5

Postulates, Principles, and Concepts

Learning Objectives

After reading this chapter, you should be able to:

- Understand the significance of Accounting Research Studies Nos. 1 and 3 and why they failed.
- Be familiar with the basic concepts of postulates and principles that underlie historical costing.
- Grasp the equity theories of accounting, their potential usefulness, and their limitations for analyzing transactions and events.

The need for a theoretical framework in financial accounting has long been felt. The Committee on Accounting Procedure (CAP) was not concerned with the task of deriving an underlying framework, but both the Accounting Principles Board (APB) and the Financial Accounting Standards Board (FASB) have attempted to develop theoretical foundations as a guide to formulating accounting rules. As briefly mentioned in Chapter 3, the APB attempted to derive a system of postulates and principles but was unsuccessful. The FASB instituted the conceptual framework project, a much longer-term endeavor consisting, at the present time, of seven parts.

Despite the fact that Accounting Research Studies (ARSs) 1 and 3 on postulates and principles were not accepted, these studies represent a milestone in the attempt to provide a unified theoretical underpinning for financial accounting rules by the APB. Consequently, it is important to assess why these studies fell short of the goal of obtaining a framework for

APB accounting opinions. Part of the story has already been told: The project advisers, not to mention the profession at large, felt the principles were too much in conflict with existing notions to serve as a frame of reference for the rules that were sure to follow. A closer look at these early studies will help us understand the FASB's conceptual framework and its prospects.

A discussion of postulates and principles would be incomplete without analyzing those concepts that have continued to form an important basis for contemporary historical cost accounting. No matter what form financial statements may take in the future, it is quite likely that many of these ideas will be retained, refined, or modified because they have proved useful in an informal but pragmatic fashion.

Finally, in this chapter we look at another group of concepts that have long played a role in interpreting accounting relationships. These are the equity theories of accounting. They are concerned with the relationship that exists between the firm itself and its ownership interests. Various inferences can be drawn from these relationships, which can have some influence on the standard-setting process.

The two appendices to this chapter are the postulates of ARS 1 and the broad principles of ARS 3. They should be read in conjunction with the discussion of these documents.

Postulates and Principles

It cannot be overstressed that the formation of the APB was a watershed in the development of accounting theory and the role of research. However, Alvin R. Jennings, in his important speech advocating this new approach to the development of accounting principles, did not propose the formation of a new rule-making body. What he did envision was a new research organization within the American Institute of Certified Public Accountants (AICPA) that would issue statements subject to a two-thirds vote of the Council of the AICPA.[1]

The Special Committee on Research Program

The result of Jennings's ideas was the Special Committee on Research Program, which stressed the need for articulating the basic set of postulates underlying accounting. In turn, the principles were to be logically derived from the postulates. The committee thus advocated a deductive approach. Chapter 2 noted that deductive approaches to theory are basically normative in outlook. The committee barely mentioned this fact and its implications in its report:

> The general purpose of the Institute . . . should be to advance the written expression of what constitutes generally accepted accounting principles, for the guidance of its members. . . . This means something more than a survey of existing practice. It means continuing efforts to determine appropriate practice and to narrow the areas of difference and inconsistency in practice. . . . The Institute should take definite steps to lead in the thinking on unsettled and controversial issues.[2]

Although the committee foresaw the need for securing the approval of those who would be subject to the rules of the new APB, it did not anticipate the storm of protest that would erupt in the wake of ARS 3.[3] The committee's conception of postulates and principles was also problematic.

Postulates are generally defined as basic assumptions that cannot be verified. They serve as a basis for inference and a foundation for a theoretical structure that consists of propositions deduced from them.[4] In systems using formal logical techniques, the basic premises are called *axioms* and consist of symbolic notation, and the operations for deducing propositions are mathematically based.[5] The committee's report represented postulates in accounting as few in number and stemming from the economic and political environments as well as from the customs and underlying viewpoints of the business community. The committee thus virtually defined postulates and limited their number for the author of ARS 1. One committee member revealed shortly thereafter that it was not the committee's intention to define postulates.[6]

The APB committee, on the other hand, did not define broad principles, although it did compare them in scope to the definitions and pronouncements that had been issued in four different reports by the American Accounting Association (AAA). These documents and several supplements were published in 1936, 1941, 1948, and 1957. The first two reports contain the word *principles* in their titles, but the word was replaced by *standards* in the 1948 and 1957 reports (the 1948 revision also used *concepts* in its title).[7] These reports contain definitions of basic accounting terms, proposed rules for presentation and measurement of accounting data, and concepts to be applied to published financial reports. The material in these reports thus covers a wide variety of topics, only some of which might be considered pertinent to the topic of principles (the basic definitions and concepts, such as disclosure and uniformity).

These reports did not use the definition of principles contained in Accounting Terminology Bulletin No. 1 of the AICPA: "A general law or rule adopted or professed as a guide to action, a settled ground or basis of conduct or practice. . . ."[8] This definition is quite close to the one used in the philosophy of science, a discipline concerned with scientific method. A principle is closely related to a law. Both are considered statements of a true and generalized nature containing referents to the real world as opposed to purely analytic statements whose truth or falsity is self-contained by their internal logic.[9]

A law contains elements observable by empirical techniques, whereas a principle does not. If a principle could be empirically tested and proven true (or at least not proven false), it would be capable of becoming a law.[10] Principles are general statements that influence the way we view phenomena and the way we think about problems.[11] The "truth" of a law or principle does not mean that it is incapable of replacement by newer systems. However, changes—particularly in the case of laws—should be extremely infrequent.

Accounting Research Study No. 1 (ARS 1)

Given his charge by the Special Committee, Moonitz adopted a frame of reference or outlook that was oriented to the problems dealt with by accountants. He rejected a deductive approach rooted in reasoning alone because it was not broad enough to encompass the experiential and empirical aspects of accounting. Deinzer correctly pointed out, however, that Moonitz did eventually revert to the axiomatic (meaning deductive) method.[12] He did indeed use a deductive type of approach—but without employing symbolic terminology and formal methods—in terms of reasoning to a second level of postulates and some of the principles. However, the postulates themselves are of two decidedly different types. One category (the A and B groups) is made up of general, descriptive postulates that appear to coincide with

the committee's charge that postulates should be derived from the economic and political environments and modes of thought and customs from all segments of the community. The second category (the C group) is value judgments. It is this group that may have gone against the committee's charge and definitely labels Moonitz's work as deductive–normative in scope.

The postulates themselves (see Appendix 5-A) are in three groups: the environmental group (A), those stemming from accounting itself (B), and the imperatives (C). Some postulates in the B group appear to stem from the A category, which led to the criticism that no postulates should be reasoned from any others and a similar criticism that postulates were given a rank order. Although these criticisms may have some validity, they could easily be overcome by relabeling. There is no rule that only two levels (postulates and principles) can be used in deductive reasoning. A complex environment, such as that in which accounting operates, can have numerous levels.

A far more telling criticism was that self-evident postulates may not be sufficiently substantive to lead to a unique and meaningful set of accounting principles. This unquestionably appears to be the case with both the A and B groups. If postulates are indeed defined as self-evident generalizations from a particular environment, this raises the question of what their role is in a deductively oriented system in which principles form the basis for more specific rules. Of necessity, it appears that postulates must play a more passive role. The principles and rules should not be in conflict with them, but alone they are not sufficiently important to lead to the desired principles and rules.[13] They are thus necessary, but not sufficient to lead to a viable outcome.

Hence, the key group in Moonitz's set of postulates is the imperatives. These appear to be more like what Mautz has called *concepts* because (a) they are normative in nature and (b) they have developed within the context of accounting practice.[14] The imperatives have the flavor of being objectives that should be attained, which is also a result of their normative aspect.

The key postulate appears to be C-4, stability of the monetary unit. This postulate appears to have two possible outcomes. If purchasing power of the monetary unit is not stable, the postulate implies that some form of inflation accounting should be instituted. If, on the other hand, purchasing power of the monetary unit is relatively stable, two further consequences of the postulate arise—one is that retention of historical cost is justified; the other is that a system of current values is still warranted, despite general stability of the monetary unit, because demand changes can cause considerable price fluctuation for individual products and services. The dual interpretation of C-4 is a definite weakness of this very important postulate. Perhaps Postulate A-1, usefulness of quantitative data, should lead to current values, but this is certainly not self-evident from the Moonitz postulates. At any rate, the profession was generally silent when the postulates appeared. It was undoubtedly awaiting the appearance of the broad principles study.

Accounting Research Study No. 3 (ARS 3)

There are eight broad principles in ARS 3 (see Appendix 5-B). At least three of them (A, B, and D) deal with the problems of changing prices, which was the point of departure

for the profession's rather stinging rejection of the study. It is interesting to note that the summary of the eight principles covers some four and one-half pages, two and one-half of which are devoted to Principle D, the asset valuation principle.

Deinzer very appropriately noted that Principle A—which states that revenue is earned by the entire process of operations of the firm rather than at one point only, usually when sale occurs—was not reasoned from any of the 14 postulates.[15] It would appear, then, to belong in the B group of postulates. More importantly, Sprouse and Moonitz apparently needed it to pave the way for their value-oriented principles because it underlies the recognition of changes in replacement cost, which leads to holding gains or losses (Principle B-2).

One of the most pointed criticisms of the asset valuation measures prescribed in Principle D was that they are not *additive*. That is, although current value dollars are being used, different attributes or characteristics are being measured; hence, they cannot theoretically be combined by addition because Sprouse and Moonitz advocated different current-value characteristics for different asset classes. For example, if inventory can easily be sold at a given market price, net realizable value (selling price less known costs of disposal) should be used (D-2). On the other hand, the value of fixed assets, which are not intended for sale, is rooted in terms of the service they can provide over present and future periods. As a result, Sprouse and Moonitz opted for replacement cost as the appropriate characteristic of measurement for this class of assets (D-3). Obviously, the additivity question, where different attributes are being measured, has strong overtones of measurement theory.

Chambers was the principal critic of the lack of additivity of asset values put forth by the broad principles of ARS 3.[16] Chambers strongly advocated the exit-value approach illustrated in Chapter 1, although his position is blurred by his acceptance of replacement cost as a secondary valuation if exit values were unavailable.[17] However, it should be clear that Chambers was attempting to separate conceptual or theoretical issues from measurement problems. Hence, it would almost appear that the additivity issue can be breached only if one's heart is in the right place. The basic theoretical system should be unified in terms of one primary characteristic of assets and liabilities to be measured. However, a less desirable measurement must be employed where the primary measurement system falls short of being able to provide the needed numbers. Nevertheless, the primacy of conceptual issues over measurement problems cannot be ignored. The answer probably lies in determining which current value elements have the most utility for financial statement users, an issue not addressed by Sprouse and Moonitz.

A last criticism to be leveled at ARS 1 and ARS 3 was that a set of postulates should be complete enough to allow no conflicting conclusions to be derived from them. Postulate C-4 says that the monetary unit should be stable. From it, Principle D was derived advocating various current values for different categories of assets. The various choices espoused in Principle D cannot be justified to the exclusion of other possibilities. Hence, the postulate system is not theoretically tight enough to justify it, whether or not one agrees with the resulting principles.

A Perspective on ARS 1 and ARS 3

ARS 1 and ARS 3 failed for a variety of reasons in addition to the most obvious one—the inability of the profession to abandon historical costs. The postulates and principles themselves had several weaknesses. The postulates were not complete and therefore could not exclude other value systems than the one prescribed in the principles. Additionally, at least one principle, Principle A, was not derived from any of the postulates. Finally, the question of whether resulting valuations of various assets should be additive (because they advocated different attributes) became an interesting, and probably moot, point.

Even beyond the questions of logic and adequacy of ARS 1 and ARS 3, a number of issues have since made it clear that the Moonitz–Sprouse efforts could not succeed. It appears that Moonitz and Sprouse were commissioned to find those postulates and principles that would lead to "true income"—in other words, to use a single concept of income that would show it superior to all other challengers. In retrospect, it has become evident that no income measurement can be deemed to have such an advantage over competing concepts.

Aside from Postulate A-1, which states that "quantitative data are helpful in making rational economic decisions," virtually nothing is said in either study about who are the outside users of accounting data and what their particular information needs and abilities might be. It is generally conceded today that users of financial data (with their underlying information needs and abilities to understand and manipulate financial data) cover a broad, relatively heterogeneous spectrum. However, the emphasis on users was not a particularly prominent theoretical accounting issue when ARS 1 and ARS 3 were published (user diversity and its implications are discussed later in Chapter 6). Thus, the postulates and principles approach tended to overlook a theoretical area that has since received a great deal of attention. The rise of the user-needs outlook has produced a new focus on the objectives of published financial statement data. Indeed, as we mentioned, several of the imperative postulates actually began to spill over into the area of financial statement objectives. Formulating the objectives of financial statements and reporting has become an extremely important part of theory formulation.

Finally, we note that the commissioning of ARS 1 and ARS 3 occurred at a time when little formal attention was given to what might be called the politics of rule making. By this we mean that under the FASB there is more opportunity to react to potential accounting rules for those who will be subject to them than was the case with the APB.

Some might say that the postulates and principles studies were a dismal failure. As we view events from the perspective of many decades, we realize that this is not the case. These studies should hold an important place in the history of accounting theory for no other reason than the fact that they were the first attempt in the United States by the practicing arm of the profession to provide a conceptual underpinning for the rule-making function. Furthermore, by examining the difficulties encountered by the APB in drafting a theoretical statement that would meet the approval of those who would be governed by it, the FASB should have learned valuable lessons for its conceptual framework project.

Basic Concepts Underlying Historical Costing

Many accounting concepts have long influenced accounting rules. These concepts have largely evolved from practical operating necessities, including income tax laws, but have also appeared in several theoretical works written mostly in the formative years (1930–1946) of accounting policy-making groups.[18] Perhaps the most outstanding of these was the monograph by Paton and Littleton, *An Introduction to Corporate Accounting Standards*, which approached theory deductively rather than from the point of view of what was being done in practice.[19] This work was not revolutionary, but it did attempt to provide a basic framework that the enterprise could use to assess its accounting practices. The authors hoped that a greater degree of consistency in accounting practice would result from their effort.

Other important works of this period included:

- Canning's attempt to relate asset valuation to future cash flows
- Separate books by Sweeney and MacNeal, which were concerned with accounting for, respectively, the changing value of the monetary unit and the weakness of historical costs
- Sanders, Hatfield, and Moore's monograph on deriving the principles of accounting from practice
- Gilman's book about refining the concept of income
- Littleton's attempt to derive inductively the accounting principles underlying relevant practice[20]

The concepts discussed in this chapter have been called *postulates*, *axioms*, *assumptions*, *doctrines*, *conventions*, *constraints*, *principles*, and *standards*. The word *concepts* is probably an accurate overall label for these terms. A *concept* is the result of the process of identifying, classifying, and interpreting various phenomena or precepts.[21] It is thus not part of the formal process of theory formulation, but can be used within a theory—as part of the structure of postulates, or in the conclusions deduced from the postulates, or even as the subject of testing in empirical research. Many elements fall into the concept category in accounting, and they are quite rightly considered part of accounting theory. Many have been and will be part of a general theoretical framework for interpreting and presenting financial accounting data as well as individual accounting theories. Indeed, several concepts will be discussed in Chapter 7 in terms of their place in the conceptual framework of the FASB.

Attempts such as ARS 1, ARS 3, and those mentioned in Chapter 2 to set up deductive systems of postulates and principles have failed to achieve a high degree of consensus owing to lack of rigor in reasoning, overlapping definitions, and different value judgments.[22] Bearing this in mind, we have given the following organization to our discussion of concepts strictly for teaching purposes. The concepts are broken down as follows:

- *Postulates* are basic assumptions concerning the business environment.
- *Principles* are general approaches utilized in the recognition and measurement of accounting events. Principles are, in turn, divided into two main types:
  1. *Input-oriented principles* are broad rules that guide the accounting function. Input-oriented principles can be divided into two general classifications: general underlying rules of operation

and constraining principles. As their names imply, the former are general in nature whereas the latter are geared to certain specific types of situations.

2. *Output-oriented principles* involve certain qualities or characteristics that financial statements should possess if the input-oriented principles are appropriately executed.

A schema of these various concepts is shown in Exhibit 5.1.

Exhibit 5.1 Basic Concepts Underlying Historical Costing

Postulates	*Principles*
Going Concern Time Period Accounting Entity Monetary Unit	Input-Oriented Principles • General Underlying Rules of Operation 1. Recognition 2. Matching • Constraining Principles 1. Conservatism 2. Disclosure 3. Materiality 4. Objectivity (also called verifiability) Output-Oriented Principles • Applicable to Users 1. Comparability • Applicable to Preparers 1. Consistency 2. Uniformity

Postulates

Going Concern or Continuity

The going-concern postulate simply states that unless there is evidence to the contrary, it is assumed that the firm will continue indefinitely. As a result, under ordinary circumstances, reporting liquidation values for assets and equities is in violation of the postulate. However, the continuity assumption is simply too broad to lead to any kind of a choice among valuation systems, including historical cost. Fremgen and Sterling have criticized this postulate extensively.[23] Sterling logically demolishes it because the time period of continuity is presumed to be long enough to conclude the firm's present contractual arrangements. However, by the time these affairs are concluded, they will have been replaced by new arrangements. Hence, the implication is one of indefinite life. However, we know that over the long run, many firms do conclude their activities. Therefore, continuity is more in the nature of a prediction than an underlying assumption. Suffice it to say that, aside from ordinarily excluding liquidation values, going concern has little to add to accounting theory.

Time Period

Business, as well as virtually every form of human and animal activity, operates within fairly rigidly specified periods of time. The time period idea is, nevertheless, somewhat artificial because it creates definite segments out of what is a continuing process. For business entities, the time period is the calendar or business year. As a result, of course, financial reports contain statements of financial condition, earnings, and funds flow over a year's time or a portion thereof. Since the year is a relatively short time in the life of most enterprises, the time period postulate has led to accrual accounting and to the principles of recognition and matching under historical costing. Furthermore, even though the needs of users have required financial reporting for less than full-year intervals, these interim financial statements have their own problems and sets of rules. APB Opinion No. 28 states in general, however, that accounting methods followed in annual financial statements must likewise be followed in interim reports. Hence, interim reports must include estimates of annual amounts.

Accounting Entity

When we view the business entity in the context of accounting as well as in its legal form, it is clear that the entity is separate from its owners, but there are nevertheless two important problems.

First is the problem of defining the entity and accounting for the relationship among its parts. Involved here is the question of whether entities should be considered as one unit as a result of one controlling the other(s). In other words, should accounts be combined or should a noncombinative method of showing the relationship be used? The whole combination issue is made more complex by the presence of foreign operations. Theoretical aspects of these questions are discussed in Chapter 18.

The second issue related to the question of the accounting entity concerns the relationship between the firm and its owners. While the accounting is separate, the point of interface between the firm and the owners exists in the owners' equity accounts. A number of deductive theories purport to describe this relationship and the role of the owners' equity accounts. These ideas influence our interpretation of what constitutes income, the meaning of equities, and other important issues. The equity theories, as they are called, are discussed later in this chapter.

Monetary Unit

In nonbarter economies, money serves as the medium of exchange. As a result, money has also become the principal standard of value and is subject to the measurement process. Thus, financial statements are expressed in terms of the monetary unit of their particular nation or by means of a common monetary unit such as the Euro in the European Union. The assumption, for accounting purposes, that the monetary unit is stable became a mainstay of accounting principles and methods. Hence, the historical cost principle became enshrined as a virtually unchallengeable tenet of accounting.

Severe inflation in the 1970s in the United States and other nations encouraged a fresh examination of valuation theories and new ways of presenting financial information. Current valuation arises in areas such as marketable securities (SFAS No. 115), impaired assets (SFAS No. 121), and derivatives (SFAS No. 133), and SFAS No. 157 will be instituting a fair (current) value measurement system.

Principles

The word *principles* has not been well defined in ARSs of the AICPA. Neither ARS 1 nor ARS 3 precisely defines the word, although the latter contains the phrase "broad accounting principles" in its title. Paul Grady indicated in the preface of ARS 7 that he regarded accounting principles as synonymous with practices.[24] However, some 400 pages later, Grady identifies principles as postulates derived from "experiences and reason" that have proved useful.[25] Deductively, then, it appears that principles are postulates that have been successful in practice, an interpretation that Grady himself would probably tend to reject.

Perhaps the most useful definition of *principles* in official publications comes from APB Statement 4. *Generally accepted accounting principles*, it says, are rooted in "experience, reason, custom, usage, and . . . practical necessity."[26] Furthermore, they "encompass the conventions, rules, and procedures necessary to define accepted accounting practice at a particular time."[27] This still overlaps with Grady's definition, in which principles are identified with acceptable practice, but it distinguishes principles from postulates even though they stem from practical necessity and related experiences.[28] However, a subset of generally accepted accounting principles, *pervasive principles,* is largely synonymous with the way the term is used in APB Statement 4:

> *Pervasive principles* [italics added] are few in number and fundamental in nature . . . pervasive principles specify the general approach accountants take to recognition and measurement of events that affect the financial position and results of operations of enterprises.[29]

Notice that both definitions of *principles* from APB Statement 4 do not include the idea of permanence that is given to the word in the scientific sense. Pervasive principles in accounting overlap with what we refer to here as *input-oriented principles.*

Input-Oriented Principles

Accounting principles are classified here into two broad types: input-oriented principles and output-oriented principles. The distinctions between these groups are at least somewhat clear. *Input-oriented principles* are concerned with general approaches or rules for preparing financial statements and their content, including any necessary supplementary disclosures. *Output-oriented principles* are concerned with the comparability of financial statements of different firms. Although some of these principles apply to preparers of the statements and others to users, there is a close linkage between them.

General Underlying Rules of Operation

The first group of input-oriented principles is the general underlying rules of operation. These are further broken down into those involved with revenue recognition and those involved with expense recognition. These principles illustrate the primary orientation of historical cost accounting toward income measurement rather than asset and liability valuation.

Recognition. *Revenue* is defined here as the output of the enterprise in terms of its product(s) or service(s). Notice that this definition says nothing about the receipt or inflow of assets as a result of revenue performance because defining revenue in this way can easily lead to problems in terms of when to recognize revenue as being earned. It is generally conceded that revenues arise in conjunction with all of the operations of a firm.[30] For a manufacturing enterprise, these operations would include acquisition of raw materials, production, sale, collection of cash or other consideration from customers, and after-sale services such as product warranties and guarantees.

Recognition concerns the problem of when to enter revenues and expenses in the accounts. The most prevalent revenue recognition point by far is at the point of sale. Other possibilities may, however, arise; for example, revenue may be recognized in accordance with the firm's *critical event.* The *critical event* is the operating function that is the most crucial in terms of the earning process.[31] Revenue recognition points are discussed in Chapter 12. Suffice it to say that the revenue recognition principle is the most pervasive in the canon of historical cost accounting.

The conceptual framework project of the FASB states that revenue recognition occurs in accordance with two criteria: (1) The assets to be received from the performance of the revenue function are realized or realizable, and (2) performance of the revenue function is "substantially accomplished."[32] In the latter case, revenues are referred to as being *earned*, a commonly used term for revenue performance. This conception of revenue recognition has its roots in that fountainhead of the historical cost approach, the Paton and Littleton monograph mentioned previously.[33] The terms *realized* and *realizable* refer to the conversion or ready convertibility of the enterprise's product or service into cash or claims to cash. *Realized* means that the firm's product or service has been converted to cash or claims to cash, while *realizable* has been defined as the ability to convert assets already received or held into known amounts of cash or claims to cash.[34] *Realization* has often been used as a synonym for *recognition*.[35] The conceptual framework project appears to have been instrumental in having the word recognition supplant realization. Attempts to breach revenue recognition rules by recognizing revenue early in order to inflate current income are a considerable problem today. More will be said about this issue in Chapter 12.

Matching. *Expenses* are defined as costs that expire as a result of generating revenues. Expenses are thus necessary to the production of revenues. If all expenses could be directly identified with either specific revenues or specific time periods, expense measurement would present few problems. Unfortunately, many important expenses cannot be specifically identified with particular revenues, and they also bring benefit to more than one time period.

The process of recognizing cost expiration (expense incurrence) for categories such as depreciation, cost of goods sold, interest, and deferred charges is called *matching*. Matching implies that expenses are being recognized on a fair and equitable basis relative to the recognition of revenues. Matching is thus the second aspect, after recognition, of the primacy of income measurement over asset and liability valuation in our present system, which has been oriented toward historical cost.

Currently, matching is under extensive attack. First, the historical cost approach often tends to substantially understate expense measurements relative to the value of expired-asset services. Second, the "systematic and rational" methods employed under generally accepted accounting principles tend to be extremely arbitrary: A particular problem can be handled in more than one way. This imprecision is known as the "allocation problem" and is discussed in Chapter 9.

Constraining Principles

The second group of input-oriented principles—constraining principles—partially overlaps with the "modifying conventions" mentioned in APB Statement 4. These principles are described in the following fashion: "Certain widely adopted conventions modify the application of the pervasive measurement principles. These modifying conventions . . . have evolved to deal with some of the most difficult and controversial problem areas in financial accounting."[36] The constraining principles either impose limitations on financial statements, as in the case of conservatism, or provide checks on them, as in the case of materiality and disclosure.

Conservatism. Unquestionably, conservatism holds an extremely important place in the ethos of accountants. Indeed, it has even been called the dominant principle of accounting.[37] *Conservatism,* from a preparer's if not a standard setter's orientation, is defined here as the attempt to select "generally accepted" accounting methods that result in any of the following: (a) slower revenue recognition, (b) faster expense recognition, (c) lower asset valuation, (d) higher liability valuation. However, in certain situations some of these criteria can conflict. If so, lower income considerations would take precedence over higher asset valuations in determining whether a method or approach is conservative. For example, in the case of current valuation of assets, one approach—called distributable income—does not include real holding gains in the computation of income. As a result, in an inflationary environment, distributable income often results in higher asset valuations and lower income calculations than would occur under the historical cost alternative. Therefore, the distributable-income approach to current valuation can be more conservative than historical costing even though, generally speaking, historical cost is assumed to be more conservative.

Basu, in a capital markets-oriented context, has interpreted conservatism to mean that "bad news" (the loss of a major customer, for example) relative to reported earnings has a greater impact on security prices than "good news." Basu has found statistical evidence bearing out his point.[38]

Bushman and Piotroski are in agreement with Basu that the more "bad news" beats out "good news" in terms of swiftness of reporting, the more conservative the institutional setting.[39] Bushman and Piotroski's particular contribution lies in their observation that the more

fully developed are financial and legal institutions (e.g., courts, Securities and Exchange Commission, Federal Trade Commission), the more conservative will be the accounting rules (e.g., recognizing loss contingencies prior to gain contingencies).[40]

Givoly and Hayn have found evidence of conservative financial reporting over time for 896 firms from 1968 to 1998.[41] Various indirect measures were used, such as the ratio of market value to book value growing over time (indicating a conservative balance sheet) and growth in the ratio of income from continuing operations to total assets. The Givoly and Hayn study should help to put into better perspective some of the recent startling headlines about corporate financial reporting behavior, although earnings management (Chapter 12) remains an extremely important problem.

Watts also sees conservatism as a dominating element of financial accounting.[42] He notes that it stems from both management and standard setters. On the management side, he sees conservatism stemming from contracting arrangements such as debt covenants covering bond issues, attempts to avoid litigation by understating assets, and minimization of taxes.[43] However, relative to standard-setting agencies, he sees the tide going from a conservative orientation (recognizing probable loss contingencies, but not gain contingencies in SFAS No. 5, for example) to more of a future-oriented outlook, helping users predict cash flows (see conceptual framework, Chapter 7). Along the same line, the FASB has backed off an overly dominating place for conservatism since it is not listed in the hierarchical qualities of the conceptual framework, although it is still seen as a "prudent reaction to uncertainty."[44]

As mentioned above, earnings management—which usually arises in regard to either management attempting to meet earnings forecasts or to maximize management compensation arrangements—puts an upward spin on calculating earnings numbers. Watts believes that conservatism is a more important factor than earnings management. We tend to agree with him because we believe that earnings management arises in a more ad hoc short-term context whereas conservatism generally has a longer-run impact, but the relationship between them is certainly open to further examination and research

Disclosure. Moonitz construed disclosure as an imperative postulate (C-5). However, he described it in negative terms: "that which is necessary to make them [accounting reports] not misleading." The fact that it is difficult to quantify the concept of adequate disclosure for users may be the reason for Moonitz's phrasing and for the failure of the Securities and Exchange Commission (SEC) or AICPA sources to define the concept adequately.[45] The FASB has not defined it, although two important FASB Statements, in particular, have dealt with it: SFAS No. 131 on segmental disclosures and SFAS No. 33 on general price-level and current value data. SFAS No. 131 requires segmental disclosures by management's own choice for making operating decisions and assessing performance. One issue that is arising relative to disclosure concerns its *credibility* or believability, which is becoming more important in the light of recent major accounting scandals. Mirroring the conservatism dichotomy mentioned previously that "bad news" affects security prices more than "good news," researchers have found that negative news disclosures are more credible than positive news disclosures.[46]

Disclosure refers to the presentation of relevant financial information both inside and outside the main body of the financial statements themselves, including methods employed in

financial statements where more than one choice exists or an unusual or innovative selection of methods arises.[47] The principal outside categories include:

- Supplementary financial statement schedules, such as those pertaining to SFAS No. 131 and SFAS No. 33 (now superseded by SFAS No. 89).
- Disclosure in footnotes of information that cannot be adequately presented in the body of the financial statements themselves.
- Disclosure of material or major post-statement events in the annual report.
- Forecasts of operations for the forthcoming year.
- Management's analysis of operations in the annual report.

Lang and Lundholm have found that disclosure activity frequently increases approximately six months prior to a stock offering.[48] This often results in a stock price increase and a lower cost of capital. If the stock price increase is maintained, it could indicate a lessening of information asymmetry, but if it is not maintained, it may indicate that the stock has been "hyped": The information may be misleading or positive conditions may have been overemphasized.

There are two important reasons for believing that disclosure will become even more important in the future. First, as the business environment grows more complex, expressing important financial and operating information adequately within the confines of the traditional financial statements becomes more difficult. Second, a considerable body of evidence indicates that capital markets are able to absorb and reflect new information within security prices fairly rapidly (see Chapter 8). However, wherever possible, information is preferable within the body of financial statements themselves rather than appearing only in footnote disclosures.

Materiality. *Materiality* refers to the importance of an item (or group of items) to users in terms of its relevance to evaluation or decision making. We can thus view it as the other side of the disclosure coin because what is disclosed should, of course, be material. Unfortunately, materiality levels are determined by auditors on a case-by-case basis and can vary greatly among auditors, among companies, and even by the same auditor over time.[49] Moreover, external users are not informed of the materiality level used by the auditor.

An early and extensive attempt to assess quantitative perceptions of materiality was conducted in Pattillo's study for the Financial Executives Research Foundation (FERF).[50] Pattillo used 684 respondents, including preparers of financial statements (financial executives from Fortune 500 and medium-sized firms), users of accounting information (bankers and financial analysts), auditors, and also academics, to use their own materiality judgments on 28 cases. Pattillo's major findings included the following:

- Although many respondents usually use a range of 5% to 10% of net income as the boundary of materiality, they did not apply a single absolute dollar or percentage relationship to all situations.
- Perceptions of materiality differ between groups, with financial executives having the highest percentage threshold of net income and certified public accountants and financial analysts having the lowest overall percentage.
- Modifying elements, such as the particular characteristics of the firm and the political and economic environment, influence the perception of materiality in particular situations.

In a study using a computer simulation, Turner found that immaterial errors can combine, resulting in a significant impact on financial ratios.[51] This error effect is more marked on profitability ratios such as profit margin on sales and return on assets than on solvency ratios such as the current ratio and debt-to-equity ratio. Among other recent materiality studies has been an attempt to measure it from the user perspective, concentrating on the vantage points of (a) percentage effect on net income, (b) percentage effect on revenues, and (c) percentage effect on total assets.[52] Using "unexpected earnings" divided by the three factors mentioned above, they found that the average investor's materiality threshold is in the range of 0.1% to 0.2% of pretax income, a range significantly below the range of 5% to 10% of net income found by Pattillo and the range used in the auditing literature. These and other empirical studies have helped to shed light on the concept of materiality, although it is not a settled issue.[53]

Despite difficulties, attempts are being made to tighten materiality boundaries. The SEC in Staff Accounting Bulletin (SAB) No. 99 tried to provide materiality guidance for auditors, although it did not provide precise percentage standards of materiality.[54]

Sarbanes-Oxley (SOX) has also become involved with materiality. In discussing SOX, Vorhies notes that using a benchmark of a 5% materiality level as a percentage of income, pretax net income would be "normalized" by adjusting net income from continuing operations for unusual events not expected to recur to arrive at the basic materiality threshold.[55] However, errors and misstatements may still be material even if they fall below 5%. Errors should be aggregated, even though individually small, to see if they breach the 5% barrier.[56] Also, any internal control deficiencies must be evaluated with the 5% materiality threshold in mind. If the accounting estimation process is flawed, the materiality threshold must also be kept in mind. Finally, materiality must also be considered if fraud arises in a context where the firm's financial statements have been misstated.[57]

It is clear that materiality, along with disclosure, will continue to be an important issue in the foreseeable future, not only in the United States, but in other countries as well.[58]

Objectivity. In the past, objectivity has been interpreted in several different ways, but primarily in terms of the quality of evidence underlying transactions that are eventually summarized and organized in the form of financial statements.[59] The concept of quality of evidence was considered apart from those who carry out the measurement function. Now, however, *objectivity* is more commonly thought of in the statistical sense (discussed in Chapter 1) as the degree of consensus among measurers. It is, therefore, an integral part of the measurement process rather than being either a postulate or principle. APB Statement 4 adopts this outlook, although it discusses the concept as a "qualitative objective" of accounting and relabels it as *verifiability*.[60] This newer, statistical sense of verifiability also appears in the Statement of Financial Accounting Concepts No. 2 of the conceptual framework project of the FASB.

Output-Oriented Principles

As mentioned earlier, output-oriented principles express qualities that financial statements should possess when viewed from the standpoint of both preparers and users. Of necessity, then, these concepts overlap somewhat as well as complement each other.

As viewed here, comparability is a concept that applies to users of financial statements, whereas consistency and uniformity focus on preparers of financial information.

Comparability

Comparability has often been described as accounting for like events in a similar manner, but this definition is too simplistic to be operational.[61] It also applies to those who use financial statements. *Comparability*, viewed here from the user's standpoint, refers to the degree of reliability users should find in financial statements when evaluating financial condition or the results of operations on an interfirm basis or predicting income or cash flows.[62]

Obviously, then, comparability is largely dependent on the amount of uniformity attained in recording transactions and preparing financial statements. Despite the secondary role of comparability relative to uniformity, the cost–benefit relationship between them should be kept in mind: Comparability might be improved by more uniformity, but costs may exceed benefits.

Consistency

Consistency refers to a given firm's use of the same accounting methods over consecutive time periods. Consistency is necessary if predictions or evaluations based on a firm's financial statements over more than one time period are to be reliable. Should change occur—because of adoption of a more relevant or objective method—full disclosure must be made to users, and the auditor's opinion must be appropriately qualified.

Consistency is really an aspect of the broader issue of uniformity. Some believe that differing circumstances among firms, particularly when different industries are involved, make it impossible to attain uniformity of accounting techniques on an interfirm basis.[63] Therefore, consistency on an intrafirm basis, with full disclosure when changes occur, would be the most practical goal relative to output-oriented principles.

Uniformity

Uniformity has been and continues to be an important issue in accounting. But it has several subtle aspects that have not always been fully taken into account. Interpretations of uniformity have included the following:

- A uniform set of principles for all firms, with interpretation and application left up to the individual entity
- Similar accounting treatment required in broadly similar situations, regardless of possibly different underlying circumstances (rigid uniformity)
- Accounting treatment that takes into account different economic circumstances in broadly similar transactions (finite uniformity)

The second and third definitions differ from the first because they are concerned with the degree of uniformity that enters into interpretation of transactions. The first definition simply prescribes a broad theoretical framework to serve as a basis for interpretation of transactions. The difference between rigid and finite uniformity is best described by illustration.

SFAS No. 2, which requires immediate expensing of research and development (R&D) costs, is an example of rigid uniformity. Different expectations apply to the broad category of R&D in terms of cash flows that will be received from these costs, but the treatment is uniform even though different patterns of receipt of benefits exist. SFAS No. 13 is an example of finite uniformity. The statement sets down some rather specific criteria for differentiating between capital and operating leases. Hence, different circumstances are taken into account in distinguishing accounting for the two types of leases (we are not concerned here with the question of agreement in terms of the capitalization criteria themselves). Rigid and finite uniformity are extensively discussed in Chapter 9.

Equity Theories

The enterprise interfaces with owners in the owners' equity accounts. Several deductive theories have attempted to depict this relationship and are useful in interpreting nonlegal rights and interests in the owners' equity accounts as well as in determining certain components of income. Previously, these normative theories received considerable attention, but today they play a secondary role to newer, empirical research approaches. The problem with the equity theories is that the relationship between the firm and its owners, while important, does not really provide an adequate base from which to define and interpret all enterprise events. Some writers have stated that to attain consistency, one equity theory must be selected and adhered to, but we do not believe this is necessary. However, these theories, though selectively applied, can still provide useful insights.

Proprietary Theory

The *proprietary theory* assumes that the owners and the firm are virtually identical. This theory, which dates back centuries, is quite descriptive of economies made up largely of the small owner-operated firms that existed prior to the Industrial Revolution. However, Merino's thesis is that the proprietary theory was modified in the late nineteenth century in response to the growth of large oligopolistic firms.[64] At that time, many reformers desired more governmental intervention against absentee owners who were reaping large returns. Proprietary theorists, according to Merino, attempted to bring the absentee owner to center stage when viewing the business enterprise. These absentee ownership claims were legitimized by measuring profit available for distribution to owners rather than the notion that earnings—and capital—belonged to the corporation itself.[65]

Under proprietary theory, the assets belong to the firm's owners, the liabilities are their obligations, and ownership equities accrue to the owners. The balance sheet equation would be

$$\Sigma\text{Assets} - \Sigma\text{Liabilities} = \text{Owners' Equities} \tag{5.1}$$

Expenses include deductions for labor costs, taxes, and interest but not for preferred and common dividends. In other words, income represents the owners' increase in both net assets (assets minus liabilities) and owners' equities arising from operations during the period. The

essentials of the proprietary approach largely coincide with the components of income measurement as it is presently construed in historical cost-based systems, although owners certainly do not exercise the control over owners' equity accounts suggested by proprietary theory. Furthermore, the relationship between the firm and its owners has changed markedly since the advent of the giant corporation in technologically advanced societies.

While Merino sees profit available for dividends as a very important idea in the development of the proprietary theory, several writers see wealth—represented by the balance sheet—as being a more important concept than income under the proprietary theory. Consequently, these individuals see either general price-level adjustment or current value approaches as integral to proprietary theory but not entity theory.[66] However, Merino points out that those who tried to revamp proprietary theory at the end of the nineteenth century also wanted accounting elevated to the level of a science that was "fact-oriented," which, in turn, led to a justification of historical costs.[67] We do not believe that either entity or proprietary theory is rich enough in basic assumptions to arrive at a justification for either a historical-cost-based system or departures from it.

Entity Theory

Dissatisfaction with the orientation of the proprietary theory led to development of the entity theory. Its chief architect was William A. Paton, long-time professor at the University of Michigan.[68] Under the *entity theory*, the firm and its owners are separate bodies. The assets belong to the firm itself; both liability and equity holders are investors in those assets with different rights and claims against them. The balance sheet equation would be

$$\Sigma\text{Assets} = \Sigma\text{Equities (including liabilities)} \tag{5.2}$$

Under orthodox entity theory, there is a dual nature to both the owners' equity accounts and the question of the primary claim to income.[69] Stockholders have rights relative to receiving dividends when declared, voting at the annual corporate meeting, and sharing in net assets after all other claims have been met, if the firm is dissolving. Nevertheless, owners' equity accounts do not represent their interest as owners but simply their claims as equity holders. Similarly, net income does not belong to the owners, although the amount is credited to the claims of equity holders after all other claims have been satisfied. Income does not belong to capital providers until dividends are declared or interest becomes due. In measuring income, both interest and dividends represent distributions of income to providers of capital. Hence, both are treated the same and *neither* is a deduction from income.

If the entity theory were taken to its logical—and unorthodox—conclusion, the owners' equity accounts would belong unequivocally to the firm, despite the presence of stockholder claims. Furthermore, income would belong to the firm itself, and, in turn, interest and dividends would *both* be deductions in calculating it.[70]

The same inconsistency relative to valuation systems and proprietary theory previously discussed is also applicable to the entity theory. Paton and Littleton, in their famed monograph considered to be the classic statement of the historical cost system, take a strong entity theory

position. Littleton, in *Structure of Accounting Theory*, held to this same position. Later, Paton, however, moved toward general price-level adjustment, which Devine saw as being totally consistent with the entity orientation.[71] We agree, but would again note that proprietary theory is also considered to be consistent with general price-level adjustment because of its presumed wealth orientation.

Anthony has provided an interesting variant on this more narrow interpretation of the entity theory.[72] The right-hand side of the balance sheet would consist of four main components: liabilities, shareholder equity, equity interest, and entity equity. Shareholder equity would consist of contributed capital, and equity interest would comprise unpaid dividends on both common and preferred stock. Interest cost to the firm would consist of both interest on debt and interest cost on the shareholder equity.[73] Entity equity would be equivalent to retained earnings but would be lower than the latter by the amount of unpaid dividends on both preferred and common stock. The shareholder-equity interest rate suggested by Anthony could either be set equal to the firm's before-tax debt rate or to a specified published rate applicable to all firms set by the United States Treasury Department in accordance with Cost Accounting Standard 414, which was published by the now defunct Cost Accounting Standards Board.

Although the entity theory provides a good description of the relationship between the firm and its shareholders, its dual nature relative to income and owners' equity in the traditional form has probably been responsible for the fact that its precepts have not taken a strong hold in committee reports and releases of various accounting bodies.[74]

Residual Equity Theory

The *residual equity theory* is a variant of both proprietary and entity theory. The theory has been developed by George Staubus, but its roots also lie in the work of William A. Paton.[75] The residual equity holders are that group of equity claimants whose rights are superseded by all other claimants. This group would be the common stockholders, although its members can change if an event such as a reorganization occurs. Common stockholders are, of course, the ultimate risk takers within an enterprise. Their interest in the firm serves as a buffer or protector for all groups with prior claims on the firm, such as preferred stockholders and bond owners.

The underlying assumption of the residual equity theory is that information appropriate for decision-making purposes (predicting cash flows, for example) must be supplied to the residual equity holders. The balance sheet equation under this approach would be

$$\Sigma\text{Assets} - \Sigma\text{Specific Equities (including liabilities and preferred stock)} = \text{Residual Equity} \tag{5.3}$$

Although the assets are still owned by the firm, they are held in a trust type of arrangement and management's objective is maximization of the value of the residual equity. Income accrues to the residual equity holders after all other claims have been met. Interest and preferred dividends (but not common dividends) would be deductions in arriving at income.

In regard to a FASB discussion memorandum concerned with whether the distinction between debt and equity should be maintained, Clark has asserted that the distinction

should be kept. She based her position on recent finance literature, which has found that the amount of leverage employed by firms (which distinguishes between debt and equity) affects the risk and return to common stockholders.[76] The higher the leverage, the more risk borne by shareholders and the greater the required return on common shares. Clark has also noted that the finance literature has also found that preferred stockholder claims are viewed as debt, that is, however, subordinate to bonds. Clark, therefore, includes preferred stock as an element of debt in debt/equity ratio calculations, clearly a residual equity position. She also sees modern finance theory as more in line with proprietary theory as opposed to entity theory because the latter does not distinguish sharply between debt and equity.

The development of the residual equity approach has been relatively recent. Nevertheless, it has undoubtedly played a role in the movement toward defining objectives of income measurement with an emphasis on measures that would aid in predicting future cash flows.

Fund Theory

Fund theory, developed by William J. Vatter, backs away from both the entity and proprietary theories because of the inherent weaknesses and inconsistencies of both.[77] A *fund* is simply a group of assets and related obligations devoted to a particular purpose, which may or may not be that of generating income. The balance sheet equation would be

$$\Sigma\text{Assets} = \Sigma\text{Restrictions on Assets} \tag{5.4}$$

The restrictions on the assets arise from both liabilities and invested capital. The invested capital must be maintained intact unless specific authority for partial or total liquidation is given. The restriction on assets also includes the specific purposes for their use mandated by law or contract. Fund theory, therefore, is most applicable to the governmental and not-for-profit areas where endowment funds, encumbrances, and special-asset groups often devoted to specific and separate purposes prevail.

Commander Theory

Louis Goldberg was uncomfortable with artificial concepts such as "funds" and "entities."[78] As a result, he proposed the *commander theory*. *Commander* is really a synonym for *management*, and Goldberg was very much concerned with the fact that management needs information so that it can carry out its control and planning functions on behalf of owners. Hence, commander theory might really be viewed as being applicable to managerial accounting rather than financial accounting, but the manager in his or her fiduciary role must apply the commander view to the investor.[79]

Commander theory creates more problems than it solves. The whole issue of agency theory arises, although Goldberg's work precedes the emergence of agency theory by at least 10 years. In addition, the investors' usage of financial statements becomes somewhat unclear. Unfortunately, Goldberg limits the possible scope of shareholder interest to "big picture"

numbers and relationships such as dividends and return on investment as opposed to possible interest in slightly lower level operating measures such as income and return on sales.[80]

Outlook on the Equity Theories

We have briefly examined five equity theories. As discussed at the beginning of this section, the equity theories cannot possibly provide a consistent deductive basis for all accounting transactions and events because they take only a very limited view of the enterprise: the relationship between the firm and its owners.[81] Nevertheless, we believe that they can be of some use to standard setters. We wonder if the time is not ripe to combine proprietary and entity theory approaches and show both numbers.[82] In Chapter 12, we suggest that stock option costs that are an expense to shareholders, but not to the firm, should be deducted from entity theory income to arrive at proprietary theory income. This solution might resolve the heated debate that has surrounded the stock option issue.

Summary

Despite APB Statement 4's use of the word *principles* to describe several concepts, the postulates–principles approach had, in essence, died out by 1970. Several factors underlie the failure of the postulates–principles approach and the rise of objectives and standards. The failure of ARS 1 and ARS 3 and the difficulty of building on a postulate base have already been discussed. The demise of the APB was certainly one of the reasons for the end of the postulates and principles orientation to standard setting. It is true that by the late 1960s the APB had abandoned this approach despite the publication in 1965 of Grady's ARS 7. Nevertheless, the APB had become identified with postulates and principles, and its decline signaled the obsolescence of this orientation as a theoretical underpinning for the standard-setting process.

Other, more fundamental factors were also at work. New research and committee reports began taking into account such issues as user needs and diversities, which, in turn, led to a focus on the objectives of financial statements, considerations that were barely mentioned in the postulates and principles literature. As a result, new outlooks and approaches to income formulation and measurement were eventually brought about.

The new outlook began stressing the need for objectives and standards. Several of the concepts that have been loosely labeled as *principles*—disclosure, materiality, and uniformity, for example—will eventually take their place in an objectives-oriented framework. Other concepts, such as going concern and stability of the monetary unit, may diminish in importance.

The equity theories of accounting are normative–deductive theories based on the relationship between the corporation and its owners. Although these theories can provide interesting insights into some problems, their scope is not sufficiently global to permit their extensive use in solving fundamental accounting problems.

Hence, our attention turns next to objectives and standards.[83] We examine important conceptual and institutional pronouncements that occurred after the decline of the postulates and principles approach in Chapter 6.

Appendix 5-A: The Basic Postulates Of Accounting (ARS 1)

Postulates Stemming from the Economic and Political Environment

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.

Postulates Stemming from the Field of Accounting Itself

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 that 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 that 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

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.

SOURCE: Appendix 5-A. The Basic Postulates of Accounting ARS 1 is reprinted by permission of the American Institute of Certified Public Accountants.

APPENDIX 5-B: A Tentative Set of Broad Accounting Principles for Business Enterprises (ARS 3)

The principles summarized here are relevant primarily to formal financial statements made available to third parties as representations by the management of the business enterprise. The "basic postulates of accounting" developed in Accounting Research Study No. 1 are integral parts of this statement of principles.

Broad principles of accounting should not be formulated mainly for the purpose of validating policies (e.g., financial management, taxation, employee compensation) established in other fields, no matter how sound or desirable those policies may be in and of themselves. Accounting draws its real strength from its neutrality as among the demands of competing special interests. Its proper functions derive from the measurement of the resources of specific entities and of changes in these resources. Its principles should be aimed at the achievement of those functions.

The principles developed in this study are as follows:

1. Profit is attributable to the whole process of business activity. Any rule or procedure, therefore, which assigns profit to a portion of the whole process should be continuously re-examined to determine the extent to which it introduces bias into the reporting of the amount of profit assigned to specific periods of time.

2. Changes in resources should be classified among the amounts attributable to
   a. Changes in the dollar (price-level changes) that lead to restatements of capital but not to revenues or expenses.
   b. Changes in replacement costs (above or below the effect of price-level changes) that lead to elements of gain or of loss.
   c. Sale or other transfer, or recognition of net realizable value, all of which lead to revenue or gain.
   d. Other causes, such as accretion or the discovery of previously unknown natural resources.

3. All assets of the enterprise, whether obtained by investments of owners or of creditors, or by other means, should be recorded in the accounts and reported in the financial statements. The existence of an asset is independent of the means by which it was acquired.

4. The problem of measuring (pricing, valuing) an asset is the problem of measuring the future services, and involves at least three steps:
   a. A determination if future services do in fact exist. For example, a building is capable of providing space for manufacturing activity.
   b. An estimate of the quantity of services. For example, a building is estimated to be usable for 20 more years, or for half of its estimated total life.
   c. The choice of a method or basis or formula for pricing (valuing) the quantity of services arrived at under (2) above. In general, the choice of a pricing basis is made from the following three exchange prices:

i. A past exchange price, e.g., acquisition cost or other initial basis. When this basis is used, profit or loss, if any, on the asset being priced will not be recognized until sale or other transfer out of the business entity.

ii. A current exchange price, e.g., replacement cost. When this basis is used, profit or loss on the asset being priced will be recognized in two stages. The first stage will recognize part of the gain or loss in the period or periods from time of acquisition to time of usage or other disposition; the second stage will recognize the remainder of the gain or loss at the time of the sale or other transfer out of the entity, measured by the difference between sale (transfer) price and replacement cost. This method is still a cost method; an asset priced on this basis is being treated as a cost factor awaiting disposition.

iii. A future exchange price, e.g., anticipated selling price. When this basis is used, profit or loss, if any, has already been recognized in the accounts. Any asset priced on this basis is therefore being treated as though it were a receivable, in that sale or other transfer out of the business (including conversion into cash) will result in no gain or loss, except for any interest (discount) arising from the passage of time.

The proper pricing (valuation) of assets and the allocation of profit to accounting periods are dependent in large part upon estimates of the existence of future benefits, regardless of the bases used to price the assets. The need for estimates is unavoidable and cannot be eliminated by the adoption of any formula as to pricing.

i. All assets in the form of money or claims to money should be shown at their discounted present value or the equivalent. The interest rate to be employed in the discounting process is the market (effective) rate at the date the asset was acquired.

The discounting process is not necessary in the case of short-term receivables where the force of interest is small. The carrying-value of receivables should be reduced by allowances for uncollectable elements; estimated collection costs should be recorded in the accounts.

If the claims to money are uncertain as to time or amount of receipt, they should be recorded at their current market value. If the current market value is so uncertain as to be unreliable, these assets should be shown at cost.

ii. Inventories which are readily salable at known prices with readily predictable costs of disposal should be recorded at net realizable value, and the related revenue taken up at the same time. Other inventory items should be recorded at their current (replacement) cost, and the related gain or loss separately reported. Accounting for inventories on either basis will result in recording revenues, gains, or losses before they are validated by sale but they are nevertheless components of the net profit (loss) of the period in which they occur.

Acquisition costs may be used whenever they approximate current (replacement) costs, as would probably be the case when the unit prices of inventory components are reasonably stable and turnover is rapid. In all cases, the basis of measurement actually employed should be "subject to verification by another competent investigator."

iii. All items of plant and equipment in service, or held in stand-by status, should be recorded at cost of acquisition or construction, with appropriate modification for the effect of the changing dollar either in the primary statements or in supplementary statements. In the external reports, plant and equipment should be restated in terms of

current replacement costs whenever some significant event occurs, such as a reorganization of the business entity or its merger with another entity or when it becomes a subsidiary of a parent company. Even in the absence of a significant event, the accounts could be restated at periodic intervals, perhaps every five years. The development of satisfactory indexes of construction costs and of machinery and equipment prices would assist materially in making the calculation of replacement costs feasible, practical, and objective.

d. The investment (cost or other basis) in plant and equipment should be amortized over the estimated service life. The basis for adopting a particular method of amortization for a given asset should be its ability to produce an allocation reasonably consistent with the anticipated flow of benefits from the asset.
e. All "intangibles" such as patents, copyrights, research and development, and goodwill should be recorded at cost, with appropriate modification for the effect of the changing dollar either in the primary statements or in supplementary statements. Limited term items should be amortized as expenses over their estimated lives. Unlimited term items should continue to be carried as assets, without amortization.

If the amount of the investment (cost or other basis) in plant and equipment or in the "intangibles" has been increased or decreased as the result of appraisal or the use of index-numbers, depreciation or other amortization should be based on the changed amount.

5. All liabilities of the enterprise should be recorded in the accounts and reported in the financial statements. Those liabilities that call for settlement in cash should be measured by the present (discounted) value of the future payments or the equivalent. The yield (market, effective) rate of interest at date of incurrence of the liability is the pertinent rate to use in the discounting process and in the amortization of "discount" and "premium." "Discount" and "premium" are technical devices for relating the issue price to the principal amount and should therefore be closely associated with principal amount in financial statements.
6. Those liabilities which call for settlement in goods or services (other than cash) should be measured by their agreed selling price. Profit accrues in these cases as the stipulated services are performed or the goods produced or delivered.
7. In a corporation, stockholders' equity should be classified into invested capital and retained earnings (earned surplus). Invested capital should, in turn, be classified according to source, that is, according to the underlying nature of the transactions giving rise to invested capital.

Retained earnings should include the cumulative amount of net profits and net losses, less dividend declarations, and less amounts transferred to invested capital.

In an unincorporated business, the same plan may be followed, but the acceptable alternative is more widely followed of reporting the total interest of each owner or group of owners at the balance sheet date.

8. A statement of the results of operations should reveal the components of profit in sufficient detail to permit comparisons and interpretations to be made. To this end, the data should be classified at least into revenues, expenses, gains, and losses.
   a. In general, the revenue of an enterprise during an accounting period represents a measurement of the exchange value of the products (goods and services) of that enterprise during that period. The preceding discussion, under D(2b), is also pertinent here.
   b. Broadly speaking, expenses measure the costs of the amount of revenue recognized. They may be directly associated with revenue-producing transactions themselves (e.g., so-called "product costs") or with the accounting period in which the revenues appear (e.g., so-called "period costs").

c. Gains include such items as the results of holding inventories through a price rise, the sale of assets (other than stock-in-trade) at more than book value, and the settlement of liabilities at less than book value. Losses include items such as the result of holding inventories through a price decline, the sale of assets (other than stock-in-trade) at less than book value or their retirement, the settlement of liabilities at more than book value, and the imposition of liabilities through a lawsuit.

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QUESTIONS

1. Do you think the "broad principles" of ARS 3 are really *principles* as that term is used in science?
2. Assuming all other things equal, it is possible that the lower-of-cost-or-market method can result in any given year in higher income than would be the case under the same inventory costing method without the use of lower-of-cost-or-market. If so, then lower-of-cost-or-market cannot be classified as a conservative method. Do you agree with this statement? Discuss.
3. Why is it that postulates stemming from the economic and political climates as well as the customs and viewpoints of the business community would not serve as a good foundation for deducing a set of accounting principles?
4. Using different studies at different times it still appears to be the case that financial executives have a higher threshold for materiality than either certified public accountants or financial analysts, who, in turn, have a higher materiality threshold than users. Why do you think this ordering exists?
5. Do you think that the so-called equity theories of accounting are really theories in the scientific sense? How would you classify them?
6. Why do you think the equity theories are less important today than they were, say, 50 years ago?
7. Four postulates (going concern, time period, accounting entity, and monetary unit) were discussed as part of the basic concepts underlying historical costing. Can any of the principles discussed under the same general category be deduced or logically derived from these postulates?
8. How does agency theory (Chapters 2 and 4) differ from the equity theories discussed in this chapter?
9. Does the entity theory or the proprietary theory provide a better description of the relationship existing between the large modern corporation and its owners?
10. Why has the entity theory fragmented into two separate conceptions?
11. Of the nine so-called principles shown in Exhibit 5.1, which do you think are the most important in terms of establishing a historical costing system?
12. What is the difference between owners' equity accounts representing shareholders' claims as equity holders and shareholders' interests as owners?
13. Postulates are supposed to be tight enough to prevent conflicting conclusions being deduced from them. Is this the case with ARS 1?

14. Is it fair to categorize ARS 1 and ARS 3 as failures? Why or why not?
15. How do the imperative postulates (group C) differ from the other two categories of postulates?
16. Distinguish among the terms *realized*, *realizable*, and *realization*.
17. How do conventional retained earnings differ from entity equity under the Anthony conception of the entity theory?
18. What inconsistencies does Merino see in the proprietary theory at the turn of the twentieth century before the advent of entity theory?
19. Why is the earnings-per-share calculation an example of the residual equity of a firm being broader than merely its current common shareholders?
20. Why is the residual equity theory more in line with Clark's assessment of recent research in finance than entity and proprietary theory?
21. Why do you think that security prices are impacted more by "bad news" than "good news"?
22. Why do you think that profitability ratios (e.g., return-on-assets) are more sensitive to the combined effect of immateriality items than would be the case with solvency ratios (debt-to-equity and current ratios)?
23. At present time, the U.S. federal income tax code allows corporations to deduct interest expense but not cash dividends paid to stockholders. Does the tax code tie in with any of the equity theories?
24. Why does it make sense to define materiality from the user's perspective?
25. What similarities are there between materiality and disclosure?
26. Discuss how the concept of conservatism may be changing as viewed by Watts.

CASES, PROBLEMS, AND WRITING ASSIGNMENTS

1. Assume the following for the year 2000 for the Staubus Company:

Revenues		$1,000,000
Operating expenses		
Cost of goods sold	$400,000	
Depreciation	100,000	
Salaries and wages	200,000	
Bond interest (8% Debentures sold at maturity value of $1,000,000)		80,000
Dividends declared on 6% Preferred Stock (par value $500,000)		30,000
Dividends declared of $5 per share on Common Stock (20,000 shares outstanding a par value of $100 per share)		100,000

a. Determine the income under each of the following equity theories:
   - Proprietary theory
   - Entity theory (orthodox view)
   - Entity theory (unorthodox view)
   - Residual equity

b. Would any of your answers change if the preferred stock is convertible at any time at the ratio of 2 preferred shares for 1 share of common stock?

2. Critique *A Statement of Basic Accounting Postulates and Principles* by the referenced study group at the University of Illinois (it should be on reserve or otherwise made available to you). Your critique should cover, but not be restricted to, the following points:
   a. How do the definitions of postulates, concepts, and principles differ?
   b. Are the examples of postulates, principles, and concepts consistent with their definitions?
   c. Does this set of postulates, principles, and concepts provide a legislative body with a useful framework for deriving operating rules?

3. List and briefly discuss as many areas as you can in which an accepted method or technique is conservative, including why it is conservative.

4. A few years ago both Halliburton Corporation, a large construction company, and its auditor, Arthur Andersen, were chided for allowing Halliburton to book a percentage of cost overruns that Halliburton has attempted to collect from customers after projects are completed but before both agreed settlements with customers and, of course, collection thereof. The practice of trying to collect cost overruns in the construction industry is not uncommon. Until 1998 cost overrun collections were not booked until received. Since that time, Halliburton "began guessing how much of a disputed surcharge would ultimately get paid and crediting itself in advance."

Required:

a. Is there a case that can be made for allowing Halliburton to book these overruns? What arguments, if any, support Halliburton's accounting methods?
b. What situations should prevent Halliburton from booking these overruns prior to collection?

CRITICAL THINKING AND ANALYSIS

1. How permanent do you think the postulates and principles underlying historical costing will be?
2. If you could relate materiality, disclosure, and conservatism to types of measurements (nominal, ordinal, interval, and ratio scale), how would you do so?

Notes

1. *Jennings (1958, p. 32).*
2. *Special Committee on Research Program (1958, pp. 62–63).*
3. *See "Comments on 'A Tentative Set of Broad Accounting Principles'" (1963).*

4. *Mautz and Sharaf (1961, p. 37).*
5. *Morgenstern (1963, pp. 23–24). Some examples of axiomatic deductive systems in accounting include Mattessich (1964, pp. 446–465), Ijiri (1975, pp. 71–84), and Carlson and Lamb (1981).*
6. *Mautz (1965).*
7. *AAA (1957).*
8. *AICPA (1953, pp. 9505–9506).*
9. *Caws (1965, p. 85).*
10. *Ibid. (p. 86).*
11. *Harré (1970, p. 206).*
12. *Deinzer (1965, p. 111).*
13. *Vatter (1963, pp. 185–186).*
14. *Mautz (1965, p. 47).*
15. *Deinzer (1965, p. 131).*
16. *Chambers (1964, p. 409).*
17. *For a complete exposition, see Chambers (1966). For additional coverage, see Wright (1967) and Chambers (1970).*
18. *Chatfield (1974, p. 256).*
19. *Paton and Littleton (1940).*
20. *Canning (1929); Sweeney (1936); MacNeal (1939); Sanders, Hatfield, and Moore (1938); Gilman (1939); and Littleton (1953).*
21. *Caws (1965, pp. 24–29).*
22. *For example, Study Group at the University of Illinois (1964). In addition, Anthony has attempted to deductively derive a conceptual framework using premises and concepts: "Premises are* descriptive *[italics added] statements based on the best available evidence. They are subject to change as new evidence develops. In this framework, concepts are normative statements; they say what financial statement information* should be *[italics added]. Concepts are deduced from the premises and they must be consistent with the premises and with one another" [Anthony (1983, p. xi)]. While not labeling his system as postulates and principles per se, Anthony is certainly using a deductive–normative approach in terms of developing underlying rules to guide and support the FASB's ongoing operating standards. Anthony states that his premises are "descriptive statements based on the best available evidence," but many surely contain strong normative overtones. For example, Premise 15 (p. xiii) states that "users are primarily interested in the performance of an entity and secondarily in its status." Premise 15-A then states that "between competing accounting practices, the one that provides users with more useful information about performance is preferable to the one that provides more useful information about status" (p. xiii).*
23. *Fremgen (1968) and Sterling (1968).*
24. *Grady (1965, p. ix).*
25. *Ibid. (p. 407).*
26. *AICPA (1970, p. 9084).*
27. *Ibid.*
28. *One reason for the overlap is that APB Statement 4 envisions a three-tiered approach to principles. The bottom level, detailed principles, is made up of the actual operating rules themselves, such as the opinions of the APB (AICPA, 1970, p. 9084).*
29. *Ibid.*
30. *For a classic statement of the idea, see Paton and Littleton (1940, pp. 48–49). Of course, this is also Principle A of ARS 3.*
31. *Myers (1959).*

32. *FASB (1984, p. 28).*

33. *Paton and Littleton (1940, p. 49).*

34. *FASB (1984, p. 28). Devine contends that the concept of realization "is concerned entirely and exclusively with liquidity." Devine (1985a, p. 61).*

35. See AICPA (1970, pp. 9085–9086). For more on the switch from *realization* to *recognition*, see Liang (2001, p. 227).

36. *AICPA (1970, p. 9089).*

37. *Sterling (1967). Skinner (1988) found an important example of conservatism. He estimates that at the end of fiscal 1976–1977 in the United Kingdom fixed asset lives used for depreciation purposes were equal only to about half of the actual period. He attributes the short write-off periods to conservatism as opposed to factors such as inflation and the equalization of book lives and tax lives.*

38. *Basu's (1997) findings were confirmed by Pae, Thornton, and Welker (2005). They also discuss two types of conservatism: (1)* Ex ante conservatism *stems from either GAAP rules (immediate research and development write-offs in SFAS No. 2, for example) or policies that reduce earnings, such as expensing stock option costs that are independent of current business and economic news, and (2)* ex post conservatism, *which is not independent of current economic news such as goodwill write-downs resulting from impairment testing. The separation between these two types of conservatism is not airtight because goodwill write-downs due to impairment result from current events but they are prescribed in SFAS No. 142. For more on these two types of conservatism, see Beaver and Ryan (2004).*

39. *Bushman and Piotroski (2006).*

40. *Lobo and Zhous (2006) discuss several ways in which conservatism has increased after passage of the Sarbanes-Oxley Act. The operating definition of conservatism, given previously, is a working definition of conservatism for purposes of accounting practice, whereas the Basu and Bushman/Piotroski definition is geared more toward research.*

41. *Givoly and Hayn (2000).*

42. *Watts (2003a and 2003b).*

43. *For more on bond covenants and dividend constraints, see Ahmed, Billings, Morton, and Stanford-Harris (2002).*

44. *Financial Accounting Standards Board (1980, para. 95).*

45. *A number of authors have constructed and used disclosure indexes. These indexes provide ordinal measures only because problems of how to weight the components of disclosure indexes cannot be easily solved. The items in the index can only be a relatively small subset of all possible items to be disclosed. Marston and Shrives (1991) provide a good summary of disclosure indexes that have been presented in the literature. They also note (p. 205) that the larger the firm, the greater the likelihood of more disclosure. Of course, managers of larger firms are more likely to understand the importance of disclosure.*

46. *Mercer (2004, p. 186).*

47. *APB Opinion No. 22 (1972).*

48. *Lang and Lundholm (2000).*

49. *Turner (1997).*

50. *Pattillo (1976).*

51. *Turner (1997, p. 126).*

52. *Cho, Hagerman, Nabar, and Patterson (2003).*

53. *Pany and Wheeler (1989) applied a number of rule-of-thumb materiality measures to various industries and found sizable differences within and among industries that vary with the particular measure of materiality employed.*

54. *SEC (1999).*

55. *Vorhies (2005, p. 54).*

56. *Ibid.*

57. *Ibid.*

58. *For a study of materiality in a European context, see Arnold, Bernardi, and Neidermeyer (2001).*

59. *Paton and Littleton (1940, pp. 18–21).*

60. *AICPA (1970, p. 9076). Vatter (1963, p. 190) was an early adherent of the view that objectivity is part of measurement methodology.*

61. *One example is Sprouse (1978, p. 71).*

62. *Revsine (1985) has conceived a formal model of comparability that is consistent with the output approach advocated here. Revsine's model is based on concepts from the information economics literature. His hypothetical application of the model compares the quality of the information signals received by users in terms of (a) historical cost information systems and (b) current cost (value) information systems. He concludes that historical costing will have a* timing difference *problem; that is, different balance sheet valuations will arise because an older asset will almost never have the same valuation as an exactly similar asset (in terms of type and condition) acquired at the balance sheet date. Hence, historical costing is noncomparable across firms. However, current costing systems have a related problem called the* estimation difference. *It arises because actual current valuations for older assets cannot be directly measured and must therefore be indirectly measured. The difference in valuation between the estimated current valuation and the actual current valuation of exactly similar assets would be the estimation difference.*

The timing difference is closely related to representational faithfulness (see Chapter 7), and the estimation difference correlates closely to the principle (concept) of verifiability or objectivity discussed here and in Chapter 1.

63. *For example, see Peloubet (1961, pp. 35–41) and Kemp (1963, pp. 126–132).*

64. *Merino (1993).*

65. *Merino (1993, p. 171) states that proprietary theorists were disingenuous about the centrality of absentee owners because conservatism was also an important tool of these same proprietary theorists, which would have minimized the profit available for dividends to these same absentee owners. Hence, proprietary theorists, while attempting to stress the importance of absentee owners, also attempted to develop accounting rules that would focus on curbing their greed by minimizing income.*

66. *For example, Lorig (1964, p. 572).*

67. *Merino (1993, p. 174).*

68. *Paton (1922, pp. 50–84).*

69. *The duality between the firm itself and its owners can lead to some strange interpretations. Husband (1938) has pointed out that a stock dividend under the conventional entity theory approach would be income to the shareholder because a transfer is made from the* firm's *account (retained earnings) to the* owners' *account (capital stock). To get around this problem, Husband viewed the corporation as an association of individuals with the affairs of the corporation largely being carried out by management. This association view—which has overtones of proprietary theory—is contrasted with the older entity view, which sees the firm as an artificial person separate and apart from its owners. We do not believe that stock dividends can be interpreted as being income to shareholders under any equity theory.*

70. *Li (1960).*

71. *Devine (1985b, p. 91).*

72. *See Anthony (1983, pp. 92–98).*

73. *An interesting sidelight to Anthony's interest on equity capital proposal is that Merino (1993, pp. 176–177) noted that proprietary theorists at the end of the nineteenth century were afraid that if interest were capitalized on owners' equities, amounts of owners' equities in excess of the capitalized interest might be claimed by labor, consumers, and government.*

74. *AAA (1957, p. 5) discusses enterprise net income in which interest, taxes, and dividends are excluded from the determination of net income; hence, a broad entity theory approach is advocated. Enterprise net income, however, is contrasted with income to shareholders, which coincides with proprietary theory.*

75. *See Staubus (1961, pp. 17–27) for an overview, and Paton (1922, pp. 84–89).*

76. *Clark (1993, p. 121).*

77. *Vatter (1947).*

78. *Goldberg (1965, p. 149) believes that totally depersonalizing the firm is much too restrictive because enterprise functions and endeavors are carried out by people. He also states that criteria for determining what funds should be established are not clearly set out by Vatter.*

79. *Ibid. (p. 169).*

80. *Ibid. (p. 173).*

81. *Rosenfield (2005) rejects both the entity and proprietary theories in favor of putting the "focus of attention" on the reporting entity itself. He appears to arrive at his own modification of the entity theory.*

82. *A European view of entity and proprietary theories sees a renewal of interest in these theories. See Zambon and Zan (2000).*

83. *Paton and Littleton noted that the word* standards *has less of a flavor of permanence than does the word* principles. *Paton and Littleton (1940, p. 4).*

References

Accounting Principles Board (1972). Opinion No. 22, *Disclosure of Accounting Policies*. Accounting Principles Board.

Ahmed, Anwer, B.K. Billings, R.M. Morton, and M. Stanford-Harris (October 2002). "The Role of Accounting Conservatism in Mitigating Bondholder-Shareholder Conflicts Over Dividend Policy and in Reducing Debt Costs," *Accounting Review*, pp. 867–890.

American Accounting Association (1957). *Accounting and Reporting Standards for Corporate Financial Statements and Preceding Statements and Supplements*. American Accounting Association.

American Institute of Certified Public Accountants (1953). *Accounting Terminology Bulletin* No. 1. AICPA, pp. 9503–9517.

American Institute of Certified Public Accountants (April 1963). "Comments on a Tentative Set of Broad Accounting Principles," *Journal of Accountancy*, pp. 36–48.

——— (1970). APB Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises.* AICPA, pp. 9057–9106.

Anthony, Robert N. (1983). *Tell It Like It Was*. Richard D. Irwin.

Arnold, Donald, R. A. Bernardi, and P. E. Neidermeyer (2001). "The Association Between European Materiality Estimates and Client Integrity, National Cultures, and Litigation," *International Journal of Accounting* (Vol. 36, No. 4), pp. 459–483.

Basu, Sudipta (December 1997). "The Conservatism Principle and the Asymmetric Timeliness of Earnings," *Journal of Accounting and Economics*, pp. 3–37.

Beaver, William, and S. G. Ryan (2004). Working Paper, "Conditional and Unconditional Conservatism: Concepts and Modeling." New York University: Stern Graduate School of Business.

Bushman, Robert, and J. Piotroski (October 2006). "Financial Reporting Incentives for Conservative Accounting: The Influence of Legal and Political Institutions," *Journal of Accounting and Economics*, pp. 107–148.

Canning, John B. (1929). *The Economics of Accountancy*. Ronald Press.

Carlson, Marvin L., and James W. Lamb (July 1981). "Constructing a Theory of Accounting—An Axiomatic Approach," *Accounting Review*, pp. 554–573.

Caws, Peter (1965). *The Philosophy of Science*. D. Van Nostrand.

Chambers, Raymond J. (1964). "The Moonitz and Sprouse Studies on Postulates and Principles," in *Accounting, Finance and Management*. Butterworth, pp. 396–414.

——— (1966). *Accounting, Evaluation and Economic Behavior*. Prentice Hall.

——— (September 1970). "Second Thoughts on Continuously Contemporary Accounting," *Abacus*, pp. 39–55.

Chatfield, Michael (1974). *A History of Accounting Thought*. The Dryden Press.

Cho, Seong-Yeon, R. L. Hagerman, S. Nabar, and E. R. Patterson (2003). "Measuring Stockholder Materiality," *Accounting Horizons* (Supplement), pp. 63–76.

Clark, Myrtle W. (September 1993). "Entity Theory, Modern Capital Structure Theory, and the Distinction Between Debt and Equity," *Accounting Horizons*, pp. 14–31.

Deinzer, Harvey T. (1965). *Development of Accounting Thought*. Holt, Rinehart and Winston.

Devine, Carl T. (1985a). "Recognition Requirements—Income Earned and Realized," in *Essays in Accounting Theory*, Vol. II, Studies in Accounting Research #22, ed. Stephen Zeff. American Accounting Association, pp. 57–67.

——— (1985b). "Comments on Paton's Entity Theory as Organization Theory," in *Essays in Accounting Theory*, Vol. IV, Studies in Accounting Research #22, ed. Stephen Zeff. American Accounting Association, pp. 83–99.

Financial Accounting Standards Board (1980). Statement of Financial Accounting Concepts No. 2, *Qualitative Characteristics of Accounting Information*. FASB.

——— (1984). Statement of Financial Accounting Concepts No. 5, *Recognition and Measurement in Financial Statements of Business Enterprises*. FASB.

Fremgen, James (October 1968). "The Going Concern Assumption: A Critical Appraisal," *Accounting Review*, pp. 49–56.

Gilman, Stephen (1939). *Accounting Concepts of Profit*. Ronald Press.

Givoly, Dan, and C. Hayn (2000). "The Changing Time-Series Properties of Earnings, Cash Flows and Accruals: Has Financial Reporting Become More Conservative?" *Journal of Accounting and Economics*, (Vol. 29, No. 3), pp. 287–320.

Goldberg, Louis (1965). *An Inquiry Into the Nature of Accounting*. American Accounting Association.

Grady, Paul (1965). Accounting Research Study No. 7, *Inventory of Generally Accepted Accounting Principles*. AICPA.

Harré, Rom (1970). *The Principles of Scientific Thinking*. University of Chicago Press.

Husband, George R. (September 1938). "The Corporate-Entity Fiction and Accounting Theory," *Accounting Review*, pp. 241–253.

Ijiri, Yuji (1975). Studies in Accounting Research #10, *Theory of Accounting Measurement*. American Accounting Association.

Jennings, Alvin R. (January 1958). "Present-Day Challenges in Financial Reporting," *Journal of Accountancy*, pp. 28–34.

Kemp, Patrick (January 1963). "Controversies on the Construction of Financial Statements," *Accounting Review*, pp. 126–132.

Lang, Mark H., and Russell Lundholm (2000). "Voluntary Disclosures and Equity Offerings: Reducing Information Asymmetry or Hyping the Stock?," *Contemporary Accounting Research* (Vol.17, No. 4), pp. 623–662.

Li, David H. (October 1960). "The Nature and Treatment of Dividends Under the Entity Concept," *Accounting Review*, pp. 674–679.

Liang, Pierre J. (September 2001). "Recognition: An Information Content Perspective," *Accounting Horizons*, pp. 223–242.

Littleton, A. C. (1953). *Structure of Accounting Theory*. American Accounting Association.

Lobo, Gerald, and J. Zhous (March 2006). "Did Conservatism in Financial Reporting Increase After the Sarbanes-Oxley Act? Initial Evidence," *Accounting Horizons*, pp. 57–73.

Lorig, Arthur N. (July 1964). "Some Basic Concepts of Accounting and Their Implications," *Accounting Review*, pp. 563–573.

MacNeal, Kenneth (1939; reissued 1970). *Truth in Accounting*. Scholars.

Marston, Claire L., and Philip J. Shrives (September 1991). "The Use of Disclosure Indices in Accounting Research: A Review Article," *British Accounting Review*, pp. 195–210.

Mattessich, Richard (1964). *Accounting and Analytical Methods*. Richard D. Irwin.

Mautz, Robert K. (January 1965). "The Place of Postulates in Accounting," *Journal of Accountancy*, pp. 46–49.

Mautz, Robert K., and Hussein A. Sharaf (1961). *The Philosophy of Auditing*. American Accounting Association.

Mercer, Molly (September 2004). "How Do Investors Assess the Credibility of Management Disclosures?" *Accounting Horizons*, pp. 185–196.

Merino, Barbara D. (February/April 1993). "An Analysis of the Development of Accounting Knowledge: A Pragmatic Approach," *Accounting, Organizations and Society*, pp. 163–185.

Moonitz, Maurice (1961). Accounting Research Study #1, *The Basic Postulates of Accounting*. American Institute of Certified Public Accountants.

Morgenstern, Oscar (1963). "Limits to the Use of Mathematics in Economics," in *Mathematics and the Social Sciences*, ed. J. C. Charlesworth. American Academy of Political and Social Science, pp. 12–39.

Myers, John H. (October 1959). "The Critical Event and Recognition of Net Profit," *Accounting Review*, pp. 528–532.

Pae, Jinhan, D. B. Thornton, and M. Welker (Fall 2005). "The Link Between Earnings Conservatism and the Price-to-Book Ratio," *Contemporary Accounting Research*, pp. 693–717.

Pany, Kurt, and Stephen Wheeler (December 1989). "Materiality: An Inter-Industry Comparison of the Magnitudes and Stabilities of Various Quantitative Measures," *Accounting Horizons*, pp. 71–78.

Paton, William A. (1922; reissued 1962). *Accounting Theory*. Accounting Studies Press.

Paton, William A., and A. C. Littleton (1940). *An Introduction to Corporate Accounting Standards*. American Accounting Association.

Pattillo, James W. (1976). *The Concept of Materiality in Financial Reporting*. Financial Executives Research Foundation.

Peloubet, Maurice (April 1961). "Is Further Uniformity Desirable or Possible?," *Journal of Accountancy*, pp. 35–41.

Revsine, Lawrence (Spring 1985). "Comparability: An Analytic Examination," *Journal of Accounting and Public Policy*, pp. 1–12.

Rosenfield, Paul (February 2005). "The Focus of Attention in Financial Reporting," *Abacus*, pp. 1–20.

Sanders, Thomas H., Henry Rand Hatfield, and Underhill Moore (1938). *A Statement of Accounting Principles*. American Accounting Association.

Securities and Exchange Commission (1999). SEC Staff Accounting Bulletin No. 99, *Materiality*. Government Printing Office.

Skinner, R. C. (Spring 1988). "The Role of Conservatism in Determining the Accounting Lives of Fixed Assets," *International Journal of Accounting*, pp. 1–18.

Special Committee on Research Program (December 1958). "Report to Council of the Special Committee on Research Program," *Journal of Accountancy*, pp. 62–68.

Sprouse, Robert T. (January 1978). "The Importance of Earnings in the Conceptual Framework," *Journal of Accountancy*, pp. 64–71.

Sprouse, Robert T., and Maurice Moonitz (1962). Accounting Research Study No. 3, *A Tentative Set of Broad Accounting Principles for Business Enterprises.*AICPA.

Staubus, George (1961). *Accounting to Investors*. University of California Press.

Sterling, Robert R. (December 1967). "Conservatism: The Fundamental Principle of Valuation in Accounting," *Abacus*, pp. 109–132.

——— (July 1968). "The Going Concern: An Examination," *Accounting Review*, pp. 481–502.

Study Group at the University of Illinois (1964). *A Statement of Basic Postulates and Principles*. Center for International Education and Research in Accounting, University of Illinois.

Sweeney, Henry W. (1936). *Stabilized Accounting*. Holt, Rinehart & Winston.

Turner, Jerry L. (Spring 1997). "The Impact of Materiality Decisions on Financial Ratios: A Computer Simulation," *Journal of Accounting, Auditing & Finance*, pp. 125–147.

Vatter, William J. (1947). *The Fund Theory of Accounting and Its Implications for Financial Reports*. University of Chicago Press.

——— (Autumn 1963). "Postulates and Principles," *Journal of Accounting Research*, pp. 179–197.

Vorhies, James B. (May 2005). "The New Importance of Materiality," *Journal of Accountancy*, pp. 53–59.

Watts, Ross (2003a). "Conservatism in Accounting Part I: Explanations and Implications," *Accounting Horizons* (September), pp. 207–221.

——— (2003b). "Conservatism in Accounting Part II: Evidence and Research Opportunities," *Accounting Horizons* (December), pp. 287–301.

Wright, F. K. (August 1967). "Capacity for Adaptation and the Asset Measurement Problem," *Abacus*, pp. 74–79.

Zambon, Stefano, and L. Zan (2000). "Accounting Relativism: The Unstable Relationship Between Income Measurement and Theories of the Firm," *Accounting, Organizations and Society* (Vol. 25, No. 89), pp. 799–822.