observations which should be included in the scope of accounting. As we saw in Chapter 1, many accountants attempt to define accounting in terms of information. Information is itself defined as *purpose-oriented data*, that is, data which has been selected for a particular purpose, such as, to use in a particular decision model. But selection of data presupposes a surplus of data, and the accountant is concerned first with data and only secondly with information. Since information is a function of the available data, some writers have attempted to identify accounting events as transactions and other changes in states which are perceived and recorded by accountants. But events do not occur labelled "accounting event"; the problem of perception remains.

In the second place, the model does not deal explicitly with the question of measurement, which we shall call *valuation*. *Valuation* is defined here as the representation of observations in monetary terms, and can be viewed simply as multiplying a quantity by a price. Thus there is a problem of determining quantities and a problem of determining prices; the two problems are frequently combined under the one question: how shall we measure? Reference to Table 2-3 will show that the measurement problem is not one but a succession of problems. Since the transmutation of savings into product goes through a series of stages, the question, how shall we measure, can arise at any one of them.

Much of the discussion of Chapters 8 and 9 will be devoted to the measurement problem. The wider question of what shall be included in the scope of accounting will be addressed in Chapters 10 through 15. Two accounting theories which have particular relevance to these questions may be mentioned at this time. The *proprietary* or ownership theory places the owner of the business in the center of the accounting model, so that all observations are made from his viewpoint. This leads to the inclusion of all changes significant to him; assets are things owned; liabilities are debts owed; expenses are losses and revenues, gains; net income is the change in the proprietor's capital during a period. This theory
suggests the inclusion of the owner’s nonbusiness assets, liabilities, revenues, and expenses, and the use of market prices for valuation purposes.

Although this theory corresponded well enough with the facts of business accounting preceding the industrial revolution, it failed to explain business accounting following the managerial revolution. The separation of ownership from management and the preparation of financial statements for the owners by the managers imply that personal factors should be omitted from the area of business accounting. The entity theory views the firm as separate from its owners and includes only the assets, liabilities, revenues, and expenses of the firm; net income is still a change in the proprietor’s capital during a period, but the capital is simply an interest in the firm. At the same time, market prices no longer represent appropriate valuations, because the owner cannot dictate market transactions to the firm.

CONCLUSION

There is a traditional accounting model of the firm which is widely used to explain and justify conventional accounting statements. Dissatisfaction with this model arises out of the observation that its use appears to constrain accountants in their efforts to produce information. This dissatisfaction has led to attempts to construct other, more basic models, which will be referred to in subsequent chapters. They include the communication model, the behavioral model, the economic theory model, and the macronomic or sociological model. Of these, the behavioral approaches are a prime object of current interest, and will be discussed in Chapter 17.

Because of the obvious similarity between the basic equations of accounting and business finance, a major effort has been made by some theorists to develop investment models as a basis for accounting theories. These theories proceed either from a cash budgeting model of the firm, like the one used in the study of corporation finance, or from a behavioral model of the functioning of financial markets, such as the ones used in the study of financial investments. The cash flow theories will be discussed in some detail in later chapters. The accounting theories based upon the efficient market hypothesis and on portfolio theory will be examined in Chapter 6 on the objectives of accounting.

The emphasis throughout this book will be on financial accounting theory, although a general theory of accounting embracing all aspects of the subject would be a major contribution to the field. In this connection, Carl Nelson has written that: “It would be well for writers concerned with income measurement and financial position measurement to eliminate any consideration of the use of financial statements for managerial decision-making.” Such an extreme position will not be taken.

ENDNOTES

1. Much of the material in this chapter can be found discussed in more detail in Michael Chatfield's A History of Accounting Thought, Hinsdale, Ill.: The Dryden Press, 1974.


4. A shorter work on the same theme, Der Bourgeois, was translated into English by M. Epstein as The Quimnseesse of Modern Capitalism, New York: L. P. Dutton & Co., 1915.


12. Some accountants reflect this approach in U.S. financial statements, by deducting current liabilities from current assets in the balance sheet. The practice is more common in the U.K.


SELECTED ADDITIONAL READINGS

Accounting History


The Traditional Model


Behavioral Theories of Accounting


ACCOUNTING THEORY IN THE USA

Until the twentieth century the contribution of the English-speaking world to the development of accounting theory was entirely pragmatic. Even today one can open a book entitled *Principles of Accounting* and find its author concerned entirely with method. The most virulent controversy before the 1930s was the dispute which centered on the notorious Jones of Bristol, and that one dealt with technical aspects of double-entry bookkeeping and the need for the journal.¹

The twentieth century has seen a radical reversal of roles. During this period the English-speaking world (the United States, the United Kingdom, Australia, Canada, and New Zealand in particular) has become a powerhouse of ideas about accounting: what it is and what it should be. In this chapter and the next we shall trace the course of this transformation, with the spotlight mainly on accounting in the United States.²

THE INDUSTRIAL REVOLUTION

A major factor was the industrial revolution and the related technological changes of the nineteenth century. The lengthening of the time period of production which characterized these changes produced a need to account for use separately from acquisition and thus directed attention to the cost allocation problem.

The processes of mass production may be contrasted with those of an artisanal economy. In the latter, manufacture was accompanied by payments at every stage—for materials when the work was put in hand and for labor as the work was executed, either in the workshop or in the worker's home. The difference between the money payments and the eventual money receipt when the work was completed was called profit and had to cover the craftsman's expenses, which were virtually all domestic in nature. This concept of profit is still used by economists, even though it is a pre-industrial one. It underlies the analysis of investment situations in terms of cash flows.

In factory production, however, the nexus between acquisition and use and between production and market was broken. The manufacturer produced for an unknown customer, in advance of demand, and therefore,
could not associate the eventual selling price with production. He acquired raw materials, machinery, and often labor in advance of production and therefore could not identify the cost of production without making assumptions about cost flows. The conceptual nature of allocation has been demonstrated by Thomas, who points out the artificiality—he calls it arbitrariness—of all accounting allocations.3

We must also be aware of a semantic problem which exists in the United States because of the use of the word “allocation” to refer to three distinct accounting processes. The first of these is assignment, the identification of payments with objects. The second is allocation, tracing the use of objects in a production process. The third is absorption, tracing the use of a production process in the production of a product or service. In this section we are contrasting the simplicity of assignment with the complexity of allocation and absorption.

The immediate problems raised by the necessity to allocate and absorb costs concerned the calculation of depreciation and depreciation accounting, the valuation of inventories of work in process and finished goods and accounting for cost of goods sold, and accruals and deferrals generally, in relation to uses which preceded or followed acquisitions. In course of time the same necessity has led to a vast area of accounting problems, covering virtually the entire field of accounting, and created what one writer has referred to as “explanation strains.”4

These strains were rendered more acute by the traditional separation of financial and cost accounting. Because of the critical importance of these allocation decisions for pricing policy, they were often retained by the proprietor of the business long after he had delegated accounting for acquisitions to a clerk.

Cost accounting went through three stages in the nineteenth century. In the first, it was performed by non-accounting calculations illustrated by the papers of Josiah Wedgwood and Charles Babbage. In the second, the need to create order out of chaos led to the introduction of accounting method and the growth of systems of cost accounts separate from the financial accounts. These separate accounts might be reconciled with the financial accounts, or made to interlock with them through the medium of control accounts: a cost ledger control account in the financial books and a general ledger control account in the cost books. Finally, the integration of financial and cost accounts in one accounting system was achieved. It is perhaps significant that the development of modern accounting theory dates from the beginning of this integration. We should not underestimate the important contribution made by industrial engineers in clarifying and sometimes finding solutions for the accounting problems of the industrial revolution.5

THE GROWTH OF THE CORPORATION

Corporations are nothing new; the Romans used them, together with elevators, central heating, and divorce. An extensive world trade was conducted from the fifteenth century on by the chartered corporations formed by rulers and entrepreneurs in the mercantilist period. During the nineteenth century, however, and particularly in the United Kingdom and the United States, the number of commercial corporations grew at an accelerating pace, from several hundreds to tens of thousands. Laws were passed to facilitate their formation and administration and to render them accountable to the governments which gave them life.

The characteristic features of the corporation are its relatively long life (perpetual succession) and the transferability of its capital. Both of these are consequences of it being an artificial person, but a legal person nonetheless. Because the corporation does not die, or become sick or insane, it is a convenient device for executing contracts, including contracts to supply capital for industrial undertakings. Because of the transferability of its capital, it is also an attractive device to businessmen and other investors concerned about their future liquidity needs. Add to these the bonus feature of limited liability, and the corporation becomes the irresistible instrument of business growth.

Use of the corporation as a device for channelling savings into business investment effected a separation between capital and its management, formal in the case of the “one man corporation,” but very real in the case of those corporations which raised capital from a number of investors. In order to provide these “anonymous partners,” as the French law called them, with some means of ascertaining what was happening to their investment, a succession of Companies Acts was legislated in the United Kingdom which required corporations to keep records and to render account to their stockholders. Most of the English-speaking world has enacted comparable legislation; only in the United States has it proved impossible to make the states, in whom the power resides, exercise social control over corporate officials. The situation is now changing slightly, as the states see the corporations as taxpayers and legislate for accounts to be kept for the purpose of demonstrating taxable capacity.

Typically, a Companies Act would contain sections requiring accounts to be kept and financial reports to be rendered to stockholders. More important, to protect stockholders from the deception of being paid dividends to keep them quiet while the managers were losing the company’s money, the law would stipulate that dividends may be paid only out of profits. This led of necessity to the preparation of period accounts, or annual financial statements, and to problems of allocation similar to those which were raised by the factory system.

As the manufacturer required information about depreciation, work in process and finished goods, and cost of sales in relation to specific products or services, so the corporation required this type of information in relation to specific periods. The major problems in financial reporting arise from so segmenting the life of the firm into artificial lengths only remotely related to the time period of production. As a consequence, we find accountants adopting the going concern assumption, that raw materials acquired will be put into production, that work in process will be completed in the form of saleable finished goods, and that finished goods will be sold at prices higher than their production costs. The going concern assumption also involves a belief—that the business will continue to operate in more or less the same way until it has recovered its investments in fixed assets from its customers as part of the selling prices of its products.
The going concern assumption, required for asset valuation, also affected profit (income) measurement, since reduction of asset values must be regarded as a loss. Other assumptions adopted for income statement preparation included the cost assumption, that allocation methods used for cost accounting are useful for financial reporting, and the stable monetary unit assumption, that changes in purchasing power can be disregarded.

Another important contribution of the corporation laws was the specification of the capital of the corporation in legal terms. The Companies Acts provided for the registration of corporations to include a description of their capital stock and for the reduction of this capital stock only by legal proceedings, under the mistaken belief that persons dealing with the corporation would be protected in some way by the maintenance of this legal fiction. A variety of ancillary problems were gradually incorporated in the statutes: how to account for amounts subscribed in excess of par, what could be charged to capital surplus, how surplus could be converted into capital stock. This set of problems combined with the problems involved in preparing period income statements to emphasize the separation of income from capital, which is a major characteristic of financial accounting. The concept of capital maintenance, of keeping the legal capital of the corporation unimpaired, came in conflict with the concept of keeping its assets in a productive state or maintaining economic capital.

In spite of these legal provisions for the protection of stockholders and creditors, unscrupulous managers nevertheless found ways to make capital look like profits, to pay dividends to one set of shareholders out of capital paid in by another set, and to defraud creditors by liquidating without keeping legal capital intact. To a certain extent, they always will. One of the objectives of accounting theory is to develop rules of conduct which will make this behavior more difficult. This explains the normative nature of many propositions in accounting; they are attempts to dissuade people from behaving dishonestly.

One fascinating byway of the growth of corporations in the United States is the antitrust law. By the end of the nineteenth century a number of corporations had grown, by retention of profits or by acquisitions, to a size which represented a visible concentration of wealth and a real source of economic power. The name for a corporation which grows by acquiring control over other corporations is a holding company. In 1890 the U.S. Congress passed the Sherman Antitrust Act, to prevent corporations which did not possess powers to own stock in other corporations from acquiring control over such stock by means of a trust instrument. This forced corporations to obtain powers to own stock in other corporations directly, and a number of state corporation laws were amended to permit this. In 1914 the Clayton Act was passed, which made illegal the acquisition of stock of another corporation if this tended to reduce competition. In spite of these and other measures, mergers and acquisitions thrived and the vertical and horizontal integration of industries has been succeeded by the conglomerate, a holding company owning controlling interests in corporations operating in different industries.

The consequence of the combination of corporations was a demand for financial reports which would reveal the combined assets of the group and the combined results of all the corporations of which it consisted. This led to the development of consolidated financial statements as early as 1886, although the first annual report of the United States Steel Corporation in 1902 is usually acknowledged as the prototype of consolidations.

THE RAILROADS AND GOVERNMENT REGULATION

The importance of the railroads in the process of identifying accounting problems cannot be exaggerated. They were the first really large-scale enterprises spawned by the industrial revolution. The first capital-intensive enterprises, they presented in unmistakable terms the separation of capital and management, and they provided the first scenario for government regulation of business, including its financial statements. This resulted in large part from the misdeeds of a host of promoters who sold railroad stock and acquired control over railroad assets with no intention other than to enrich themselves.

The New York Stock Exchange dates from before the American revolution, but only in 1866 did it prescribe that listed corporations should file their financial statements. Not until 1900 did this influence become effective. One of the principal reasons for the involvement of the New York Stock Exchange was the tremendous fluctuation in the prices of railroad stocks, a consequence of the ignorance of investors as well as the manipulations of the railroad barons.

The railroads were the center of a historic struggle which resulted in the recognition that use should be accounted for, and not merely acquisition. The railroad managers argued that regular maintenance and replacement of worn equipment would cause the permanent way and the rolling stock to last indefinitely. Depreciation was therefore not a relevant concept, and replacements should be charged to expense as incurred. This solution had obvious attractiveness, since it made the expense a discretionary item—in good years more and in lean years less or possibly none.

In 1876 the Railway Commissioners of Massachusetts required railroads to keep accounts, and by 1879 a uniform system of accounting had been adopted nationally on the initiative of the Interstate Commerce Commission (ICC). The Hepburn Act of 1906 authorized the ICC to prescribe railroad accounting, which it did in part by publishing “Classification of Operating Expenses” in 1907 and finally a complete “Accounting Classification for Steam Railroads” in 1914.

The 1907 scheme provided for depreciation to be charged to operating expenses on a monthly basis, but gave individual railroads the option not to do so (or to include accrued expenses) if, for example, they were losing money. In 1923 the ICC proposed to make depreciation accounting mandatory; the railroads opposed, using arguments which are still heard today when additional disclosure is sought—that it was unnecessary, deceptive, and impossible to calculate with accuracy. The railroads' opposition delayed the imposition of mandatory depreciation until 1932, when it was immediately suspended because of the depression. It finally came into force in 1943. The omission of depreciation was undoubtedly one of the factors which permitted railroads to operate and attract
capital long after obsolescence and inefficiency had made them a burden on the economy.

The outcome of the struggle just described was irrelevant, because of the development of generally accepted accounting principles in the United States, which required railroads to charge depreciation in their published financial statements. The struggle itself is important because it documents the transition from a pre-industrial to an industrial accounting system. Government regulation in the United States has had some of the effects of the Companies Acts in the United Kingdom and elsewhere, in that a number of commissions besides the ICC (the Federal Power Commission, the Federal Communications Commission, the Federal Aviation Authority, etc.) have prescribed accounting systems for the enterprises they regulate. Although some accounting problems have been identified and solutions found through this process, the consensus is that government regulation has had an unfavorable effect on the accounting of regulated enterprises, through discouraging experimentation and innovation. Further, the accounting systems have ceased to be oriented toward disclosure, as in the unregulated sector, and have increasingly become instruments of politics. This is because the commissions have become rate makers, thus taking the pricing function out of the market. One of the principal means for a government to effect a political purpose is by fixing prices.

Thus, although a number of accounting issues have been raised by the regulation of public utilities, they can be readily explained in the context of the political problems of rate setting and do not form part of the set of issues which accounting theory seeks to explain.

THE CORPORATE INCOME TAX

Perhaps the single most pervasive influence on the growth of accounting has been the corporate income tax, since it affects all business firms, large or small, incorporated or unincorporated, regulated or unregulated. Here we are concerned with the influence of the corporate income tax on the development of modern accounting theory.

The critical point is that the corporate income tax is a legal structure, and therefore the solutions to tax problems are legal solutions. To the extent that the tax laws recognize accounting solutions, accounting becomes part of the law. There is, for example, no definition of income to be found in the tax code, and the logical tendency of the taxing authority is to tax movements of cash. The first attempts at a corporate income tax in the United States, the 1909 Excise Act and the 1913 Revenue Act, measured net income as cash receipts less cash disbursements, and a battle had to be fought to establish the acceptability of accrual accounting as the basis for income taxation.

A striking illustration of the difference between accounting and taxation is found in the United Kingdom, where the objective is also to tax receipts, and business accounts are accepted as a point of departure. The tax laws were laid down before the need to charge depreciation was clearly identified, and to this day, depreciation is not deductible in the U.K. However, businessmen were eventually successful in persuading the tax authority that fixed assets may be losing value through time, and the tax laws were amended to introduce capital allowances. These are a quite separate legal system for calculating depreciation for tax purposes, having no connection with accounting depreciation and applicable only to specified classes of depreciable fixed assets; store fixtures and office buildings are excluded. In preparing a business tax return therefore, the U.K. accountant adds back depreciation to net income and deducts a different amount, calculated according to the law.

This illustration serves to remind us that although business net income is a point of departure for arriving at taxable income, the two are essentially distinct concepts. It appears that the original intention of Congress in the United States was to establish a concept of taxable income which corresponded with business net income, but the harmonization of the two has become impossible. In the first place, tax avoidance through technical accounting methods created loopholes which led to legislation forbidding certain tax accounting practices; the valuation of inventories at prime cost, for example, is not permissible, however logical this might be in a specific context. In the second place, use of the income tax laws to effect a redistribution of wealth and to promote political objectives has led to the enactment of a multitude of provisions concerning what is or is not to be included in taxable income, and what may or may not be deducted therefrom.

We should not look, therefore, to the corporate income tax as a source of modern accounting theory. Its importance lies in:

1. Extending the need for accounting to many businesses which would not otherwise have prepared financial statements.
2. Influencing many businesses to adopt tax rules or guidelines for the recognition of items of revenue or expense, because of the complications involved in operating two accounting systems.
3. Stimulating debate on such questions as depreciation and inventory accounting, accrual and deferral, and asset and liability valuation, by revealing alternatives to conventional practices.
4. Introducing a new subset of accounting problems, accounting for taxation, which have strained the ability of accountants to explain the application to them of accounting principles developed in a different context.
5. Distorting accounting to conform with taxation where the tax laws provide that a particular deferral or deduction may be claimed only if the requisite tax treatment becomes also the financial statement treatment. This is the situation in the United States with regard to the use of the LIFO method of determining cost of goods sold. In some countries (France, Germany) many of the items in the financial statements are there because of the requirements of the tax laws.
6. Providing a false trail for accounting theorists, such as the rule in Fisher v. Macomber (Chapter 7), who have been tempted to adopt legal explanations for practices found outside the legal framework.
THE ECONOMISTS

Until the early nineteenth century most economists were political economists; their preoccupation with the production and distribution of wealth centered on the source of political power. By the end of the nineteenth century, however, economists had begun to appreciate the role which industry played in the production and distribution of wealth. Such noted economists as Alfred Marshall in England, Böhm-Bawerk in Austria, and J.B. Clark in the United States conducted studies of business enterprises and attempted explanations of concepts such as income, capital, and cost which are the subject of accounting theory also. Sombart pointed out that the ideas of economists on these matters originated in accounting, but the victory of the marginalist school resulted in new definitions which gradually moved economics and accounting further apart.

Nevertheless, the apparent similarity of the subject-matter of economic studies led some early accounting theorists to assume that the disciplines of accounting and economics were essentially one, so that accounting problems could be solved within the framework of economic theory. This assumption pervades much of the contemporary literature on accounting theory, and its origins can be traced to books written in the early years of the twentieth century.

The interests of economists lie primarily in macro-economics, the study of the national income and its generation, and their work in micro-economics, the study of economic behavior at the level of the firm, is designed to support the major field of interest. For this reason, economists have never made the transition from the pre-industrial model of the firm, where acquisitions and uses, and capital and assets, cannot be distinguished, where financial institutions as sources of money can be disregarded, and where time can be reduced to an average or omitted entirely as a significant variable. As we have noted, this transition was accomplished by accountants in the nineteenth century and resulted in the valuation method we call allocation.

One notable exception to the failure of economists to adapt to the industrial (and indeed, the post-industrial) realities was J.M. Clark. Clark recognized the existence of situations in which economic valuation could not be effected by imputing marginal amounts to production inputs or outputs; he dealt specifically with the nonimputable overheard costs of manufacturing firms. Another American economist who attempted to adapt micro-economics to the industrial scene was Thorstein Veblen. Unfortunately the pioneering work of these theorists proved abortive, as their colleagues were unwilling or able to abandon the Ricardian images on which their science was based.

THE AMERICAN SCHOOL OF ACCOUNTING THEORY

Much the same sequence of events can be identified in other countries. The situation in the United Kingdom, where the industrial revolution and the corporate income tax originated, can be contrasted with that in the United States, where government regulation played a unique role. The Anglo-American jurisdictions can be contrasted with those jurisdictions which forced financial accounting to conform to tax accounting. Neverthe-

less, it is noteworthy that the responses of accountants in different parts of the world to similar situations was highly comparable. By the beginning of the twentieth century the form and content of financial statements did not differ to any considerable extent throughout the Western world. From 1930 on, however, special factors have caused the U.S. to act as a trail-blazer in the development of accounting theory. There is a distinct "American School of Accounting Theory." The characteristics of this school are: 1) the involvement of a relatively large number of academicians and practitioners in defining, researching, and debating accounting issues; 2) the existence of institutions which publicize and focus attention on the views of accounting theorists, e.g. the AICPA and the AAA; 3) the general acceptance of the neo-classical economic theory of investment, as adapted by scholars in corporation finance; and 4) an experimental approach to accounting aimed at producing a framework which will justify and explain a more significant social role for the accountant than he has appeared to play in the past.

Because of the absence of a legal framework to which accounting questions could be referred, early American textbook writers displayed a tendency to look for reasons behind their expositions of accounting practices. The prevalence of the proprietary theory approach impelled Baker to attribute its origins to these writers, although we now know this theory to have originated in Europe.

The first author to identify himself clearly as an accounting theorist was Paton, whose seminal work was originally published as a doctoral dissertation in 1916. It was Paton who emphasized the entity theory, which earlier American writers had used and Littleton has identified in nineteenth century European publications. Paton pointed out in the preface to his book that "The conception of the business enterprise as in all cases a distinct entity or personality—an extension of the fiction of the corporate entity—is adopted, although not without important qualifications ..."

A. C. Littleton was another accounting scholar of this period whose works took an explicitly theoretical form and whose ideas contributed significantly to modern accounting thought. Both Paton and Littleton made a number of important contributions to the literature between 1925 and the latter's death in 1974. Dr. Paton is still at work in this field. The two combined forces to produce an influential monograph widely regarded as an accounting classic.

The principal features of Littleton's contributions to accounting theory have been summarized as:

1. The inductive approach to the development of accounting knowledge
2. The historical method of relating accounting practice to its social and economic development
3. The development of the idea of general purpose financial statements which permitted the initial development of an organized structure of accounting thought
4. The view of accounting theory construction as explanations of varying levels of validity of relations among concepts
5. The comprehensive view of accounting as one common interrelated body of knowledge to be studied and examined as a single discipline. 

Littleton is now viewed as a figure of the past; current accounting scholarship adopts contrary assumptions on virtually every point. Nevertheless, his definitions and interpretations have not yet been demonstrated false in practice, and for that reason are still part of accounting theory. During this period a number of other accounting writers occupied themselves with theoretical questions. Some, such as G. O. May, Maurice E. Peloubet, Wilmer L. Green, Thomas Henry Sanders, and Perry Mason, concentrated on explaining current financial accounting practices and their origins. S. Paul Garner performed a similar service for cost accounting. D. R. Scott attempted to reconcile accounting with statistical method; John B. Canning with the economic theories of Irving Fisher. Henry W. Sweeney investigated the problems of accounting in a time of changing price-levels. Robert H. Montgomery attempted to develop a theory of auditing, Stephen Gilman to produce agreed definitions of accounting terms and a common concept of income.

Since 1950 the number and quality of contributions to accounting theory have increased rapidly as the subject of accounting has been firmly placed in the mainstream of academic life in American universities. In part this has been a function of an increase in the number of Ph.D.s in accounting, since the Ph.D. is generally regarded as a research degree and carries with it the moral obligation to continue to explore and publish after the completion of the doctoral dissertation. But many practitioners and accounting teachers who did not acquire this degree have also contributed richly to the expanding body of accountancy knowledge. It is impossible to provide a complete list in a book of this kind, but reference will be made to the work of many individuals at appropriate places. In any case, it is clear that the world has never seen a comparable concentration of talents on the problems of accounting as that in the United States during the past seventy years.

Much of this work was made possible by institutional arrangements which were ahead of the rest of the world by many decades. Public accountants established foundations which awarded funds for research and publication: Sanders, Hatfield, and Moore, for example, were commissioned by the Haskins and Sells Foundation. The American Institute of Accountants, and its successor body, the American Institute of Certified Public Accountants, sponsored research often ignored by their committees responsible for promulgating accounting principles, and provided a forum for ideas in an official publication. The Journal of Accountancy. The American Accounting Association's quarterly publication The Accounting Review, founded in 1925, quickly became the leading vehicle for exposing new ideas and discussing theoretical problems. The AAA created a committee structure for scholars with similar research interests, who were encouraged to work together and publish jointly-authored papers. The AAA also established its monograph series, permitting outstanding scholars to publish works of high quality which would be unlikely to attract the support of a commercial publishing house. Similar support to that provided by the AICPA and the AAA was available to scholars interested in cost and management accounting from the National Association of Cost Accountants (now the National Association of Accountants) and through its journal the NACA Bulletin, (now called Management Accounting). In recent years these institutional arrangements have increased, and many other sources of support are now offered to accounting theorists in the United States.

THE ACCEPTANCE OF NEO-CLASSICAL ECONOMIC THEORY

At the beginning of the period under discussion the primary influence on accounting theory was legal in nature. The modern profession of accountancy owes its origins to the law and has never forgotten the fact—to the bankruptcy and company laws of nineteenth century England and to the taxation and regulatory laws of twentieth century United States. The search for accounting principles was invariably referred to a framework analogous to that of the law; writers contrasted the conventional principles of law and accounting with the immutable principles of the sciences.

Beginning with Canning in 1929, however, we find an increasingly explicit effort to establish accounting as a science in the mold of economics. Canning was a disciple of Irving Fisher, whose important work on income and capital theory will be discussed in Chapter 7, and attempted to translate Fisher's ideas into a form useful to accountants. Fisher and Canning taught at Californian universities, and we can imagine a "California School" of accounting theorists formulating their views. Maurice Moonitz is the current leader of the California School.

Paton was also exposed to the models of economic theory and taught economics as a young man at the University of Michigan, but he attempted to distinguish accounting from economics rather than to integrate accounting into a framework of economic theory. The second generation of accounting theorists appears to have been more ready to espouse this integration, and from about 1936 until the present day the acceptance of economic theory in its neo-classical form, the form in which it is usually taught in American universities, has become more general. This is not to denigrate Fisherian and Keynesian economics, which have been skillfully interwoven into the neo-classical fabric during the past forty years.

The acceptance of economic theory has had several effects on the development of accounting theory. In the first place, the rigor which characterizes the formulation of economic propositions and the construction of economic models and their use to derive theorems and to deduce principles and rules has been widely accepted as a desirable standard for parallel work in accounting theory. The almost theological tone of previous generations of accounting writers has been replaced by the voice of reason. Secondly, many definitions and concepts used by economists have been taken over by accountants (as earlier economists adopted accounting terms and ideas), which has opened up fruitful lines of inquiry and permitted the formulation of new research problems. Examples of this are accountants' uses of such economic concepts as marginal cost, sunk cost.
present value and uncertainty. Indeed, accounting has at times appeared to be a branch of economics, or vice versa.18

Thirdly, and in particular, the development of a theory of corporate finance based on the investment theory of economics has presented accounting theorists with a challenge and an opportunity. It is clear that finance and accounting are inextricably interwoven, and we have pointed out the similarity between the basic equations of the two disciplines. To produce a theory of accounting compatible with the theory of finance would appear to be a useful goal. We shall demonstrate later how this objective underlies APB Statement No. 4, the most comprehensive statement of accounting theory to come from the accountant's profession.

METHODOLOGY OF ACCOUNTING THEORY FORMULATION

The view that accounting theory should consist of principles “relatively few in number” was accepted by the AIA’s Joint Committee with the New York Stock Exchange. We may infer that economics provided the inspiration, where the law of demand is deduced from the postulate of utility maximization and the law of supply from the postulates of the production function and profit maximization.

This view contrasts sharply with the inductive approach favored by Littleton. Littleton saw the derivation of accounting principles from the observation of good accounting practices; good business practices were accompanied by good accounting practices. Although the formal structure of postulates, principles, and rules did not appear explicitly in this process, the Littleton-Chambers debate suggests that a set of normative postulates underlie Littleton’s reasoning; to him, accounting was what accountants should do.19

Paton, on the other hand, summarized the postulates on which his theory was based.

1. The separate existence of the business entity from its owners or managers
2. The going concern assumption of continuity as the normal case
3. The balance sheet equation, Assets = Equities
4. The exhaustive nature of financial condition, in which every significant fact is expressed in dollars
5. The stability of the measuring unit (dollars)
6. The equivalence of cost and value on original entry
7. The transitivity of cost, which “passes over and attaches”
8. The accrual of costs, their expiry over time and attachability to production

A more formal approach is taken by Mattessich, who starts with a definition:

Accounting is [a discipline concerned with] the quantitative description and projection of [the] income [circulation] and [of] wealth [aggregates] by means of [a method based on the following set of assumptions ...]

There are eighteen assumptions, specifically:
1. Monetary valuation
2. Time
3. Structure (accounting as a closed system)
4. Duality (double-entry)
5. Aggregation (algebraic operations)
6. Economic objects (scarce resources)
7. Equity of monetary claims (stability of the measuring unit)
8. Economic agents (human actors)
9. Entities (functional institutions)
10. Economic transactions (movements of values)
11. Valuation (operational rules for measuring movements of values)
12. Realization (comparative rules for measuring income)
13. Classification (operational rules for analyzing movements of values)
14. Data input (operating rules for bookkeeping)
15. Duration (operating rules for relating entities to time)
16. Extension (operating rules for consolidating entity accounts)
17. Materiality (operating rules for identifying data)
18. Allocation (operating rules for imputing values to parts of entities)

In spite of the elements of overlap, this is the most precise statement of assumptions which has been presented as such by an accounting theorist and from which explanations of accounting practices have been derived. Nevertheless, it could be viewed as incomplete, because it does not contain any reference to user needs (behavioral assumptions concerning the actor) and because it omits other postulates which appear to have general acceptance, particularly relevance, consistency, continuity, and objectivity.

Another approach to methodology is that taken by Sterling.22 Sterling adopts expressly and by reference economic theories of income (Chapter III), price theory (Chapter III), information and communication theory (Chapter IV), and measurement theory (Chapters V and VI). Because of the contradictions inherent in any, theoretical framework it would have been preferable for Sterling to specify more closely which definitions, assumptions, and models were used in the construction of his theory, particularly because Sterling’s theory is normative in nature.

APB Statement No. 4, “Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises” lies somewhere between these two extremes, including as it does both specific postulates and the adoption of general frames of reference as integral parts of the exposition.23

APB STATEMENT NO. 4

Whereas the need for a formal structure of accounting theory has been apparent to academics since the 1920s, it was not until 1958 that the American accountancy profession was ready to accept such an objective. The then president of the AICPA called for the Institute to provide an
adequate research organization continuously to reexamine basic accounting assumptions and to develop authoritative statements. In the event, the APB did not live up to these expectations, and the first attempts to state postulates and principles were rejected by the APB. In spite of the return to a piecemeal approach to pronouncing on accounting principles, the search for broad fundamentals went on and resulted in the publication in 1970 of APB Statement No. 4. The aims of the Statement were both educational and developmental; the latter intended to provide a basis for guiding the future development of financial accounting. But the two aims were essentially distinct. The developmental part contained general propositions about the environment, objectives, and basic features of financial accounting. The educational part contained a description of the then generally accepted accounting practices. The contradiction between these two approaches was nowhere acknowledged; it was avoided by eliminating deduction and relying entirely on induction.

The part on generally accepted accounting principles divided them into three classes:

1. Pervasive principles which underlie other principles (but are restricted by modifying conventions)
2. Broad operating principles, of recording, measuring, and communicating
3. Detailed principles of practical application

Classes 2 and 3 will be discussed in subsequent chapters on measurement and disclosure and when the individual financial statements are examined in detail. Here we shall analyze the developmental part of the statement and the pervasive principles, to demonstrate the relevance of economic theory to the former and its irrelevance to the latter.

We have examined the new definition of accounting put forward by the Statement (Chapter 1). While it does not help identify the kind of problems with which accounting is concerned, it nevertheless puts accountants firmly in their places, as the servants of those who make economic decisions. The many planning roles of the professional accountant in modern society are not recognized by this definition. Financial accounting is viewed as the production of "a continual history quantified in money terms."

The Statement treats financial accounting as a continuous history of economic resources and obligations and of economic activities that change those resources and obligations. While the word "economic" is frequently used in a layman's sense as a synonym for business, subsequent evidence indicates that this is not the case here, and that "economic" is a reference to the subject-matter of economic theory. That these two concepts are different will be explained more fully in Chapter 7; suffice at this point to mention that economic theory abstracts from the institutional framework; there are no businesses in economic theory, only entrepreneurs.

The following environmental postulates are then introduced:

1. Financial accounting information is used by a variety of users for diverse purposes. (The Statement expresses a refrain from distinguishing information from data).
2. There is a presumption that a significant number of users need similar information.
3. All societies engage in production, income distribution, exchange, consumption, saving, and investment.
4. In the United States most productive activity is by investor-owned business enterprises of a complex kind. This complexity is a function of
   a. Continuity of economic activity (underlying the need for allocation)
   b. Jointness of products (underlying the need for arbitrary assumptions)
   c. Uncertainty
5. Modern economics function within a stabilizing framework of law, custom, and tradition affecting corporate existence and contractual rights and obligations.

The Statement provides the following definitions:

1. Economic resources—Scarc means, consisting of productive resources (owned and leased), products, money, claims to money, and ownership interests in other enterprises.
2. Economic obligations—Present responsibilities to transfer economic resources to other entities in the future.
3. Residual interests—Economic resources minus economic obligations.
4. Economic events—Acquisition and disposal of resources, inure and discharge of obligations, and changes in the utility or prices of resources held. These are classified into external and internal events; the former include exchanges and nonreciprocal transfers, and the latter, production and casualties. Although the classification is intended to be complete and to avoid overlapping, it will be observed that there is no place for waste (economic theory likewise abstracts from waste), and casualty losses could not readily be classified as external events.
5. Cost—Economic cost is the sacrifice incurred in economic activities.

What other assumptions and definitions appear to do is to transform certain propositions used by economists into a form in which they can be related to other propositions used by accountants. It is also interesting to observe the survival of the proprietary theory in the form of the equation: residual interest equals economic resources minus economic obligations, and in the proposition that "Net income or loss can result from each of the types of events listed apart transfers between an enterprise and its owners." Net income is not otherwise defined.

The Statement lists the basic features and basic elements of financial accounting, which are shown on Table 3-1. The similarity of the features to Paton's and Mattessich's assumptions is apparent, as is also the absence of a method whereby they can be combined with objectives to produce financial statements.
<table>
<thead>
<tr>
<th>Basic Features of Financial Accounting</th>
<th>Basic Elements of Financial Accounting</th>
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<tr>
<td>1. The accounting entity</td>
<td>Assets</td>
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<tr>
<td>2. The going concern</td>
<td>Liabilities</td>
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<tr>
<td>3. Measurement of economic resources</td>
<td>Owners' equity</td>
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<td>and obligations</td>
<td>Other Balance Sheet elements</td>
</tr>
<tr>
<td>4. Time periods</td>
<td>(commitments, contingencies and</td>
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<td>5. Money measurement</td>
<td>other financial matters)</td>
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<tr>
<td>6. Accrual</td>
<td>Revenue</td>
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<td>7. Exchange price as the “basis” for</td>
<td>Expenses</td>
</tr>
<tr>
<td>financial accounting measurements</td>
<td>Net income (net loss)</td>
</tr>
<tr>
<td>8. Approximation (allocation)</td>
<td></td>
</tr>
<tr>
<td>9. Judgment required</td>
<td></td>
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<tr>
<td>10. General-purpose financial</td>
<td></td>
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<td>information</td>
<td></td>
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<td>11. Fundamentally related financial</td>
<td></td>
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<tr>
<td>statements (double entry system)</td>
<td></td>
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<td>12. Substance over form</td>
<td></td>
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<td>13. Materiality</td>
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<td>Objectives</td>
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<td>- Economic elements</td>
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<td>recognized and measured</td>
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<td>Basic Elements</td>
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**PERVASIVE PRINCIPLES AND MODIFYING CONVENTIONS**

Since generally accepted accounting principles are found by inquiry and not deduced from postulates, we would not expect them to lie snugly within the framework established in the developmental part of the Statement. However, they are said themselves to form a hierarchy, pervasive principles being "few in number and fundamental in nature." The **Statement** emphasized that "No attempt is made . . . to indicate specific relationships between principles" nor indeed, between postulates, objectives, basic features and elements, as these terms are used in the Statement. The pervasive principles "establish the basis for implementing accrual accounting" and determine 1) the types of events to be recognized, 2) the bases on which to measure the events, 3) the time periods with which to identify the events, and 4) the common denomination of measurement. The pervasive principles are six in number:

P-1. Initial recording of assets and liabilities “generally . . . on the basis of events in which the enterprise acquires resources . . . or incurs obligations . . . the assets and liabilities are measured by the exchange prices at which the transfers take place.” (emphasis supplied) The events do not include own construction of assets.

P-2. Revenue recognition requires 1) that the earning process be complete and 2) that an exchange has taken place. [Note: this is a new realization assumption and does not correspond with current generally accepted accounting principles.]

P-3. Some costs are recognized as expenses on the basis of a presumed direct association with specific revenue. (The matching principle)

P-4. In the absence of a direct cause and effect measurement some costs are allocated to periods using a systematic and rational relationship to benefits.

P-5. Some costs are expenses because no future benefits are likely, or allocation between periods seems pointless.

P-6. The U.S. dollar is the unit of measure in the United States. Changes in its general purchasing power are not recorded in the basic financial statements. (This is an example of a principle which is clearly incompatible with the economic theories referred to in the developmental section, and the Statement refers to the use of LIFO and accelerated depreciation in the USA as attempts to minimize the effects of not recording changes in purchasing power.)

The modifying conventions have evolved to mitigate the unwanted effects of rigidly applying these pervasive measurement principles. They are: **conservatism** (understatement of net assets and net income preferred to overstatement); **emphasis on income** (the income statement takes precedence over the balance sheet); **judgment of the accounting profession** may modify the principles, by approving measurements which are in direct conflict with the fundamental, pervasive, accounting principles of measurement.

**LOOKING TO THE FUTURE**

The **Statement** concluded by pointing to ways in which generally accepted accounting principles might change, even the pervasive and broad operating principles, in response to changes in economic and social conditions, technology and user demands. Orderly change depended upon the consistency of proposed principles with the general tenor of the **Statement**.

Suggestions for change included 1) eliminating differences in accounting practices not justified by differences in circumstances, 2) making accounting principles more consistent internally, 3) improving their effectiveness, and 4) reflecting more adequately the economic activities represented. Specific proposals related to including commitments, contracts, and leases in financial statements as assets and liabilities; developing unique methods for charging costs, including depreciation, against revenue; recording revenue under the accrual method; substituting output values for input values; recognizing price-level changes; and including budgets as part of the basic financial statements.

Other proposals concerned new financial statements; use of ratios in place of money amounts; more effective visual communication by graphs.
and charts. The Statement also pointed toward the development of international accounting standards, the world equivalent of generally accepted accounting principles.

CONCLUSION

By no stretch of the imagination can the postulates, objectives, basic features and elements, and pervasive measurement principles identified in the Statement be consistent with the radical changes in definitions, valuation, and presentation covered by these last proposals. We are witnessing a process of rationalization, of finding explanations for conduct which are reasonable but false.

It is arguable that explanations of accounting should not proceed from the economist's view of society. Economists and accountants are both studying the same phenomena, but for different purposes. To proceed from economic theory is therefore to pile concept upon concept, a dangerous intellectual exercise. A more fruitful approach to explaining business accounting would be to describe the business world as its participants see it, rather than as economic theorists see it.

A critical factor in this process is the interpretation of economic reality. Those who use this phrase refer to some underlying phenomenon perceived dimly through the "veil of money": replacement cost, or current selling market price, or net cash flow, or physical production of goods and services, or "real values," whatever these may be.

By restricting their attention to the markets in which financial securities are traded, theorists simplify the task of constructing a normative theory of accounting. Economic reality is confined to those transactions and events which are represented in the real world by decisions to buy, sell, or hold securities, or to hold securities in times of changing market conditions and price-levels.

These theories include the efficient market hypothesis, which will be discussed in Chapter 6, together with other theories revolving around the measurement of cash flows, which are the primary realities of financial investment. There is also an influence from portfolio theory, which incorporates statistical measurements of risks of different kinds in the evaluation of financial securities.

ENDNOTES

2. For additional details, see Michael Saltfield, A History of Accounting Thought, Hindale, Ill.: The Dryden Press, 1974, Chs. 8-11.

SELECTED ADDITIONAL READINGS

Development of Accounting Theory


The Economists


Influence of Income Taxation


Michael Chatfield, op. cit., Ch. 15.


The American School


GENERALLY ACCEPTED
ACCOUNTING
PRINCIPLES

The sequence of events leading to the concept of generally accepted accounting principles (or GAAP) was followed by three phases of institutionalizing the concept. In the first of these, an attempt was made to identify a body of knowledge designated accounting principles (1932-1940). In the second, a set of rules was laid down by the accounting profession, to the accompaniment of rationalizations emanating from its members (1938-1973). In the third, the pursuit of principles has been abandoned in favor of standards, both national (through the Financial Accounting Standards Board) and international (through the International Accounting Standards Committee).

In this chapter we shall see how an early movement toward uniform accounting proved abortive, and how the subsequent search for universal principles seemed to lead the accounting profession in a direction which it did not choose to follow. Nevertheless, the search for principles has not ceased; it has taken the form of seeking answers to questions of usefulness and use as a preliminary to formulating propositions having general applicability.

THE PROTAGONISTS

The principal participants in this were the accountancy profession, the New York Stock Exchange (NYSE), and the Securities and Exchange Commission (SEC). Playing significant roles were the American Accounting Association (AAA) and the National Association of Accountants (NAA).

The American Association of Public Accountants, founded in 1886, was the predecessor of the American Institute of Accountants (AIA) and of the American Institute of Certified Public Accountants (AICPA). The American Association had few members, some of them originally from the United Kingdom, and neither this association nor the New York State legislation first licensing Certified Public Accountants (CPAs), required any examination to test their qualifications. The AIA, formed in 1916, established a Board of Examiners in 1917 to create a uniform CPA examination. The AIA became the AICPA in 1957.
The New York Stock Exchange was organized as such in 1794 to facilitate the transfer of government and corporate securities. As early as 1866 it attempted to obtain financial statements from corporations listed on the exchange, but the NYSE had little success until 1900, when it required all corporations applying for listing to agree to publish annual financial statements. In 1926 the NYSE required listed companies to provide stockholders with financial statements prior to the company’s annual general meeting, which was already a provision of the company laws in other countries.

The Securities and Exchange Commission was established by an act of Congress in 1934 to protect the public from loss through ignorance. The Securities Act of 1933 required companies to register new offerings of securities, and the Securities Exchange Act of 1934 stipulated for the registration of any securities listed for sale to the public. The SEC was set up to administer these two acts and given broad powers to prescribe the form and content of disclosure documents filed, including financial statements.

The American Accounting Association began life as the American Association of University Instructors in Accounting in 1916; its name was changed in 1935. The AAA in 1935 expanded its scope to include research and the development of accounting principles and standards.

The National Association of Accountants (formerly the National Association of Cost Accountants) was established in 1919. From its inception the NACA, later the NAA, published research studies and monographs on managerial accounting, including both financial and cost accounting. Emphasis was on problems of practice, and many managerial accounting techniques were first presented to the public through the medium of the monthly NACA Bulletin.

Other organizations which have concerned themselves with the development of accounting principles in the United States include the Financial Executives Institute, the Financial Analysts Federation, and research groups centered on universities.

**BEGINNINGS OF UNIFORM ACCOUNTING**

The search for uniform cost accounting in the United Kingdom and the United States began in the late nineteenth century as a response to lethal cut-throat competition. The adoption of uniform cost accounting schemes by a number of trades and industries did not of itself lead to any degree of standardization of accounting generally.

Most of the capital needed in the United States for economic development in the nineteenth century came from Europe, and the financiers sent their accountants to check on the use of their money. These accountants, mainly Scottish and English, brought with them standards for the form and content of financial statements which were those laid down in the U.K. Companies Acts. As the American economy developed, the banking system became the principal source of capital, and bankers tended to set standards for financial accounting. Not surprisingly, they tried to make business financial statements as much like bank accounts as possible.

In response to this pressure, the Federal Reserve Board and the Federal Trade Commission in 1917 requested the AIA to put forward proposals for standardized financial statements. The resulting memorandum received the endorsement of the Federal Reserve Board and, after being submitted to the banking community nationally for their reactions, it was published in the April 1917 issue of the Federal Reserve Bulletin. This memorandum became the publication Uniform Accounting, and was published in 1918 as the Pamphlet of Balance Sheet Statements. The Federal Reserve Board published a revised edition, Verification of Financial Statements, in 1929.

Uniform Accounting placed emphasis on the balance sheet. As might be expected in the context of its publication, assets were to be presented in order of decreasing liquidity, liabilities in the order in which they were to be met. Inventories must be stated at the lower of cost or market value. Fixed asset changes must identify value changes recorded separately from movements. As for the profit and loss statement (note the terminology), depreciation was to be shown as a "deduction from income" together with interest and taxes. Net income became profit or loss by the addition or deduction of special credits or charges.

A 1936 revision of this publication was published by the AIA, entitled Examination of Financial Statements by Independent Public Accountants, it proclaimed its object to be financial statements for creditors and annual reports to stockholders. The 1936 revision, in the jargon of the time, adopted the going concern convention and the cost basis of valuation. It provided a new emphasis on the income statement and earning capacity in order to improve the reporting of income, special credits and charges for nonoperating and extraordinary items were to be included with revenues and expenses as "other income" and "other charges." The heading "net income for the period" disappeared, and the statement ended with a figure labelled "net profit (loss) for period carried to surplus."

It is doubtful whether this 1936 revision can be said to have had much effect on the development of accounting theory. It contained a combination of tentative steps forward and backward and did not succeed in eliminating the term "net income."

**THE GREAT DEPRESSION**

In the 1920s the general public, flush with cash from World War I and the subsequent boom, began buying corporate securities heavily. The United States went through a period of speculation similar to the English "South Sea Bubble" of the early 1700s or the Dutch "tulipmania" of the preceding century. Lacking any company laws worth mentioning, these investors were unprotected from fraud or the consequences of their own ignorance. In particular, they could not rely on audited financial statements for their information.

As we have seen, the American audit began as a means of verifying transactions for absentee owners. It developed as a means of providing banks with information about solvency and liquidity; hence the peculiarly American concept of a balance sheet audit. Audit techniques used by
English auditors to verify transactions and report on the profit and loss account were largely neglected. Thus, financial statements presented to investors were either over-conservative, showing assets at their liquidation values, or overly-optimistic, showing assets at written-up values and manipulated income figures.

In a speech at the 1930 convention of the AIA, J. M. B. Hoxsey voiced several criticisms of contemporary accounting, which were particularly painful coming from the executive assistant of the Committee on Stock List of the NYSE. He drew attention to the diversity of approaches to depreciation accounting and the lack of information about depreciation policy, diversity of approaches to consolidation, absence of sales volume figures and a clear separation of nonoperating income, failure to identify earned surplus in the balance sheet, recording stock dividends received at higher amounts than those shown by the companies declaring the dividends, and practices designed to understate profits. These criticisms echoed the earlier findings of William Z. Ripley, a Harvard University professor of economics, made public in a 1926 article.

The need for protection for the investing public was expressed by the accounting profession no less than by the stock exchanges and the federal government. The AIA set up a special "Committee on Cooperation with Stock Exchanges" under the chairmanship of G. O. May, of Price, Waterhouse & Co., which undertook to clarify the public accountant's position in a correspondence, later published in extenso in May's 23 Years of Accounting Responsibility.

The May Committee put forward the view that balance sheets do not show values, the real value of assets being their earning capacity. Hence, emphasis was placed on the income statement, or profit and loss account. Annual assessment of earning capacity, in order to value assets, was both impossible and unprofitable, so that a body of conventions of balance sheet preparation had been adopted, partly based on theory and partly on practice. While there was agreement on broad principles, there were differences in their application. The May Committee suggested that two alternatives were possible, either uniform accounting rules, which it rejected on the grounds that the arguments against were "overwhelming," or every corporation free to choose its own accounting methods subject to rules of disclosure and consistency. There was, nevertheless, room for great improvement.

The May Committee specified five "principles":

1. That income accounts should not include unrealized profit, realization being the consequence of an act of sale
2. That capital surplus (reserves) should not be used for revenue items of charge
3. That earned surplus (revenue reserves) of a subsidiary created prior to acquisition was not part of the consolidated earned surplus of the parent
4. That dividends paid by a corporation to itself in respect of holdings of its own stock should not be credited to income
5. That amounts receivable from officers, employees and affiliated companies should be shown separately

This modest list of principles was quoted with approval in a statement issued the following year by the president of the New York Stock Exchange (NYSE) when it was announced that after July 1, 1933, all applicants for listing must henceforth agree to have their financial statements audited, and submit them on application (with the exception of certain railroads). The correspondence concluded with a draft form of audit report, and The Accountant (London) of May 19, 1934, commented favorably on the manner in which this result was reached, i.e., by cooperation between the AIA and the stock exchange authorities, and not by legislative sanction.

**ORIGINS OF THE SHORT-FORM AUDIT REPORT**

The correspondence mentioned included a letter from the NYSE Committee on Stock List to the Governing Committee of the NYSE dated October 24, 1933. This letter said:

It would . . . be advantageous if audit reports were so framed as to constitute specific answers to the last three questions embodied in the NYSE President's letter to listed companies of January 31, 1933, namely:

4. Whether in their opinion the form of the balance sheet and of the income or profit-and-loss account is such as fairly to present the financial position and the results of operation.
5. Whether the accounts are in their opinion fairly determined on the basis of consistent application of the system of accounting regularly employed by the company.
6. Whether such system in their opinion conforms to accepted accounting practices, and particularly whether it is in any respect inconsistent with any of the principles set forth in the statement attached hereto. (i.e., the May Committee's five principles)

The Revised Suggestions of a Form of Accountants' Report produced by the May Committee reads as follows:

To the XYZ Company:

We have made an examination of the balance sheet of the XYZ Company as of December 31, 1933 and of the statement of income and surplus for the year 1933. In connection therewith, we examined and tested accounting records of the Company and other supporting evidence and obtained information and explanations from officers and employees of the Company. We also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions.

In our opinion, based upon such examination, the accompanying balance sheet and related statement of income and surplus fairly present, in accordance with accepted principles of accounting consistently maintained by the Company during the year under review, its position at December 31, 1933 and the results of its operations for the year.
The short-form audit report subsequently adopted by the AIA for use by its members was as follows:

**Address**  
**Date**

We have examined the balance sheet of X Company as of December 31, 19-- and the related statement(s) of income and surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion the accompanying balance sheet and statement(s) of income and surplus present fairly the financial position of X Company at December 31, 19-- and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

It appears, therefore, that the short-form audit report in use in the United States is in essence the product of suggestions made by a former president of the NYSE.

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**THE SEARCH FOR PRINCIPLES**

The implications of an audit report resting on generally accepted accounting principles were immediately apparent to the profession, which cast about for something more substantial than the five principles produced by the May Committee. A prize was offered for the best paper on the subject, and the winner, Gilbert R. Byrne, presented his list at the Fiftieth Anniversary celebration of the AIA in 1937. Byrne quoted with approval the Webster definition of a principle as "A fundamental truth; a comprehensive law or doctrine, from which others are derived, or on which others are founded; an elementary proposition or fundamental assumption; a maxim; an axiom; a postulate." Byrne accepted the assumption that accounting principles "like the axioms of geometry . . . are few in number . . ." It was Byrne likewise who stated the postulate that "Accounting is essentially the allocation of historical costs and revenues to the current and succeeding fiscal periods." He also postulated that "while it is not in many cases of great importance which of several alternative accounting rules is applied in a given situation, it is essential that, once having adopted a certain procedure, it be consistently adhered to in preparing accounts over a period of time." Finally, Byrne postulated that "income shall include only realized profits" and "profit is deemed to be realized when a sale in the ordinary course of business is effected." From these four unnecessary assumptions the theory and practice of accounting are only now, forty years later, painfully liberating themselves.

The five rules which Byrne laid down as principles of accounting (having "a coercive or compelling quality" based on business laws which must be obeyed if an enterprise is to survive) are: (depreciation on plant must be charged against operations, all expenses incurred in producing net income must be provided for, probable losses should also be provided for, proprietors' contributions of capital consist of capital stock and capital surplus, and earned surplus should represent accumulated earnings less distributions to stockholders.) The banality of these observations has long concealed the accounting problems which underly them. Even so, the precise phrasing of Byrne can be traced in APB Opinions, e.g., No. 10, December 1966, "Profit is deemed to be realized when a sale in the ordinary course of business is effected unless the circumstances are such that the collection of the sale price is not reasonably assured." (Para. 12)

In 1935, the Haskins and Sells Foundation decided to assist in the identification of accounting principles by requesting a committee of academics to study the subject and prepare an impartial report. The committee consisted of two accounting professors, Thomas Henry Sanders of Harvard University Graduate School of Business Administration and Henry Rand Hatfield of the University of California, and a legal scholar, Underhill Moore of Yale University. Their report, A Statement of Accounting Principles, was published by the American Accounting Association in 1938.

The trustees of the foundation, in their letter of invitation to Dr. Sanders, specified the reasons why the need for accounting principles had become apparent. They were:

- Inconsistency between corporation and other statutes, some of which permitted indefensible accounting practices;
- Contradiction between federal agencies issuing regulations involving accounting, and between federal and state regulatory bodies;
- Questions raised by the stock exchanges and the SEC in their efforts to ensure adequate disclosure. In particular

Notwithstanding the difficulties involved, accountants who certify to financial statements filed with the Securities and Exchange Commission have been required by the regulations of that commission to express an opinion concerning such financial statements and the practices of the registrant in the light of accepted principles of accounting.

In the letter of transmittal, the committee reported that they had "made inquiry in four directions." These were:

- Personal interviews, supplemented by correspondence, with competent persons
- Review of accounting literature
- Study of statutes and court decisions
- Examination of current corporate reports

The report stated as the objectives of accounting "Making effective and effectively maintaining . . . the distinction between capital and income of a particular enterprise . . ." Hence, its findings could only be expected to apply to business accounting. The report recognized as conventional the balance sheet/income statement complex and the going concern assumption and the effect of legal considerations on liabilities, also the importance of the notes to financial statements.
The Common Law nature of accounting principles, that they exist in unwritten form, was one of the findings of the committee, based on their observation that controversy within the profession was restricted to a relatively small number of situations out of the much greater number which might lead to disagreement. However, instead of proceeding empirically to list those objects of agreement, the committee based its statement of accounting principles on economic definitions of capital and income in an attempt to force the principles into a framework of deductive reasoning. Hence the dubious proposition that "Income normally arises from the sale of goods or services for amounts greater than their cost."  

The bulk of the report consisted of an enumeration of the items found in published financial statements, including consolidated statements, with rationalizations in some cases to justify contemporary practices. From this descriptive material certain generalizations were made, and Part VI of the report, "Summary of Accounting Principles," is reproduced below. These principles are reproduced here because they reveal, as recently as 1938, an unawareness of the problems with which accounting theory is concerned.

**PART VI SUMMARY OF ACCOUNTING PRINCIPLES**

The following enumeration of accounting principles is to be read as a very general summary of the report. Each proposition is to be construed in the light of the relevant discussion in the body of the report.

**I. GENERAL PRINCIPLES**

A. Accounting should make available all material information of a financial nature relating to (a) the financial condition or status of the business, (b) its progress in earning income.

B. Transactions which add to or subtract from capital must be distinguished from those which add to or subtract from revenue, and, where both kinds of change occur in one transaction, the extent of each must be shown.

C. A reliable historical record must be made of all transactions of the business; but this record must also be analytical, or susceptible to subsequent analysis, to preserve the necessary distinction between capital and income.

D. The use of long-term assets involves the apportionment of capital and income over the several accounting periods; the accuracy of the accounts depends in large measure upon the exercise of competent judgment in making these apportionments.

E. The basis of the treatment applied to the several items should be adhered to consistently from period to period; when any change of treatment becomes necessary, due attention should be drawn to the change.

F. The possible extent of unforeseen contingencies of adverse character calls for a generally conservative treatment of items to which judgment must be applied.

**II. INCOME STATEMENT PRINCIPLES**

A. The income statement should show, for the period it covers, (a) income from all sources, (b) costs and expenses of all kinds, and (c) net income.

B. Only income realized by the sale of goods or rendering of service is to be shown in the income statement. Unrealized income should not be recorded, nor utilized to absorb proper charges against earnings.

C. Income from sources other than the main operations of the business should be stated separately.

D. Costs and expenses must include:
   (a) all current operating costs,
   (b) inventory losses of the period,
   (c) provision for losses on other current assets, which have become imminent in the period,
   (d) proper allocations for the depreciation, depletion, or amortization of all capital assets subject to those processes.

E. Nonrecurring items should be reported in terms which indicate their nature.

F. As far as possible net income should be so determined that it will not need no subsequent correction. When, however, such correction becomes necessary, it may be made through current income only if it is not so large as to distort the statement of that income, otherwise it should be made through earned surplus.

**III. BALANCE-SHEET PRINCIPLES**

A. A balance-sheet should show (a) the nature and amounts of the assets, (b) the nature and amounts of the liabilities, (c) the nature and amounts of the invested capital, (d) the amounts of earned and of capital surplus.

B. With reference to fixed or capital assets in the balance sheet:
   1. The amounts should be based upon the amounts invested in such assets.
   2. Reserves for depreciation, depletion, and amortization should show the cumulative progress of prorating their cost over their useful lives.
   3. Proper distinction should be made between (1) tangible assets, (2) intangibles, and (3) investments.

C. The proper showing of current assets requires:
   1. that inclusion or exclusion of particular items be determined on the same time basis as is applied to current liabilities;
   2. that the values in general be the lowest of cost, replacement market, or realization, as may be applicable for the several items;
   3. that reserves be plainly associated with the current assets to which they apply;
   4. that separate mention be made of items not in the ordinary course of business.

D. Particular care must be given in reporting deferred charges:
   1. to the distinction between charges inuring to the benefit of future periods and losses actually sustained;
   2. to the basis of amortization, which in general should be the periods to be benefited by the deferred charges.

E. Contingent liabilities should be noted in the balance-sheet or in
a footnote, if they are material, imminent, and of reasonably determinable amount.

F. Recaptured stock should be shown as a deduction from capital stock, unless exceptional circumstances justify showing it as an asset, when the reason should be given.

G. The restatement of capital assets at higher values results in capital surplus. Restatement at lower values may result in a subtraction from capital, capital surplus, or earned surplus, depending on circumstances.

H. Capital surplus should not be utilized to relieve either earnings or earned surplus of charges which should be made against them.

IV. CONSOLIDATED STATEMENTS
A. Consolidated statements should include only units which are effectively controlled by the parent company.
B. The amount at which the stock of a subsidiary is carried in the parent company books constitutes in effect a revaluation of the subsidiary properties, either tangible or intangible, and is reflected as such in the consolidated balance-sheet.
C. Surplus of subsidiaries existing at the time when control of them was acquired by a parent company should not be shown in the consolidated balance-sheet.
D. Minority interests in subsidiaries may be shown in the consolidated balance-sheet at their net value in the subsidiary books.

V. COMMENTS AND FOOTNOTES
A. Comments, footnotes of reasonable length, and supplementary schedules may be used to elucidate items in the statements calling for explanation, or to supplement the statements.

ORIGINS OF THE APB

Two major influences on the subsequent pronouncements of the AICPA were 1) the “Student Department” of the Journal of Accountancy, dating back to 1914, and 2) a series of Special Bulletins published by the AIA in the 1920s. The former was “a gold mine of information on the accounting principles of the time and the reasons for their existence.”

THE COMMITTEE ON ACCOUNTING PROCEDURE

Prior to 1938 various committees of the AIA worked on specific projects aimed at clarifying points of practice. In 1936 the AIA publication Examination of Financial Statements ... referred to the phrase “generally accepted accounting principles.” During the period 1936–1938 a Committee on Accounting Procedure existed, consisting of the seven chairmen of various AIA committees, which responded to specific questions from members of the AIA and thus built up a collection of precedents. In 1938 the membership of the CAP was increased to twenty-one, all appointed for one-year terms, which may have accounted for a certain lack of continuity; after that date what continuity there was came from the CAP’s research staff, a small and diminishing number.

In spite of the need for generally accepted accounting principles, the CAP devoted itself to decisions of an ad hoc nature; few of its pronouncements were based on research studies. They were called Accounting Research Bulletins (ARBs) and forty-two ARBs were published during the first fifteen years. Most of these were consolidated into ARB 43, and between 1953 and 1959 a further eight were published, bringing the total to 51. The consolidated ARB 43 included eight reports of a Committee on Terminology, published separately in 1953 as Accounting Terminology Bulletin No. 1, “Review and Resume.” This publication has been of great significance in that, to the extent that definitions and practices have not been revised subsequently, it represents the source of “generally accepted accounting principles” in the United States. ARB’s 1-31, together with the APB Opinions available at the time, provided the basis for Accounting Research Study No. 7.

The shortcomings of the CAP were revealed in the period following World War II, when new financing techniques such as conglomerate acquisitions, equipment leasing, convertible securities and leaseback arrangements created accounting problems which could not be solved from precedents. In addition, the decline in the purchasing power of money raised the prospect of the abandonment of historical costs, and changes in technology threw up intangibles of great value which were inadequately expressed at a memorandum figure of one dollar. G. O. May wrote at this time that there was a need for:

1. Continuous research on a high level; a service that a rapidly changing Committee on Accounting Procedure cannot render.
2. Consideration of questions in a longer historical perspective.
3. Consideration of problems, not in isolation, but in their relationship one to another.
4. More penetrating discrimination between phenomena that have in the past been considered as indistinguishable for the purposes in hand, ...
5. A receptiveness to change...
6. More rigorous logic and presentations in which there shall be no begging of the question by making assumptions which leave the conclusions apparently inevitable.

THE ESTABLISHMENT OF AN ACCOUNTING PRINCIPLES BOARD

As if in response to these proposals, the then president of the AICPA, Alvin R. Jennings, addressed himself to the question “how successful we have been in narrowing areas of difference and inconsistency in the preparation and presentation of financial information.” He proposed that a new approach be taken and that the development of accounting principles should be regarded as “in the nature of pure research.” A proper research organization should be set up, staffed with academically qualified
persons and financed by the profession and industry jointly. The function of
the research organization should be to carry on continuous examination
and reexamination of basic accounting assumptions and to develop
authoritative statements for the guidance of both industry and the
profession. Such statements would be submitted for approval or rejection
to the Council of the AICPA.

Jennings set up a Special Committee on Research Program in 1957,
and in 1958 the Special Committee recommended the dissolution of the
CAP and its research department. They were to be replaced by an
Accounting Principles Board (APB) and an appointed director of ac-
counting research, with a permanent research staff. The Council of the
AICPA accepted these recommendations in 1959, and the APB was duly
established and given the mission "to advance the written expression of
what constitutes generally accepted accounting principles."
The Special Committee's report stated that the problem required at-
tention at four levels: the basic postulates, the principles themselves,
rules or guides for the application of the principles, and research itself.
It was again asserted that "postulates are few in number"; environmental
postulates were indicated. A broad set of coordinated principles should be
formulated on the basis of the postulates. Rules and other guides should
be developed in relation to the postulates and principles. Adequate ac-
counting research was necessary in all of these contexts.
The report suggested that although primary attention be given to
published financial statements, in the long-run this work should be ex-
tended to institutions other than corporations regulated by the SEC.
The APB consisted of between eighteen and twenty-one members,
mainly representatives of public accounting firms but also including
representatives of industry and government, and academics. The Ac-
counting Research Division consisted of a director and a research staff.

ACCOUNTING RESEARCH STUDIES

The Special Committee's report specified that "immediate projects of
the accounting research staff should be a study of the basic postulates
underlying accounting principles, and a study of the broad principles of
accounting." The first director of research was Dr. Maurice Moonitz,
an academic of the California school, strongly influenced by Fisher and
Canning. He started work on the postulates study, and appointed Dr.
Robert T. Sprouse to work on the principles study. The products, Ac-
counting Research Studies Nos. 1 and 3, were published in 1961 and 1962
respectively.

The Accounting Research Division was intended to produce rigorously
argued studies heavily dependent on deductive reasoning, and these two
publications disappointed the AICPA and the accounting profession.
Instead of a carefully argued position, Moonitz and Sprouse produced two
polemical papers attempting to move the profession toward basing finan-
cial statements on exit values, i.e., valuing assets at market prices.
Deizer has shown that the postulates presented in ARS No. 1 could have
equally supported diametrically opposed principles.

The principles laid down by Sprouse and Moonitz included the as-
sertion that "profit is attributable to the whole process of business
activity," which contradicted the realization principle. The restatement
capital for general price level changes, and the recognition of specific
price changes as gains or losses, whether due to accruals or market
events, were asserted as principles. Valuation principles involved three
steps: determine if future services exist; quantify the estimate; multiply
the quantity by a past, present, or future price. Monetary assets and
liabilities should be recorded at present values.

Of these, the two propositions which proved most unacceptable to the
AICPA were probably the necessity to account for general and specific
price-level changes and the need to record "inventories which are ready
salable at known prices" at net realizable value. The two studies were
rejected by the AICPA and published with a letter insert stating that the
postulates and principles were not acceptable at the present time. A
statement by the APB to the same effect which appeared in the May
1962 issue of the Journal of Accountancy contained these words:
The Board believes, however, that while these studies are a valuable
contribution to accounting thinking, they are too radically different from
present generally accepted accounting principles for acceptance at this
time.

After a period of exposure and consideration, some of the specific re-
commendations in these studies may prove acceptable to the Board
while others may not.

It is noteworthy that none of the principles of ARS No. 3 has yet
been endorsed by either the Accounting Principles Board or the Financial
Accounting Standards Board.

The rejection of ARS No. 1 and No. 3 resulted in the commissioning
of Paul Grady's ARS No. 7 which merely inventorized accounting
methods sanctioned by ARBs, APB Opinions, or other precedent. Other
products of the Accounting Research Division proved more fruitful
and will be referred to at appropriate places in this book. They were:
ARS No. 2, "Cash Flow Analysis and the Funds Statement," by Perry
Mason, AICPA 1961.
ARS No. 4, "Reporting of Leases in Financial Statements," by John
H. Myers, AICPA 1962.
ARS No. 5, "A Critical Study of Accounting for Business Combi-
ARS No. 6, "Reporting the Financial Effects of Price-level Changes,
by the staff of the Research Division, AICPA 1963.
ARS No. 8, "Accounting for the Cost of Pension Plans," by Ernest L.
Hicks, AICPA 1965.
ARS No. 9, "Interperiod Allocation of Corporate Income Taxes," by
Homer A. Black, AICPA 1966.
ARS No. 10, "Accounting for Goodwill," by George R. Catlett and
Norman O. Olson, AICPA 1968.
ARS No. 11, "Financial Reporting in the Extractive Industries," by

APB OPINIONS AND STATEMENTS

The APB added to the body of generally accepted accounting principles by issuing Opinions. Between 1959 and 1973 the APB produced thirty-one Opinions. In 1964 the council of the AICPA resolved that after 1965 all departures from APB Opinions and surviving Accounting Research Bulletins must be disclosed in footnotes to financial statements or in audit reports signed by members. The Code of Ethics of the AICPA lays down the procedure to be followed if a member believes that an alternative accounting method should be used in place of one prescribed as part of GAAP. The Standards issued by the FASB are now included in the body of generally accepted accounting principles.

In addition to the Opinions, the APB also published four Statements, of which the response to the publication of ARS No. 1 and 3 was the first. The Statements, which can be viewed as tentative opinions designed to inform the public on specific issues included:


Within a decade considerable dissatisfaction with the operation of the APB had arisen. The same faults identified in relation to the CAP were discerned in the APB—a "fire-fighting" approach to accounting problems, discrediting its own research in favor of decisions reflecting the preconceived ideas of board members, lack of a theoretical framework resulting in inconsistencies, failure to deal with new questions resulting from change. A new fault was also attributed to the APB: failure to resist pressure from outside interests.

While these outside pressures included public accounting firms and their clients and industry associations, the most significant source was the SEC. The APB’s position on accounting for the investment tax credit, which presented quite new accounting issues, was expressed in APB Opinion No. 2 and came into conflict with the SEC’s position. As a consequence, the APB abandoned its requirement of a uniform treatment and, in Opinion No. 4, permitted several alternatives. Returning to the task in Opinion No. 11 on “Accounting for Income Taxes,” the APB was again forced to abandon its position, this time by the opposition of the Internal Revenue Service.

In a thoughtful article, Professor Horngren looked back over four years as a member of the APB and attempted to diagnose its weaknesses. In his view a great mistake had been made in believing that the power to set principles rested in the private sector. "The increasing role of the federal government in our society," wrote Horngren, "is an unstoppable phenomenon." The APB had formulated principles subject to the constraints set by the SEC, to which organization Congress had delegated its powers in this area. The APB had been used by the SEC as a buffer, insulating the SEC from pressures and criticisms and doing an enormous amount of unpaid work for the government. Horngren cited as evidence the sequence of events accompanying APB Opinions 2 and 4 on accounting for the investment tax credit; the establishment by Congress in 1972 of a Cost Accounting Standards Board has served to underline this point.

The APB was criticized for failing to define the objectives of accounting, failing to construct a comprehensive and internally consistent theory of accounting, and failing to understand the interrelatedness and repercussions of its decisions. Dale Gerboth has referred to this view as "the-comprehensive approach...to policy-making" and pointed out that it postulates an ideal world which is useless as a standard. In his opinion, the APB had adopted the "incremental approach" as a standard, which consists of rational behavior as a substitute for perfection. The allegations that the APB acted ad hoc, repeatedly confronted the same problems, and adopted short-run solutions at the expense of long-run objectives, were misguided and arose from a false conception of policy-making. The subsequent history of the successor organization, the Financial Accounting Standards Board, lends some credence to Gerboth’s position.

Finally, it has been suggested that the increasing volume of litigation against public accountants in the United States was a factor in the demise of the APB. Most APB members were partners in CPA firms, and there was a real possibility that the defense of compliance with generally accepted accounting principles might be rejected in court on the grounds that these principles had been laid down by those who sought to hide behind them.

BIRTH OF THE FINANCIAL ACCOUNTING STANDARDS BOARD

Following the 1968 stock market crash the usual drive to blame the accountancy profession began. It was alleged that "creative accounting" was responsible for fostering imaginary earnings growth, and the SEC publicly charged some accounting firms with failure to safeguard investors. Many investors had recourse to the courts for compensation; such lawsuits as Westec, Mill Elec., Four Seasons Nursing Homes, Continental Vending, Revenue Properties, Black Watch Farms, Orvis Brothers, and Penn Central, threatened to undermine the auditing profession’s reputation for reliability and independence.

The thrust of this criticism was that accountants had been "managing" the income statement by selecting from different generally accepted accounting principles those methods which would result in the highest
reported earnings per share. In a report to Congress on the Penn-Central bankruptcy, dated August 3, 1972, the SEC stated that:

The whole pattern of income management which emerges here is made up of some practices which, standing alone, could perhaps be justified as supported by generally accepted accounting principles, and other practices which could be so supported with great difficulty, if at all. But certainly the aggregate of these practices produced highly misleading results.

The chairman of the SEC blamed the APB for writing detailed opinions, pointing out that some circumstances were bound to occur which would make the literal application of these rules produce misleading disclosure.

In response to this kind of criticism the AICPA announced in April 1971 the formation of two study groups. One, entitled "The Study Group on the Objectives of Financial Statements" was chaired by Robert M. Trueblood, a prominent CPA, and will be analyzed in Chapter 6. The other, entitled "The Study Group on Establishment of Accounting Principles," was chaired by Francis M. Wheat, a former SEC commissioner and long-time critic of the profession. The Wheat Committee reported on March 9, 1972, and proposed a new structure for establishing accounting rules and standards, based on a Financial Accounting Standards Board. The organization of this new structure is shown in Exhibit 4-1.

EXHIBIT 4-1
FINANCIAL ACCOUNTING FOUNDATION ORGANIZATION STRUCTURE

At the top of the structure is the Financial Accounting Foundation (FAF) with nine trustees of whom five are public accountants, two retired corporate executives, one a financial executive, and one an accounting educator; the president of the AICPA is a trustee. The FAF is charged principally with appointing the seven member Financial Accounting Standards Board (FASB) who depend upon a research and administrative staff and are advised by a thirty-member Advisory Council. The FASB consists of four CPA practitioners and three others with extensive experience in financial reporting, and to assure the status and independence of the FASB, its members received salaries of $125,000 annually, (1976/77). The public accounting profession was quick to promise substantial financial support to this new body which would separate them from GAAP.

Critics of the structure revolved around the FASB and its funding. It was feared that the seven members would operate in an ivory tower environment far removed from actual practice, a fear reinforced when the FASB moved into an elegant new building in Stamford, Connecticut. It was also feared that a substantial commitment called for from the accounting profession—a projected annual cost of $2.5 million—would result in the Big Eight firms, some of which offered to pay as much as one million dollars each over a five-year period, forming a powerful pressure group. Organizationally it was pointed out that, by being separated from the AICPA, the FASB would have no apparent constituency and that the system had no appeals mechanism.

In spite of these criticisms, the Wheat Report met with a remarkable display of enthusiasm, and the FASB was endorsed by the AICPA at its 85th annual meeting in 1972 and was in operation by the following year.

The method of operation of the FASB is this: a problem is identified and a task force appointed, led by a board member and consisting of individuals believed to be knowledgeable. A member of the research staff is assigned to this task force and produces a discussion memorandum, which attempts to pose the issues as seen by the task force, and to review the solutions found in practice or recommended by writers. After a period for consideration, the FASB convenes a public hearing at which interested parties may present their viewpoints orally to members of the board. Subsequently an exposure draft of a standard is issued, with notice that a final standard will be issued after consideration of any responses. Eventually a standard is promulgated, which frequently contains modifications of the exposure draft. In some cases a revised exposure draft may be issued prior to the determination of a standard.

THE ROLE OF THE SEC

The role of the SEC as an influence on accounting practice in the United States cannot be overstated. The SEC's requirement that corporations file data on sales, other operating revenue, cost of goods sold, operating expenses, and other details, undoubtedly led to the expansion of financial reporting generally to the same ends. Again, the SEC's stand in opposition to recording appreciation has been a major factor in restricting the growth of current value accounting in the U.S. The influence of the SEC was exerted largely behind the scenes, but it seems obvious that, possessing the authority of the legislature, the SEC must prevail
on any issue joined with an essentially voluntary body such as the Accounting Principles Board or the Financial Accounting Standards Board.

In the fiscal year ended June 30, 1936, two years after the passage of the Securities Exchange Act of 1934, there were 2,303 issuers required to file annual financial reports with the SEC, and 781 registration statements were filed for $4.9 billion under the 1933 Act. Twenty-five years later, in 1961, 4,789 issuers were required to file annual reports, and 1,830 registration statements were filed for $20.7 billion. It is obvious that the task of ensuring that this flow of information was reliable rested on the public accounting profession, as the SEC, which has never had more than a few hundred professional employees, could only look at a fraction of the total volume of filings.

From the beginning the SEC relied upon the accounting profession to set standards, although it reserved the right to prescribe for financial statements generally and to advise on specific matters through its Accounting Series Releases. The first chief accountant of the SEC, Garman G. Blough, stated before the commission that:

... the policy of the Securities and Exchange Commission was to encourage the accountants to develop uniformity of procedure themselves, in which case we would follow, only as a last resort would the Commission feel the necessity to step in. ... If the time comes when the Commission is convinced that a procedure which is not generally accepted in the profession is a procedure that should nevertheless be followed, the matter will be handled not through the release of an opinion by the chief accountant, but through a rule or regulation of the Commission requiring that such procedure be followed. (Emphasis supplied.)

The policy of the SEC was laid down in Accounting Series Release No. 4, which stated that the commission would accept only financial statements prepared in accordance with accounting principles which have substantial authoritative support or in accordance with rules, regulations, or other official pronouncements of the commission or the chief accountant. As to the latter, the commission has issued nearly 200 Accounting Series Releases and, through the publication of Regulation S-X and the Burns Report, has heavily influenced the accounting profession and the inclusiveness of financial statements in the United States. The SEC’s opposition to writing-up asset values for any reason undoubtedly underlies the inability of the accounting profession to make progress on this question. The SEC’s reliance on the accountancy profession was underscored by ASR No. 150. This stated that accounting principles, standards, and practices theretofore or thereafter promulgated by Statements and Interpretations of the FASB, the Opinions of the APB, and the Accounting Research Bulletins of the Committee on Accounting Procedure that are still in effect will be considered by the commission as having “substantial authoritative support.” ASR No. 150 also indicated that financial statements prepared in accordance with any accounting practices for which “substantial authoritative support” was lacking were presumed to be misleading.

In ASR No. 177, the SEC required companies changing their accounting practices from one acceptable method to another to file a letter from their auditors indicating whether the change is to an alternative principle which, in their judgment, is “preferable under the circumstances.” In May 1976 the firm of Arthur Andersen & Co. filed a petition with the SEC. The petition objected, first, to ASR No. 150, on the grounds that the SEC had no authority to issue such a sweeping rule, and secondly, that the preferable statement required under ASR No. 177 would necessarily result in the SEC setting accounting standards. In effect, the SEC’s distinction between disclosure standards, which was the previously claimed to establish, and measurement standards, which it had left to the accountancy profession, would be eroded.

Since the appointment of Dr. John C. Burton as chief accountant in 1972 there has been a considerable increase in the pressure from the SEC, both directly through Accounting Series Releases and indirectly through threats to act in a certain way if the FASB failed to do so. The clearest illustration was the situation resulting in the publication of the FASB Standard on gains and losses from extinguishment of debt. A spate of articles appeared in business journals in 1974 drawing attention to the long-standing practice of crediting to the income statement profit arising through retiring debt by buying it for less than the maturity amount. The SEC obliged the FASB to issue an exposure draft at short notice and a standard without a public hearing by threatening to act on the issue itself.

The year 1975 saw the SEC pushing for financial statements to disclose environmental data, forecasts, corporate payoffs, and replacement costs of inventories, fixed assets, cost of goods sold, and depreciation, none of which was high on the FASB’s list of priorities. In addition, the SEC initiated a discussion of the concept of differential disclosure which had received virtually no attention from the AICPA or the FASB.

In this connection it is instructive to refer to an article written by Dr. Burton in 1971, in which he predicted the demise of accounting as an academic discipline because of the "lack of eminent scholars in the field and the scarcity of high quality students." Besides criticizing the accounting profession for absolving its professional responsibility to keep its distance from management, Burton suggested that the traditional accounting model might be out of date. Users of accounting statements wanted "useful economic information" and not simply "generally accepted accounting principles." The best answer, wrote Burton, is "to do something, not to consider it." Dr. Burton resigned as chief accountant of the SEC in September, 1976.

THE AMERICAN ACCOUNTING ASSOCIATION

In the reorganization which created the AAA out of the predecessor organization in 1935, the executive committee was assigned the responsibility for creating broad, fundamental accounting principles which would provide a framework for corporate financial statements. In 1936 the first effort in this direction appeared, entitled A Tentative Statement of Accounting Principles Underlying Corporate Financial Statements. In spite of the objective, this publication was an amalgam of standards and rules, some of the latter aimed at reforming contemporary accounting practices.
In 1940 the AAA published Paton and Littleton's *An Introduction to Corporate Accounting Standards* which was destined to become the most influential AAA effort in this field. 28 Paton and Littleton had been members of the original AAA Executive Committee which had prepared the 1936 Tentative Statement. The 1936 statement was revised in 1941, with the words "A Tentative Statement" omitted, and again in 1948, under the title "Accounting Concepts and Standards Underlying Corporate Financial Statements." Eight supplementary statements were prepared between 1950 and 1954, clarifying or expanding on the 1948 statement.

In 1957 a fourth revision appeared, entitled "Accounting and Reporting Standards for Corporate Financial Statements—1957 Revision." Five supplementary statements to this revision were published between 1957 and 1964.

During this period, 1940–1965, the AAA also published a number of research studies, notably Louis Goldberg's *An Inquiry into the Nature of Accounting* (Monograph No. 7, 1964) and R. C. Jones' *Price-Level Changes and Financial Statements: Case Studies of Four Companies* (1955). A new departure was taken in 1964 with the appointment of a Committee to Develop a Statement of Basic Accounting Theory. The resulting report is known as *ASOBAT*. Some of the material in *ASOBAT* was taken over by the authors of *APB Statement No. 4* and has proved a fruitful source of reference to the basic standards of relevance, quantifiability, verifiability, and freedom from bias which it laid down.

The task of applying these basic standards varied upon a number of technical committees, whose reports have been published since 1970 as annual supplements to *The Accounting Review*. 29

The AAA's involvement in identifying accounting standards reveals a shift from the inductive to the deductive mode of reasoning, the 1957 Revision being the transition point. The first statement placed emphasis on correcting improper current practices and while assuming the need for "a single coordinated body of accounting theory" nevertheless adopted the profession's view of accounting as a process of allocation. This statement took the position that accounting was a process of valuation; by 1941 the concept of value was being discussed, but in the 1940 *Monograph* Paton and Littleton set their faces sternly against such an idea.

The 1957 Revision proceeded from the principles of economics in general, and particularly the theory of corporation finance which had been developed from Fisherian economics. Revenue was defined as the money expression of the aggregate of products or services transferred to customers during a period. Assets were "aggregates of service-potentials," which become expenses (or losses) as they "expire," and stockholders equity the residual claims to corporate assets. This framework was conspicuous in two subsequent supplementary statements, which recommended current cost for long-lived assets and replacement cost for inventories. 30

The significance of this move from a positive to a normative theoretical framework is that it provided the profession with a rationale for the abandonment of historical cost. By identifying an attribute to be measured in money (quantities of units of future services) the way is opened up to multiplying those quantities by prices other than the ones which relate to their acquisition. The immediate response to the 1957 Revision, however, was critical, although in time much of its terminology became familiar to U.S. accountants through classroom contact during their educational experiences.

*ASOBAT* was a "new and different kind of effort"; its authors' ambitions went beyond anything previously attempted. They sought to occupy the field of information generally, not merely that part which can be expressed in terms of money. They arrived at propositions which would be applicable to all accounting—financial and managerial; individual, corporate, and governmental; not-for-profit enterprises, and so on. They did not restrict themselves to concepts of income and wealth, but spilled over into "the concepts arising from the growing body of knowledge about management."

Actually, the authors constructed an open-ended model which has not as yet been useful in explaining accounting as it is and is difficult to interpret as an explanation of what accounting should be.

**OTHER CONTRIBUTIONS**

The National Association of Accountants has investigated many of the same problems as the AICPA but from the viewpoint of the business executive—controller or financial vice-president. For reasons which are unclear, the NAA has failed to make an impact, in spite of several initiatives designed to improve the quality of its contributions, except perhaps in its foreign currency translation.

However, the NAA has placed great importance on research to identify the "entire range of socioeconomic information needed by those who manage a business and by those who provide its capital." 31

The various associations of financial executives and analysts from time to time publish studies of accounting problems, some of which draw attention to areas avoided by the professional bodies, such as accounting for multinational corporations. It is noteworthy that the international field was left to the AICPA and the APB. In other English-speaking countries there has been a comparable surge of interest in reducing the number of alternative treatments available for apparently similar transactions. The extent to which associations of accountants outside the United States have been influential in developing accounting principles, as distinct from improving the general level of accounting practice in those countries, is debatable. The Institute of Chartered Accountants in England and Wales has since 1942 issued "Recommendations on Accounting Principles" to its members. In recent years the Accounting Standards Steering Committee (ASSC), a body jointly managed by five of the principal British and Irish accounting associations, has issued exposure drafts and standards on many of the same topics as the APB and the FASB, often with contrary opinions. The Canadian Institute of Chartered Accountants has a research committee which has tended to propose more adventurous solutions than those favored by the AICPA but with little to show for its trouble. In Australia, the Institute of Chartered Accountants in Australia and the Australian Society of Ac-
countants have both engaged in accounting research and publications, often of a high standard. Several Australian scholars enjoy considerable reputations in the United States. In spite of this, Australian financial statements do not reveal the influence of accounting theories different from those which can be identified in the United States.

TOWARD INTERNATIONAL ACCOUNTING STANDARDS

A feature of accounting which has gone almost unnoticed until recent years is its international aspect.

Prior to World War II accountants from different countries met infrequently at International Congresses, starting in St. Louis in 1904. The purpose of these meetings was largely social and fraternal, although technical sessions were an important part. The largest British and American firms of public accountants already had worldwide practices. The growth of international trade, particularly international money markets, following World War II accelerated the internationalization of public accounting but did not lead to the establishment of any supranational organization to regulate the profession.

The development of an international structure for the profession has proceeded since World War II on three levels:

1. Regular International Congresses of Accountants and regular meetings such as the Inter-American Accounting Conferences and the Asian and Pacific Accounting Conventions. A permanent organization, the Union Européenne des Experts Comptables Économiques et Financiers (U.E.C.C) was established in Europe. In addition to biennial congresses, it has standing committees which work toward the goal of harmonizing the public accounting, auditing, and taxation systems of the European countries, particularly those belonging to the European Common Market.

At the International Congress of 1972 a committee was entrusted with the task of coordinating public accounting worldwide. This International Coordination Committee for the Accounting Profession (ICCAP) reported in March 1976 and recommended the formation of an International Federation of Accountants (IFAC) headquartered in New York.

2. The formation in 1973 of the International Accounting Standards Committee (IASC). Its nine original members had each been hosts to one of the International Congresses, and over twenty other countries are now associated with its work. The IASC is headquartered in London and has pushed ahead with the process of establishing international standards for published financial statements. Through June 1976 these included:

- Standards issued
  - IAS 1 "Disclosure of Accounting Policies"
  - IAS 2 "Valuation and Presentation of Inventories in the Context of the Historical Cost System"
  - IAS 3 "Consolidated Financial Statements"
  - Exposure drafts issued
  - ED "Depreciation accounting"

3. The Accountants International Study Group was organized in 1966 by the three British Institutes of Chartered Accountants, the Canadian Institute of Chartered Accountants and the AICPA. It has published fifteen comparative studies of practices in the principal countries of the English-speaking world.

CONCLUSION

The development of generally accepted accounting principles or accounting standards has been a difficult process. The present state, both in the United States and abroad, is a mass of opinions, rules, and official regulations which can by no means be regarded as satisfactory.

During the nineteen-sixties a mini scientific revolution appears to have started to bring some order into the chaotic situation. This phenomenon, which will be described in subsequent chapters, has been characterized as "a priori research in accounting" because it consists of hypotheses concerning accounting different from those underlying generally accepted accounting principles, but unaccompanied by any suggestions as to how they can be tested. There now exist two separate communities in accounting, one of which attempts to continue in the ways described in this chapter, and the other to establish a totally different method of developing accounting standards.

ENDNOTES

2. See the Journal of Accountancy, June 1919, pp. 401-433.
9. Ibid., p. 121.
10. Ibid., p. 1.
11. Ibid., p. 12.
SELECT ADDITIONAL READINGS


Gilbert R. Byrne, "To What Extent Can the Practice of Accounting be Reduced to Rules and Standards?", Journal of Accountancy, November 1937, pp. 364-79.


Paul Grady, "Inventory of Generally Accepted Accounting Principles in the United States of America", The Accounting Review, January 1965, pp. 21-30.


Thomas S. Higgins and Herman Bevis, "Generally Accepted Accounting Principles - Their Definition and Authority", The New York Certified Public Accountants, February 1964, pp. 93-94.


Ibid, p. 33.


W. A. Poten and A. C. Littleton, An Introduction to Corporate Accounting Standards, American Accounting Association Monograph No. 2, AAA, 1940.

A Statement of Basic Accounting Theory, AAA, 1966.


"Report and Recommendations of the Long-Range Objectives Committee of the NAA," Management Accounting, August 1968, Section 3.

DISCLOSURE AND MATERIALITY

The United States is probably unique in that corporate disclosure in the states is not governed by corporation laws. In the United Kingdom, for example, the Companies Acts specify what must be reported by the directors and other officers of a company, and legal liability attaches to noncompliance. In Germany the precise form of the financial statements is laid down in the corporation laws (Aktiengesetze), and departure from this form can have serious legal consequences.

Nevertheless, even in those jurisdictions where the law dictates the form and contents of corporate reports there is a problem of disclosure. We observe that many companies include more data and additional information in their annual reports than called for by the law and are therefore obliged to ask the same question.

The question is: what should be disclosed in financial statements and in the reports of which financial statements form the central part? It is one which has become a subject of wide ranging debate in the accounting literature. The main objective of the SEC is disclosure through registration statements, prospectuses, and other filings, and insofar as the SEC has permitted the accountancy profession to establish its own principles and standards, disclosure has acquired special significance for the accountant.

In spite of this, no meaningful concept of disclosure can be identified either in SEC or AICPA sources. It is generally agreed that accounting reports should disclose that which is necessary to make them not misleading, but this appears to be an open-ended construct and attempts to make it more specific lead only to confusion. At first sight the potential area of disclosure is commensurate with the information available to management, and thus a workable construct of disclosure could be derived from analysis of management decisions. An attempt will be made later in this chapter to examine this approach. Recent developments have indicated that such a construct is inadequate, since some interested parties look to financial statements and the reports in which they are presented to disclose matters not normally part of a management information system. Such matters could include data believed useful for macroeconomic models and data having assumed relevance to the solution of social problems such as employment of the disadvantaged and environ-
mental quality control. It is easily perceived that these data could include observations not required by managers to perform their functions efficiently. It therefore appears that the concept of disclosure extends beyond the search for fairness and that problems of disclosure cannot be solved by reference to the legal rules against suppressio veri or suggestio falsi.

A major problem can arise when different governmental-regulatory agencies prescribe for different disclosures of the same, or similar, information, often defining the object of disclosure in different terms. Line of business (LOB) sales, costs, and assets; direct and portfolio investments by foreigners in the United States and by U.S. corporations overseas; expenditures on pollution control and environmental protection are examples of this situation. Even within the area of accounting rule-making there is an acute problem; can one reconcile the disclosure requirements of the SEC, APB, FASB, and IRS on a change to the LIFO basis of inventory valuation?

The question of materiality also has to be answered in this new context. The conventional view of materiality as a function of size arises from the definition of materiality as that which is capable of affecting judgment. But if disclosure must be related to the purposes of unspecified users, no size determinants can be identified. In the United Kingdom, for example, companies are required by law to report charitable donations, a very insignificant corporate expenditure. The current debate on materiality will also be examined in this chapter.

Among the references to disclosure we meet the modifiers "adequate," "fair," and "full," which appear to some to designate a progression. As Hendriksen has pointed out, there is no real difference between the three concepts; adequate disclosure must be full and fair, and so on.  

### THE TRADITIONAL VIEW OF DISCLOSURE

We have observed that the boundaries of disclosure extend beyond the financial statements themselves and even beyond the reports in which these statements appear. However, we shall first examine the traditional view—that disclosure is theoretically commensurate with financial reporting.

This view proceeds from the assumption that the principal or sole objective of financial reporting is to assist in buy/hold/sell decisions of investors, particularly those investors lacking the powers to obtain information at will. Extension of this assumption to a definition of investment resource allocation directs attention to the needs of others besides present and potential future stockholders. These have been classified as *direct uses* and *indirect uses*, and the two classes are listed in Table 5.1.

It should be emphasized that these groups are not mutually exclusive; the same individuals, corporations, and financial institutions which supply goods on credit or loan money also hold equity or ownership interests. The *indirect users* can exist only as providers of services to *direct users*. Further, the lists are not definitive; since *APB Statement No. 4* was written social action groups have become influential users of financial statements.

### TABLE 5-1 USERS OF FINANCIAL STATEMENTS

<table>
<thead>
<tr>
<th>Direct Users</th>
<th>Indirect Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners</td>
<td>Financial Analysts and Advisers</td>
</tr>
<tr>
<td>Creditors and Suppliers</td>
<td>Stock Exchanges</td>
</tr>
<tr>
<td>Managers</td>
<td>Lawyers</td>
</tr>
<tr>
<td>Taxing Authorities</td>
<td>Regulatory or Registration Authorities</td>
</tr>
<tr>
<td>Employees</td>
<td>Financial Press and Reporting Agencies</td>
</tr>
<tr>
<td>Customers</td>
<td>Labor Unions</td>
</tr>
</tbody>
</table>

At this point we encounter the difficulty to be discussed in Chapter 6 on the objectives of financial statements. The concept of information disclosure can be structured only by reference to the perceived or assumed needs of a specified user or user-group, because different users have different information needs. For example, even where investors are narrowly defined as present and potential future stockholders, a distinction may be made between the standard user, who is assumed to understand accounting, and the unskilled user, who cannot interpret financial statements. This observation leads to the idea of *differential disclosure*, which SEC spokesmen have exposed since 1974, and to the idea of *modified financial reporting*, in which different figures for different purposes are laid out, in the manner of hors d'oeuvres, for the user to select. These ideas contrast sharply with the current AICPA official position that financial reports should be general-purpose sources of financial information designed to serve the common needs of those interested in them.

Assuming that this difficulty could be overcome, the traditional view states that the problem of disclosure can be referred to the criterion of relevance, which is the primary qualitative objective of financial reporting. Information relevant for one purpose is not necessarily relevant for another, so that even if the user group can be identified, the disclosure problem is not solved. Decision theory postulates a set of parameters which must be known before the criterion of relevance can be applied.

Suppose that we can apply the criterion of relevance; the next question is how much to disclose? The traditional view specifies the following elements of the disclosure model:

1. Income statement
2. Statement of financial position (including statement of retained earnings)
3. Statement of changes in financial position
4. Notes to financial statements
5. Audit report

These elements, as we have seen, do not automatically dictate the quantitative aspects of disclosure. The perception, classification, accumulation, and aggregation of data are subject to what *APB Statement No. 4* refers to as constraints, which can be of three kinds:
• Conflicts of objectives, or the trade-off between verifiability and relevance.\(^8\)
• Environmental influences, of which the most important is the economic question of value of information compared to cost of providing it.
• Incomplete understanding of the purpose of the information.

Under the heading “Fair Presentation in Conformity with Generally Accepted Accounting Principles,” APB Statement No. 4 laid down that the qualitative standard of fair presentation is met if “A proper balance has been achieved between the conflicting needs to disclose important aspects of financial position and results of operations in accordance with conventional concepts and to summarize the voluminous underlying data in a limited number of financial statement captions and supporting notes.” The difficulty of interpreting such a proposition has been referred to repeatedly throughout this book. Among the problems are:

1. Definition of the constituents of financial statements
2. Valuation alternatives
3. Whether the statements should be prepared within a closed system
4. Error measurement and presentation
5. Need for conservatism
6. Treatment of intangibles and nontransaction measurements
7. Accounting for business combinations

A new direction to the question “how much disclosure” has been given by the current interest in publication of forecasts, another of the matters in which the SEC has shown great interest. Dr. John C. Burton, when chief accountant of the SEC, directed attention to the continuous aspect of business operations, suggesting that while quarterly, annual, or other periodic reports may be useful, continuous timely reporting may be preferable to reporting the results of a single time period. As an example of this approach, Dr. Burton suggested the use of exception reporting; historical reporting would occur only at times when a change in expectations arose. Implicit in this concept of the “business continuum” and explicit in some of the SEC proposals published in 1975, is the assumption that forecasts and projections should be included in the scope of disclosure. It must be admitted that the SEC’s initiatives in the area of future-oriented disclosure have met with virtually unanimous opposition from corporate executives, public accountants, lawyers, and financial analysts. There has also been little attempt outside the SEC to determine how forecasts should be disclosed.\(^9\)

Among the other matters which have been proposed as additions to the traditional model of disclosure are:

• Macro-economic accounting
• Social accounting

There has also been some suggestion that the contents of financial statements might be reduced by doing away with deferrals and by deducting consolidated goodwill from stockholders’ equity.\(^10\) This, coupled with the suggestion from Dr. Burton previously mentioned, relate to the possibility of disclosure being excessive. We are faced with a problem rather like that of the golfer, whose task is to hit the ball with a club, but not too often.

**CURRENT DISCLOSURE REQUIREMENTS—APB AND FASB**

In the United States the overriding requirement is for reports to conform to generally accepted accounting principles. These principles are not codified but have been defined by the AICPA as “those which have substantial authoritative support.” Pronouncements of committees of the AICPA prior to the creation of the APB, insofar as they have not subsequently been revoked, and the opinions of textbook writers may constitute substantial authoritative support. An auditor must disclose any departure from the recognized sources of accounting principles (the Accounting Research Bulletins, APB Opinions and FASB Standards) and disclose the effect of the departure on the financial statements, where “practicable.”\(^11\)

Hendriksen has drawn attention to some matters which could result in misinterpretation if not disclosed:

1. The use of procedures that materially affect income statements or balance sheets compared to alternative methods which could be assumed by the reader in the absence of disclosure
2. A material change in procedures from one period to the next
3. Significant events or relationships not arising from normal activities
4. Special contracts or arrangements affecting the relationships of interested parties
5. Material changes or events that would normally affect expectations
6. Material changes in activities or operations that would affect decisions regarding the firm\(^12\)

Specific disclosure requirements include:

**Accounting Principles Board Opinions**

No. 6—Departures from APB Opinions
No. 7—Investment in leasing activities
No. 8—Details concerning employee pension plans operated by the firm
No. 11—Income tax expense, amount currently payable and effects of tax allocation
No. 12—Depreciable assets, depreciation methods, depreciation expense and accumulated depreciation
No. 15—Earnings per share, primary and diluted, and details underlying the computations.

No. 16—A considerable number of matters relating to business combinations, separately for those treated as purchases and those treated as poolings of interests.

No. 18—Details of corporate investments and the method of accounting for them.

No. 19—Certain aggregates which must be included in the Statement of Changes in Financial Position.

No. 21—Discount or premium on the issue of notes and other obligations.

No. 22—A description of all significant accounting policies.

No. 28—The contents of interim financial statements.

No. 30—Effects of discontinuing a segment of the business.

No. 31—Details of lease commitments by lessees.

Financial Accounting Standards Board Statements

No. 2—Research and development costs charged to expense.

No. 3—Effects on net income and related per share amounts of cumulative effecttype accounting changes.

No. 4—Effects of extinguishment of debt.

No. 5—Loss contingencies not meeting the test for accrual, where there is a reasonable possibility of loss.

These disclosure requirements sometimes call for inclusion of the matter to be disclosed as an item in a particular financial statement, sometimes specify that it should be presented in the footnotes to the financial statements, and sometimes require disclosure in financial statements or “in the financial notes or statements.” Earnings per share should be presented “on the face of the income statement,” and disclosure of accounting policies may be made in a separate (new) section preceding the notes to financial statements. Departures from APB Opinions should be disclosed either in the footnotes or in the audit report.

It appears unlikely that satisfactory generalizations can be derived from a study of these sporadic pronouncements on ostensibly discrete issues, and the substitution of the FASB for the APB does not seem to have aided the task.

SEC DISCLOSURE REQUIREMENTS

The Securities and Exchange Commission (SEC) was created in 1934 by Act of Congress to administer laws passed in 1933 relating to securities transactions. The 1933 Act was intended to protect the investor by requiring the issuer of a security to make full disclosure of the material facts concerning the security and its issue. A material fact is defined as a fact the average prudent investor would be expected to rely on. Disclosure is enforced by filing a registration statement and prospectus for review by the Commission. In its review, the Commission determines whether there has been compliance with the Securities Acts of 1933 and 1934 and with the rules, regulations, and instructions issued by the SEC.

The 1934 Act required disclosure through filing the financial statements of corporations whose securities are held by the public. The SEC expresses its views in the following five ways:

1. Regulation S-X. This governs the form and content of financial statements filed.
2. Accounting Series Releases, which are opinions of the SEC's accounting staff on major accounting and administrative questions.
3. SEC decisions and reports, including Staff Accounting Bulletins.
4. Annual reports of the SEC.
5. Speeches and articles by members of the Commission and its staff.

Among the documents filed with the SEC are the 10-Q (quarterly financial report), 12-F (annual report of certain regulated companies), and 8-K (report of unscheduled material events or corporate changes deemed of importance to shareholders or to the SEC). Of major importance to this topic is the 10-K or annual filing of financial statements by corporations with securities which are publicly traded.

The 10-K is in two parts and seventeen schedules. The contents are:

Part I

1. The business: Products, markets, methods of distribution; competitive factors, backlog and bottlenecks. Cost of research, number of employees, effects of compliance with ecology laws. A statement of total sales and net income for each line of business accounting for 10 percent or more of total sales or pre-tax income during either of the last two fiscal years.
2. Summary of operations: For each of the last five fiscal years, including explanations for changes in revenues, earnings and other items.
3. Properties: Location and character of principal plants, mines, etc. and how held.
4. Parents and subsidiaries: A list or diagram of all controlling and/or controlled companies and the percentage of voting securities owned.
5. Legal proceedings: Material legal proceedings pending or in progress.
6. Changes in number of outstanding securities.
7. Approximate number of equity security holders.
8. Executive officers: Names, positions and family relationships.
9. Indemnities of directors and officers.
10. Financial statements: Audited financial information and list of exhibits filed.

Part II

11. Principal holders of securities: Identity of owners of more than 10 percent of any class of securities and holdings of directors and officers.
12. Directors: Names, terms of office and other information.
13. Remuneration of directors and officers.
14. Options granted to management.
15. Interest of management and others in certain transactions.

Schedules

I. Marketable and other securities.
II. Due from directors, officers and principal holders of equity securities.
III. Investments in securities of affiliates.
IV. Indebtedness of affiliates, other than current.
V. Property, plant and equipment.
VI. Accumulated depreciation, depletion and amortization of property, plant and equipment.
VII. Intangible assets.
VIII. Accumulated depreciation and amortization of intangible assets.
IX. Bonds, mortgages and similar debt.
X. Indebtedness to affiliates (not current).
XI. Guarantees of securities of other issuers.
XII. Reserves.
XIII. Capital shares.
XIV. Warrants or rights.
XV. Other securities.
XVI. Income from dividends and equity in income of affiliates.

Regulation S-X calls for inclusion in the notes of information concerning
- Changes in accounting principles
- Retroactive adjustments
- Purchase commitments
- Long-term leases
- Assets subject to lien
- Preferred stock data
- Pension and retirement plans
- Dividend restrictions
- Contingent liabilities
- Depreciation policies
- Stock option plans
- Stock purchase plans

Besides pressing for additional information in interim financial reports and encouraging discussion of the concept of differential disclosure, the SEC has also called for footnote disclosure of replacement cost data for inventories, cost of sales, productive capacity, and depreciation, depletion, and amortization. In contrast to current-value accounting, these data would be outside the accounting system and the financial statements excluding footnotes. Replacement cost is defined as "the lowest amount that would have to be paid in the normal course of business to obtain an asset of equivalent operating or productive capability" and is contrasted with reproduction cost, "the cost to replace an expiring asset in identical form but at current price levels." The concept of replacement cost resembles that of replacement value defined in Chapter 11.

Clearly, there is some overlap between the requirements of the APB/FASB and of the SEC. Equally clearly, the disclosure requirements of the SEC are oriented to the kind of information necessarily demanded by one who holds, or contemplates holding, the securities issued by a corporation: number of units of each class of security at issue, rights of security holders, relationships which might affect interests in securities, and so on. The distinguishing feature of SEC disclosure requirements, however, is the generality of the information required. The SEC places the financial statements in context—in the context of the business from which they emanate and in the context of the stock markets for which SEC filings are intended.

ACCOUNTING AS A COMMUNICATION PROCESS

The disclosure problem belongs within the general area of communication.

\[
\text{Accounting is the process of identifying, measuring, and communicating economic information to permit informed judgments and decisions by users of the information.}^{14}
\]

Sterling has presented a graphic model to handle accounting as a measurement-communications system.\(^{15}\)

\[
\begin{align*}
\text{Accountant} & \quad \text{Metician-Transmitter} & \quad \text{Message} & \quad \text{Receiver} \\
\downarrow & \quad \text{Identified Objects:} & \quad \text{Decision-Maker} & \quad \text{Picture of} \\
\text{Establishment} & \quad \text{Firm-Environment} & \quad \text{the firm} \uparrow
\end{align*}
\]

In this model, the accountant measures observed attributes of the firm in relation to its environment and transmits these measurements in message form (the financial statements) to the investor-user. The investor-user has an image of the firm in which he is interested, permitting him to interpret that message.

There are a number of conceptual problems to be solved before this model can be validated.

1. Does the accountant measure? Measurement is itself a science called metrology, with its own methodology in which accountants are not trained.
2. If the accountant does not measure, then he receives messages containing measurements and transmits them. The simpler Shannon and Weaver model seems more relevant to this situation. Source — Transmitter — Channel — Receiver.

3. There can be a considerable variance between the reality as perceived by the transmitter and as perceived by receiver; indeed, the problem of separating the identified object from the person observing it is a fundamental philosophical difficulty. Chambers has abstracted from it by postulating as an ideal the neutrality of the accountant; Chambers' actor must be able to perceive what the accountant has observed as if he, the actor, had observed it himself.

4. If accounting is only a part of the information system serving the user, it is necessary to identify the position of financial statements in a vector of messages or assume that the user utilizes financial statements exclusively. In spite of these criticisms, the communication approach to disclosure has considerable promise. It forces us to analyze disclosure into parts: the elements, as in the Shannon and Weaver model; the dimensions, as in questions of materiality and other constraints, and the process, as in the accountant's role. It also permits us to examine the message without reference to user needs. In a sense, the accountant becomes a map-maker, and financial statements can be viewed as maps of the territory they represent.

The critical feature of the message is that it is independent of transmitter and receiver. Thus, there is no concordance between message and meaning; meaning lies in the minds of the transmitter and the receiver. Further, the communication process can be disturbed, a phenomenon known as "noise." Noise consists of those factors which interfere with the message, such as overloading the channel (too much data) or using a linguistic code for inputs which differs from the one used for outputs. This occurs when the user of financial statements cannot understand (decode) them. Terminology is still the fundamental accounting problem.

METHODS OF DISCLOSURE

Disclosure in accounting takes a number of forms, principally:

1. Financial statements, consisting of three principal statements, an income statement, balance sheet, and funds statement. Reference to a separate statement of retained earnings is misleading, since this is simply a supporting schedule to the balance sheet. Financial statements include schedules and exhibits designed to reveal details of items aggregated in the principal statements, and comparative statements of prior periods.

2. The auditor's certificate. This is more properly defined as a report by the auditor disclosing the reliability of the financial statements. Thus, the auditor's certificate would be the appropriate place to disclose departures from generally accepted accounting principles and their effects, changes from one generally accepted accounting principle to another and their effects, and differences of opinion between auditor and client on these and other questions.

3. Footnotes, which are conventionally viewed as forming part of the financial statements.

4. Statistical data derived from the financial statements, of which earnings per share is the prime example. Such data are sometimes presented in a separate, supplementary report.

The form and contents of the financial statements will be discussed extensively in subsequent chapters. The contents of the auditor's report is the proper subject of a work on auditing. The question of footnotes, however, deserves separate examination. Analysis of the contents of footnotes reveals that they are likely to be of three kinds:

1. Schedules and exhibits more properly viewed as part of the financial statements themselves, e.g., analysis of the item "Property, plant and equipment — net." Before the obligation to present a separate funds statement, sources and application of funds were frequently shown in a footnote, as is still the case in some European countries.

2. Explanations of items appearing in the financial statements, such as methods of valuation of inventories, depreciation policy, effects on future years of lease and pension obligations.

3. Information additional to the contents of the financial statements and auditor's certificate. This information may either throw light on the financial statements as a whole, (e.g., consolidation policy; effects of translating foreign currencies), or refer to specific matters not included in the financial statements, such as: contingent liabilities and subsequent events.

Unfortunately, the footnotes have tended to become substitutes for financial statement items, the possibility of avoiding an accounting decision by mentioning the item in a note has acted as a severe brake on the modernization of financial statements. For example, where unquoted investments have substantially altered their value since acquisition, companies which disclosed the fact tended to do so by way of footnote rather than to amend the asset valuation directly.

In practice, the number and size of footnotes should be severely scrutinized, as they are often obscure and may even contradict the financial statements themselves. Information which does not fall under categories (a) to (c) above should be disclosed in a nonaccounting part of the report, such as the president's letter or directors' review. Information which purports to specify accounting policies and methods used, according to Hendriksen, is critical, but the complexities of practice cannot be explained in a short note, and a long one would remain unread.

Indeed, the road to disclosure outside the financial statements is strewn with hazards; earnings per share presents a good illustration. This statistic is used by financial analysis as a variable in share valuation models, and therefore an information approach to accounting would insist
on its inclusion in financial statements. Return on invested capital would be a more useful datum, yet no APB opinion or FASB standard requires this to be disclosed. Furthermore, the obligatory methods of calculating earnings per share are incapable of providing the datum which financial analysts seek.

A MODEL FOR DISCLOSURE

We may accept the possibility of deciding whether a particular observation should be disclosed in the financial statements, in the auditor’s certificate, in the footnotes, or in a supplementary statement, without necessarily agreeing on an answer to our opening question: what should be disclosed?

The SEC disclosure requirements provide one possible answer to this question. Obviously, the SEC considers this amount of disclosure adequate; otherwise it would call for more. Reference to the U.K. Companies Acts (1948 and 1967), or to the German Aktiengesetze, or to the French Commission des Opérations Boursières, however, reveals that the SEC has omitted to prescribe certain disclosures which other jurisdictions require, and vice versa.

To produce a model for disclosure, to which questions can be referred in the absence of specific laws, rules, principles, or standards, we shall assume that the receiver of the message is primarily concerned with the effectiveness of the firm and that the accountant’s role is to provide the user with measurements of effectivenss. These may be either financial or nonfinancial, the former being those measurements expressed in money terms.

The effectiveness of the firm may be measured functionally, in respect of production, marketing, and finance; structurally, in respect of personnel, equipment, and inventories; or operationally, in respect of products, product groups, or brands. All of these measurements are potentially useful to all of those interested in financial reporting. In addition to the financial statements themselves, which provide overall measurements of effectiveness, the following measurements are suggested by this approach:

1. Production Productivity is not reflected in current income since its effects may be disguised by inventory changes and variations in fixed assets. Separate measurements of productivity, defined as the economy of means, are used by firms internally to relate inputs to outputs, and the more important of these measurements should be reported outside the firm. Nonfinancial measurements of production volume are also necessary.

2. Marketing Key measurements in the area of marketing are: market penetration (sales relative to market potential); market share (sales relative to sales of other firms); advertising and research and development expenditures related to sales; order position in terms of quantities and time periods.

3. Finance Conventional financial statements contain only part of the information relevant to the finance function. Budgets and cash forecasts are other critical elements of the measurement of financial effectiveness. The financial statements should distinguish between current operating margins and period profits resulting from holding gains and losses.

4. Personnel The social report which German companies include in their annual reports is indicative of the scope of disclosure in respect of personnel matters. Average remuneration and direct employee benefits per employee; value added per employee; expenditures for pensions, training, and welfare; health services and accident prevention statistics; average hours worked and other measurements are provided.

The central place of the worker in modern society, as both producer and consumer, requires that social effectiveness be measured. It must be admitted that this area is not yet developed and that internal measurements of effectiveness are as tentative as those reported outside the firm. Beresford points to the need for reporting practices that are more quantitative, relate costs to benefits, and proceed from a general concept of matters of social concern.19

5. Equipment Current and planned capital expenditure should be disclosed, in both the gross and net investment forms. Fixed asset totals should distinguish between assets in use and assets not in use, and productivity measurements should include the latter. Average age of plant and equipment, its replacement value, disinvestment (both normal and abnormal), and write-offs should be disclosed. The value of equipment manufactured by the firm for its own use should be included in output measurements and not simply netted out of cost of production.

6. Inventories The analysis of inventories is important, as is the measurement of inventory turnover. The effectiveness of quality control should be disclosed, including measurements of waste, scrap and other inefficiencies in the use of materials. Replacement value should also be disclosed for inventories.

7. Operations Virtually all modern businesses are diversified, and the problem of measuring effectiveness is acute in the case of the most diversified groups, the conglomerates. In those instances, the financial statements fail to provide even an overall measurement of effectiveness.

With regard to this last point, some countries have legislated for the inclusion in corporate financial reports of an analysis of sales and operating profits by segment or line of business, notably the U.K. and Sweden. The SEC requires registrants to disclose total sales and net income for each line of business which, during either of the last two fiscal years, accounted for 10 percent or more of total sales or pre-tax income. The Federal Trade Commission is currently formulating a reporting obligation on these lines, which has encountered serious objections.20

The conventional argument in favor of disclosure points to the loss of information which occurs when firms previously publishing separate financial reports combine and consolidated financial statements take their place.
Opponents of line of business (LOB) reporting argue that the allocations and apportionments which must be made present insuperable accounting and interpretation difficulties. Neither of these arguments has much substance. To combine firms is to change them significantly, and to analyze them as though they were separate is a logical error. The accounting difficulties referred to pervade all financial reporting without rendering it abortive.

The overriding consideration suggested by the model presented here is that LOB reporting is necessary because it provides measurements of effectiveness. This view implies that assets and liabilities are also be allocated to segments of the business, so that net income can be related to capital employed for each of them as well as for the business as a whole. This is normally regarded as a necessary feature of management accounting, for the same reasons. In the last analysis, LOB disclosure hangs on the question of materiality.

**MATERIALITY**

That there is no such thing as materiality should be evident from its definition as “the quality or state of being material.” There is no materiality but there are material things— in this context, data which is material. To seek the answer to the question “what is material?” is a philosophical exercise, similar to the search for truth or beauty.

The SEC has identified a quantitative measure of materiality in one case as 10 percent of a given amount. However, SEC registrants must disclose the effects of timing differences necessitating tax allocation only when the amount exceeds 5 percent of the product of income before tax and the “applicable statutory Federal Income Tax rate.” The FASB has attempted to study the problem in depth and a Discussion Memorandum has drawn attention to the difficulties inherent in this approach. The FASB research staff conducted a literature search and interviews to find out how those responsible for financial statements made materiality decisions, and users’ perceptions of financial information useful for making economic decisions. These questions have formed the subject of a number of empirical studies, which are listed and, in one case, reproduced in Appendices C and D of the FASB Discussion Memorandum.

The authors of the Discussion Memorandum view materiality criteria in terms of a hierarchy of factors with descending levels, moving from general to specific considerations, their mode of expression being quantitative or nonquantitative or both. Quantitative expression has been illustrated; a nonquantitative expression would be a statement such as “If, in view of all information existing at the time, its disclosure or the disclosure of the accounting treatment of it should reasonably be expected to influence the judgement and actions of a well-informed investor or creditor (either existing or potential).” As an example of a criterion which is both, the Discussion Memorandum provides the following:

a. If the amount of its current or potential effect equals or exceeds 10 percent of a pertinent financial statement amount, the matter should be presumed to be material.

b. If its amount or current or potential effect is between 5 and 10 percent of a pertinent financial statement amount, the materiality of the matter depends on the surrounding circumstances.

The use of a quantitative criterion must always run up against the statistical problem that, although tests of significance are desired, no logical justification can be provided for the neglect of small probabilities or for the conventional choice by statisticians of a determinate confidence level. This is the underlying reason for the Discussion Memorandum’s conclusion that “Although the literature suggests the desirability of authoritative criteria for the determination of materiality, a sufficient basis for the development of operational criteria that would be responsive to the needs of users has not been developed.”

Appendix D of the Discussion Memorandum makes a similar statement from a different viewpoint. The question remains however, whether that objective of providing the “average prudent investor” with information necessary to make an informed investment decision is attainable without knowledge of the characteristics of the average investor or the decision model that he uses.

The authors proposed additional research to test the association between price changes and the magnitude of unexpected changes in accounting variables, on the assumption that the securities market is “efficient” in the sense that prices fully reflect all presently available information. The research which has been conducted reveals the researchers divided on the issues. Benston and Gonedes found either no significant impact or an impact which suggested that the quantitative criteria generally proposed are far too low. Ball and Brown found that reported earnings correlated with price movements and consequently would constitute an appropriate base for judging materiality, but other studies have shown a clear correlation between share prices and earnings reported subsequently.

Whatever the significance of research aimed at investor uses of financial statements, it must be remembered that many other user groups are also affected by published accounts and what is material to them may be quite different. In a recent Supreme Court case (TSC Industries, Inc. v. Northway, Inc.) the opinion of Justice Thurgood Marshall contained this statement:

The question of materiality, it is universally agreed, is an objective one, involving the significance of an omitted or misrepresented fact to a reasonable investor. Variations in the formulation of a general test of materiality occur in the articulation of just how significant a fact must be and, put another way, how certain it must be that the fact would affect a reasonable investor’s judgement.

In this case, the Court concluded that omission of a fact in a proxy statement was material if there was a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote. Expanding this proposition to cover other user groups suggests that the search for a specific materiality criterion must prove abortive.
ENDNOTES


3. AAA Committee on Accounting Concepts and Standards, Accounting and Reporting Standards for Corporate Financial Statements etc., Columbus, Ohio: AAA 1971, pp. 7-9, 46-50.


22. Ibid. p. 156.


SELECTED ADDITIONAL READINGS

Disclosure


Disclosure of Forecasts


Communication Theory


THE OBJECTIVES OF ACCOUNTING

The belief that accounting principles should be derived from agreed objectives of accounting appears to have acquired widespread acceptance during the past decade. Writers had previously tended to take a teleological approach to accounting theory, believing that the financial statements were the objectives of the accounting process.

Hendriksen put forward the proposition that "the starting point for any field of study is to set forth its boundaries and determine its objectives." He identified two major approaches to accounting objectives:

1. The view that financial statement users are unknown and have multiple uses. From this it can be inferred that financial statements should contain data rather than information.
2. The view that financial statement users are known and have a specific use. From this it can be inferred that financial statements should contain information relevant to specific user decision models, leading to the concept of "different figures for different purposes"—the preparation of separate kinds of financial statements for different users.

The proposition that both views may be correct has not attracted much support. APB Statement No. 4 illustrates the ensuing dilemma by providing that general purpose financial statements are the norm and yet accounting must produce information. Statement No. 4 resolves this dilemma by assuming that "a significant number of users need similar information" while at the same time confessing that "a vital task is to determine these common needs and the information that is relevant to them."

A comparable controversy has arisen in the field of transnational financial reporting, i.e., publication in Country B of financial statements originating in Country A. Two opposing philosophies have been expressed:

1. The single domicile approach, under which essentially the same financial statements are issued outside the country of domicile with
THE WHEAT AND TRUEBLOOD COMMITTEES

In response to criticisms of corporate financial reporting and the lack of a framework for developing accounting principles, in April 1971 the president of the AICPA announced the formation of two study groups. One was called "The Study Group on the Objectives of Financial Statements," the other "The Study Group on the Establishment of Accounting Principles." The objectives study group was headed by Robert M. Trueblood, a practicing public accountant, and became known as "The Trueblood Committee." The principles study group was headed by Francis M. Wheat, a former Securities and Exchange commissioner and critic of the accountant profession, and became known as "The Wheat Committee."

These actions followed a conference of 35 prominent CPAs, representing 21 major accounting firms, held in Washington, D.C. in January 1971. The crucial issues raised by this conference included the desirability of undertaking a broad review of how accounting principles should be established. It was intended that the Wheat and Trueblood Committees should report at approximately the same time, and that the Trueblood Committee's statement of objectives should support the Wheat Committee's recommendations. The Wheat Committee reported in March 1972 but the report of the Trueblood Committee did not appear until October 1973. The Wheat Committee report and its consequences were discussed in Chapter 4.

In its charge to the Trueblood Committee the Board of Directors of the AICPA laid down four questions to be considered by the study group:

1. Who needs financial statements
2. What information do they need
3. How much of the needed information can be provided by accountants
4. What framework is required to provide the needed information

To answer these questions the Trueblood Committee assembled a staff of academicians, practitioners, and consultants, solicited the views of more than 5,000 corporations and other organizations, conducted more than 30 interviews and held 35 meetings with institutional and professional groups and a three-day public hearing in New York.3

THE OBJECTIVES OF ACCOUNTING

The Trueblood Report contained twelve objectives which were stated within a context of assumptions and argument purporting to support the objectives and underline their logical derivation. As Anton has demonstrated, they can be viewed as a hierarchy, the principal objective being stated in these terms:

"The basic objective of financial statements is to provide information useful for making economic decisions."

As a general proposition this objective acquires its meaning from the further objectives stated in the report which Anton refers to as: identifying users and uses, specifying information needed, and implementing. The report also contains nine "imperative recommendations" and two "nonhierarchical" objectives, the latter relating to governmental and not-for-profit organizations and to social reporting. The further objectives are:

TRUEBLOOD COMMITTEE OBJECTIVES

Identifying Users And Uses

An objective of financial statements is to serve primarily those users who have limited authority, ability, or resources to obtain information and who rely on financial statements as their principal source of information about an enterprise's economic activity.

An objective of financial statements is to provide information useful to investors and creditors for predicting, comparing, and evaluating potential cash flows to them in terms of amount, timing, and related uncertainty.

Implementing

An objective of financial statements is to provide users with information for predicting, comparing, and evaluating enterprise earning power.

An objective of financial statements is to supply information useful in judging management's ability to utilize enterprise resources effectively in achieving the primary enterprise goal.

Specifying Information Needed

An objective of financial statements is to provide users with information for predicting, comparing, and evaluating enterprise earning power.

An objective of financial statements is to supply useful information about transactions and other events which is useful for predicting, comparing, and evaluating enterprise earning power. Basic underlying assumptions with respect to matters subject to interpretation, evaluation, prediction, or estimation should be disclosed.
An objective is to provide a statement of financial position useful for predicting, comparing and evaluating enterprise earning power. This statement should provide information concerning enterprise transactions and other events that are part of incomplete earnings cycles. Current values should also be reported when they differ significantly from historical cost. Assets and liabilities should be grouped or segregated by the relative uncertainty of the amount and timing of prospective realization or liquidation.

An objective is to provide a statement of periodic earnings useful for predicting, comparing, and evaluating enterprise earning power. The net result of completed earnings cycles and enterprise activities resulting in recognizable progress toward completion of incomplete cycles should be reported. Changes in the values reflected in successive statements of financial position should also be reported, but separately, since they differ in terms of their certainty of realization.

An objective is to provide a statement of financial activities useful for predicting, comparing, and evaluating enterprise earning power. This statement should report mainly on factual aspects of enterprise transactions having or expected to have significant cash consequences. This statement should report data that require minimal judgment and interpretation by the preparer.

An objective of financial statements is to provide information useful for the predictive process. Financial forecasts should be provided when they will enhance the reliability of users’ predictions.

The nine imperative recommendations are a mixture of disclosure standards, valuation methods, postulates concerning the production process, and behavioral assumptions. The two nonhierarchial objectives are:

An objective of financial statements for governmental and not-for-profit organizations is to provide information useful for evaluating the effectiveness of the management of resources in achieving the organization’s goals. Performance measures should be quantified in terms of identified goals.

An objective of financial statements is to report on those activities of the enterprise affecting society which can be determined and described or measured and which are important to the role of the enterprise in its social environment.

The Trueblood Report also presented, in a separate chapter, seven qualitative characteristics which financial statement information should possess in order to satisfy users’ needs.

1. Relevance and Materiality
2. Substance rather than Form
3. Reliability
4. Freedom from Bias
5. Comparability
6. Consistency
7. Understandability

PREDECESSORS OF THE TRUEBLOOD COMMITTEE OBJECTIVES

The thrust of the basic objective can be traced to Staubus’ pioneering work A Theory of Accounting to Investors. However, the Trueblood Report was directly influenced to a very considerable extent by Chapter 4 of APB Statement No. 4 on the objectives of financial statements. This chapter divided objectives into particular, general, and qualitative, and placed them under a set of constraints. The following paragraphs summarize the chapter.

Particular Objective

To present fairly in conformity with generally accepted accounting principles, financial position, results of operations, and other changes in financial position.

General Objectives

1. To provide reliable information about economic resources and obligations of a business
   a. To evaluate its strengths and weaknesses
   b. To reveal its financing and investment
   c. To evaluate its solvency
   d. To demonstrate its resource base for expansion
2. To provide reliable information about changes in net resources resulting from its profit-directed activities
   a. To indicate to investors expected dividend return.
   b. Successful operations indicate to creditors that they will be paid, employees that they will receive employment, government that it will collect taxes.
   c. To provide management with planning and evaluation information.
   d. To help users make predictions about earning potential.
3. To provide other information about changes in economic resources
4. To provide other information relevant to financial statement users’ needs

Qualitative Objectives

1. Relevance to common needs of users is primary.
2. Understandability (but users must have “some understanding”).
3. Verifiability, which involves specifying attributes to be measured and measurement methods.
4. Neutrality—absence of bias toward particular user needs.
5. Timeliness—for economic decisions.
6. Comparability—differences should not be the result of financial accounting treatment.
7. Completeness—"reasonable" in order to fulfill the other qualitative objectives.

The comparability objective covers form, content, accounting principles, and disclosure of changes in principles or circumstances. Consistency is an important factor in attaining comparability, which also requires identifying circumstances necessitating a particular accounting principle or method and eliminating alternatives under these circumstances.

Constraints on achieving the objectives consist of conflicts of objectives (relevance being primary); environmental influences (user needs vs. cost of satisfying them); and incomplete understanding of the objectives, i.e. human error. The Statement concluded that, notwithstanding these constraints, "the objectives of financial accounting and financial statements are at least partially achieved at present." The basic purpose was to provide quantitative financial information about a business enterprise that is useful to statement users, particularly owners and creditors, in making economic decisions. Since the Statement confessed its inability to identify either information or needs, it is difficult to find support for the belief that objectives are currently being achieved "partially." Further, the stated belief that the objectives provide means to evaluate and improve generally accepted accounting principles does not result in any attempt to test this proposition, nor is it apparent how the particular, general, and qualitative objectives can do more than rationalize the form and content of conventional financial reports.

It will be noted that this rationalization included the repetition of the wording of the conventional audit certificate: "present fairly in conformity with generally accepted accounting principles" as a particular objective. In another form, this might be regarded as the classical general objective of accountants: to represent the operations, results and state of a business by means of the model illustrated in Table 2-3. The formulation underlies the view of accounting as an art, rather than a science, and can be observed in the true and fair view audit certificates of the countries which derive their financial reporting from the British Companies Acts. It contrasts sharply with the wording of the German audit certificate, that the accounts correspond with the company law and the corporation's statutes.

An intermediate position is suggested by this quotation: "The principal purpose to be achieved by the collection of accounting data (other than prevention of fraud and theft and the like) is to provide useful information for the evaluation of past business decisions and of the methods used in reaching those decisions." A subsidiary purpose is to provide a basis for taxation. By emphasizing the role of accounting in evaluations both by management and of management, Edwards and Bell included in their objectives virtually the entire range of contemporary accounting functions inexplicably omitted by the authors of both Statement No. 4 and the Trueblood Report. The management, taxation, regulatory, and other functions were dismissed by the Trueblood Committee on the spurious grounds that financial reporting primarily serves users with limited power to obtain information elsewhere. The representation view of the purpose of financial reporting embraces everything in the Edwards and Bell proposition, and budgeting as well. It does rely on our ability to specify more precisely the model used by accountants and the image of reality from which it has been derived, and therefore may not serve the purposes of those who desire to divert the scope of financial reporting into areas dominated by users of other models.

THE POSITION OF THE FASB

As was suggested earlier (and has been confirmed by the FASB) the Trueblood Report was intended as guidance when accounting standards were being formulated. The standards of the FASB should contribute to the achievement of the objectives of financial accounting and reporting.

To demonstrate the relationship between objectives and standards, the FASB Discussion Memorandum on the conceptual framework for accounting and reporting dated June 6, 1974, presented a hierarchy of elements in such a conceptual framework. (Figure 6-1).

In this Discussion Memorandum the FASB posed the following questions:

A. Which, if any, of the objectives and qualitative characteristics set forth in the Trueblood report should the FASB adopt at this time?
B. Which, if any, objectives and qualitative characteristics should the FASB subject further to study and consideration before deciding whether to adopt?
C. Should the FASB defer further consideration of any of the objectives and qualitative characteristics set forth in the Trueblood Report, and if so, which?
D. Are there objectives or qualitative characteristics other than those set forth in the Trueblood Report that the FASB should consider?

Additional questions were posed with reference to the specific objectives of the Trueblood Report, including such basic ones as:

- What should be included in the term "financial statements"?
- Are guidelines needed to determine which information should be provided by financial statements, rather than some other medium?
- If a primary audience [user group] is critical, how should it be discovered?
- Is ability to obtain information more critical than ability to assimilate it?
- Should "financial" be defined in cash flow terms and if so, what are the implications for the financial statements?
The publication of “Tentative Conclusions on Objectives of Financial Statements of Business Enterprises” by the FASB on December 2, 1976, revealed that the FASB was not prepared to depart from the propositions contained in AFB Statement No. 4.

A CRITICAL LOOK AT THE NEED FOR OBJECTIVES

The belief that the provision of information to investors and others having limited ability to obtain it elsewhere should be a primary objective of financial statements can be traced directly to the work of the noted economist J. K. Galbraith. Galbraith has recently publicized the concept of the “technostructure” meaning that a business is run by those who have information. This management elite—managers, scientists, lawyers, accountants and so on—wield power because information is the real source of power. The owners of the business, the investors, lack power and the way to give it to them is by providing them with information via the financial statements.

The fallacy of this argument (quite apart from the problem that the technostructure would always have the information before the investors) is the assumption that information is required in order to exercise power. The study of political science reveals that all that is required to exercise power is power; hence the concept of absolutism. Even if we look at the democratic form of organization which supposedly characterizes the modern corporation, all that is required to exercise power is a simple majority. The reason why stockholders have lost control of the modern corporation is not because they have been denied access to information, but because they have not formed a majority. The resulting power vacuum has been occupied by the technocrats, but this is an accident outside their control; the government will take power away from them even though they memorize the contents of their computer storage nightly.

Other fallacies underlying the Trueblood Report are:

- That all problems of user needs can be resolved within an accounting framework. The need to decide questions of taxation in a legal framework, and questions of regulation generally in a political framework, was not recognized, but it should be clear that the scientific determination of the question “what are the objectives of the financial reports required by the IRS, or the SEC?” is a quite distinct process from the scientific determination of the question “what are the objectives of the financial reports required by investors?”
- That the objectives of financial reporting can abstract from the operating needs of managers, who are responsible for the preparation and publication of financial statements and pay for them to be audited.
- That agreement on objectives will lead to agreement on standard rules and practices. The field of capital budgeting provides direct evidence to the contrary. In the theory of finance the objective is the one thing all agree on: to prepare and evaluate investment decisions. From that point, finance theorists can agree on nothing—not on the form of their algorithms, the meaning of their terms, or even the name for what
they are doing. A vast contradictory literature has arisen since the early 1950s in which writers draw attention to the superiority of their methods over those of others.

Perhaps the most significant fallacy, however, is the assumption that it is necessary generally to specify objectives for financial reporting to establish standards or rules governing the form and content of financial statements. This view may originate in the current preoccupation with Management by Objectives (MBO) which would support the proposition that an accountant should specify his objectives before producing a set of financial statements. There can, however, be a number of objectives for the preparation of financial statements:

1. To satisfy a legal obligation, such as the one imposed by the SEC, or the Companies Acts in the UK
2. To inform stockholders about what has happened to their investments, and what is expected to happen
3. To provide the basis for a tax assessment
4. To attract new equity or loan financing
5. To assist in the negotiation of a labor contract
6. To satisfy a contractual agreement with a customer, including to conform to the standards laid down by the Cost Accounting Standards Board
7. To arrive at a price for a business, or a share in a business, on sale or merger
8. To determine the amount available for dividends or for re-investment
9. To support a request for government assistance, e.g. in the form of a subsidy
10. To decide whether to liquidate a going concern
11. To participate in an interfirm comparison scheme

It is no more necessary to specify objectives to develop rules and standards for financial reporting than to specify user needs to discuss the rules for drawing or analyzing a critical path network.

This point can be made by redesigning the ‘‘hierarchy of elements in a conceptual framework for financial accounting’’ in a form which abstracts from objectives (Figure 6-2).

![Diagram of hierarchy of elements in a conceptual framework for financial accounting and reporting](image)

**THE PROBLEM OF INFORMATION**

Overriding all other difficulties is the problem presented by the use of the word ‘‘information.’’ It is unlikely in this context that the word means any communication of knowledge, because its users refer to information ‘‘useful for making economic decisions.’’ It is clear that the expectation is for financial statements to contain inputs into a specific decision model.

We may recall the components of a decision. They are: the available actions that can be taken, the states of nature which could occur, the consequences of each combination of action and state of nature, an experiment or other device for obtaining information about the states of nature, the available strategies, the action probabilities, and a choice criterion. The decision model requires information, which is defined as purpose oriented data, and only when the purpose is known can the device for obtaining information be constructed or used.

Further, if we accept this definition of information as *evaluated data*, we must accept the possibility of a surplus of data in all but the limiting case. If the accountant is concerned with data collection, aggregation, and presentation, he is leaving to the user the task of selecting the data which satisfies his needs.

Thus, on the one hand ‘‘information’’ forces us to distinguish accounting information from other kinds, and on the other hand, it places us upon the horns of a dilemma: data is not information, yet the accountant must work with an unknown user need. The Trueblood Report classifies these unknown users into investors, creditors, and managers which is an unsatisfactory scheme since the same person may play two or three roles at the same time. If we can identify mutually exclusive groups we can better ascertain their needs. One such classification would be into:
investors: those responsible for resource allocation decisions (subgroups: owners, lenders, managers/financial investors and real investors).

regulators: those responsible for establishing the rules of the investment game—and for policing the players (subgroups: the stock exchanges, financial analysts, and the SEC/financial institutions generally).

stabilizers: those responsible for making adjustments to the economic environment in which investment decisions are made (subgroups: the Federal Reserve Board, the U.S. Treasury and the IRS; many other federal, state and local government agencies).

It is not, however, necessary to undertake research into the information needs of these three groups to achieve the structure illustrated in Figure 6-2. The objective of preparing financial statements is to represent formally, using the methodology of accounting, the actual or planned activities of an organization for a given period or their state at a given moment. This proposition directs attention to the object of accounting: the entity. Although much of the literature in the United States is contradictory, preference appears to be rather for an objectives decision matrix as in Figure 6-3 as a basis for the solution of this problem.

<table>
<thead>
<tr>
<th>FIRM</th>
<th>Single Objective</th>
<th>Observation of similar facts</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Multiple Objectives</td>
<td>Circumstances of apparently similar facts</td>
</tr>
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</table>

**FIGURE 6-3 OBJECTIVES MATRIX**

This was the viewpoint adopted in a comparable study, *The Corporate Report*, published in England in 1975. Instead of placing themselves in the corner of one type of user of financial statements, the authors of *The Corporate Report* concerned themselves with the accountability of economic entities of all kinds, although the emphasis was on the business enterprise. This accountability lies with equity investors, loan creditors, and suppliers, but also with employees, financial analysts and investment advisers. Business connections of different types, the government, and the public in general. Accountability arises from the social role of the entity and not solely from legal requirements.

"Such organizations, which exist with the general consent of the community, are afforded special legal and operational privileges, they compete for resources of manpower, materials, and energy, and they make use of community owned assets such as roads and harbors."

From this proposition *The Corporate Report* derived its criticism of current financial statements, that they are primarily concerned with supplying measurements and information of use to shareholders and creditors. The report also listed the defects of current financial reports:

1. Emphasis on period earnings encourages users to believe erroneously, that the maximization of short-term profits is the goal of the enterprise.
2. The audit certificate combines with the financial statements to give the figures a false impression of certainty.
3. The form of the financial statements encourages users to evaluate the enterprise on the basis of short-term results and may thus influence management to take a short-run view.
4. The financial statements implicitly direct attention to proprietors as the dominant interest group, which they may not be.

*The Corporate Report* rejects the assumption that general-purpose financial statements can satisfy the information needs of all user groups. It suggests that employees may require special reports at the plant or site level, and proposes six additional statements:

(i) A statement of value added to show the wealth produced by the firm and how it has been distributed.
(ii) An employment report, dealing with efficiency, productivity, personal policies, industrial relations, and other matters of interest to workers.
(iii) A statement of money exchanges with government, to show the firm's role in financing the public sector not only through taxes on its own profits, but also through collections and payments of withholding taxes and social security contributions, sales taxes, and other imposts. The statement would also show receipts from government, such as grants and subsidies.
(iv) A statement of transactions in foreign currency, distinguishing between current and capital transactions and showing overseas borrowings and repayments and dividends received and paid.
(v) A statement of future prospects, attempting to forecast profits, employment, and investments.
(vi) A statement of corporate objectives.

In short, the report draws attention to the concept of "social accounting," and attempts to move in that direction.

The additional statements suggested by the report appear to be of primary interest to economists, particularly those employed by the government, and it is difficult to see how businesses can be made to pay for providing such information unless required to do so by legislation containing effective sanctions for noncompliance. This may well be the consequence of *The Corporate Report* and if so, will result in an increase in the role and remuneration of the accounting profession. In this respect it contrasts markedly with the *Trueblood Report*, which attempted to hitch the profession to the declining star of the individual investor.
ENDNOTES


5. This phrase must mean resources minus obligations.


SELECTED ADDITIONAL READINGS

American Accounting Association Committee to Prepare a Statement of Basic Accounting Theory, A Statement of Basic Accounting Theory, Evanston, Ill.: AAA 1966.


William H. Beaver, "What should be the FASB's objectives, Journal of Accountancy, August 1973, pp. 49-56.


