

1-1-1961

Basic postulates of accounting; Accounting research study no. 01

Maurice Moonitz

Follow this and additional works at: https://egrove.olemiss.edu/aicpa_guides

Part of the [Accounting Commons](#), and the [Taxation Commons](#)

Recommended Citation

Moonitz, Maurice, "Basic postulates of accounting; Accounting research study no. 01" (1961). *Guides, Handbooks and Manuals*. 141.
https://egrove.olemiss.edu/aicpa_guides/141

This Article is brought to you for free and open access by the American Institute of Certified Public Accountants (AICPA) Historical Collection at eGrove. It has been accepted for inclusion in Guides, Handbooks and Manuals by an authorized administrator of eGrove. For more information, please contact egrove@olemiss.edu.

AN ACCOUNTING RESEARCH STUDY

1

THE
BASIC
POSTULATES
OF
ACCOUNTING

By Maurice Moonitz, Ph.D. CPA

AICPA

PROJECT ADVISORY COMMITTEES

This research project benefited greatly from the advice and criticism of the members of two advisory committees:

Basic Accounting Postulates

- ARTHUR M. CANNON, *Chairman*
Standard Insurance Co., Portland, Ore.
- MARTIN R. GAINSBROUGH
National Industrial Conference Board, Inc., New York, N. Y.
- OSCAR S. GELLEIN
Haskins & Sells, New York, N. Y.
- PROFESSOR C. A. MOYER
University of Illinois, Urbana, Ill.
- LEONARD SPACEK
Arthur Andersen & Co., Chicago, Ill.
- WILLIAM W. WERNITZ
Touche, Ross, Bailey & Smart, New York, N. Y.

Broad Accounting Principles

- JOHN H. ZEBLEY, JR., *Chairman*
Turner, Crook, Zebley and Parry, Philadelphia, Pa.
- ANDREW BARR
Securities & Exchange Commission, Washington, D. C.
- CARMAN G. BLOUGH
American Institute of Certified Public Accountants, New York, N. Y.
- PAUL GRADY
Price Waterhouse & Co., New York, N. Y.
- GEORGE S. HILLS
Rogers, Hoge & Hills, New York, N. Y.
- PROFESSOR HERBERT E. MILLER
Michigan State University, East Lansing, Mich.

The members of a project advisory committee are appointed by the Director of Accounting Research, with the approval of the chairman of the Accounting Principles Board, to consult with the Director and the staff assigned to the research project. A project advisory committee reviews the plan of research in its early stages, suggests sources of information, acts as a sounding board for conclusions reached by the staff, and reviews the draft of the report to advise the Director as to its suitability for publication as an accounting research study. Each member has the privilege of commenting on any part of the study. These comments will be found at the relevant places in this publication.

THE
BASIC
POSTULATES
OF
ACCOUNTING

**ACCOUNTING
RESEARCH
STUDY NO. 1**

**THE
BASIC
POSTULATES
OF
ACCOUNTING**

By Maurice Moonitz, Ph.D., CPA

**AMERICAN
INSTITUTE
OF CPAs**

*Copyright 1961 by the
American Institute of Certified Public Accountants
270 Madison Ave., New York 16, N. Y.*

Table of Contents

Chapter	Page
1. INTRODUCTION	1
<i>The Problem, 1</i>	
<i>The Approach, 2</i>	
<i>The Principle of Selection, 5</i>	
<i>The Problem of Method, 5</i>	
2. THE ENVIRONMENT OF ACCOUNTING	8
<i>Economic Activity, 8</i>	
<i>Quantitative Data, 8</i>	
<i>Predictability, 9</i>	
<i>Characteristics of Economic Organization, 9</i>	
<i>Wealth and Welfare, 11</i>	
<i>Wealth and Assets, 12</i>	
<i>The Accounting Entity, 12</i>	
<i>The Nonprofit Area, 14</i>	
<i>Income Measurements and Position Statements, 15</i>	
<i>Accounting Periods, 16</i>	
<i>The Unit of Account, 17</i>	
<i>Value in Exchange, 18</i>	
<i>Historical Example, 19</i>	
3. ACCOUNTING POSTULATES—THE ENVIRONMENT	21
<i>Postulate A-1. Quantification, 21</i>	
<i>Postulate A-2. Exchange, 22</i>	
<i>Postulate A-3. Entities, 22</i>	
<i>Postulate A-4. Time Period, 22</i>	
<i>Postulate A-5. Unit of Measure, 22</i>	
<i>Definition of Accounting, 23</i>	
4. SUPPLEMENTARY PROPOSITIONS—THE FIELD OF ACCOUNTING	25
<i>Arbitrary Conditions, 25</i>	

	<i>Implied Conditions</i> , 26	
	<i>Rational Decisions</i> , 26	
	<i>Financial Statements</i> , 27	
	<i>Market Prices and "Cost,"</i> 28	
	<i>Accounting Entities and Uniformity</i> , 31	
	<i>Time and Uncertainty</i> , 33	
	<i>Summary</i> , 36	
	<i>Postulate B-1. Financial Statements</i> , 36	
	<i>Postulate B-2. Market Prices</i> , 37	
	<i>Postulate B-3. Entities</i> , 37	
	<i>Postulate B-4. Tentativeness</i> , 37	
5.	A THIRD SET OF PROPOSITIONS—THE IMPERATIVES	38
	<i>Continuity or Going Concern</i> , 38	
	<i>Accounts Receivable</i> , 39	
	<i>Inventories</i> , 40	
	<i>Buildings and Equipment</i> , 40	
	<i>Liabilities</i> , 40	
	<i>Objectivity</i> , 41	
	<i>Consistency</i> , 43	
	<i>The Monetary Unit</i> , 44	
	<i>Materiality and Conservatism</i> , 46	
	<i>Disclosure</i> , 48	
	<i>Summary</i> , 50	
	<i>Postulate C-1. Continuity</i> , 50	
	<i>Postulate C-2. Objectivity</i> , 50	
	<i>Postulate C-3. Consistency</i> , 50	
	<i>Postulate C-4. Stable Unit</i> , 50	
	<i>Postulate C-5. Disclosure</i> , 50	
6.	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
	PROSPECTUS	51
	<i>Summary</i> , 51	
	<i>Conclusions and Recommendations</i> , 51	
	<i>Prospectus</i> , 54	
	COMMENTS OF LEONARD SPACEK	56
	SELECTED BIBLIOGRAPHY	58

Foreword

The Director of Accounting Research of the American Institute of Certified Public Accountants publishes this accounting research study under his authority to circulate the results of the research activities of his staff.

Accounting research studies are designed to provide professional accountants and others interested in the development of accounting with a discussion and documentation of accounting problems. The studies are intended to be informative, but not conclusive. They furnish a vehicle for the exposure of matters for consideration and experimentation prior to the issuance of pronouncements by the Accounting Principles Board.

Individuals and groups are invited to express their views in writing on the conclusions and recommendations contained in this study. These views will be considered by the Accounting Principles Board in forming its own conclusions on the subject.

The responsibility for this study is that of the Director of Accounting Research and those who have been associated with him in the project. The conclusions and recommendations have not been approved, disapproved, or otherwise acted upon by the Accounting Principles Board, the only agency of the American Institute of Certified Public Accountants having authority to make or approve public pronouncements on accounting principles. The study does not necessarily reflect the views of the Board, nor has it been acted upon by the membership or by the governing body of the Institute.

Preface

The report of the Special Committee on Research Program, which laid the basis for the new research program of the American Institute of Certified Public Accountants, proposed that "an immediate project of the accounting research staff should be a study of the basic postulates underlying accounting principles generally, and the preparation of a brief statement thereof. There should be also a study of the broad principles of accounting. . . . The results of these, as adopted by the [Accounting Principles] Board, should serve as the foundation for the entire body of future pronouncements by the Institute on accounting matters, to which each new release should be related." This monograph is the study of the basic postulates of accounting. The study of the broad principles of accounting is nearing completion and the results will be published later.

The members of two project advisory committees served effectively as advisers and consultants during the conduct of this study. Their names are listed elsewhere in this publication. I wish to extend my heartfelt thanks to them for their constructive criticism and encouragement.

Many persons outside the advisory committees have also contributed much to this study. I have tried to give acknowledgment to some of them where the assistance was direct and therefore readily identifiable. But others have also been of assistance. I can only extend my appreciation to them in this anonymous fashion, reminding them that often I could not measure up to the high standards they set. The flaws in the report are chargeable entirely to my account.

New York, September 1961

MAURICE MOONITZ
Director of Accounting Research

Introduction

The Problem

Terms such as axiom, postulate, principle, standard, procedure, canon, and rule, among others, are widely used, but with no general agreement as to their precise meaning. In order to make its own position clear, the American Institute's special committee on research program used three basic terms: postulates, principles, and rules. It spelled out its conception of the relationship among these terms in the following paragraph taken from its report of September 1958 to the Council of the American Institute of CPAs:

Postulates are few in number and are the basic assumptions on which principles rest. They necessarily are derived from the economic and political environment and from the modes of thought and customs of all segments of the business community. The profession, however, should make clear their understanding and interpretation of what they are, to provide a meaningful foundation for the formulation of principles and the development of rules or other guides for the application of principles in specific situations.¹

This usage of the terms is not consistent with Accounting Terminology Bulletin No. 1 (pp. 10-11).² The Terminology Bulletin stresses the definition of "principle" rather than that of postulate, with "principle" defined as "a general law or rule adopted or professed as a guide to action; a settled ground or basis of conduct or practice. . . ." It then subordinates "postulate" to "principle" by stating that "initially, accounting postulates are derived from experience and reason; after postulates so derived have proved useful, they become accepted as principles of accounting."

¹ *Journal of Accountancy*, Dec. 1958, p. 63.

² Prepared by the committee on terminology of the American Institute of Certified Public Accountants, and published in 1953 under the title *Review and Resumé*.

The definition of postulates in the Terminology Bulletin is the same as the usage by the Study Group on Business Income in its report entitled *Changing Concepts of Business Income*.³ That report singled out three of the postulates of accounting for special attention:

1. *The monetary postulate*. "Fluctuations in value of the monetary unit, which is the accounting symbol, may properly be ignored."
2. *The permanence postulate*. "In the absence of actual evidence to the contrary, the prospective life of the enterprise may be deemed to be indefinitely long."
3. *The realization postulate*. "The entire income from sale arises at the moment when realization is deemed to take place."

The report then proceeded to subject the first or monetary postulate to searching analysis, and concluded (with a number of dissents) by recommending a change in the assumption (postulate) that the monetary unit is stable.

- 2 In this study we use the term as the special committee used it.* This choice is dictated not merely because this study was commissioned, so to speak, by the special committee, but also because its usage of the term lends itself readily to a systematic classification of the propositions of accounting theory and practice.

The Approach

We must choose a starting point, determine how much of the environment we are to explore, and decide on a way to proceed. Of the possible approaches considered, the one with the most advantages and the fewest disadvantages is to focus on the question: With what kinds of problems in the economic or political environment do accountants concern themselves?

Among other approaches, the "axiomatic" is the most abstract to come to our attention. Euclidean plane geometry is probably the most familiar example of the axiomatic approach since it is a subject taught in virtually every secondary school in the country. It is based on a few axioms (e.g., "a straight line is the shortest distance between

³ Published by The Macmillan Company, 1952. The Study Group's discussion of "postulates" starts on p. 19 of *Changing Concepts of Business Income*.

* See "Comments of Leonard Spacek," page 56.

two points”) and a few undefined terms (e.g., a “point”). Given these axioms and terms, certain theorems are then proved by the application of the rules of deductive logic.

A few years ago a beginning was made in the application of this method to the *a priori* part of accounting, that is, the part that can be known by reason alone and not through experience.⁴ This method, however, will probably prove incapable of dealing with the empirical part of accounting, especially with respect to valuation problems. For this aspect of accounting more pragmatic procedures are probably necessary. We are not prepared to operate at the level of abstraction implied by the axiomatic method.

An ethical or sociological approach appeals to many. If this were used as a starting point, concepts such as justice, truth, and fairness would be discussed and extended to accounting. For example, DR Scott gives the following “general statements” in which he relates “accounting rules and procedures to underlying principles.”⁵

1. Justice—equitable treatment should be accorded to all interests involved in the financial situation covered by the accounts.
2. Truth—accounts must not be made a means of misrepresentation.
3. Fairness—accounting rules, procedures, etc., should not serve a special interest.

3

He adds two other items which he states are subordinate to the three listed above:

4. Adaptability—accounting rules, etc., must allow for changing economic relations.
5. Consistency—rules, etc., should never be changed arbitrarily or to serve temporary purposes.

In a field such as accounting these concepts and their implications cannot and should not be ignored. But a major disadvantage attaches to them. Terms such as justice, truth, and fairness designate subjective concepts which themselves need standards to be capable of appli-

⁴ See Richard Mattessich’s “Towards a general and axiomatic foundation of accountancy, with an introduction to the matrix formulation of accounting systems.” *Accounting Research* (Eng.) Oct. 1957, pp. 328-55.

⁵ “The basis for accounting principles,” *Accounting Review*, Dec. 1941, pp. 341-49.

cation. Ultimately, the results of any purposive human activity must be judged in the light of the value judgments inherent in ethical concepts. They are not satisfactory, however, as a point of departure for an objective inquiry such as this one.*

One immediate advantage of our problem-oriented approach over an ethical one is that it enables us to separate the problems and their solutions from the people who have to recognize and to solve them. Contrast, for example, the requirement to "measure income" with the requirement to determine if income is, in fact, properly measured and reported in any given instance. For our purposes, we want to be free to assume that whatever has to be done will be done. Later we can discuss the arrangements for making sure that the problem is adequately recognized and solved.

4 Another popular approach is to stress the pragmatic aspect of accounting.⁶ Accounting must be useful, so the assertion goes, or serve a useful purpose. If this assertion is designed merely to distinguish accounting from metaphysics or chess, no one can quarrel with it. If it is designed to point out that accounting is "applied" and not "pure" or "abstract" and must ultimately be useful to someone for some purpose, we are in thorough agreement, as the subsequent discussion will amply demonstrate. But anyone who stresses "usefulness" as a criterion, in accounting or elsewhere, must answer the two pointed questions—useful to whom? and for what purpose? And herein lies the danger. We could easily be trapped into defining accounting and formulating its postulates, principles, and rules in terms of some special interest, such as the business community, or the regulatory agencies, or investors, or tax collectors. But accounting has been used in the affairs of private business, regulated and unregulated, of profit-motivated enterprises as well as nonprofit ones, of illegal as well as legal enterprises, of socially undesirable as well as desirable entities, of organizations in socialist, fascist, or communist states as well as

* See "Comments of Leonard Spacek," page 56.

⁶ *Webster's New International Dictionary, Second Edition, Unabridged*: "Pragmatism . . . (2) *Philos.* Emphasis upon the application of ideas or the practical bearings of conceptions and beliefs; specif., the American movement in philosophy founded by C. S. Peirce and William James and continued by John Dewey and his followers. Characteristic doctrines of this movement are that the meaning of conceptions is to be sought in their practical bearings, that the function of thought is as a guide to action, and that the truth is pre-eminently to be tested by the practical consequences of belief."

those in free enterprise societies. We cannot proceed on the premise that accounting is the monopoly of any one group, whether that group is concerned mainly with the development of the accounting process or with its end-product in the form of financial statements and reports.

An eminently satisfactory application of the criterion of useful purpose is set forth in the following passage on page 7 of Accounting Research Bulletin No. 43 of the American Institute of Certified Public Accountants:⁷

Accounting is essential to the effective functioning of any business organization, particularly the corporate form. *The test of the corporate system and of the special phase of it represented by corporate accounting ultimately lies in the results which are produced. These results must be judged from the standpoint of society as a whole—not merely from that of any one group of interested persons.* [Emphasis added.]

The Principle of Selection

No one could ever compile all the “facts” of the economic and political environment or of the business community, let alone analyze or interpret them. We therefore need a principle of selection as a guide in formulating propositions about the environment in which accounting operates. This principle is at hand in the choice of a method of procedure. We will explore as much of the environment as relates to the *problems* that accountants deal with.

5

The Problem of Method

An inquiry in the field of accounting suffers from the special problem of many social studies because the subjects of the investigation are often aware of the implications of what they are doing, and modify their behavior accordingly. For example, the behavior of accountants in specified situations and their reports could be studied for the purpose of deriving the “laws” which govern their behavior and account for their reports. And we might well succeed in the sense that we make sufficient valid observations, analyze and correlate them properly, and emerge with technically unassailable statements of the relationships among the relevant variables. But, as soon as the “laws” are

⁷ Issued by the committee on accounting procedure in 1953 as *Restatement and Revision of Accounting Research Bulletins*. The passage quoted is in the Introduction as part of a section titled “Accounting and the Corporate System.”

announced, some accountants will modify their behavior and their reports. As a consequence, new "laws" are needed to explain the new behavior. The original "laws," at the very most, turn out to be merely an explanation of behavior at a particular point of time or period in history. This type of shifting in the "laws" indicates no error in our observations, in our analysis, or in our intelligence; instead it indicates an error in our method, the plan of attack we chose to "solve" the problem.

Notice that this interrelation between the observer and the observed does not occur when an astronomer studies the heavenly bodies, or a geologist examines the crust of the earth, or a chemist tries to solve the riddle of chemical bonding. These men observe, correlate, and analyze; and they propose explanations of what they have seen. But even after they announce their "laws," the heavenly bodies continue on their course as before, the crust of the earth remains unaffected by the geologists' findings, and the chemical elements unite as they always have.

6 Every accountant worthy of his salt is self-conscious — he tests every analysis he makes against some type of standard or set of standards of which he is aware. But not all accountants have the same set of standards; furthermore, the standards of any one accountant may change from time to time. As a result, when we investigate different "accounting practices," we must realize that our observations may be the net result of (1) differences in the accounting problems themselves that give rise to the observed practices; (2) differences in the extent to which the accountants involved see or apprehend the problems to be solved; and (3) differences in the ideas of these accountants as to what ought to be done about the problems at hand.

We are driven to the conclusion, then, that relatively heavy reliance must be placed on deductive reasoning in the development of accounting postulates and principles. We must first recognize and define the problems to be solved, then move to their solution by careful attention to what "ought" to be the case, not what "is" the case. Hopefully, the two, "ought" and "is," will not be too far apart, but we have no reason to expect them to be identical.

Despite the firm conclusion just stated, good use can still be made of the statistical method in accounting research, as well as the other observational methods used in the social sciences, such as questionnaires, interviews, opinions of experts, etc. These methods are useful in indicating the range of problems to be solved, the kinds of variables involved, and the types of solutions proposed. They represent a form

of experience, of exposure to the world in which accounting issues arise; accordingly, they are invaluable as a means of acquainting us relatively quickly with considerations that might escape even the most rational of minds. We are simply pointing out a *fundamental, pervasive limit* in the field of accounting research to the use of methods that have served so well in those other disciplines where the subject of the observations is indifferent to the observer and totally uninfluenced by the conclusions that the observer reaches.⁸

⁸ A strong case for the use of the scientific method in accounting is made by Ray J. Chambers in "The conditions of research in accounting," *Journal of Accountancy*, Dec. 1960, pp. 33-39. He concludes a section on "the possibility of scientific study" (p. 35) with the unexceptionable statement that "not all the methods of the natural sciences may be appropriate to the study of accounting, but the attitude toward the subject matter can be essentially the same."

2

The Environment of Accounting

Economic Activity

8 In virtually all the organized groups of which knowledge exists goods and services are produced by the interaction of human effort with the other elements in the environment. Elements in the environment include natural resources as well as the brain and muscle of human beings, and also imply their combination in all conceivable stages. Furthermore, the goods and services produced are, for the most part, distributed through exchange of some sort, and not consumed by the producers themselves.

Quantitative Data

Given the general pattern sketched above, the necessity for decisions of various types becomes apparent. Decisions must be made as to the goods and services to be produced and the resources to be used in their production. In primitive or elementary or simple conditions, the alternatives available are few, and the results of decisions made usually become apparent at an early stage. But, as soon as the processes become complex or sophisticated, a means of calculation is necessary to weigh alternatives, to measure and check on the progress that is being made, and ultimately to measure and evaluate the results obtained. Accounting clearly furnishes one type of quantitative data that can be used as a basis for making some of the choices that have to be made from among the alternatives available, and for checking and evaluating progress and results. How well accounting has performed this function can be answered only in terms of specific problems and specific types of accounting. But the relationship of accounting, along with other forms of systematic calculation, to the economic environment is clear and direct.

Predictability

Accounting seems to flourish in a stable environment, and to languish in an unstable one. Flux, change, and disorder are always unsettling, requiring the adaptation of behavior to the changed circumstances. If the changes are small in magnitude or slow in pace, adaptations can be made smoothly. But if the changes are large and swift, as in war or revolution or in a rapid inflation or deep depression, the underpinnings of action become unstable and behavior becomes erratic.

Uncertainty of any type makes economic calculations difficult, perhaps even impossible. Some types of uncertainty may, however, be reduced, if not eliminated, by appropriate social arrangements. For example, a police system is of immense help to holders of property to assure them that they can continue in quiet possession in lawful uses. A system of courts to enforce commercial agreements acts to stimulate their use. Laws establishing property rights make for a firmer basis of accountability. The whole climate becomes one in which more and more formal consequences become almost indistinguishable from actual consequences.

This influence of the “orderly society” on accounting is so powerful that accounting principles, procedures, and rules often rest squarely on the formal relationships themselves, sometimes even to the point of overshadowing the real events that are occurring. For example, there may be a tendency to accept the salary of the president, who is also the principal stockholder, of a closely held corporation as the result of arm’s-length bargaining simply because, in form, the amount was set in an agreement between the man and the corporation. In similar fashion, the acts of a wholly owned subsidiary are often treated as though they were independent of the parent company because they were performed by a separate corporation. Form and custom, rules, laws, and traditional patterns of action are all powerful forces. But a transaction among related interests, for example, must be more than form or custom or legal relationship in order to possess substance.

9

Characteristics of Economic Organization

Three of the salient characteristics of our economic organization from the standpoint of accounting are as follows:

1. Private ownership of most productive resources. This characteristic, for example, accounts for the observed emphasis on “investors” as the group for whom financial statements are prepared, and the related

tendency to restrict accounting to the needs of that group. **But** observation also reveals that accounting is used in cases where private ownership is not present. As a consequence, we can conclude that the problems of investors as a class, while undeniably important and worthy of close study and attention, do not encompass all the relevant or important problems of accounting.

2. **Role of the market.** In recent years, the market, as the agency or machinery by which the exchange of goods and services is effected, has clearly increased in importance. Two familiar examples will illustrate this assertion: (1) the housewife formerly baked her own bread; today she buys it from a retailer who in turn obtained it from a commercial baker; (2) farmers used to raise their own vegetables and chickens, and kept a cow to provide milk for the family; today many farmers buy these products in town, preferring to devote the farm's resources to the crops which can be sold for cash. The importance of production for exchange rather than for consumption by the producer himself is so great that later we formulate a proposition to indicate that the primary basis of accounting lies in records of exchange dealings or their equivalents.

10

Related to the function of a market as a method of effecting exchanges is its function in generating prices which act as guides to everyone concerned with economic activity. The influence of these market prices on the tremendous number of economic decisions that have to be made has, in relative terms, been declining. As industrialization increases, and with it the size and complexity of the most efficient productive unit, more and more decisions have to be made within the framework of the economic (business) unit. Ultimately, of course, the decisions made must stand the test of the market, but meanwhile management can and must exercise a considerable degree of control over the company's activities. One evident result has been an increased interest in "managerial accounting," where the emphasis is inward to assist management in making better decisions and in improving its control, through better "intelligence," over the activities going on inside the economic unit.

3. **Free labor.** A significant aspect of our form of economic organization is that the services of human beings are supplied by free and not by slave labor. From the vantage point of accounting, the significance is seen in the fact that labor services cannot be "inventoried" or "stockpiled" in advance. We can have accounts for materials on hand, awaiting usage, or for equipment available for use, but except for a

few minor instances such as "prepaid wages," we can have no accounts for labor services stockpiled and awaiting usage. Even in the face of an agreement between an employer and an employee, specific performance cannot be enforced under our legal system, although damages in some limited amount might be recoverable in the event of a breach. A small business worth \$5,000 can be sold, lock, stock, and barrel, and all the benefits transferred to the buyer who can hold the former owner to "specific performance" as to the *business* transferred. An employment contract for ten times that amount cannot be sold with any assurance to the buyer that he will get any benefits at all in the form of specific performance. Contracts in professional sports and in the movie industry are apparent but not real exceptions, since the "owners" of those contracts (the employers) do not use the courts to enforce them, but instead rely on extra-legal means of insuring compliance.

The upshot of these considerations is that we can deal with greater confidence with agreements concerning property where both the property and the agreements are highly marketable, transferable, exchangeable than we can with agreements concerning the services of human beings. And this result flows not from any characteristic of accounting but of the environment.

A fourth salient characteristic, the use of money, is discussed later on.

Wealth and Welfare

The position occupied by the concept of wealth has undergone a transformation in recent years. The dominant voices of the early nineteenth century had no doubts on the score — wealth in the form of an abundance of goods and services became identified with happiness; wealth and welfare were almost interchangeable terms. In fact, one economist (J. B. Say) stated explicitly that the main task of the economist was to teach people the advantages of wealth, to make them want to be wealthy.

We of the twentieth century are somewhat more sophisticated, at least to the extent of distinguishing between wealth and welfare. The two concepts are clearly related, but they are not identical, and neither one equates necessarily with happiness. These observations are hardly profound, but they are significant for accounting. In its present and prospective stages of development, accounting is intimately and directly tied to the processes and institutions surrounding the

production, safeguarding, distribution, and consumption of *wealth*, not of welfare or of happiness. Accounting can conceivably measure how “well off” some person or some organization is, provided that “well offness” is measured by wealth in one form or another. Criticisms of accounting which say in essence that it does not measure welfare or happiness can be rejected as irrelevant and unwarranted. By the same token, assertions by some that accounting can or should measure welfare or happiness should likewise be viewed with a critical eye.

Wealth and Assets

The preceding discussion referred to an interest in wealth with the term “wealth” used in a broad economic sense. From the vantage point of accounting, this interest in wealth is really an interest in assets. Furthermore, this interest in assets is the common thread which unites accounting, economics, business administration, industrial engineering, and other similar areas. Thus, an economist is concerned with “wealth,” usually in a social sense, while the accountant, the administrator, and the engineer are concerned with “wealth” in particular forms, normally owned or in the possession of business concerns.

Economic analysis is usually not concerned with the specific person who owns the wealth or to whom the benefits run. The economist’s apparent interest at times in units of activity turns out on closer examination to be an interest in these units as types or as examples. It is not an interest in the fate of the unit, as such, as distinct from any and all other similar units. The accountant, by contrast, is almost always concerned with specific units and must assign the “wealth” and its changes to *some specific entity for a specified time period*. Incidentally, this specific interest of the accountant makes him more conservative than the economist faced with the same problem — for example, the accountant typically hesitates to recognize a favorable change “too early” because it may never be “realized,” and the party to whom the benefit flows may prematurely demand his share or act on the presumption that it is his.

The Accounting Entity

In a preceding paragraph, we translated the “wealth” of economics into the “assets” of accounting. Let us now cross the bridge the other way by defining the accounting entity in economic terms. The purpose of the earlier translation of “wealth” into “assets” was to relate a general idea to a specific, more familiar, context. The purpose of the

proposed explanation of the accounting entity in economic terms is to get the advantage of the more general attitude of the economist.

An accounting entity controls and transforms resources. It acquires them from some source and transforms them in order to produce goods and services.

The term "transforms" is used in the broadest possible sense to denote conversion or combination or rearrangement. It includes physical transformation, as in manufacturing, but also covers, for example, the activities of professional men in applying their knowledge and skill to the solution of a client's problems. In order to do this, the accounting entity incurs costs for the services of persons, for money borrowed, and for other property used in whatever form (e.g., materials, supplies, equipment) and acquired by whatever means (e.g., purchase, lease). Its revenues are "distributable" in the form of wages, rent, taxes, interest, and dividends, with the residue (if any) retained by the entity. (If the occasion demands, we can add "non-economic" attributes, e.g., that an accounting entity is also a "communication network" or a "social institution.")

Another attribute of an accounting entity is that it is almost always an intermediary between natural resources on the one hand, and ultimate consumption of goods and services by human beings on the other. We observe that accounting has been applied most successfully to the affairs of those economic entities which are actually links in a chain connecting basic resources and ultimate consumption. On this point, F. Sewell Bray, the eminent English accounting theorist, has written in correspondence:

In a completely articulated economy, everyone assumed to be keeping accounts, we should find that apart from the generators of income most people's accounts would fall within the category of spending ones. *Enterprises* do not need to have spending or consumer accounts because they are concerned with the generation of income and its transfer either to owners or to governments. [Emphasis added.]

In other words, entities produce, consume, spend; business or business-type entities concentrate mainly on producing goods and services. This distinction is widely recognized in the separation of business and personal affairs (e.g., the use of separate records for each distinctive venture under common ownership in proprietorships, partnerships, and other forms of unincorporated associations). We propose to use this distinction as the basis for suggesting that "income" is a term that should not be applied both to natural persons and to business entities.

Mainly because the economic theory of income is primarily a theory of the income of natural persons and not of accounting entities, we should restrict the term "income" to personal income. The terms "earnings" or "profit" are then available to describe the related concept when applied to accounting entities.*

In Accounting Terminology Bulletin No. 2 (March 1955), the committee on terminology of the American Institute of Certified Public Accountants made the following recommendation with respect to "earnings":

The committee is hopeful that eventually there will be a single term, uniformly used to designate the net results of business operations. In recent years there has been a trend toward the term "earnings," although a majority of published financial statements employ the term "net income." Until one or the other of these terms achieves pronounced preference, the committee makes no recommendation as between them. It approves the use of the term in accounting language in connection with the concept of ability to realize net income [e.g., "earning power"] (page 4).

14

The Institute of Chartered Accountants in England and Wales seems to favor "profit" and "loss," as does the Canadian Institute of Chartered Accountants. We propose to use "profit" and "earnings" interchangeably in the remainder of this monograph.

The Nonprofit Area

Limitation on the profit concept is found in cases where its relevance is not apparent from observation, that is to say, no earnings are generated that are subject to tax or to distribution as a dividend to investors or other beneficiaries.

The example of government comes to mind. But many governmental activities involve the management of economic resources and their conversion into goods and services. Examples of these activities are found in the case of roads, bridges, dams, postal service, recreational

* Professor C. A. Moyer, as a member of the project advisory committee, dissents to this proposal as to terminology. He states that: "The term 'income,' especially when used with appropriate adjectives or descriptive phrases, is a useful and meaningful term in business and in accounting. There seems to be no convincing reason for abandoning this word in accounting. It has been widely accepted, particularly in the income statement and in discussions of the income concept in accounting, and an extension of its use should be encouraged."

facilities, schools, hospitals, prisons, irrigation projects, etc. In some cases, government is carrying on activities (e.g., public utilities) which are also carried on by private enterprises. In other cases, government has simply acquired a monopoly (e.g., postal service) of services formerly carried on by private enterprises.

Many nongovernmental activities are also "nonprofit" and therefore seem at first glance to fall outside the "profit" area. But, as in the case of the governmental activities sketched above, many of these "nonprofit" enterprises also manage and convert economic resources.

To the extent, then, that the principal activities of a nonprofit entity involve the management and conversion of economic resources, it resembles an entity in the "profit" sector. Accordingly, propositions that bear directly on accounting for resources (assets) should be applicable equally to the "profit" and "nonprofit" areas. If there are distinctive differences between the two, they should emerge in connection with the analysis of or reports on equity interests and changes in resources (operations). What changes are relevant to the measurement of the progress of a nonprofit enterprise might be different from those relevant to a profit-oriented one. We anticipate no such difference, however, at the level of the broader or more basic propositions.

The Senate, the House of Representatives, the Office of the President of the United States, the U. S. Supreme Court, and the corresponding units at the state and local levels, illustrate types of activities whose primary or even major interest is definitely *not* the management of their own economic resources. These activities are political in nature, in the technical meaning of that term. Each of these activities, however, has some economic aspect. To the extent that it has, the operations should be accounted for in the same manner as any other economic activity.¹

Income Measurements and Position Statements

The preceding discussion leads up to a consideration of the reasons for the central position of the income concept in accounting. This central position is a special aspect of the more general interest in maintaining or increasing wealth. More precisely, from a formal or analytical point of view the measurement of income should be directed

¹ A separate research project on accounting for nonprofit organizations is now under way in the Division of Accounting Research. It is being conducted by Professor Emerson Henke of Baylor University. His report should be available for publication in the near future.

at the question — has our wealth increased, decreased, or remained the same? And the interest in and importance of the accuracy of the measures that are made to attempt to answer this question become greatly heightened in a highly developed private enterprise setting, with its separation of the ownership from the management of economic resources, its concern with the protection of the position of investors, and with its taxation of business earnings and of personal income.

We hasten to point out that we are doing nothing more than asserting the central position that income measurement has and does occupy in accounting. We are not asserting or implying that this importance is deserved or right or proper or should continue to be the center of our discipline. We do not even assert that the income concept sets the metes and bounds of our study. Instead we merely note the existence of a fact on which all seem to agree, and do insist that this gives us a solid basis from which to explore the environment of accounting.

16

A list or inventory of items of wealth and a measure of their size will always be essential to a complete analysis of economic activity, whether that activity is confined to a single small unit or encompasses the whole economy. Such a statement or list may vary in form and content (e.g., the balance sheet of a going concern, a statement of affairs for a person in receivership, a statement of assets and unrecovered costs of a company in the developmental stage, a summary of national wealth) but it is always essential. If changes in wealth cannot be measured more directly, they can always be derived or inferred from a comparison of successive statements of position. The reverse is not ordinarily possible; it is only rarely and under special circumstances that the amount of wealth on hand can be calculated from a record of changes. Without statements of position we have no starting point, no end, no check points to verify our measures of change.

Accounting Periods

Let us pursue a bit further the mention previously made of the necessity for accounting to assign changes in wealth (capital) to some period of time. At present, accounting periods are almost always of equal length. But this emphasis on profits calculated in periods of equal length is relatively recent. Contrast, for example, the calculation of business profits in terms of completed ventures, where the ventures cover varying lengths of time. The recency of the current emphasis on periods of equal length is closely tied to the necessity of determining the coverage of bond interest, of profits available for

dividends or subject to taxation, as well as the requirements of a budget-planning period, etc. The observed equal length and regularity of accounting periods probably comes from the fact that the earth revolves around the sun once a year, and that we have four seasons. Regular periods, however established or defined, are also "consistent" and therefore promote comparability. In terms of the emphasis upon wealth (capital), however, no fundamental importance attaches to a succession of periods of equal length. What is clearly required is that changes be recognized and measured and be assigned to some period of specifiable length.

The Unit of Account

The measurement of capital and its changes must be made in a common denominator, a "money of account." Measurement in physical units (e.g., weight, quantity, density, dimension) can have only limited application unless a unit is found that is common to all objects to be measured. When such a unit is found, it can be used as the "money of account" for that group of objects.

Nonmonetary units are technically feasible, and might even be used for special projects. But accounting for economic (business) activity is based on money as a unit of account.

While there are other types of data utilized by management (e.g., production reports and market statistics), accounting is distinguished from other internal data-supplying functions by the fact that accounting data are stated largely in monetary terms while the other data are stated largely in quantitative terms.²

Money is used both as a medium of exchange (debt-paying medium) and as a measure of exchangeability or "standard of value." The first of these characteristics specifies the type of economic system we are most interested in—one in which money is used almost universally to pay wages and taxes and generally to discharge debts. Except, however, for characterizing the kind of economic organization—the "money economy"—in which accounting flourishes, this first characteristic is not of much significance. Accounts can be and are kept in the absence of any "money" (cash on hand or in bank, legal tender or its close substitutes).

² W. B. McFarland, "Research in management accounting by the National Association of Accountants," *Accounting Review*, Jan. 1961, pp. 21-25.

It is the second characteristic that is crucial for accounting. Accounting involves measurement; in order to measure, a unit common to all objects to be measured is needed; in an "exchange economy" the only measure common to all objects that do or can enter into the exchange process is their exchangeability or "value in exchange." And this measurement is expressed in terms of money in its function as a common denominator or standard of value, with "value" meaning "value in exchange." This use by accounting of money as a common denominator is merely a specific example of the logical requirement that two or more objects must be expressed in identical units before we can perform operations on them, such as adding them together, or subtracting one from the other. Emphasis on this logical requirement leads naturally to a question as to whether the use of the monetary unit in current use does in fact express all the objects in terms of a common unit. Almost universally, in the past as well as the present, the "money of account" in use is the local currency of the country in which the accounting entity is located. But the variability of all local currencies is notorious. Later we will have to face the problem of deciding whether or not the dollar, or pound, or franc is in fact the best measuring unit available in the United States, or England, or France. For the present, the point of agreement is that money is used almost universally as the common denominator in economic and business affairs and, hence, in accounting.

Value in Exchange

Aside from the problem of the measuring unit itself, the emphasis on exchangeability or "value in exchange" leads to the observation that difficulties of measurement are reduced if exchange values (market prices) actually exist. This is true because of the "independent judgment" expressed in the market transaction. The market transaction (exchange) exposes exchange values to the light, as it were, revealing the judgment of the market as to what the values are. Consequently, an actual exchange does usually measure values in a way that is easier to see and to verify than if the measurements were made at some other time or place or by some other means. The observed stress in present-day accounting on "objectivity" and on "cost," for example, and the widespread antipathy to "appraisal" and to value not based on an exchange, are all related to the problem of evidence. Valid as all this may be, we must recognize that measurement is not impossible in the absence of exchange, nor is it necessarily less accurate. Exchange does not make values; at best, it merely reveals them.

To forestall misinterpretation, we point out that “value in exchange” includes any price that refers to an exchange transaction. It therefore includes cost, selling price, sound value, new, scrap or salvage value, or any other measure in terms of price which rests on an exchange or is derived from it. It does *not* include “subjective values” or “intrinsic values” which rest on people’s tastes or hopes. Subjective values of this type are undoubtedly useful in welfare economics; they have no place, however, in accounting.

Historical Example

Prior to the French Revolution, the monetary system of most countries in western Europe distinguished between one monetary unit used as a standard of value and of deferred payments and a different monetary unit used as a medium of exchange.

There was . . . a monetary unit used only as a standard of deferred payments (promises to pay) or for the purpose of keeping accounts. This was the function of a money of account, an imaginary or ideal money. The public made contracts, kept books, established mortgages, or stipulated rents in pounds, shillings, and pence. . . .³

This imaginary money apparently originated as real money in the time of Charlemagne (A.D. 800) who coined 240 pennies from a Roman pound (12 oz.) of silver. But in the succeeding thousand years the real money gradually became imaginary.

Pounds, shillings, and pence were not coined in most countries. Everywhere 12 pence (Fr. *deniers*; It. *denari*) were equal to 1 shilling (Fr. *sous*; It. *soldi*) and 20 shillings to 1 pound (Fr. *livre*; It. *lira*). The abbreviations £, s., d. were used universally. Pounds of different countries or kingdoms were not equal to each other any more than Mexican dollars and American dollars are equal.

In these countries actual payments in these units could not be made. Instead, payments were made in real currency—gold coins, white

³ The discussion in this section is based on Luigi Einaudi’s article titled “Teoria della moneta immaginaria nel tempo da Carlomagno alla rivoluzione francese,” which appeared in *Revista di Storia Economica* in 1936, and was translated by Giorgio Tagliacozzo under the title “The theory of imaginary money from Charlemagne to the French Revolution” for inclusion in *Enterprise and Secular Change: Readings in Economic History*, edited by Frederick C. Lane and J. C. Riemersma (1953). Einaudi, a leading economist in the field of public finance, later became President of Italy.

money or silver coins, black money or low grade silver, vellon or copper coins.

Einaudi develops the thesis that this imaginary money was not money at all; it was a mere instrument or technical device used to perform some monetary functions. The money of account of the imaginary pound was the device used to remedy monetary disturbances. "It was an instrument of extraordinary flexibility which had been slowly developed in ten centuries after the reign of Charlemagne. Its full possibilities were realized neither by the Revolutionary Assemblies, which eventually abandoned it, nor by the monetary authorities, who during the ten preceding centuries had failed to take full advantage of it and had diverted it to dangerous uses. . . ."

In a passage that strikes close to home, Einaudi remarks:

. . . how difficult it is in times of monetary devaluations and revaluations to persuade men that prices have not changed but that the monetary yardstick has become longer or shorter. Yet today the terms of comparison are only two: the monetary unit . . . and one unit of a given commodity . . . and there is only one ratio: between the monetary unit and the unit of a commodity. . . . At the time of imaginary money three units had to be correlated: the imaginary monetary unit (the pound), the real monetary unit (the scudo), and a unit of an economic good (e.g., a kilogram of bread). As a result there were three ratios: pound to commodity, pound to scudo, and scudo to commodity.

Accounting Postulates — the Environment

The preceding discussion furnishes the basis on which to formulate numerous generalizations concerning the economic and political environment in which accounting exists. We have seen, for example, that we live in an orderly society in which the potential consequences of actions can be predicted with some degree of success.

This generalization underlies any others that can be formulated because it asserts the existence of order and predictability in human affairs. We could of course assume that no one has any idea at all about what will happen next but the facts of our own behavior and of our environment belie such an assumption. Order and predictability make it possible to use estimates and to lay plans, and to construct rational systems and procedures. The qualifying phrase, "with some degree of success," robs the generalization of real precision, but its main drift is clear enough. The underlying notions of order and predictability are essential for any further analysis.

We have also seen that the production of wealth (goods and services) is carried on by combining labor, natural resources, and capital. This generalization sums up the technical processes of production, with production interpreted in the broadest possible sense.

Certain other generalizations are set forth below in the form of specific propositions. These propositions are of direct relevance to accounting, as will be demonstrated later, although in form they refer to the environment. For convenience in reference, this first set of propositions will be called "Group A."

Postulate A-1. Quantification. Quantitative data are helpful in making *rational economic decisions*, i.e., in making choices among alternatives so that actions are correctly related to consequences.

This proposition is essentially psychological in nature because it makes an assertion concerning the behavior of individuals, namely,

that they find use for quantitative data. With relation to accounting, it indicates why financial statements (including schedules, budgets, and analyses) are useful, and therefore points the way to the most appropriate form and content of financial statements.

Postulate A-2. Exchange. Most of the goods and services that are produced are distributed through exchange, and are not directly consumed by the producers.

This proposition describes the dominant method of distributing the results of economic activity. As we see later, this proposition is an extraordinarily fruitful one for accounting.

Postulate A-3. Entities. Economic activity is carried on through specific units or entities.

This proposition refers to the basic unit of economic organization and points the way for a similar orientation of accounting data.

Postulate A-4. Time Period. Economic activity is carried on during specifiable periods of time.

22

This proposition simply applies to economic activity, the temporal setting in which all human activity takes place. The natural extension to accounting of the same concept follows in due course.

Postulate A-5. Unit of Measure. Money is the common denominator in terms of which the exchangeability of goods and services, including labor, natural resources, and capital, are measured.

This proposition has two aspects. One of them describes the dominant type of economic organization, namely, one in which payments in money rather than in kind are the rule. The other, of prime significance for accounting, refers to the basis on which economic calculations are made. The "money" referred to is not any particular form of money, but instead is the abstract unit in actual use. In the United States, this unit is the gold dollar, which is not minted and therefore has no physical representation, but exists only by legal definition.

That there may be more than five basic postulates referring to the environment is readily conceded. For one thing, each of the five is a complex assertion and could be restated in the form of two or more simpler statements. In other words, these propositions are not as basic as might appear from their brevity and relative simplicity of statement.

For another thing, other aspects of the environment, not covered

in these five propositions, could be expressed in suitable fashion. In this sense, the list is open-ended, and admits of indefinite extension. As long as the additional propositions are independent and do not contradict any of our "Group A," no logical conflict is created. To be admitted to any list of basic postulates of accounting, however, their relevance to accounting would have to be established.

Definition of Accounting

The relationship between the foregoing propositions and the field of accounting can be illustrated by means of the following definition:

The function of accounting is (1) to measure the resources held by specific entities; (2) to reflect the claims against and the interests in those entities; (3) to measure the changes in those resources, claims, and interests; (4) to assign the changes to specifiable periods of time; and (5) to express the foregoing in terms of money as a common denominator.

This definition is compatible with the one set forth in Accounting Terminology Bulletin No. 1 (page 9), issued by the committee on terminology of the American Institute of Certified Public Accountants in 1953:

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.

Compare also the definition proposed by F. Sewell Bray:¹

Accounting is the art of recording, classifying and summarizing in terms of units of money the many and diverse economic transactions which day by day enter into the business affairs of society.

These references to definitions of accounting are not intended to propose a new definition but rather to illustrate that the conclusions derived so far fit into the conceptions of the field already widely held.

The preceding assertion as to compatibility among these definitions has been challenged because Mr. Bray's and the Institute committee's definitions refer to "transactions" whereas ours refers to "resources" and "changes in resources." True, in the case of psychic or subjective income (the satisfaction of human wants), the presence of scarce

¹ *The Measurement of Profit*, p. 1. Oxford Univ. Press. 1949.

resources is not always essential. But in the case of all other economic and financial transactions, scarce resources are inevitably involved, whether their presence is recognized explicitly or not.

The preceding definition of the *function* of accounting also leads readily to a definition of "accountants" as the people who perform this function, and of "independent accountants" (certified public accountants, chartered accountants, etc.) as those accountants who attest whether or not the measurements have been made and reported in accordance with appropriate standards.

Supplementary Propositions — the Field of Accounting

The preceding chapters dealt principally with the “economic and political environment.” This chapter is the first of two which deal with accounting itself. The purpose of this discussion is to provide some further propositions to assist in the construction of “accounting principles” upon the foundation of “accounting postulates.”

Arbitrary Conditions

In any field of activity certain choices have to be made where the option chosen seems entirely arbitrary and without substantive effect. For example, autos are driven on the left side of the road in England, but on the right side in the United States; the titles of most books printed in the United States run from the top to the bottom of the spine, but from the bottom to the top in England and Australia; the buttons on a man’s coat are on the right but on a lady’s coat they are on the left.

25

In bookkeeping, debits appear on the left and credits on the right in the standard ledger form. No harm would be done if their placement was reversed, provided everyone followed the new practice. American balance sheets usually place assets on the left while English balance sheets place them on the right. The growth of mechanized accounting and of electronic data processing has taught us a valuable lesson —where items are placed in the records can be and is often dictated by the technical nature of the tabulating card or the magnetic tape, but the technical process involved does not alter the nature of the information provided or the problems of classification and interpretation it presents.

If it makes no difference in the results, why bother to mention the subject at all? Mainly because the existence of some undeniably arbitrary choices in accounting often leads us to assume that we can make arbitrary choices in a wider area than we really can or should. We could decide entirely by chance whether to put debits on the left or on

the right, knowing in advance that the result would make no difference in whatever is important in the accounting process. We could not, however, choose a "standard of value," or a "realization principle" by the same process because each different possible "standard" or "principle" has a different effect on the results obtained.

Implied Conditions

Any proposition carries with it certain implied conditions or corollaries or results which might not be explicitly recognized or expressed at the time the proposition is formulated. A few examples are listed below to illustrate the point:

1. If "economic activity is carried on by specific units or entities" (Postulate A-3), it follows that any report on the activity must identify clearly the particular unit or entity involved.
2. If "economic activity occurs during specifiable periods of time" (Postulate A-4), any report on that activity must identify clearly the period of time involved.
3. If "money is the common denominator . . ." (Postulate A-5), then any report must clearly indicate which money (e.g., dollar, francs, pounds) is being used.

26

Notice that these examples are not arbitrary conditions chosen at random but instead depend on the related propositions. These examples are also simple and direct, requiring nothing more than explicit statement by way of "proof." Other examples of implied conditions may, however, be asserted by someone where the relationship with the underlying proposition is not so simple. In those cases, the "proof" of the alleged implied condition will have to be spelled out in detail.¹

Rational Decisions

Previously the importance of quantitative data to support the calculations needed to make rational economic decisions was stressed. These decisions involve the identification of the alternative lines of action that are open, the determination of the consequences which will flow from each line of action, and the selection of the action which will

¹ Mattessich uses the term "requirements" to describe his list of "implied conditions." *Op. cit.*, pp. 340 ff. (See footnote reference No. 4, Chapter I.)

in fact be taken. Financial reports can supply some of the data needed to make these decisions. The "financial reports" in question are those which give some information concerning the resources of an economic entity and changes therein. Thus, calculations are essential in order to decide how to allocate resources and to measure the results of those allocations to determine if the objectives have been accomplished. Accounting has traditionally been geared to the measurement of the results of the allocations actually made. Perhaps it can also be used in more positive fashion to make better allocations in the future.

At this point the ideas of "purpose" and of "usefulness" begin to take on concrete meaning. The kinds of economic (business) decisions to be made can be specified, as well as who is to make them. Given these specifications, the kinds of information needed can be spelled out. Given these needs, we can determine (a) the extent to which accounting can at present supply the necessary information (e.g., the financial resources—money and claims to money—of existing businesses); (b) the extent to which accounting could be made to supply the data not now available (e.g., the factory buildings in existence stated in constant dollars or at replacement costs); and (c) the extent to which accounting can probably never satisfy the needs (e.g., the size of the available work force three years hence.)

The accounting process itself characteristically culminates in the preparation of one or more financial reports at periodic intervals. A proposition to sum up the connection among these reports follows:

Financial statements. The results of the accounting process are expressed in a set of fundamentally related financial statements which articulate with each other and rest upon the same underlying data.

The fact that accounting statements articulate with each other distinguishes them from most other types of statistical exhibits. Accounting statements constitute a design that is readily apprehended; they depend on each other in a systematic manner.

At the present time published financial statements usually consist of statements reflecting financial position, results of operations and an analysis of retained earnings. The operating statement ties in explicitly and obviously with the analysis of retained earnings, which, in turn, articulates perfectly with one element of the balance sheet. Analytically, then, the statement of financial position is the pivot because it is the most comprehensive financial statement prepared.

But these three statements are greatly influenced by the objective of allocating revenues and costs to accounting periods. If the focus is shifted somewhat, other financial statements emerge. For example,

a statement of the source and application of "funds" or of cash receipts and outlays can be and is prepared by appropriate selection from the same mass of underlying data. In these cases, the objective is to allocate "funds" or cash movements, rather than revenues and costs, to periods. And each such statement would tie in explicitly with some elements of the balance sheet, other than retained earnings.

These considerations lead to the conclusion that a whole battery of statements can be prepared, each of which stresses a different aspect of the same mass of underlying data, and all of which articulate with each other. As social and economic conditions change, the aspects that *ought* to be stressed in published financial statements can change without necessarily altering the kinds of underlying data that are accumulated.

Market Prices and "Cost"

Accounting data are based on prices generated by past, present, or future exchanges which have actually taken place or are expected to. They are not based on subjective attitudes toward "intrinsic" value or worth, although those attitudes might influence some of the judgments exercised in certain cases. As F. Sewell Bray has observed:

The primary basis of accounting lies in records of exchange dealings or their equivalents, conveniently classified within group definitions, at present largely promulgated to conform with entity needs.²

No exception to this proposition comes to mind. It clearly covers the purchases and sales of goods and services, the lending and borrowing of money, the issue and redemption of capital stock, the receipt and payment of cash, and any other instances of financial events (transactions) involving at least two accounting entities. By extension it also covers the consequences of these transactions, e.g., amortization of cost, accrual of interest, accumulation of cost of production, since they are based on a preceding exchange of some sort. It even covers those cases in which the accounts reflect future events, e.g., use of net realizable value, because the future event reflected is an expected or anticipated exchange. It also covers the characteristic problems of "managerial accounting," such as make-or-buy decisions, equipment replacement problems, the determination of product-mix, and the like,

² *The Accounting Mission*, p. 27. Melbourne Univ. Press. 1951.

because in each case the alternatives posed, although they may be hypothetical, are clearly capable of implementation. Similarly, budgeting and *pro forma* statements are covered and for the same reasons.

For the most part, accounting data rely on *past* exchanges and *past* prices, but not entirely. Pressures have been building up in recent years for more use of future, and hence estimated, events and prices in order to make accounting reports “more useful.” If estimates are used more extensively, the results will necessarily be less accurate than reports based on past data, but they might well prove “more useful.” Whether or not accounting *should* move more rapidly into this area is not at issue here. We merely emphasize that nothing in any of these propositions stands in the way of such a development. It would do no violence whatsoever to the kind of environment in which accounting operates or to its basic framework.

One corollary readily suggests itself, namely, that exchange price is the proper basis for purposes of *initial* recording. Exchange price as used here, means the consideration given or the “sacrifice” made in an exchange. This corollary has a high degree of validity in a market economy. To make it applicable to specific cases, however, certain other conditions must be present, for example:

1. Arm’s-length bargaining between two (or more) independent entities, or evidence that is the equivalent of this standard³;
2. Rational conduct on the part of all entities involved in the exchange; and
3. Dealings in a market that is active enough to warrant the assumption that the prices generated are representative.

The recital of these conditions makes it abundantly clear that there are numerous exceptions to an assumption that exchange price equates with “actual value” at the time of exchange. Nevertheless the assumption does fit well into the normal cases, with “normal” defined as “modal,” the most frequently encountered case.

Another possible corollary is the proposition that accounting is restricted to exchange price, or that our accounting is, or ought to be, or must be, “cost-based.” But this proposition does not follow from any of the preceding considerations. Even if an entity engages exclu-

³ This point is ably discussed by the committee on accounting procedure of the American Institute of CPAs on pages 5 and 6 of a release dated October 20, 1945 (the “Blue Bulletin”), concerned with some questions in public utility accounting. See *Journal of Accountancy*, May 1946, p. 441.

sively in exchange transactions in a real market so that exchange price becomes the "natural" basis for initial recording, it does not follow that its treatment of the consequences of those transactions (their subsequent history) must be restricted to that price. A bond bought at a substantial discount, for example, may be properly reflected initially at its exchange price, but its subsequent growth to maturity value can be reflected without violating the nature of the basic transaction or the objectives of accounting.

"Cost" has often been used in accounting as synonymous with a price established in an exchange. As a result, it may include "fair market value" and "appraised value." For example, Accounting Research Bulletin No. 43⁴ states (p. 38) that:

In the case of noncash acquisitions, as, for example, where intangibles are acquired in exchange for securities, cost may be considered as being either the *fair value* of the consideration given or the *fair value* of the property or right acquired. [Emphasis added.]

On page 28 of the same source,⁵ a footnote states that:

30

In the case of goods which have been written down below cost at the close of a fiscal period, such *reduced amount* is to be considered the cost for subsequent accounting purposes. [Emphasis added.]

Cost is frequently used, however, in a more restricted sense in order to exclude concepts such as fair market value and appraisals. In these more restricted meanings, the attempt to restrict accounting to "cost" is even less justified. Important cases exist in which there is no "cost" because there is no exchange. We refer to cases such as gifts, proprietary contributions of capital, etc., where the initial basis of accountability must be fair market value or its equivalent.

In the interests of precision in meaning and in analysis, "cost" should be given a single meaning. Otherwise, those characteristics of "cost" which are valid in one of its meanings may easily be attributed incorrectly to its other meanings. For example, "cost" is often urged as a basis in accounting because it is objective, or easily measured, or verifiable. These characteristics are usually valid if cost means "actual price, in money, paid or promised." They are not so valid, however,

⁴ Chapter 5, *Intangible Assets*, American Institute of Certified Public Accountants, 1953.

⁵ Chapter 4, *Inventory Pricing*.

in cases where the consideration given is in a form other than cash or a promise to pay cash. Preferably we should restrict "cost" to those resources acquired for money, e.g., the purchase of materials and their subsequent transfer to work in process and finished goods. The "non-cash acquisitions" should then be called by other names, such as "market price," "fair value," "estimated value," etc. It will then be crystal clear that accounting is not and cannot be restricted to "cost" (cash-price), and the whole problem of basis will come into sharper focus.

Accounting Entities and Uniformity

Since economic activity is carried on by specific units or entities, the results of the accounting process are expressed in terms of specific units or entities.

In most cases the specification of the entity involved is relatively easy because the economic and legal units coincide. In other words the legal form (e.g., ABC Partnership, XYZ Corporation, Blank Health Association, City of Z) clothes an actually functioning economic entity which is readily identified and easily distinguished from other similar units.

But the specification of the entity is not always easy or obvious. The following list poses some actual problems, without solutions at this point. None of them is speculative or hypothetical.

1. Should financial statements be prepared for subdivisions or parts of a recognized entity?

Ordinarily, this problem creates no special difficulties because branch accounts, departmental reports and divisional statements circulate internally and can be conceived of as memoranda. The recent move toward decentralization of large businesses, however, has raised the related question of the proper way to prepare reports on those divisions which are relatively autonomous.

2. Should combined or consolidated reports be prepared for two or more affiliated legal units? This is the problem of consolidated financial statements and is probably the best known single example of the preparation of financial statements which include more than one well-defined legal unit.
3. Does the merging of two formerly independent entities represent an ingestion of one by the other or does it represent a continuation of the two? In the public utility field, the Federal Power Com-

mission's "original cost" doctrine can be conceived of in part as an assertion that the accounting entity consists of the assets dedicated to the public service, and not of the legal units that happen to hold title. In recent years, the concept of a "pooling of interests" has gained prominence in all sectors of the economy. Under this concept the legal forms are observed as to entity but the substantive questions (e.g., treatment of retained earnings, basis of assets, goodwill) are treated as though the formerly separate entities were still in existence.⁶

4. Are existing accounting entities really independent or are they merely cells in a larger social organism? This problem has been discussed somewhat in the theoretical literature. In the sphere of practice, it is being felt in pressures from regulatory agencies (and elsewhere) both for the adoption of procedures which will aid in the preparation of national accounts and for the abandonment of those which interfere. This development is probably a mild manifestation on the accounting level of the shift from a highly competitive society to the interdependent society toward which we seem to be moving so rapidly.

32

The form which this challenge to traditional conceptions and modes of thought is taking is illustrated by two passages taken from some correspondence with government officials:

Uniformity in accounting practice is clearly necessary and generally recognized in respect to the individual units of a chain store, the branch plants of a multi-unit manufacturing company, or the different departments of a large department store. Comparability of data is equally essential to equitable economic regulation of the type which the Board must perform. . . .

Notice the comparison—each company is to its industry as a branch plant is to its home office or as a single department is to a whole department store. The focus of attention is shifted from the individual company to the industry as an alleged entity.

This point is explicitly recognized in the second source:

. . . we prescribe what is intended to be a uniform system of accounts for the industry rather than an individual system of

⁶ Professor Arthur Wyatt of the University of Illinois is completing a research study for the Accounting Research Division on the general topic of business combinations, with special reference to "pooling of interests."

accounts for each [company]. Since the attainment of uniformity in accounting practices . . . necessitates some rather loose fits in some situations, the results cannot be equally well-suited to the individual needs of every [company]. Nevertheless, our interpretations of the accounting regulations, of necessity, look toward maintaining the maximum uniformity. . . .

Time and Uncertainty

If economic activity occurs during specifiable periods of time, then accounting must be continuously concerned with the recognition and allocation of events. The problem of recognition and allocation is made more difficult because the "events" often take longer to work themselves out than the reporting periods customarily in vogue. The results of operations for relatively short periods of time are tentative whenever allocations between past, present, and future periods are required.

Because of the uncertainty of the future, some of these allocations are likely to be inaccurate in the sense that future events demonstrate that the allocations should have been different from the ones actually made. In the words of Accounting Research Bulletin No. 43,⁷ at page 59:

Profits are not fundamentally the result of operations during any short period of time. Allocations to fiscal periods of both charges and credits affecting the determination of net income are, in part, estimated and conventional and based on assumptions as to future events which may be invalidated by experience. While the items of which this is true are usually few in relation to the total number of transactions, they sometimes are large in relation to the other amounts in the income statement.

Thus, at the end of the useful life of a building, its cost, salvage value, and life are known. Accordingly, the periodic amount of depreciation can be accurately calculated on a retroactive basis in accordance with the depreciation method (e.g., straight-line) that has been adopted. Prior to the end of its useful life, however, this periodic amount is necessarily an estimate based on assumptions as to useful life and salvage value.

No doubt, everyone would like timely reports that are also conclusive, but for the most part the two conditions (timeliness and conclusiveness) are in conflict. In most cases accountants have chosen to be more conclusive rather than more timely in their recognition of changes that

⁷ Chapter 8, *Income and Earned Surplus*.

have occurred, thereby exposing themselves to the charge that their reports (issued at frequent intervals) are less useful than they could be. For example, they rarely show the accretion of a stand of timber until it is cut, and the accretion "realized." As a result the financial impact is concentrated in the period of cutting or usage, but not distributed among the periods in which the growth actually occurred.

Human beings adapt themselves in various ways to the presence of uncertainty. Some adaptations which have found their way into accounting (e.g., consistency, conservatism) are discussed in later sections. At this point we comment on two others:

1. *The use of estimates.* Whether or not a particular account receivable will ever be paid cannot be known in advance, nor can the actual useful life of a single piece of equipment. By dint of statistical analysis based upon observation (including experience), however, a conclusion can often be stated with some confidence, e.g., that 2 per cent of open balances will prove uncollectible or that equipment of the type under observation lasts not less than five years in 90 per cent of the cases. These statistical conclusions can then be used as the basis for allocations among relevant periods. More extensive use of estimates of this type might well be made in many areas and the results used to improve the timeliness of accounting reports without undue sacrifice of exactitude.
2. *The use of judgment.* "Judgment" is pertinent to a great many of the topics discussed in this monograph, but it is especially relevant here because, from an analytical point of view, judgment is necessary when decisions have to be made about unknown variables. In the face of certainty, consequences can be calculated in advance, and rules formulated to reduce or eliminate judgment. But the imponderables have to be handled somehow, and judgment fills the need. We must, however, distinguish situations where judgment could be replaced by better statistical procedures (see discussion, above) from those in which the variables cannot be "quantified" or, perhaps, even identified. Consider the following:

Some discussions of the principles or standards of accounting fail to distinguish between problems which are created by the obligation of a professional man to his client and to other parties at interest from those which arise from some technical problem related to the underlying framework of accounting. The former type of problem clearly places a premium on "judgment" while the latter almost as certainly

may be made the subject of formal analysis with clear-cut, noncontroversial answers. As an example take the case of the relationship of the operating statement to the balance sheet. In terms of the "social relationships" different answers can be obtained as to the relative importance of these two published statements, depending on the times and the general economic setting. But, whether the operating statement is a link between two balance sheets, or vice versa, or whether either one is subordinate to the other cannot be determined by their relative usefulness. Instead the answer must be obtained by an analysis of the interrelationships among the parts of the accounting process.

Another example arises whenever a correction of past estimates (e.g., amortization, accruals) is in order. Analytically, the precise locus of the "error" can be determined; e.g., it resulted in an understatement of depreciation last year in the amount of so many dollars, with related effects on inventory valuations and income taxes. The manner in which the correction should be disclosed, however, may involve a large element of judgment—the correction could be treated as a routine item in the current reports, or separately disclosed through profit or through retained earnings. It is even conceivable that revised statements for the prior periods are indicated. But this "judgmental" aspect does not alter the occurrence of an error with a known magnitude and a precisely calculable effect on the accounts.

Decisions based on the data contained in financial statements must in the nature of the case be influenced by all of the estimates that went into the preparation of those statements. Subsequent adjustments, revisions, or corrections of those estimates cannot possibly affect past decisions, only future ones. The method of disclosing or of giving effect to those changes must take this consideration into account. The fact that decisions are, to a large extent, irreversible does not, however, make the estimates on which they were based "right." The estimates themselves must still meet the test of experience; the unfolding of experience should be the basis for improved estimates in the future so that decisions based upon them will be sounder.⁸

⁸ The difficulties of reconciling the fact of known errors in past estimates with the appropriate method of giving recognition to those errors is vividly illustrated in the discussions contained in the following sources:

- (a) Accounting Research Bulletin No. 43, Chapter 8, *Income and Earned Surplus*, discussing the criteria for determining which "extraordinary charges and credits" should be "excluded from the determination of net income."

Some critics of accounting practice have attacked the inconsistencies in the formal relationships among the accounts (e.g., leaseholds, bases of pricing inventories, depreciation methods) and have probably underestimated the importance of the judgmental aspects. Other critics, by contrast, have underplayed the formal problem and stressed the obligation to report in a certain political and economic setting. The profession itself has been most sensitive to these "social" critics, less so to the others.

We are primarily concerned with the issues that can be analyzed in a formal sense. The problem of applying the results in practice raises questions of policy which we are not prepared to cope with or equipped to handle. For example, our analysis will no doubt indicate that an estimate of uncollectibles is essential to the determination of periodic net profit and of financial position. But an analytical result of this type does not carry with it a mandate to every accountant to make these estimates under any and all circumstances or according to any one formula.

36 To summarize with respect to "judgment": As the basic analytical framework of accounting becomes more firmly established and more widely accepted, specific rules can be set according to some principle of optimization, that is, by a balancing of conflicting forces, such as the cost of data accumulation, the accuracy of the results, the benefits to be derived from the resultant data, and the like. Ultimately the optimal solution may even be determinable by analytical means. Meanwhile, judgment must be relied upon to perform the function of more formal analysis.

Summary

For convenience in reference, the second set of propositions is restated at this point as group "B."

Postulate B-1. Financial statements. The results of the accounting process are expressed in a set of fundamentally related financial statements which articulate with each other and rest upon the same underlying data.

-
- (b) American Accounting Association. Executive Committee. "Accounting concepts and standards underlying corporate financial statements—1948 revision" which holds that an estimate made in "good faith . . . is not subject to reversal in a later period."
 - (c) American Accounting Association. Committee on Concepts and Standards. "Accounting Corrections" (December 31, 1953) which holds that "correction of judgment errors is also proper."

Postulate B-2. Market prices. Accounting data are based on prices generated by past, present, or future exchanges which have actually taken place or are expected to.

Postulate B-3. Entities. The results of the accounting process are expressed in terms of specific units or entities.

Postulate B-4. Tentativeness. The results of operations for relatively short periods of time are tentative whenever allocations between past, present, and future periods are required.

A Third Set of Propositions — the Imperatives

The four propositions (Group B) described in the preceding chapter have one important characteristic in common—if they are valid at all, they apply over an area that is coextensive with accounting, at least as it exists today.

38

Let us turn now to some propositions for which this claim cannot be made, but which do have wide applicability. One notable difference between the propositions which follow and those which have already been stated is that the earlier ones are couched as simple declarations, e.g., “accounting data are based on prices generated by . . . exchanges.” This kind of language conveys an impression that “this is the way things are.” The propositions which follow, by contrast, will be stated more circumspectly because they refer to the area of “ought to be” rather than “is.” Mainly for this reason we set forth these propositions in a separate series. Because they stress what ought to be (goals, objectives, standards) they are referred to as “imperatives.”

Continuity or Going Concern

It is a commonplace that business activity has changed over the past century or so from a series of separate ventures to a pattern of continuous activity. As a consequence, a large part of accounting practice as well as theory is based on the presumption that the accounting entity will continue in operation and not be liquidated in the foreseeable future. In the absence of evidence to the contrary, the entity should be viewed as remaining in operation indefinitely.

An obvious corollary of this proposition is that “in the presence of evidence that the entity has a limited life, it should not be viewed as remaining in operation indefinitely.” Under these circumstances the form, content, and descriptive captions of the financial reports should make clear this characteristic of limited life; pricing rules and other formulas for expressing assets and liabilities, and for assigning revenues

and costs to periods, should be appropriate to the expected terminal date of the entity and to the type of liquidation anticipated. There are many exceptions to the assumption of a "going concern," including large areas where it is not applicable at all (e.g., receiver's statements; statements of affairs; statements of companies in the developmental or exploratory stage; joint ventures; etc.) It is nevertheless a unifying force behind a whole array of measurement practices and procedures in the so-called "normal" or "modal" cases.¹

"Going concern" implies indefinite continuance of the accounting entity under scrutiny. Indefinite continuance means that the business will not be liquidated within a span of time necessary to carry out present contractual commitments or to use up assets according to the plans and expectations presently held. This view makes the concept a tentative judgment, subject to revision in the future as contractual agreements are changed and plans and expectations with respect to operations shift. "Going concern" should not be identified with "permanence," as the Study Group did in its report, *Changing Concept of Business Income*. Permanence means, fundamentally, that economic activity of some sort or other will be carried on as long as human beings inhabit this planet. It is, therefore, much too sweeping a concept to serve as a guide to action.

Regardless of the specific meaning attached to "going concern," however, the concept has been useful in broadening the scope of accounting beyond the limitations of liquidation value and of strictly construed legal rights and obligations. Some specific cases are presented below:

1. *Accounts receivable*. We ordinarily recognize an account receivable (and the related revenues) whenever future cash receipts from customers are definitely expected and can be measured. The

¹ *Selected references:*

T. H. Sanders, H. R. Hatfield, and U. Moore, *A Statement of Accounting Principles*, p. 3. 1938.

W. A. Paton and A. C. Littleton, *Introduction to Corporate Accounting Standards*, pp. 9-10. 1940.

William J. Vatter, *Fund Theory of Accounting and Its Implications for Financial Reports*, p. 5. 1947.

"Accounting and reporting standards of corporate financial statements—1957 revision," *Accounting Review*, Oct. 1957, pp. 536-46.

Reed Storey, "Revenue realization, going concern and measurement of income," *Accounting Review*, Apr. 1959, pp. 232-38.

size of the receivable is geared to the size of the anticipated future cash receipts, not to the present realizable (liquidation) value of the receivable in the market. In addition, some legal defect in the transaction may be present, e.g., an incomplete transfer of title in the goods sold, but it will ordinarily be ignored in accounting for the transaction. These considerations of liquidity and legality are of some relevance, but only in those cases in which the expected cash receipts from the customer are in doubt or in jeopardy. In addition, the device of an allowance for uncollectibles is not based upon either (a) immediate market or liquidation value, or (b) the right to sue and to obtain judgment.

2. *Inventories.* In the usual case, work in process and finished goods are assumed to be worth more than raw materials by the amount of labor and other production costs added; this is a rational attitude if the inventories will be disposed of in the normal course of business by a going concern. As others have pointed out, however, the immediate market (liquidation) value of work in process is usually low compared with the market value of the materials before processing. Plain white paper, for example, is worth more than printed pages, unless the process can be completed by assembling the printed pages into a book or magazine which can be sold for some price above cost. In pricing inventories at cost, then, we assume a going concern which will finish the work in process and which will sell the finished output.
3. *Buildings and equipment.* The influence of the going-concern concept is particularly pronounced in the case of the depreciable assets. In the first place, we are enabled to avoid the effects of random changes in immediate market prices (liquidation values) of the depreciable items because we assume a using-up of the services supplied by these assets rather than sale in the market of the depreciable assets themselves. In the second place, any depreciation formula which employs an estimate of useful life is based upon the concept of a going concern (among other concepts) which will operate at least as long as this useful life and, furthermore, will be able to recover the undepreciated cost of the assets from future revenues.
4. *Liabilities.* The case of estimated debts for guaranties, for collection costs, etc., comes to mind. In this area, accounting has shown a tendency to follow through on the going-concern concept, whereas the courts and the taxing authorities have usually insisted on the

existence of a legally enforceable obligation before permitting recognition of the liability and the related expense. For accounting at its present stage of development, the existence of probable future outlays, arising from or related to past transactions, is sufficient in most cases to warrant the recognition of a liability; for legal purposes (including income taxation) a further condition is usually necessary; namely, the existence of a legal person to whom the obligation runs, and who has the right to sue for payment, if necessary.

Objectivity

In order to present statements reflecting the condition of economic resources and changes in them, measurements are needed of their magnitude at different points of time. These measurements are essential to establish both the amount of change and the time of its occurrence, and they must be made in terms of well-defined units. (See discussion, below, on “stable unit.”) They must be performed by those competent to make them and must rest on evidence that is reliable and subject to verification. The range of acceptable or reliable evidence in use today by accountants is wide and includes index numbers (in dollar-value Lifo) as well as cancelled checks and unpaid invoices. Because they cannot be recognized at an earlier date in “objective” terms, however, changes in assets and liabilities will not be recognized in financial reports until they can be measured.²

41

Accordingly, we regard it as an “imperative” that changes in assets and liabilities, and the related effects (if any) on revenues, expenses, retained earnings, and the like, should not be given formal recognition in the accounts earlier than the point of time at which they can be measured in objective terms.

If this general proposition on objectivity were expressed in positive terms, it would assert that “changes in assets . . . should be given formal recognition in the accounts at the earliest point of time at which they can be measured in objective terms.” The basic (negative) form of this proposition does not rule out the “positive” form. The “positive”

² Harold Arnett of the Accounting Research Division of the American Institute of CPAs developed a staff report to demonstrate the equivalence of recognition and measurement in accounting. See his article “What does ‘objectivity’ mean to accountants?” in *Journal of Accountancy*, May 1961, pp. 63-68.

form, however, does lay down an injunction as to early recognition and therefore rules out the basic (negative) form.

Two comments are in order by way of further clarification. First, the term "objective" is used here to mean "unbiased; subject to verification by another competent investigator." In this usage, an estimate or forecast can be objective, along with completed events of the past. Second, the imperative on objectivity does not rule out the use of notes to financial statements or other devices to reveal factors which do not belong in the accounts themselves. See the discussion, below, on "disclosure."

In his incisive study of profit measurement, Sidney S. Alexander makes the following assessment of accounting procedures:³

Choice among various concepts of income is not governed only by considerations of which measure serves best the ends in view. Another very powerful factor operating on the development of accounting methods has been the attempt to reduce the accountant's responsibility for the human judgments which must be made in passing from a consideration of the accounts to the conduct of business affairs. This attempted avoidance of responsibility has led accountants to set up two requirements for sound accounting that somewhat limit the choice of methods. These are the requirements of objectivity and conservatism. To the extent that accountants have achieved objectivity and conservatism they have transformed the measurement of income into a safer activity but one which yields a result that only partially achieves the end sought. Anyone using the accountant's measure of income, particularly the businessman, must then adjust it into accordance with reality by himself making the subjective judgments which the accountant has avoided.

This division of function is probably well justified; the formation of the subjective judgments necessary for a final evaluation of income are more in accord with the activities and responsibilities of the businessman than with those of the accountant. It is certainly not suggested that the accountant should assume these responsibilities. But it should be recognized that income, as measured by the accountant, does fall short of the ideal appropriate to any particular purpose because the subjective judgments, inherent in the measure of income, are avoided.

If this view of Alexander's is read in the light of our own preceding discussion, it becomes clear that he is really complaining that account-

³ "Income measurement in a dynamic economy" in *Five Monographs on Business Income*, p. 2. 1950.

ants wait too long to measure (and, hence, to recognize) changes; that they could measure them (or, at least, some of them) earlier than they now do, and in this manner improve the usefulness of their reports to the businessman.

Consistency

In an earlier passage (Chapter 2), we cited the logical requirement that “two or more objects must be expressed in identical units before we can perform operations on them, such as adding them together. . . .” By extension, this same idea can be applied to the accounting process and its resultant reports and statements. The procedures used in accounting for a given entity should be appropriate for the measurement of its position and its activities and should be followed consistently from period to period.

The following conditions are implied by this proposition and are necessary to make it acceptable:

1. Changes in procedures will not be made except to make the measurements more accurate than before. When changes are introduced they will be disclosed in sufficient detail to make the reports comparable. If they are comparable, either one can be converted into the image of the other, and in that manner made consistent. As a result, consistency does not require absolute unbending uniformity.
2. The proposition refers to accounting “for a given entity,” not for a given industry or entire economic system. Whether, for example, all steel companies should follow the same procedures is neither affirmed nor denied by this proposition. We take it, however, that no accounting entity following an appropriate set of procedures should change to a less appropriate set merely for the purpose of making its reports consistent with those of others in the same industry, nor should it refrain from adopting an improved practice on the grounds that to do so would destroy comparability.*

43

* Arthur M. Cannon, as a member of the project advisory committee, objects to the concluding sentence of this paragraph. In his opinion all statistical data of which accounting is a part acquire their significance in ratios and comparisons and not in the absolute figures. He would support the views previously set out in the quotations on pages 32 and 33 and would, therefore, omit the sentence in question and substitute this phraseology: Nevertheless the circumstances of a particular industry are likely to be such that reasonable uniformity may be attained and, therefore, the usefulness of their resulting statements enhanced by the comparability of different business entities within the industry.

Why do we want consistency? To be able to visualize trends in the significant components of the accounting entity, to be able to measure differences in them, and to know that the trends or differences are real (i.e., reflecting actual economic or business events) and are not an illusion. For example, if the "revenues" of Company A increased from \$1,000,000 in Year I to \$1,250,000 in Year II (according to its financial reports) the significance of the trend (increase of 25 per cent) or of the difference (increase of \$250,000) depends upon the reason for the change:

1. If Company A changed from a cash receipts to a sales basis of measuring revenues, the two figures for revenues cannot be compared.
2. If Company A consistently observed either basis of measuring revenues, the increase reported reflects an actual expansion in that portion of A's activities measured by "revenues." As a result, comparisons are valid; the measurements are significant.

44 One important aspect of consistency is the so-called "matching principle" which requires the pairing of revenues and expenses in a certain way in the determination of profit. Extended discussions of this problem of matching will not be attempted in this monograph. An excellent review of it in actual practice has already been done by the Study Group in its report, *Changing Concepts of Business Income*, published by Macmillan in 1952. In a long passage starting on page 28, *Changing Concepts* demonstrates clearly that accountants have matched "product costs" with some degree of success, but not "period costs."

The Monetary Unit

Part of the problem of "consistency" is the choice of a stable measuring unit which will make it possible to compare accounting reports of the same entity for two different periods of time. Without exception, the "official" financial statements, in the United States at any rate, are prepared on the basis of money as the measuring unit. But the instability of money is notorious, in large part because money itself is a commodity whose quantity as well as turnover are influenced by the actions of government and the central banks, as well as of the business community. The "money illusion," as Irving Fisher dubbed it, has long been known, and ways to overcome (or, at least to measure) the illusion have been developed.

The source and nature of this instability are concisely set forth by Clark Warburton, in his "Monetary theory and the price level trend in the future" in *Five Monographs on Business Income*, p. 164 (1950).

The basic content and logic of the theory of monetary disequilibrium are simple, though its details have many ramifications. It consists essentially of two parts. One part is a simple application to money of the pervading economic principle of supply and demand. If the supply of money increases more rapidly than the rate of progress in producing economic goods *the value of money relative to goods* will tend to fall, that is, the level of prices will rise. If the quantity of circulating medium is contracted, or does not grow when increases in population and productivity are enlarging productive capacity, *the value of the unit of circulating medium* will rise, that is, the price level will fall. [Emphasis added.]

The second and much larger part of the theory of monetary disequilibrium is a description of the process by which the value of money becomes adjusted to changes in its quantity (relative to productive capacity), and of the disturbances to business and employment and the injustices in the distribution of the national income and product which result from the character of this process.

45

The problem of the monetary unit in accounting is part of the problem of consistency. From this point of view, it should be handled as a corollary of the proposition on consistency. Accounting reports should be based on a stable measuring unit.

Stated in this fashion, the proposition leaves open certain factual (statistical) questions, for example, (1) has the U.S. dollar been so unstable as to warrant the use of some other basis (e.g., another currency; index numbers); (2) are the methods of measuring instability reliable enough to warrant the introduction of a new basis of measurement?

At least two serious accounting studies have been published on this subject in the United States in the postwar period. In 1951, the Committee on Concepts and Standards of the American Accounting Association issued a statement, *Price Level Changes and Financial Statements*,⁴ in which it urged experimentation with supplementary statements fully adjusted for the effects of price-level changes by the use of index numbers. As a consequence of this statement, the Association

⁴ *Accounting Review*, Oct. 1951, pp. 468-74. *Journal of Accountancy*, Oct. 1951, pp. 461-65.

sponsored a series of research studies under Ralph C. Jones of Yale.⁵ In 1952, the Study Group on Business Income published *Changing Concepts of Business Income*, in which it urged the adjustment of the earnings statement, but not the balance sheet, by means of a general index of the price level. The Study Group recommended that as a minimum financial reports should disclose (1) the results of activities measured in a stable unit, separate from (2) the results of changes in the measuring unit itself. Neither of these studies seems to have had much impact on practice.

The literature of accounting also reflected an interest in the problem in the postwar period. For example, the following passage is fairly typical:

46 The accountant has naturally been chiefly concerned with practical issues viewed first and foremost from the standpoint of proprietorship interests and many of his principles appear to date from a time when money was, or at least was thought to be, more or less stable in value . . . the obvious instability of money values over the past generation, the present high rates of taxation and the growing stress on the contributions of businesses to the national welfare has led some accountants to question traditional procedures, however well they may have served their purpose in the past. (Richard Stone in the Preface to F. Sewell Bray's *The Measurement of Profit* (Oxford Univ. Press, 1949).)

The evidence of the instability of the monetary unit in recent decades is overwhelming; the probability that the instability will prevail into the foreseeable future is high. Accountants should move quickly therefore to implement modest proposals such as those of the Study Group⁶ and the American Accounting Association Committee.

The Division of Accounting Research is setting up a research project to study the problem of price-level changes. This project is based on the premise that it is no longer realistic to ignore fluctuations in the value of the dollar. The study will pay special attention to the use of supplementary statements, but other methods of disclosure will be explored.

Materiality and Conservatism

These two concepts, materiality and conservatism, logically do not

⁵ *Price Level Changes and Financial Statements—Case Studies of Four Companies*. American Accounting Association, 1956.

⁶ *Op. cit.*, pp. 105, 139.

belong in a set of basic propositions but they do recur over and over again in discussions of accounting "principles."

"Materiality" is a statistical concept that says essentially that items of small significance need not be taken seriously. Logically, however, such a doctrine is unnecessary since insignificant things cannot also be significant.

"Materiality" is, however, also a psychological concept. "An item should be regarded as material if there is reason to believe that knowledge of it would influence the decisions of an informed investor," says the *1957 Revision*.⁷ The fiction of an "informed investor" is a useful one, just as are the related fictions of "the prudent man," and "the trained observer." But its usefulness lies precisely in the fact that it cannot and should not be strictly defined. What the fiction means can be determined only in the light of a specific set of circumstances. Its meaning will therefore vary over a wide range of possibilities. Accordingly, it cannot be used in this meaning as an analytical device, but instead probably will remain as an element in the exercise of judgment.

"Conservatism" is a reaction to uncertainty and represents in essence merely a counsel of caution. The proper role of conservatism in accounting is to insure that the uncertainties and risks inherent in any given business situation are given adequate consideration.⁸ This "principle" is in clear conflict with "consistency" and probably also with "disclosure."

47

A "conservative" procedure which later turns out to have been correct is, of course, not at issue here. The reference is to those cases in which a conservative procedure in one accounting period has a reverse or nonconservative effect in a later period. These are the cases in which inconsistency occurs. With respect to a conservative valuation of single elements (e.g., inventories or fixed assets), the question always arises as to the extent of undervaluation, and hence of lack of adequate disclosure. "At cost or less" sounds comforting until one asks, "How much less?"

A shift from conservatism to a more explicit statistical basis would be more congenial to the objective of appropriate measurement of re-

⁷ American Accounting Association. Committee on Concepts and Standards. "Accounting and reporting standards for corporate financial statements—1957 revision," *Accounting Review*. Oct. 1957, p. 543. See also James L. Dohr, "Materiality—what does it mean in accounting?" *Journal of Accountancy*, July 1950, pp. 54-56.

⁸ Professor Robert L. Dixon of the University of Michigan supplied this conception of the role of conservatism.

sources and of changes therein. J. B. Canning made a point over thirty years ago which would better serve the purpose, namely, that the best valuation of an asset (or any other element in the accounting project) is not the lowest (or highest, in the case of adverse elements) which can be sustained, but the one with the highest probability of being proved correct by later events. For example, in the case of inventories, what proportion in fact was sold at prices equal to, greater than, or less than those used in the financial statements? In the case of different classes of depreciable fixed assets, was the actually experienced average life equal to, greater than, or less than the estimated life used in setting the depreciation rate? This approach, already widely used by some, offers more hope for improved reports than does "conservatism."

If experience indicates that profit is overstated in one case out of ten when "conservative" procedures are omitted, is this justification for understating it in the remaining nine? Perhaps it is, but the reasons should be spelled out. Perhaps they lie in experience; they do not lie in logic.

48

Disclosure

"Adequate disclosure" is perhaps best viewed as an imperative to accountants to stress the aspects which should be stressed. Adequacy of disclosure is especially important in any period of rapid change because it can serve as the safety valve in the system to require the reporting of items which do not fit easily into the formal framework.⁹

The concept of disclosure should be conceived of in the broadest possible terms. It can be discussed in terms of (a) what should be disclosed, (b) to whom and (c) how disclosure should be made.

Accounting reports should disclose that which is necessary to make them not misleading.¹⁰

An extension of this idea is the notion that "when in doubt, disclose."

In order to make progress toward pinpointing the concept of adequate disclosure, the following classification is put forth as a suggestion:

1. Disclose items not in the regular or normal activities of the business,

⁹ Professor Robert T. Sprouse of the University of California prepared much of the background material for the discussion of disclosure.

¹⁰ See Rule 5. Rules of Professional Conduct of the American Institute of Certified Public Accountants.

for example, loans to officers, unamortized discount on refunded bond issues, termination claims, and tax refunds.

2. Disclose items reflecting changes in expectations, for example, losses on purchase commitments.
3. Disclose that which a statute or a contract requires to be disclosed, for example, sinking fund provisions.
4. Disclose new activities or major changes in old ones, for example, pension plans, stock options, etc.

To whom should the disclosure be made? As in the case of “materiality” we find frequent reference to a useful fiction, such as the “informed investor” or “the standard reader.” According to Chetkovich, the “standard reader” should satisfy two criteria: “He should be interested to the extent that he is willing to read carefully and he should be reasonably informed on financial matters, at least with respect to the commonly used terminology of accounting and finance.”¹¹

How should disclosure be made? In the body of the formal financial statements themselves, certainly, whenever disclosure in that manner is technically feasible. If the conventional forms of financial statements are inadequate for this purpose, perhaps they can be modified to reflect more of the essential data on business activity. If not in the body of the financial statements, then disclosure can be and is frequently made in notes attached to the financial statements. The interrelationship between disclosure in the body of the financial statements and in notes is clear — for any given volume of data to be disclosed, the more disclosure in the body of the financial statements, the less in the notes, and vice versa. If disclosure cannot be made in the financial statements (including the notes) other methods may be used, e.g., the president’s letter to the stockholders, special communications to investors, and the like.

The foregoing paragraphs do not resolve the problems surrounding disclosure. Instead the discussion assesses the place of disclosure in a set of basic accounting propositions and in identifying the kinds of issues which arise. As specific rules are developed to fit particular problems (e.g., leases, pensions, purchase commitments) the extent and method of disclosure will have to be spelled out.

¹¹ Michael N. Chetkovich, “Standards of disclosure and their development,” *Journal of Accountancy*, Dec. 1955, p. 49.

Summary

In this chapter, the following additional postulates were formulated as group "C."

Postulate C-1. Continuity. In the absence of evidence to the contrary, the entity should be viewed as remaining in operation indefinitely.

Corollary. In the presence of evidence that the entity has a limited life, it should not be viewed as remaining in operation indefinitely.

Postulate C-2. Objectivity. Changes in assets and liabilities, and the related effects (if any) on revenues, expenses, retained earnings, and the like, should not be given formal recognition in the accounts earlier than the point of time at which they can be measured in objective terms.

Postulate C-3. Consistency. The procedures used in accounting for a given entity should be appropriate for the measurement of its position and its activities and should be followed consistently from period to period.

Postulate C-4. Stable unit. Accounting reports should be based on a stable measuring unit.

Postulate C-5. Disclosure. Accounting reports should disclose that which is necessary to make them not misleading.

We also discussed uniformity, materiality, and conservatism, without formulating any related propositions.

Summary, Conclusions and Recommendations Prospectus

Summary

Economic activity is carried on by human beings interacting with their environment. This type of interaction of human effort (labor) and natural resources takes place through the medium of entities which are used as organizing units for the purpose of producing goods and services. In this process the existing resources must be allocated by some means among the available alternatives. To make these allocations properly, predictions as to the outcome of the available alternatives are essential. Results of the past and estimates of the future are used to form these predictions. These results, estimates and predictions are couched in part in quantitative terms so that comparisons and evaluations can be facilitated. Accounting is one form of quantitative expression that is widely used.

51

In their economic aspects, all organized societies of which we have knowledge are concerned with the production and distribution of wealth; all use entities of one kind or another to accomplish the result. Accordingly, accounting is and always will be closely identified with *wealth* and with *entities*.

Specifically, we observe that every single example of accounting in actual or potential use deals with some aspect of wealth—its creation, its form, its consumption, its safeguarding, its magnitude, its augmentation, or its diminution. And every aspect of this wealth is assignable or attributable to one or more entities.

The results of the detailed analysis in this study are summarized in the following sets of propositions.

Conclusions and Recommendations

The analysis of the environment of accounting (Chapter III) gave rise to five postulates (Group A), as follows:

Postulate A-1. Quantification. Quantitative data are helpful in making rational economic decisions, i.e., in making choices among alternatives so that actions are correctly related to consequences.

Postulate A-2. Exchange. Most of the goods and services that are produced are distributed through exchange, and are not directly consumed by the producers.

Postulate A-3. Entities (including identification of the entity). Economic activity is carried on through specific units or entities. Any report on the activity must identify clearly the particular unit or entity involved.

Postulate A-4. Time period (including specification of the time period). Economic activity is carried on during specifiable periods of time. Any report on that activity must identify clearly the period of time involved.

Postulate A-5. Unit of measure (including identification of the monetary unit). Money is the common denominator in terms of which goods and services, including labor, natural resources, and capital are measured. Any report must clearly indicate which money (e.g., dollars, francs, pounds) is being used.

52

The discussion (Chapter IV) of those aspects of accounting itself which appear to be valid in every circumstance led to the four additional postulates (Group B) as follows:

Postulate B-1. Financial statements. (Related to A-1.) The results of the accounting process are expressed in a set of fundamentally related financial statements which articulate with each other and rest upon the same underlying data.

Postulate B-2. Market prices. (Related to A-2.) Accounting data are based on prices generated by past, present or future exchanges which have actually taken place or are expected to.

Postulate B-3. Entities. (Related to A-3.) The results of the accounting process are expressed in terms of specific units or entities.

Postulate B-4. Tentativeness. (Related to A-4.) The results of operations for relatively short periods of time are tentative whenever allocations between past, present, and future periods are required.

The "imperatives" discussed in Chapter V are expressed in the following postulates (Group C):

Postulate C-1. Continuity (including the correlative concept of limited life). In the absence of evidence to the contrary, the entity should be viewed as remaining in operation indefinitely. In the presence of evidence that the entity has a limited life, it should not be viewed as remaining in operation indefinitely.

Postulate C-2. Objectivity. Changes in assets and liabilities, and the related effects (if any) on revenues, expenses, retained earnings, and the like, should not be given formal recognition in the accounts earlier than the point of time at which they can be measured in objective terms.

Postulate C-3. Consistency. The procedures used in accounting for a given entity should be appropriate for the measurement of its position and its activities and should be followed consistently from period to period.

Postulate C-4. Stable unit. Accounting reports should be based on a stable measuring unit.

Postulate C-5. Disclosure. Accounting reports should disclose that which is necessary to make them not misleading.

In addition to the postulates three specific proposals were made with respect to terminology, and one with respect to the unit of measurement. With respect to terminology we recommend that:

1. The discussion of "principle" and "postulate" in Accounting Terminology Bulletin No. 1 (AICPA, 1953), pages 10-11, be revised to conform to the usage in any forthcoming pronouncements of the Accounting Principles Board based on or related to this monograph.
2. The terms "earnings" or "profit" be used in relation to accounting entities (other than natural persons) and the term "income" be used in relation to natural persons, in any circumstance where precision of meaning is essential.*

* Professor C. A. Moyer, as a member of the project advisory committee, dissents to this proposal as to terminology. He states that: "The term 'income,' especially when used with appropriate adjectives or descriptive phrases, is a useful and meaningful term in business and in accounting. There seems to be no convincing reason for abandoning this word in accounting. It has been widely accepted, particularly in the income statement and in discussions of the income concept in accounting, and an extension of its use should be encouraged."

3. The term "cost," as descriptive of the basis of assets, be restricted to those cases in which the consideration given consisted entirely of cash or promises to pay cash. Where consideration given was in a different form, the basis should be described in other terms, e.g., "at fair market value," at "appraised value."

With respect to the unit of measure, the proposal was made (see p. 46) that accountants should implement the proposals of the Study Group on Business Income and of the American Accounting Association's Committee on Concepts and Standards.

Prospectus

54 The line of analysis developed in this monograph needs extension, at least to the point where the problems at hand require specific formulas and rules (e.g., the determination of the proper amount of depreciation on turret lathes) as contrasted with broader guides (e.g., the circumstances under which depreciation ought to be reflected). Two such broad studies are under way in the Accounting Research Division of the American Institute of Certified Public Accountants, specifically, one on the accounting principles applicable to the financial statements of business enterprises, and one on the accounting principles of nonprofit organizations. In addition, several more specific subjects are under investigation (e.g., funds statements, business combinations, income taxes, leases, pensions). Other studies will be added from time to time. The results of all these studies will amplify the work done in this monograph as well as test its adequacy for the task of determining the basic postulates of accounting.

In addition to any inadvertent gaps in this monograph, one major area has been left deliberately to the other studies. This is the problem of defining explicitly such terms as asset, liability, revenue, and expense. These terms have been used, of course, but in contexts where their general meaning was clear enough for the purpose at hand. These terms were left undefined in order to permit a clearer delineation of the broad framework of accounting and its environment. The main line of development should, however, be evident—assets must be related to the economic resources held by specific entities, derived from an exchange, and expressed in terms of a unit of measurement, such as money; liabilities must be related to the notion of obligations; revenues, expenses, and profit must refer to some part of economic activity, measurable by changes in the resources of these entities occurring during

specifiable time periods; and similarly for other terms which have not been explicitly defined in this monograph.

Related to the omission just referred to is the absence of a theory of valuation or of pricing of assets and liabilities, and their related concepts. A theory of valuation or set of pricing rules is necessary if for no other purpose than to define the limits of the financial statements, to describe more precisely what events in the environment will be recognized for accounting purposes. All of this has been covered in a general way in this monograph. When it is covered more specifically, we will have attained the stated objective of developing a co-ordinated system of postulates, principles, and rules for accounting.

Comments of Leonard Spacek

This monograph is a well-written and comprehensive summary of certain factors or concepts that either have had or should have had an influence on accounting practices. There are viewpoints expressed in this monograph that are adequately supported by evidence and logic. On the other hand, there are other views that are not supported; however, no useful purpose would be served by discussing them in detail at this time, since the two project advisory committees are not asked to approve this document.

56

I would like to comment briefly on whether this monograph accomplishes the objective outlined by the Special Committee (in its September 1958 report) of determining postulates to "provide a meaningful foundation for the formulation of principles and the development of rules or other guides for the application of principles in specific situations."

This monograph brings together in a concise manner and a logical order many of the views of accountants over the years with respect to accounting theories underlying customs and practices, with certain additions, changes and interpretations by the author. However, in my opinion, this study illustrates that the historic and customary approach to the formulation of a basic foundation and framework of accounting theory is not adequate and that a completely new approach is needed.

Whether or not the fourteen propositions set forth in this monograph are in fact "postulates" (and I do not think they are) depends upon the definition selected for that word. The purpose of this research study and the objective established by the Special Committee (of which I was a member) was to establish the basic postulates as a foundation for the formulation of accounting principles. This is what is urgently needed by the accounting profession today. Most of the so-called postulates set forth in this monograph are self-evident observations that cannot serve as the basic foundation on which sound accounting principles can be established. Unless such a foundation can be established, the accounting principles when they are determined (1) become merely assertions or opinions of individuals or committees, or (2) reflect customs that are not inconsistent with the postulates stated in the monograph.

The essential prerequisite to the establishment of a sound framework of accounting theory must be a clear determination of the purposes and objectives of accounting, which would go far beyond the "definition of accounting" in Chapter 3 and would involve such matters as "justice, truth and fairness," which in Chapter 1 are rejected as "not satisfactory . . . as a point of departure for an objective inquiry such as this one." (However, the author does state, "Ultimately, the results of any purposive human activity must be judged in the light of the value judgments inherent in ethical concepts.")

My own view is that the one basic accounting postulate underlying accounting principles may be stated as that of fairness — fairness to all segments of the business community (management, labor, stockholders, creditors, customers and the public), determined and measured in the light of the economic and political environment and the modes of thought and customs of all segments — to the end that the accounting principles based upon this postulate shall produce financial accounting for the lawfully established economic rights and interests that is fair to all segments. This monograph tends to confirm the necessity of recognizing this postulate as the only one on which pronouncements on accounting principles can be based if such principles are to serve the needs of the public.

After the purposes and objectives of accounting are properly defined, the next step is the establishment of a basic foundation to accomplish these purposes and objectives (perhaps postulates is not the best term to use in this connection but we need not lose time in arguing nomenclature). Then, sound accounting principles consistent with that foundation should be determined. In my opinion, this monograph does not adequately describe the real purposes and objectives of accounting, and the concepts set forth as being postulates cannot provide a basic foundation from which to build a sound framework of accounting theory. However, this monograph, as a research study, should be useful to the accounting profession for analysis and discussion, and I approve its release and distribution for that purpose.

Selected Bibliography

(The items listed below were selected primarily for their relevance to this research project. No attempt has been made to trace ideas to their sources or to compile a definitive bibliography on accounting postulates and principles. General reference works, including textbooks and manuals, have been omitted.)

ALEXANDER, S. S., "Income measurement in a dynamic economy" in *Five Monographs on Business Income*, published by the Study Group on Business Income, American Institute of Certified Public Accountants. 1950.

AMERICAN ACCOUNTING ASSOCIATION. Executive Committee. "Accounting principles underlying corporate financial statements," *Accounting Review*, June 1941, pp. 133-39.

58

AMERICAN ACCOUNTING ASSOCIATION. Executive Committee. "Accounting concepts and standards underlying corporate financial statements—1948 revision," *Accounting Review*, Oct. 1948, pp. 339-44.

AMERICAN ACCOUNTING ASSOCIATION. Committee on Concepts and Standards, Supplementary Statement No. 2, "Price level changes and financial statements" (Aug. 1, 1951.) Also in *Accounting Review*, Oct. 1951, pp. 468-74, and *Journal of Accountancy*, Oct. 1951, pp. 461-65.

AMERICAN ACCOUNTING ASSOCIATION. Committee on Concepts and Standards. "Accounting and reporting standards for corporate financial statements" (Aug. 1, 1951). Also in *Accounting Review*, Oct. 1951, pp.

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS. Committee on Accounting Procedure. *Accounting Research Bulletins*, Nos. 1-51, inc. (Various dates.)

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS. Committee on Terminology. *Accounting Terminology Bulletins*, Nos. 1-4, inc. (Various dates.)

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS. Special Committee on Research Program. "Report to Council," *Journal of Accountancy*, Dec. 1958, pp. 62-68.

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS. *Contemporary Accounting*, T. W. LELAND, editor, especially chapter 1, "Progress in development of basic concepts," by T. H. Sanders. 1945.

ARNETT, H., "What does 'objectivity' mean to accountants?" *Journal of Accountancy*, May 1961, pp. 63-68.

- ARTHUR ANDERSEN & Co. *The Postulate of Accounting—What It Is, How It Is Determined, and How It Should Be used.* (Privately printed.) 1960.
- BAXTER, W. T., "Recommendations on accounting theory," *Accountant* (Eng.), Oct. 10, 1953, pp. 405-10.
- BLOUGH, CARMAN G., "Accounting principles and their application," *CPA Handbook*, ROBERT L. KANE, editor, chapter 17. American Institute of Certified Public Accountants. 1953.
- BORDNER, H. W., "Fund concepts as accounting postulates," *Journal of Accountancy*, July 1961, pp. 52-60.
- BRAY, F. SEWELL, *The Measurement of Profit*, Oxford Univ. Press. 1949.
- BRAY, F. SEWELL, *The Accounting Mission*, Melbourne Univ. Press. 1951.
- BRAY, F. SEWELL, *Four Essays in Accounting Theory*, Oxford Univ. Press. 1953.
- CANNING, J. B., *Economics of Accountancy*, Ronald Press. 1929.
- CHAMBERS, R. J., "Blueprint for a theory of accounting," *Accounting Research* (Eng.), Jan. 1955, pp. 17-25.
- CHAMBERS, R. J., "A scientific pattern for accounting theory," *Australian Accountant*, Oct. 1955, pp. 428-34.
- CHAMBERS, R. J., "Detail for a blueprint," *Accounting Review*, April 1957, pp. 206-15.
- CHAMBERS, R. J., "The conditions of research in accounting," *Journal of Accountancy*, Dec. 1960, pp. 33-39.
- CHETKOVICH, M. N., "Standards of disclosure and their development," *Journal of Accountancy*, Dec. 1955, pp. 48-52.
- DEVINE, CARL T., "Research methodology and accounting theory formation," *Accounting Review*, July 1960, pp. 387-99.
- DILLEY, DAVID R., "An American viewpoint on accounting concepts," *Canadian Chartered Accountant*, June 1960, pp. 540-45.
- DOHR, JAMES L., "Materiality—what does it mean in accounting?" *Journal of Accountancy*, July 1950, pp. 54-56.
- EINAUDI, LUIGI, "The theory of imaginary money from Charlemagne to the French Revolution" (translated by Georgio Tagliacozzo) in *Enterprise and Secular Change: Readings in Economic History*, FREDERICK C. LANE and J. C. RIEMERSMA, editors. Richard D. Irwin, Inc. 1953. Original appeared in *Revista di storia economica*, 1936, as "Teoria della moneta imaginaria nel tempo da Carlomagno alla rivoluzione francese."
- GILMAN, S., *Accounting concepts of profit*, Ronald Press Company. 1939.
- GORDON, MYRON J., "Scope and method of theory and research in the measurement of income and wealth," *Accounting Review*, Oct. 1960, pp. 603-18.

Hoxsey, J. M. B., "Accounting for investors," *Journal of Accountancy*, Oct. 1930, pp. 251-84.

INSTITUTE OF CHARTERED ACCOUNTANTS IN ENGLAND AND WALES. *Members' Handbook*, first issued in Oct. 1958.

Sec. N—Recommendations on Accounting Principles

Sec. S—Miscellaneous Technical Statements

JENNINGS, ALVIN R., "Present-day challenges in financial reporting," *Journal of Accountancy*, Jan. 1958, pp. 28-34. Address at annual meeting of American Institute of Certified Public Accountants, Oct. 1957, in which he proposed new research program.

JONES, RALPH C., *Price Level Changes and Financial Statements—Case Studies of Four Companies*, American Accounting Association. 1956. The four companies are: New York Telephone; Reece Corporation; Armstrong Cork, and; Sargent & Co.

KOHLER, E. L., "Development of accounting principles by accounting societies," in *Handbook of Modern Accounting Theory*, MORTON BACKER, editor. Prentice-Hall, Inc. 1955.

LITTLETON, A. C., *Structure of Accounting Theory*, American Accounting Association. 1953.

60 McFARLAND, W. B., "Research in management accounting by the National Association of Accountants," *Accounting Review*, Jan. 1961, pp. 21-25.

MATTESSICH, RICHARD, "Towards a general and axiomatic foundation of accountancy, with an introduction to the matrix formulation of accounting systems." *Accounting Research* (Eng.), Oct. 1957, pp. 328-55.

MATTESSICH, RICHARD, "Mathematical models in business accounting," *Accounting Review*, July 1958, pp. 472-81.

MAY, GEORGE O., "The position of accountants under the Securities Act," *Journal of Accountancy*, Jan. 1934, pp. 9-23.

MAY, GEORGE O., *Financial Accounting*, especially Chapter 3, "Accounting Principles." Macmillan Company. 1943.

PATON, W. A., "Assumptions of the accountant," *Administration*, June 1921, pp. 1-17.

PATON, W. A., *Accounting Theory*, especially Chapter 22, "The postulates of accounting." Ronald Press Company. 1922.

PATON, W. A., "Accounting procedures and private enterprise," *Journal of Accountancy*, April 1948, pp. 278-91.

PATON, W. A., and LITTLETON, A. C., *Introduction to Corporate Accounting Standards*, American Accounting Association. 1940.

REICHENBACH, HANS, *The rise of scientific philosophy*, University of California Press. 1959.

SANDERS, T. H.; HATFIELD, H. R.; and MOORE, U., *A Statement of Accounting Principles*. American Institute of Certified Public Accountants. 1938.

- SCOTT, DR, *The Cultural Significance of Accounts*, Henry Holt and Co. 1931.
- SCOTT, DR, "The basis for accounting principles," *Accounting Review*, Dec. 1941, pp. 341-49.
- STEAD, GORDON W., "Toward a synthesis of accounting doctrine," *Accounting Review*, Oct. 1948, pp. 355-59.
- STOREY, REED K., "Revenue realization, going concern and measurement of income," *Accounting Review*, April 1959, pp. 232-38.
- STUDY GROUP ON BUSINESS INCOME, American Institute of Certified Public Accountants, *Changing Concepts of Business Income*. Macmillan Company. 1952. See "Bibliography," pp. 147-60.
- TRUEBLOOD, ROBERT M., "The management service function in public accounting," *Journal of Accountancy*, July 1961, pp. 37-44.
- VATTER, WM. J., *The Fund Theory of Accounting and Its Implications for Financial Reports*, University of Chicago Press. 1947.
- WARBURTON, CLARK, "Monetary theory and the price level trend in the future" in *Five Monographs on Business Income*, published by the Study Group on Business Income, American Institute of Certified Public Accountants. 1950.
- WHYTE, W. H., Jr., *The Organization Man*. Chapter 3, "Scientism." Simon & Schuster. 1956.